# Olmec Bloodletting: An Iconographic Study

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> One of the most important of all Maya rituals was ceremonial bloodletting, either by drawing a cord through a hole in the tongue or by passing a stingray spine, pointed bone, or maguey thorn through the penis. Stingray spines used in the rite have often been found in Maya caches; in fact, so significant was this act among the Classic Maya that the perforator itself was worshipped as a god. This ritual must also have been frequently practiced among the earlier Olmec...
>
> Michael D. Coe
> in *The Origins of Maya Civilization*

The iconography of bloodletting in the Early and Middle Formative (ca. 1200-500 B.C.) Olmec symbol system is the focus of the present study.[1] We have identified a series of symbols in large- and small-scale stone objects and ceramics representing perforators and a zoomorphic supernatural associated with bloodletting. While aspects of this iconography are comparable to later Classic Lowland Maya iconography of bloodletting, its deployment in public and private contexts differs, suggesting fundamental variation in the way bloodletting was related to political legitimation in the Formative Olmec and Classic Maya cases. Our point of departure is the relatively well-documented iconography of autosacrifice among the Lowland Maya.

### Maya Bloodletting

The nature and iconography of bloodletting among the Lowland Classic Maya have been elucidated in a series of studies (Joralemon 1974; Schele 1984a; Stuart 1984e). Maya autosacrifice imagery includes scenes related to bloodletting, iconographic elements indicating autosacrifice, and glyphs referring to bloodletting. Most scenes shown take place after the act of bloodletting and include holding paraphernalia of autosacrifice, visions of blood serpents enclosing ancestors, and scattering blood in a ritual gesture. The paraphernalia of bloodletting may also be held, not simply as indications that an act of autosacrifice has taken place, but as royal regalia. Two elements are common both in scenes of bloodletting and as royal regalia: the personified bloodletter, which Coe (1977a:188) referred to as a god, and bands tied in three knots. Three-knotted bands mark the wrists and ankles of participants in autosacrifice, mark staffs held in bloodletting rituals, and form part of the personified bloodletter.

The personified bloodletter (Joralemon 1974) has a profile, long-nosed face above the long shaft of the perforator that forms a central prominent tooth. Three knotted bands and a three-lobed or three-tufted element form a headdress for the personified bloodletter. Naturalistic perforators are

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also depicted in Maya art. These include stingray spines, pointed awl-shaped objects (perhaps bones), maguey thorns, and a lobed stone perforator. The single-lobed stone perforator is also the main sign of a glyph for the act of letting blood (T712; Schele 1982:64-69). An alternative expression for the same act shows a hand grasping a fish (Proskouriakoff 1973).

Bloodletting among the Maya has been associated with varied supernaturals. Prominent among these are the Palenque Triad of deities (Berlin 1963), the Paddlers or floaters (Schele 1984b: 31-32; Stuart 1984e:10-15), and God K (Robicsek 1979; Schele and Miller 1983:3-20; Stuart 1984e: 13). All have associations with dynastic genealogy and royal legitimation. The Palenque Triad includes a saurian or fishlike supernatural (GI) whose face is marked with small fins. In a jade mask probably from Río Azul, Guatemala, this supernatural has a central tooth in the form of a stingray spine of shell rubbed with cinnabar (Adams 1986: cover photo). The stingray spine, or alternatively an awl-shaped perforator, forms the distinctive nose ornament for one of the floaters, referred to as the "Fish" God (Stuart 1984e:11).

Maya autosacrifice, using any of the kinds of perforators noted, produced blood that was spattered on paper or scattered in a ritual gesture. Blood-spattered paper in bowls or baskets is displayed, and apparently burnt, during rituals that produce visions of serpents with ancestors in their jaws. Two of the Palenque Triad have been identified with the Hero Twins of the Popul Vuh (Freidel and Schele 1988), divine mythical ancestors of Maya rulers. The floaters, suspended above Maya rulers in S-shaped blood scrolls, also appear to represent divine ancestors (Stuart 1984:11).

