

# A DIVINE WIND: THE ARTS OF DEATH AND MUSIC IN TERMINAL FORMATIVE OAXACA

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## Abstract

This paper examines the social context of music and musical instruments in pre-Columbian Mesoamerica through the detailed analysis of a late Terminal Formative period (A.D. 100–250) burial from the site of Yuguë in the lower Río Verde Valley of Oaxaca. The burial contained a sub-adult male interred with an incised bone flute and a plaster-backed iron-ore mirror. The Yuguë flute is the earliest reported bone flute from Mesoamerica and is incised and carved to create the bas relief image of a skeletal male figure. Based on the instrument's archaeological context and elaborate incising, we argue that the flute was categorized in pre-Columbian ontology as an animate object that actively participated in ceremonial action at Yuguë. While the nature of such ceremony remains unclear, the incising on the flute indicates that the instrument was capable of making manifest ancestral and divine forces affiliated with rain, wind, and agricultural fertility.

While ancient music was inherently ephemeral, gone once its sound ceased, an extensive record of portable objects, visual art, and ethnohistoric documents attest to its importance in pre-Columbian Mesoamerica. Musical instruments appear in exclusive high-status contexts such as palaces (Inomata and Stiver 1998; Stockli 2007) and temple precincts (Both 2005a). Musicians and instruments were painted onto temple walls (Gann 1901; Miller 1988) and in the pages of codices. They occur in caches in public spaces (Both 2005a) and in tombs (Caso and Bernal 1952). Instruments can be found in the form of modest ceramic whistles and ocarinas in domestic middens and non-elite burials (Barber and Hepp 2010; Hepp 2007; King 2003; Martínez López and Winter 1994; Sánchez Santiago 2005; Yaeger 2000). Their ubiquity in the archaeological record emphasizes their significance; people of all social positions played musical instruments for a wide range of purposes. While the documentation and organology of Mesoamerican musical instruments has a long scholarly history (Both 2010), consideration of the social context of pre-Columbian music is a topic that has only recently been broached by researchers (Both 2005b, 2007; Houston et al. 2006; Olivier 2002; Taube 2001). The more recent studies suggest that music was not simply an aural accompaniment to certain kinds of social action and that musical instruments were more than tools for producing sound. Instead, recent research suggests that music and instruments were enmeshed in communication and interaction between humans and other animate entities within the Mesoamerican universe.

Drawing on these ideas, we seek to expand the discussion of music in pre-Columbian Mesoamerica through the detailed examination of a Terminal Formative period (150 B.C.–A.D. 250) burial from the site of Yuguë in the lower Río Verde Valley on the Pacific coast of Oaxaca (Figure 1). Burial 14-Individual 16 (B14-I16) consisted of a sub-adult male wearing an iron-ore

mirror and holding an elaborately incised bone flute. Both the incising on the instrument and its archaeological context offer a unique opportunity to consider the social context of music and musical instruments at Yuguë and in Mesoamerica more broadly. Like many Mesoamerican instruments (Hammond 1972; Martí 1955, 1968; Martínez López and Winter 1994; Mendoza 1941; Payne and Hartley 1992; Peterson 1952; Sánchez Santiago 2005), the Yuguë flute bears the portrait of an anthropomorphic figure (see Figure 10). Given the ability of portraits to literally embody the essence of a depicted entity in Mesoamerican ontologies (Furst 1995; Guernsey 2006; Houston et al. 2006; Houston and Stuart 1998; Monaghan 2000; Stuart 1996), we argue that the Yuguë flute was an animate object with a voice and a life essence that actively participated in social action. Attributing animacy to the flute requires us to consider musical production as part of interactions between human and “nonhuman” beings (following Walker 2008; see also Gell 1998; Latour 1999; Mills and Ferguson 2008) rather than simply as human-produced harmonic or rhythmic sound. It also suggests that B14-I16 was not simply the interment of a young man and his possessions, but rather the multiple burial of animate beings linked, in life and in death, through their social relationships with one another.