Through blood sacrifice, Maya rulers stated that they gave birth to and nurtured the gods who had been their ancestors, a claim that formed an important basis of elite legitimation and justification (Freidel and Schele 1988; Stuart 1984e). The processes of elite legitimation and justification were equally important to the Early and Middle Formative rulers whose dynastic monuments form a major part of Olmec art. An examination of the Formative Period record suggests that autosacrifice formed a major theme of the Olmec symbol system.

**Iconography of Olmec Bloodletting**

Bloodletting is attested in the archaeological record from Early and Middle Formative sites such as La Venta, Chalcatzingo, and San José Mogote in the presence of shark's teeth, stingray spines, and obsidian blades that probably functioned as perforators (Flannery 1976:341-344; Coe 1977a:188; Grove 1984:108). In addition, perforators and iconography suggestive of bloodletting are found in the widespread Early and Middle Formative Olmec symbol system.

The Olmec symbol system, developed in sites of the Olmec archaeological culture of the Mexican Gulf Coast such as San Lorenzo and La Venta, was expressed in a variety of media. These included large-scale cave paintings and stone sculpture and small-scale ceramics and portable stone carvings, especially jadeite and other greenstone. The Olmec symbol system is found, outside of the heart of the Olmec culture, from Guerrero to Honduras and El Salvador. A number of studies

**Fig. 1**. Olmec bloodletters: (a) "ice-pick" style (redrawn by Rosemary Joyce after Joralemon 1971, fig. 124); (b) three-knotted hafted point (redrawn by Rosemary Joyce after Joralemon 1971, fig. 183).

**Fig. 2**. Design from an incised grayware vessel reportedly from the vicinity of Chalcatzingo, Morelos (drawing by Richard Edging, based on photographs).

of the iconography of the Olmec symbol system (e.g., Coe 1965b, 1968; Grove 1973, 1981, 1984; Joralemon 1971, 1976) have established the range of motifs and their combinations in this widespread art style.

Much large-scale Olmec art consists of portraits of rulers and monuments recording the legitimacy of and justification for elite rule (e.g., Coe 1972; Grove 1973, 1981). Portable art may also relate to individual rulers, as has been suggested for certain figurines from Chalcatzingo (Grove and Gillespie 1984). Included among small-scale objects are a number of depictions of bloodletting instruments that provide a starting point to establish the iconography of Olmec autosacrifice.

**Images of Bloodletters**

Coe (1977a:188) noted that a jade effigy stingray spine was found at La Venta in a tomb in Mound A-2. The jade effigy accompanied several actual stingray spines, a shark's tooth, and a jade "ice-pick" perforator (Drucker 1953:23-26; Drucker et al. 1959:272). Other jade perforators of this kind were found in two other probable La Venta burials (Drucker et al. 1959:273-274). One was at waist level (Drucker 1952: fig. 22). "Ice-pick" shaped perforators are part of a group of portable stone bloodletting instruments that may have been functional (fig. 1a). One such bloodletter was included in an Olmec style cache in Real Xe phase Seibal (Willey et al. 1975:44). Griffin (1981:219-220) noted a number of examples without provenience from Guerrero. Another form of probable stone bloodletter is represented by a depiction of a hafted knife, with three knotted bands around the handle (fig. 1b), from Ejido Ojoshal, Tabasco (Joralemon 1971: fig. 65). A second fragment, from Paso del Toro, Vera Cruz, may derive from an identical form (Joralemon 1976: fig. 10e1). As in the Maya case, Olmec iconography marks instruments and participants in bloodletting with bands and other elements in sets of three.

A complex composition employing the motif of three knotted bands is a Middle Formative ceramic vessel from near Chalcatzingo, Morelos (Gay 1971: pl. 23), which we believe represents a personified bloodletter (fig. 2)[2]. The unique

**Fig. 3**. Incised profiles from the greenstone Las Limas figure: (a) God VIII, Profile D (the fish zoomorph) (redrawn by Richard Edging after Joralemon 1971, fig. 253); (b) God VI, Profile A (redrawn by Richard Edging after Joralemon 1971, fig. 232).

**Fig. 4**. Formative Period fish zoomorph: (a) San Lorenzo Monument 58 (redrawn by Rosemary Joyce after Joralemon 1976, fig. 5d); (b) tecomate from Las Bocas (redrawn by Rosemary Joyce after Joralemon 1971, fig. 100); (c) design from a ceramic plaque from Tlapacoya (redrawn by Rosemary Joyce after Joralemon 1976, fig. 4f). Note U-shaped markings at gums (b, c) and crescent eye.

form of this vessel (an in-tapering cylinder) is reinforced by the use of incised iconography otherwise limited in the Middle Formative to stone objects. The vessel has a central panel with a profile head flanked by a pair of hands holding torch and knuckleduster motifs (Joralemon 1971: 12, 16). The central panel includes a profile head that incorporates elements of two profiles incised on the limbs of the seated Las Limas figure (Coe 1968; cf. Joralemon 1971, 1976: fig. 3b, 3f). This central face also has a forehead ornament that is duplicated on jade celts (Joralemon 1971: fig. 33, 1976: fig. 10g). This unique vessel represents the application of contemporary iconography of stone incising to a container, which because of its unique shape must be of nonordinary function.

The precise nature of this function is suggested by the secondary iconography of the vessel. Four "shark's tooth" motifs are spaced around a central panel. The central panel framework is composed of three horizontal elements, a basal motif, and upper motifs. The base of the frame appears to be a mouth with incurved fangs, identical to a basal motif on Monument 21 from Chalcatzingo (David Grove, personal communication; cf. Grove 1984: fig. 12). The top element has a motif found on the torch in the right hand, above a crossed band with three tabs on either side. We identify the three main horizontal elements as three knotted bands, with a loop to the right and two ends to the left. The knot on the center loop is obscured by the central profile head. Together, the three knots and profile face with central prominent tooth reproduce the essential features of the Classic Lowland Maya personified bloodletter (Joralemon 1974).

The facial features of the proposed Formative personified bloodletter, as noted, combine the eye and mouth of Las Limas profile D with the stripe through the eye of Las Limas profile E, respectively the lower and upper heads on the right hand

**Fig. 5**. Depictions related to the fish zoomorph. Reptilian Highland Mexican zoomorphs: (a) Chalcatzingo Relief V (redrawn by Rosemary Joyce after Joralemon 1971, fig. 244); (b) Oxtotitlán Cave painting I-C (redrawn by Rosemary Joyce after Joralemon 1971, fig. 243). Note crossed-bands body markings (a, b), prominent upper tooth row (a), and crescent eye (b). Anthropomorphic face with asymmetric eyes: (c) Laguna de los Cerros Monument 1 (redrawn by Rosemary Joyce after Joralemon 1971, fig. 125); (d) San Lorenzo Monument 30 (redrawn by Rosemary Joyce after Joralemon 1971, fig. 8). Note prominent central tooth.

**Fig. 6**. Incised abstract motifs form Formative Period ceramics: (a) tecomate from Las Bocas; note crescent eye motif (redrawn by Rosemary Joyce after Joralemon 1971, fig. 45); (b) fish zoomorph motifs (drawing by Rosemary Joyce; compare Coe and Diehl 1980, figs. 140b, e); (c) crocodilian motifs (drawing by Rosemary Joyce; compare Coe and Diehl 1980, figs. 138a, 143i).

side of the Las Limas figure (fig. 3). We suggest the identification of the face with empty crescent eye and central tooth with a supernatural with fish features and bloodletting associations. Depictions of these facial features on a profile, finned, legless zoomorph are present in large and small-scale Olmec art from both the Gulf Coast and Highlands (fig. 4).