## ARCHAEOLOGICAL CONTEXT

Burial 14-Individual 16 was recovered from a late Terminal Formative period (A.D. 100–250) cemetery located at the summit of the 10 m high earthen platform that comprises much of Yuguë's 9.75-ha area (Barber 2005; Joyce 1999) (Figure 2). The area was not domestic, and was used for collective ritual and burial throughout the Terminal Formative period (Barber 2005). The cemetery, or Burial Area 1 (BA1), was a discrete burial group containing the remains of at least 44 individuals (Figure 3).

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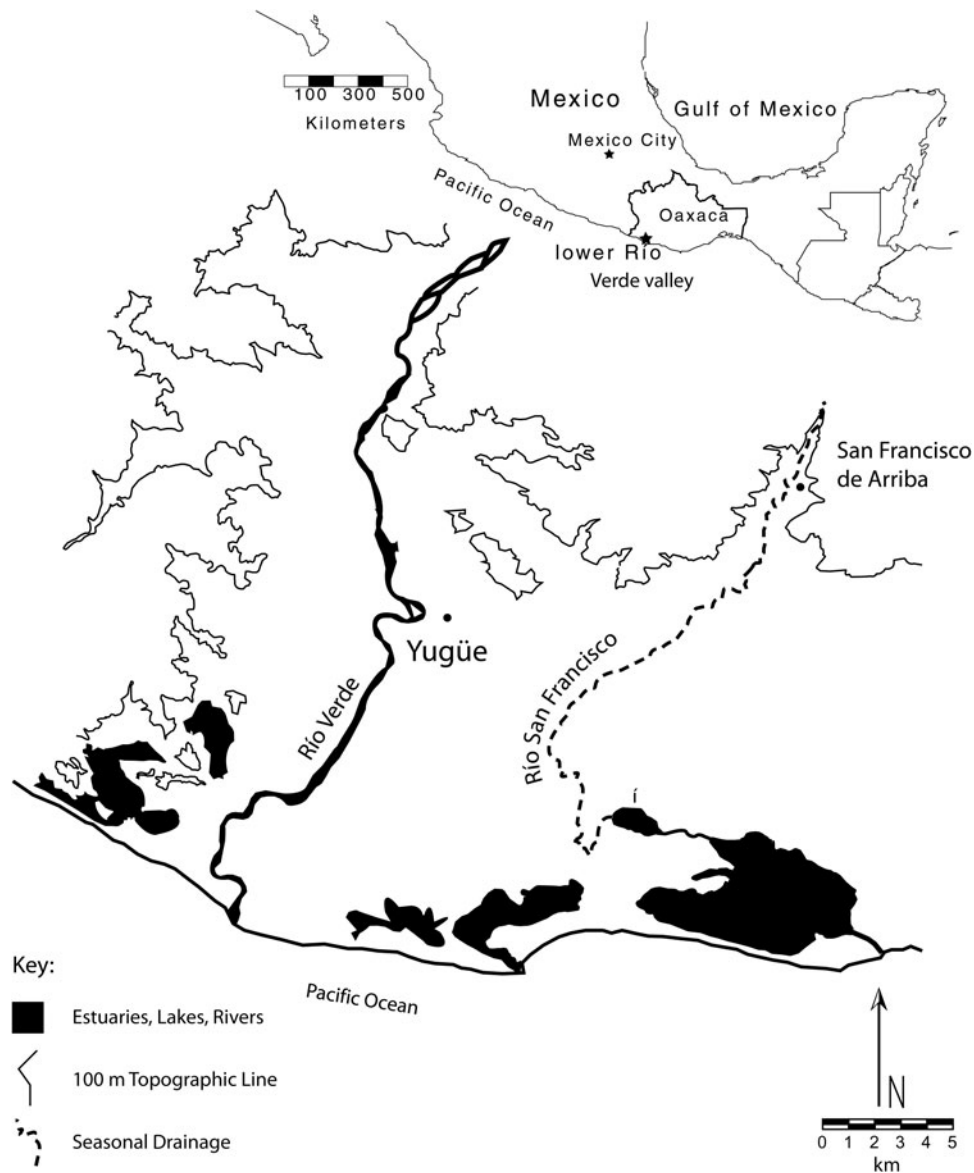


Figure 1. The lower Río Verde Valley with sites mentioned in the text.

The east and south limits of BA1 were abrupt and formed a clear right angle, suggesting that the burials had been emplaced beneath the floor of a now-invisible superstructure built of earth and organic materials. Sub-floor collective burial in non-residential buildings was practiced throughout the Late (400–150 B.C.) and Terminal Formative periods in the lower Verde region (Barber 2005, 2008; Joyce 1991a, 1991b, 1994). Both primary and secondary burials were present, and the majority of primary interments had been disturbed by the placement of subsequent individuals. Both sexes were represented, and ages ranged from neonate to elderly adult (Mayes and Barber 2008). In general, individuals in the cemetery had been emplaced following a standard pattern. Adults were buried in an extended position, on their right sides with their heads to the west. Juveniles were placed perpendicular to the adults, on their left sides with their heads to the south. There were several exceptions to this pattern, in part due to cultural disturbance caused by later interments. In one case, an adult female holding an infant was interred following the pattern for a juvenile (Burial

8-Individual 8) (Figure 3). Four individuals had either grave goods or dental modification (Table 1). Five ceramic vessels were also present in the fill of the burial area but could not be definitively associated with any particular individual due to the commingling of remains. Small, unshaped fragments of the soft local granodiorite bedrock were placed beneath the skulls of six individuals: three adult males, two adult females, and one juvenile. Only one of these individuals, a young adult male (see Table 1), also was interred with offerings.

Burial 14-Individual 16 was a sub-adult male between 15 and 17 years of age buried according to the pattern of other adults in the cemetery (Barber 2005:394–395) (Figure 4). No burial pit was evident, unsurprising given that six individuals were buried later in the superimposed fill; there were no pathologies that could indicate cause of death (Mayes and Barber 2008). An iron-ore and plaster disc was located below B14-I16's mandible (Figure 5) and the flute was resting against his left forearm. The fingers of his left hand were curled around the bell of the instrument. The

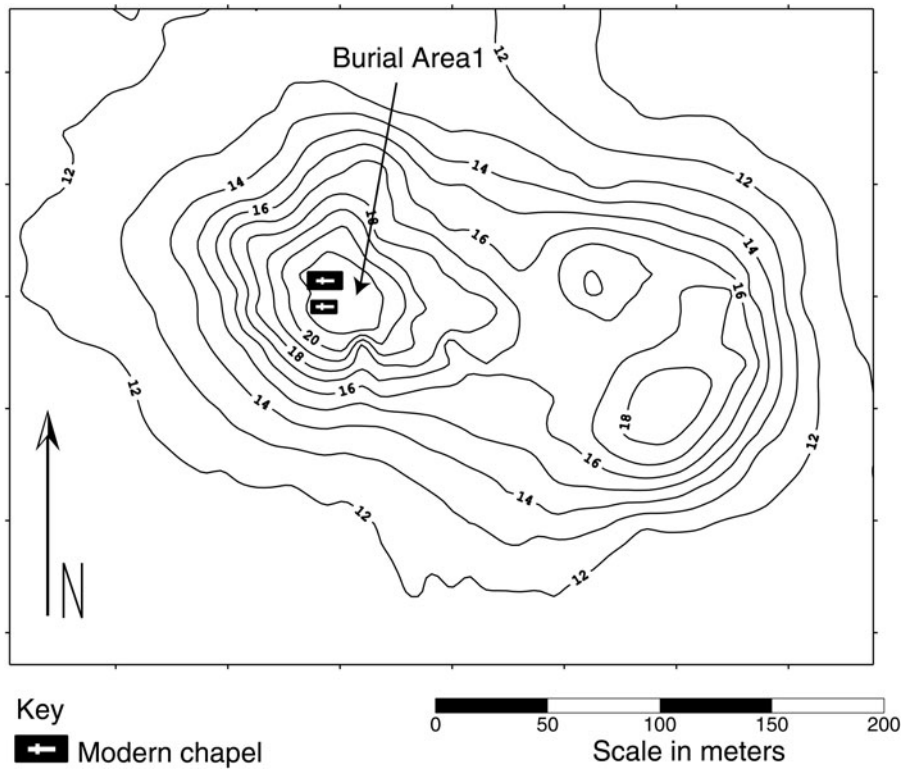


Figure 2. Topographic map of the Yugué platform with excavation areas indicated.