**The Fish Zoomorph**

A number of examples of the fish zoomorph were subsumed by Joralemon (1976) under his "Olmec Dragon." The body of this fish may be marked by a single large crossed-band motif — for example, San Lorenzo bas-relief Monument 58 (Joralemon 1976: fig. 5; fig. 4a). The same zoomorph is depicted on ceramics from the Highlands of Central Mexico. Ceramic representations have more variable body markings, including, but not limited to, the crossed-band motif. They all share the crescent eye and prominent tooth, usually with U-shaped markings at the gum line. On the Morelos vessel (fig. 2) these gum markings are inverted and form a trilobal motif, which in later Mesoamerican iconography was a prominent sign of liquid (water and/or blood; Stocker and Spence 1973). On a tecomate from Las Bocas (fig. 4b), the teeth are serrated (Joralemon 1971: fig. 100). A plaque from Tlapacoya (fig. 4c) has the band through the eye also noted on the Morelos vessel, typical of Las Limas profile A (Joralemon 1976: fig. 4f).

A number of Highland Mexican Formative monuments may represent a version of this zoomorph with somewhat more serpentine characteristics (fig. 5a, b). These include the zoomorph of Chalcatzingo Relief V, whose body is marked with crossed bands, which floats over a series of S-shaped scrolls (Grove 1984), and Oxtotitlán cave painting I-C (Grove 1970). These serpentine zoomorphs share the crossed-bands body markings and a series of fins, often referred to as feathers or wings, with the fish zoomorph. In addition, they may have the essential crescent-shaped eye and teeth of the fish zoomorph.

The central tooth motif is also found on a series of frontal heads in which the eyes are marked with an asymmetric motif: a crossed band on one side, and a dotted **U** bracket on the other — for example, Laguna de los Cerros Monument 1 (fig. 5c). Two circumstances suggest that this pair of motifs is also related to the bloodletting fish zoomorph. A jade perforator (fig. 1a) has the same pair of elements incised on the head. Fragmentary bas-relief San Lorenzo Monument 30 (Joralemon 1971: fig. 8) depicts the profile of a zoomorph, whose anthropomorphic face has the eye replaced by the crossed-band motif and in whose mouth is a prominent central tooth (fig. 5d).

In addition to these representational depictions, certain associated abstract elements of the fish zoomorph can be identified. Prominent among these is a serrated outline oval, with interior cross-hatching or other textured patterning (fig. 6a, b). On an unpublished incised stone fig-

ure from the Pacific Slope of Guatemala, a profile full-body figure of the fish zoomorph is placed in a position opposite, and complementary to, a representation of a crocodilian (personal observation based on drawing by Linda Schele). Along with the diagnostic crossed bands, the body of the fish zoomorph is marked with oval motifs. These are shown three additional times as the interior of a serrated motif, incised below the belly, within the spread jaws, and above the head of the fish. Two of these serrated motifs have attached brushlike fin motifs, comparable to the tail fin of the zoomorph. The example in the jaws of the zoomorph is attached to a series of dots reminiscent of the Lowland Maya conventionalization of blood (cf. Schele 1984a; Stuart 1984e). The suggestion that the serrated motif, with or without the tailfin, stands for the fish zoomorph is reinforced in this composition by the complementary presence of a shorthand profile of the crocodilian, Joralemon's (1976) Olmec Dragon, above the head opposite the fish zoomorph.

**Crocodilian and Fish in Ceramic Iconography**

The abstract version of the crocodilian is widely recognized as a major incised motif on Early Formative Gulf Coast Olmec ceramics. An evaluation of the ceramics of San Lorenzo (Coe and Diehl 1980) suggests that it occurs in complementary distribution with the newly identified abstract motif of the fish zoomorph. Incised ceramics of the types Calzadas Carved and Limón Incised are hallmarks of the San Lorenzo phase of the Early Formative. Calzadas Carved and Limón Incised are, respectively, polished gray to black and differentially fired types. They share two dominant flat-bottom, flaring wall open-bowl forms, with simple direct rims or complex bolstered and down-turned rims. In addition, rarer examples of incurved rim vessels (tecomates) and jars are found in Calzadas Carved, but in numbers too small to permit real assessment of their characteristics.