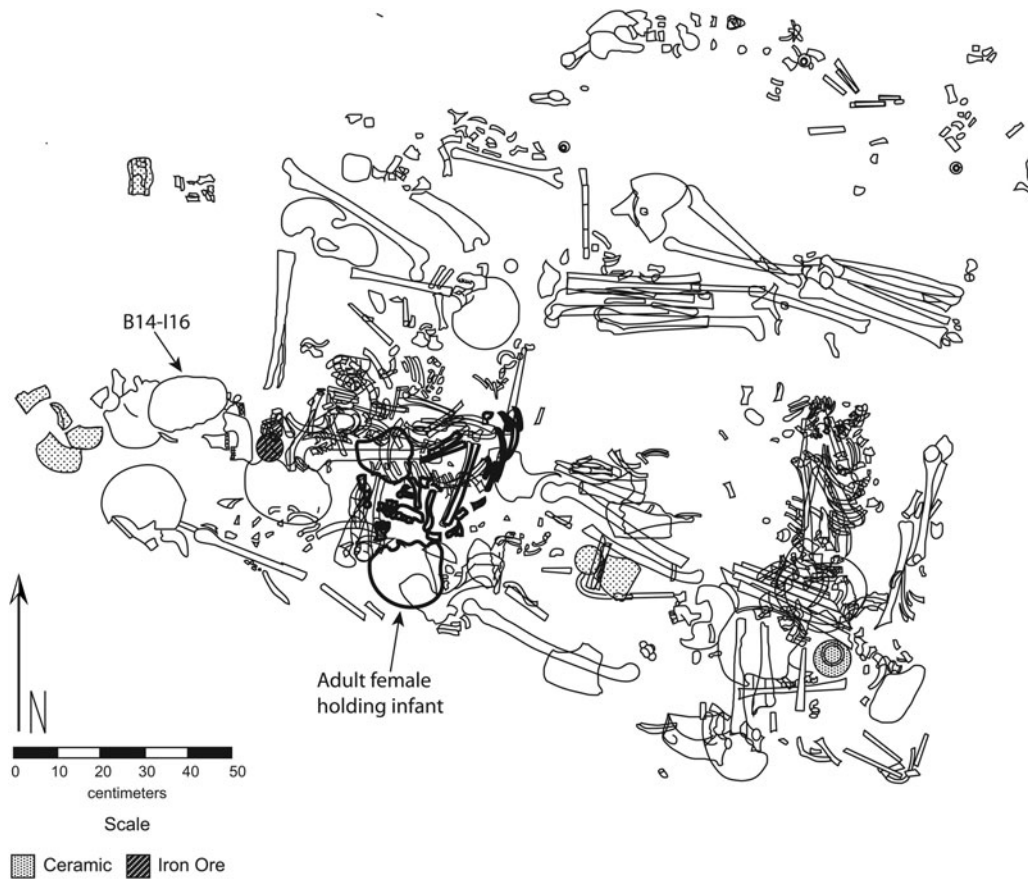


Figure 3. Burial Area 1, Yugué.

Table 1. Burial offerings and dental modification, Terminal Formative period

Burial	Individual	Sex	Age	Position	Comments
8	8	F	40 – 50	Extended left	Pyrite incrustations in upper incisors
11	12	–	6	Partial, Left side	String of 29 greenstone and white stone or shell beads, anthropomorphic greenstone pendant
14	16	M	15 – 17	Extended right	Plaster-backed iron-ore mirror, incised deer femur flute, stone beneath skull
28	32	F	30 – 40	Secondary?	Circular impressions in incisors for incrustations

mouthpiece of the instrument was near his elbow, and the stops were facing away from his body. A line of six fragments of granodiorite had been placed beneath the flute.

While it is not possible to reject the hypothesis that I16 was a human sacrifice, we believe that the burial context and contents more strongly support the interpretation that he was a prominent community member who died of natural causes.<sup>1</sup> BA1 itself was a supra-domestic burial location for individuals of varying social positions (Barber 2005). The very elaborate items with which I16 was buried distinguish him from the other 43 individuals buried in the cemetery. However, at least one adult woman from BA1 had pyrite incrustations in her incisors and a juvenile was interred holding a string of white stone and greenstone beads. Burial offerings from earlier interments nearby also contained grave goods, including a greenstone pendant interred with a juvenile and four ceramic jars placed in the burial of an adult. Thus, several individuals of different ages and sexes buried in this part of the site were distinguished from others through grave goods. The fact that some, but not all, individuals were interred with grave goods suggests that people with differing access to social valuables were buried there. Pathologies within the cemetery also varied, with some individuals showing limited post-weaning evidence for physical stress and others manifesting health problems like anemia and arthritis that may have been influenced by lower social status (Mayes and Barber 2008; Melmed 2006). BA1 also contained both sexes and all ages, reiterating the area's use as a local, collective burial site. All of the intact adult interments in BA1 follow an azimuth of 15° east of north, a locally-significant orientation repeated site-wide in architecture, burials, and caches for at least 400 years. We doubt that a human sacrifice would be included in a community cemetery. There is also the issue of Yügüe's size. At 9.75 ha, it was a third-order site in the lower Verde's Terminal Formative site hierarchy and over 20 times smaller in area than the regional political center of Río Viejo. While regional political relations at this time are not well understood, we find it unlikely that a small site such as Yügüe would be a locus at which human sacrifice was carried out.

## PHYSICAL CHARACTERISTICS OF THE YÜGÜE FLUTE

### The Yügüe Flute as a Musical Instrument

The Yügüe flute was a vertically held external duct flute (following Hornbostel and Sachs 1961:26) made from the left femur of a white-

tailed deer (*Odocoileus virginianus*) (see Barber et al. 2009) (Figures 6 and 7). When played, the bone would have been held in an inverted position with the embouchure at the distal end of the bone and the bell at the proximal end. There are four stops running down the ventral side with a probable fifth stop near the bell of the flute on the bone's dorsal side. While four stops are common in Mesoamerican flutes, frequently occurring in examples made of ceramic from the Classic (A.D. 300–800) and Postclassic (A.D. 800–1521) periods (Both 2002; Crossley-Holland 1980; Marti 1978; Payne and Hartley 1992), instruments with stops on

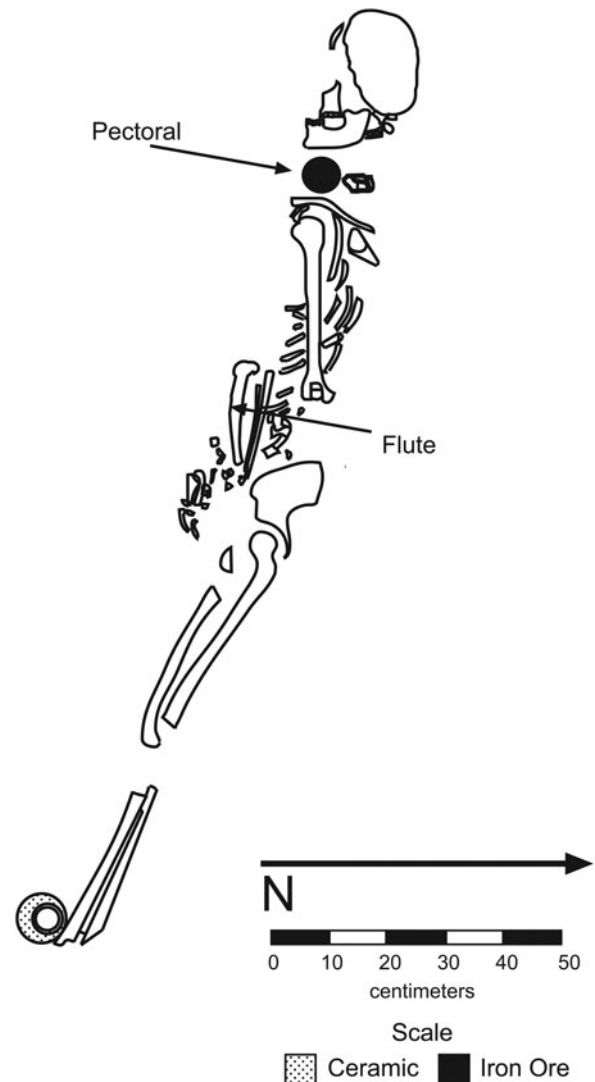
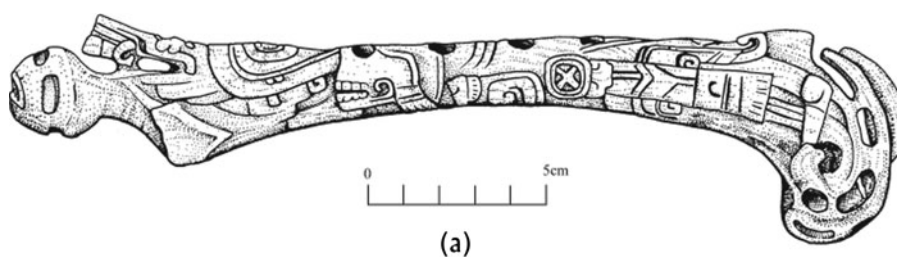