The illustrations provided in Coe and Diehl (1980, vol. 1, figs. 138-145) were used as a basis to tabulate motifs and their associations with the direct and complex rim bowl forms. There is no way to tell how representative these illustrations are of the proportions of different motifs and motif-form combinations in the type, but unless some kind of deliberate selection is operative, the two forms should have frequency roughly equivalent to the motifs of the crocodilian Olmec Dragon and the fish zoomorph. This is not the case: in Calzadas Carved, with roughly equal numbers of illustrations of direct and complex rims (19 bolstered, 22 direct rims), all the explicit crocodilian profiles (2) are on bolstered rim bowls, and all the serrated outline oval motifs (3) are on direct rim bowls (cf. fig. 6b and 6c). The majority of the bolstered rim bowls carried horizontal brackets (10),

**Fig. 8**. "Knuckledusters": (a) Serrated pair in headdress of seated greenstone figure (note three knotted bands at ankles; similar bands are present at wrists) (redrawn by Rosemary Joyce after Joralemon 1976, fig. 4c); (b) serrated pair held by hands of stylized figure incised on celt (redrawn by Rosemary Joyce after Joralemon 1976, fig. 19i); (c) serrated, held with torch by standing greenstone figure from Puebla (redrawn by Rosemary Joyce after Joralemon 1971, fig. 20); (d) plain, in headdress of stylized figure on incised celt (redrawn by Rosemary Joyce after Joralemon 1971, fig. 33); (e) plain pair, San Lorenzo Monument 10, held by seated figure (redrawn by Rosemary Joyce after Joralemon 1971, fig. 222); (f) plain, held with torch by flying figure incised on celt (redrawn by Rosemary Joyce after Joralemon 1971, fig. 36).

or K-shaped motifs (4), parts of crocodilian jaw row and hand-paw-wing motifs. The majority of direct rim vessels carried unique panels of design (9) or crossed-band motifs (4), the body marking associated with the fish zoomorph. Limón Carved Incised had no crocodilian iconography (brackets, K motifs, hand-paw-wing motifs). No serrated outlines or crossed-band motifs, typical of the bloodletter zoomorph, were found. Most depictions were a double scroll alternating with a dotted or cross-hatched circle in a few cases.

A survey of published illustrations of Highland Mexican ceramics with incised Olmec style iconography (Coe 1965a, 1968; Joralemon 1971) provided confirmation for the distinctiveness of these three sets of iconography, for their complementary distribution, and for their identification with zoomorphs more explicitly depicted in Olmec frontier art.[3] The incised iconography is found on a wider range of vessel forms, including bottles, flaring wall bowls, and cylinders, in the Highland sites. Double scrolls, as in the Gulf Coast, are found separately from the other motifs.

**Fig. 8**. Humboldt Celt; note lower motifs, "shark's tooth," and cross-sectioned bowl (redrawn by Rosemary Joyce after Joralemon 1971, fig. 32).

They are common on bottles with incised birds, or in the shape of birds, where they form a base panel. Crocodilian motifs including explicit profiles, hand-paw-wing, and K motifs are common on flat-bottom, flaring wall bowls and cylinder forms. The crossed-band motif is found on several vessels in the Highlands with apparent crocodilian depictions — for example, marking the mouth.

The serrated motif identified with the fish zoomorph is commonly found only on bottles or tecomates in the Highland sample. A pair of tecomates from Las Bocas — almost identical in form, size, and surface treatment (Coe 1968: figs. 23, 24) — includes one with a full-figure version of the fish zoomorph (fig. 4b). The second tecomate (fig. 6a) has a serrated cogwheel with intricate internal design, including a crescent U-shape identical to the eye motif of the fish zoomorph. In other Highland Mexican ceramics, the abstracted body marking is generally insufficient to specify the fish zoomorph, and the representations of the mouth and teeth are given greater prominence.