Figure 4. Burial 14-Individual 16, Yügüe.

<sup>1</sup> This burial obviously begs comparison to the Toxcatl ceremony, in which a young man who had spent a year impersonating the Aztec divinity Tezcatlipoca and playing the flute was sacrificed (see Olivier 2002, 2003). However, there is neither evidence for such a divinity or ceremony prior to the Postclassic period (Olivier 2003:123) nor that such a divinity was ever recognized by ethnic groups in Oaxaca (Paddock 1985).



Figure 5. Iron-ore and plaster pectoral recovered with BI4-II6.



(a)

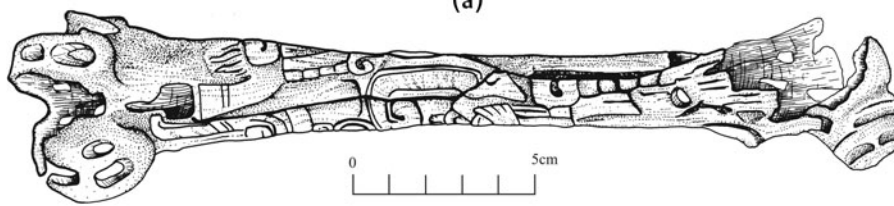


(b)

Figure 6. Yugué flute, lateral view.



(a)



(b)

Figure 7. Yugué flute, dorsal view.

both sides of the windway are uncommon. Like all instruments in the duct-flute family, external-duct flutes produce sound by forcing air over a beveled edge in the instrument's windway; the edge is usually located on a square aperture somewhere below the mouthpiece (Crossley-Holland 1980). In external-duct flutes, a duct separate from the main resonating chamber of the instrument is used to channel air over the beveled edge. In the case of the Yugüe flute, a separate duct was necessary for the production of sound because the aperture is located approximately 1.5 cm below the dorsal projection of the distal condyles, making it impossible to blow directly onto the beveled edge (see Figure 7). No duct was found with the instrument when it was excavated, indicating either that the flute was interred without the duct or that the duct was made from organic material that did not preserve. Because of the instrument's extremely fragile condition, it cannot be played. Information on the range of tones the flute produced is therefore unavailable.

External-duct flutes are documented in Mesoamerican ethnography, ethnohistory, and archaeology (Barber et al. 2009). Flutes with external ducts of perishable material have been described ethnographically for the Lacandon Maya (Marti 1968), the Pames of north-east Mexico (Contreras Arias 1988), the Yaquis of Sonora (Desmore 1972), and the Coras of Nayarit (Jauregi 1993). External-duct flutes are depicted in the *Dresden Codex*, the *Codex Tonindeye*, and the *Codex Iya Nacuaa* (Figure 8).<sup>2</sup> The duct flutes depicted in the two Mixtec Codices are part of a place name sometimes translated as the "Hill of the Flowery Flutes," a location that Manuel Hermann Lejarazu (2006) has argued was probably located on the coast of Oaxaca. Interestingly, these possibly coastal flutes have a sound mechanism very similar to that of the Yugüe flute, with an external duct and an aperture on the side opposite the stops (Barber et al. 2009). There is also an external-duct flute made of bone from Totolapan, in highland Oaxaca, that lacks archaeological provenience but may be Postclassic in date (Barber et al. 2009). The Yugüe flute is currently the earliest example of an external-duct flute reported for Mesoamerica.

Although unusual because of its raw material and elaboration, the Yugüe flute is part of a well-documented body of musical instruments recovered from pre-Columbian contexts in the lower Río Verde Valley and Oaxaca. The burned fragments of at least one other incised bone flute were found in a Terminal Formative midden located near BA1 at Yugüe (Figure 9). Ceramic ocarinas and whistles are common in Terminal Formative middens at sites throughout the region. The ceramic instruments tend to be zoomorphs, usually in the shape of birds, which produce up to three notes and a range of microtones (Barber and Hepp 2010). Ceramic flutes and whistles have been recovered from Late Classic (A.D. 500–800) and Early Postclassic (A.D. 800–1200) period domestic deposits at the site of Río Viejo (Barber and Hepp 2010; King 2003). Beyond the lower Verde, ceramic ocarinas and whistles are common in Terminal Formative contexts elsewhere in Oaxaca (Martínez López and Winter 1994; Sánchez Santiago 2005, 2009). Five other bone flutes, all dating to the Classic or Postclassic period, have been recovered at sites in highland Oaxaca (Barber et al. 2009).

<sup>2</sup> The *Codex Tonindeye* is also known as the *Codex Nuttall* or *Codex Zouche-Nuttall* and the *Codex Ica Nacuaa* is also known as the *Codex Alfonso Caso* or the *Codex Columbino-Becker* (see Jansen and Pérez Jiménez 2004:269).

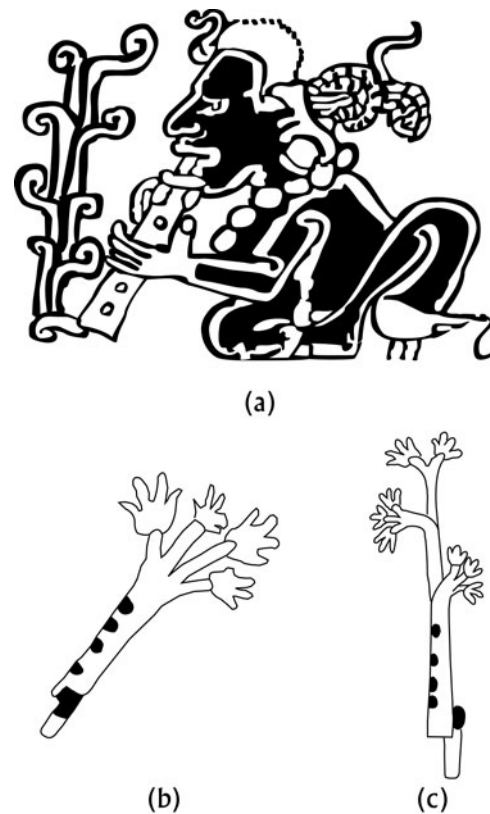


Figure 8. External-duct flutes depicted in pre-Columbian codices: (a) flute player from the *Dresden Codex* (Redrawn from Thompson [1972] by W. Bayuk), (b) "Hill of the Flowery Flutes" from the *Codex Tonindeye* (Redrawn from Nuttall [1975]), (c) "Hill of the Flowery Flutes" from the *Codex Ica Nacuaa* (Redrawn from Caso and Leon-Portilla [1996]).

#### The Yugüe Flute as an Art Object

In addition to being the earliest intact example of a Mesoamerican bone flute, the Yugüe flute can be distinguished from most pre-Columbian Mesoamerican flutes due to the artistry of its design (Figures 10 and 11). The central element of the image is an anthropomorphic male figure in profile facing toward the bell of the instrument. The individual is rendered in low relief, with the surrounding cortical bone excised so that the central figure is set slightly above the background. The head and torso of the figure are "skeletonized" (following Furst 1982) while the limbs are fleshed. The individual's head is depicted as a skull and the eye orbit is one of the stops of the flute. Hair, perhaps in the form



Figure 9. Burned fragment of incised bone flute, Yugüe.