The contrast between the crocodilian and fish zoomorph motifs is maintained on the Gulf Coast by their use on bowl forms with different rim treatment. In the Highlands, the contrast becomes one between open bowls, decorated with crocodilian motifs, and restricted vessels (tecomates and bottles) with fish zoomorph motifs. This association of form and motif appears to hold even in incised ceramics from Izapa on the Mexican border in coastal Chiapas (Ekholm 1969) and from Copán, Honduras (personal observation; unpublished data of William Fash). The serrated outline of the abstract motif associated with the fish zoomorph also marks the edge of a number of depictions of knuckledusters, suggesting that these enigmatic objects are also related to autosacrifice.

## The Knuckleduster Motif and the Bloodletting Zoomorph

The serrated edge of many examples of knuckledusters may mark these as symbolic bloodletters. A small stone sculpture of an elaborately dressed seated ruler in the Dumbarton Oaks collection (Benson 1971) has three knotted bands at each wrist and ankle, a detail of costume that in later Maya iconography marks participants in bloodletting. The main element of the headdress

that this figure wears has a pair of hands holding knuckle-dusters with an incised serrated edge (fig. 7a).

The knuckleduster (Coe 1965b: 764-765) is a common motif, both in the headdress (fig. 7a, 7d) and held in the hands (fig. 7b, 7c, 7e, 7f). When held in the hands, it is generally paired either with a second knuckle-duster (fig. 7b, 7e) or with a torch motif (fig. 7c, 7f). Serrated (fig. 7a-c) and unserrated (fig. 7d-f) knuckle-duster forms occur in all of these contexts. The incised Middle Formative vessel from Morelos, in addition to the central profile that we believe is a personified bloodletter, has a pair of hands holding a serrated knuckle-duster and torch (fig. 2).

The referent of the knuckleduster is problematic. Various suggestions (weapon, ballgame implement, or ritual object) have been made (Coe 1965b: 762-765; Benson 1971:19-23; Cervantes 1969), but no archaeological example of the object represented by knuckle-dusters is known. This implies that the material must have been, in whole or part, perishable or that the depiction is wholly symbolic, standing for something else that is found, such as the natural stingray spine bloodletters that came from the sea. The interpretation of knuckledusters as symbolic perforators greatly expands the number of Olmec depictions related to bloodletting by rulers.

**Bloodletting and Olmec Rulers**

The knuckleduster is held as an item of royal regalia, as well as being depicted on celts (such as the split celt from La Venta Offering 4; Drucker et al. 1959: fig. 40), carried by the flying figures that Cervantes (1969) suggested were actively involved in ritual. Grove (1984) demonstrated that the similar flying figure in Chalcatzingo Relief XII was literally in the air, accompanied by birds. The flying Olmecs strongly recall the floaters of Classic Lowland Maya iconography, divine ancestors who appear among blood scrolls in dynastic monuments (Stuart 1984e:10-15). Similar subsidiary floating figures are noted in La Venta Stelae 2 and 3, depicting Olmec rulers amid symbols of their legitimacy. These floaters are suspended, like the flying Olmecs, in midair. If the consistent association in ceramic iconography between S-shaped scrolls and birds indicates that the abstract motif stands for the zoomorph in the same way that other motifs stand for the crocodilian and fish zoomorphs, in addition to marking the place as the sky, the birds in Chalcatzingo Relief XII may also be a reference to S-shaped (blood?) scrolls like those below the fishlike reptilian zoomorph of Chalcatzingo Relief V.

Implicit references to bloodletting may also be present in historical monuments in regalia worn by the main figures. Grove (1973, 1981, 1984) suggested that the headdresses of human figures in Olmec art include both personal identification and signs identifying previous rulers. The headdress of one figure on La Venta Stela 2 consists of a fish, possibly related to divine ancestors identified with the fish zoomorph. The presence of three knotted bands on the arms and legs of a seated portrait figure (Benson 1971), in whose headdress were a pair of knuckle-dusters, has been mentioned.

The use of bloodletting paraphernalia as regalia of rule is in somewhat marked contrast with the apparent absence of bloodletting related scenes in Olmec dynastic art. Absent from Olmec imagery are the representation of the act of bloodletting, holding the bowl with the paraphernalia of bloodletting, and the subsequent visions of blood serpents framing ancestors. La Venta Monument 19, in which a human figure reclines above a crested rattlesnake while holding a bag in one hand and an indistinct object in the other, could be an example of the latter type of scene. Sheptak (personal communication, 1986) noted that similar bags are strongly associated with events that feature bloodletting acts in Classic Lowland Maya art. The serrated outline abstract motif of the fish zoomorph is common on the interior base of Middle Formative bowls (Grove, personal communication) where it may mark these as appropriate receptacles for bloodletting paraphernalia. While no reliefs depict Olmec rulers holding a bowl containing a bloodletting instrument, the highly abstract Humboldt Celt (Joralemon 1971: fig. 32) shows a motif found on the Morelos vessel, which we interpret as a shark's tooth perforator, above a cross-sectioned open bowl (fig. 8). This may be an early textual reference to bloodletting.

**Conclusions**

In the preceding pages, we have discussed a series of images in Early and Middle Formative Olmec art that we feel are related to the practice of

bloodletting. Primary among these images is a fish supernatural, which we feel is identified with the personified bloodletter. For the Olmec, the archetypal perforator had a marine source, particularly in the stingray spine (imitated in jade at La Venta) and shark's tooth (which may have iconic significance on the Humboldt Celt). The marine zoomorph identified with the perforator was limbless, provided with fins, and identified by a prominent central tooth and crescent-shaped eye.

The marine zoomorph, which in some Highland Mexican sites may have more serpentine features, was in distinct, complementary distribution to the crocodilian Earth Monster that has been called the Olmec Dragon, with which it has sometimes been merged. This complementary distribution is found both in versions of these zoomorphs incised on stone human figures and in incised ceramic iconography. It is maintained equally for full-body depictions of the zoomorph, for profile heads, and for abstract symbols that stand as badges for the whole zoomorph.

The prime abstract motifs that stand for the fishlike zoomorph are body markings, especially the crossed-bands motif and a serrated outline oval motif. Crossed bands infixed in or above one eye mark frontal anthropomorphic masks with a prominent central tooth, suggesting the identification with the fish zoomorph. The same asymmetric pair of motifs marks the head of an "ice-pick" style perforator, tying the central tooth directly to the point of the bloodletter.

The serrated motif is common in abstract incised ceramics of the Early Formative. Pairing of this motif with full-body depictions of the marine zoomorph in Highland ceramics reinforces the identification of the motif as symbol of the zoomorph. The same serrated form marks many examples of the enigmatic knuckleduster. This hints at the identification of the knuckleduster as a symbolic perforator, a suggestion that finds support in a number of areas.

Knuckledusters occur as symbols of power, held in pairs or with a torch motif, and as an element in the headdress of anthropomorphic figures. An elaborate stone figure with paired knuckledusters in the headdress has three knotted bands at wrists and ankles, an element of dress that in Maya imagery marks bloodletting participants. Three knotted bands, a rare motif in Olmec iconography, are incised around a personified bloodletter head on an unusual ceramic vessel, along with paired torch and knuckleduster, and four shark's teeth motifs. From the top of the three-knotted panel, and from the top of the torch in this depiction, protrude single pointed spines. Three knotted bands are also carved around an object that appears to represent a celt hafted in a torch-like bundle of reeds, with a profile crocodilian handle.

The imagery of bloodletting in the Formative Period has suggestive parallels to established Classic Lowland Maya autosacrifice iconography. Perhaps most intriguing of these is the possible relationship between the fish zoomorph of the Formative and the Maya Fish God floater and GI of the Palenque Triad. Both of the latter anthropomorphic supernaturals have a series of features associating them with the marine environment, including the presence of small fins on the face of GI and the use of a stingray spine nose ornament by the Fish God floater. A portrait mask of GI shows the central tooth of the supernatural as a stingray spine. An underlying Mesoamerican conception of the stingray spine as archetypal perforator may be indicated.

Minimal suggestions of the continued relationship of a similar fish supernatural with bloodletting during the Lowland Maya Classic Period may be found in glyphic expressions for bloodletting, T714 and T712. The fish in expression T714 ("hand grasping fish") may stand for the fish supernatural as personified bloodletter. In two early inscriptions (Schele 1982:86, 235), the T712 perforator has a serrated prefix comparable to the abstract motif of the Formative Period fish supernatural. No interpretation has been suggested for this affix on the bloodletter glyph. On one example, the Hauberg stela (Greene, Rands, and Graham 1972:252-253), a Maya ruler with a prominent central tooth in his mouth carries the blood-generated ancestral serpent on which floating ancestor figures climb (Schele 1982:86-87). It is possible that the serrated prefix in these two cases specifies a bloodletter of marine origin rather than any of a number of other types of perforators.

The practice of bloodletting and its association with supernaturals with marine characteristics in the Formative Period and among the Classic Lowland Maya are presumably reflections of a shared Mesoamerican belief system of some antiquity. Bloodletting validated the lineal connection with ancestors in both Olmec and Maya iconography through the manifestation of ancestral figures (the floaters). The Formative Period practices of holding bloodletters as royal regalia and inserting them (in the form of knuckledusters) in the headdress probably are related primarily to the idea of legitimate lineal descent.

Differences in the deployment of symbols of auto-sacrifice are as obvious as points of comparison. Maya bloodletting imagery forms a major part of public art and is essential to the process of elite legitimation. The Classic Maya "scattering" gesture is a public act without apparent parallel in the Formative Period. Large-scale public art of the Formative Period emphasizes the connection of elite with the supernatural more directly through the emergence of rulers from the cave mouths of the underworld with personified power.

Unlike the Classic Lowland Maya, Formative Period rulers did not make their own bloodletting central to continuation of the natural world. Rather than representing the ruler as a manifestation of divine personality in the natural world, Formative Period iconography presents the ruler as specially capable of passage to and from the supernatural world. While the separation between rulers and commoners was in both cases clearly dependent on the unique relationship of rulers to the supernatural, it was a Maya innovation that placed the ruler in the lineage of the gods. In the process auto-sacrifice, in which lines of descent were recreated, became a central focus of public elite legitimation.

**Notes**

1. This essay is based in large part on discussion and papers produced for a seminar in Mesoamerican Iconography at the University of Illinois in 1985. The authors would like to acknowledge the contribution of David Grove, both in providing the context in which the issues discussed were raised and in encouraging us in our development of these ideas. Joyce produced the final draft; any errors or infelicities of expression are entirely her responsibility.

2. David Grove originally suggested that this unique vessel was not authentic. Subsequently, based on the agreement between the baseline design and that on a newly discovered monument from Chalcarzingo, he reevaluated this vessel and concluded that it is certainly authentic, although still unique.

3. "Frontier art" is a concept developed by Grove (1984), to describe the greater explicitness in Formative Period art outside the Gulf Coast heartland. In his view, frontier art is more explicit because the audience to which it is addressed is not yet fully conversant with the conventions of Olmec art as developed and expressed in the heartland. Hence, Highland Mexican ceramics depict full-body zoomorphs, while Gulf Coast ceramics feature largely abstract motifs.

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