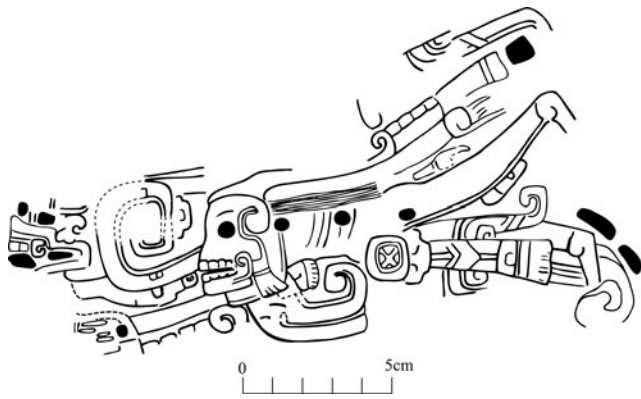


Figure 10. Rollout of incising, Yugué flute.

of a scalp lock, and ribs are depicted. The figure’s feet wrap around the mouthpiece end of the flute. What is probably the left arm and hand extend forward, with the stop on the underside of the flute serving as the palm of the figure’s hand. The individual wears a loincloth and there is a cartouche with crossed bands at his waist, perhaps representing a belt or buckle. The figure wears a pectoral, to which is attached a tasseled rectangular object that may be a mirror.

Additional motifs that accompany the central figure are also rendered in low relief. A volute adorned with dots and a trefoil element emanates from the mouth and nasal aperture of the skull. Attached to the volute is an anthropomorphic face in profile. This second individual wears a buccal mask over the mouth and in front of the nose. A second volute carved around the femoral head of the deer bone emanates from the buccal-masked figure’s mouth (see Figure 6). Two anthropomorphic jaw bones are present: a mandible and possibly a maxilla. Between the right arm and left leg is a curved implement with a handle. Details on the central figure and additional elements are rendered in shallow, fine incision. Tassels on the loincloth and possible mirror, for instance, are depicted as shallow tics in the elevated surfaces of each element. There are also a series of small openings and deep carvings around both the embouchure and bell of the flute (see Figure 6). Damage to the lateral side of the bone has obscured additional incised motifs.

The incisions make use of the bone’s topography to imbue a sense of three-dimensionality to the design. The bend in the individual’s left knee, for instance, is incised over a protuberance in the distal diaphysis of the bone. The front and back portions of the loin cloth appear on different sides of the bone. And the carvings on the femoral head create a three-dimensional volute emanating from the mouth of the buccal-masked figure.

The rendering of the image and the motifs present reveal evidence of cultural transmission between both highland-coastal and transcoastal interaction spheres. The cluttered organization of the incised design on the flute is reminiscent of later Formative period art from the southern highlands and coast of Mesoamerica. The entire bone is carved or incised, with little open space between elements. Similarly crowded incising is present on some contemporaneous local ceramics (Barber and Joyce 2004; Joyce 1991a; Joyce et al. 1998) (Figure 12). Cluttered images are also characteristic of two Terminal Formative period incised bones from Chiapa de Corzo (Dixon 1958), stelae from Izapa (Norman 1973; Smith 1984), Kaminaljuyu (Parsons 1986), and Takalik Abaj (Smith 1984:Figures 43–45), and indeed much Formative period Maya-style art (e.g., plates in Fields and Reents-Budet 2005). Late and Terminal Formative period Zapotec art, on the other hand, is less involuted. Stone monuments such as the carved orthostats from Building L-sub (Scott 1978) and incised slabs of Building J (Caso 1938:12–16; Marcus 1983b) from Monte Alban, and the ballplayers from Dainzu (Orr 1997) lack densely-packed imagery. The use of carving to create a low relief image is also common in Formative period southern Mesoamerica (Guernsey 2006:1; Norman 1973) but not in the Zapotec highlands (Scott 1978). Excision to create the appearance of low relief for some design elements occasionally appears on gray ware ceramics in the lower Río Verde Valley, suggesting that relief was employed in the region across several media (Figure 13). The proportions of the skeletal figure, with his long limbs, are also characteristic of art from southern Mesoamerica (Norman 1973; Parsons 1986) rather than the squat figures common to Terminal Formative and particularly Classic period Zapotec art (Orr 1997; Urcid 2005b, 2011).

Specific iconographic elements on the flute are related to both highland Oaxacan and southern Mesoamerican imagery. Skeletal imagery does not occur in the Formative period in highland

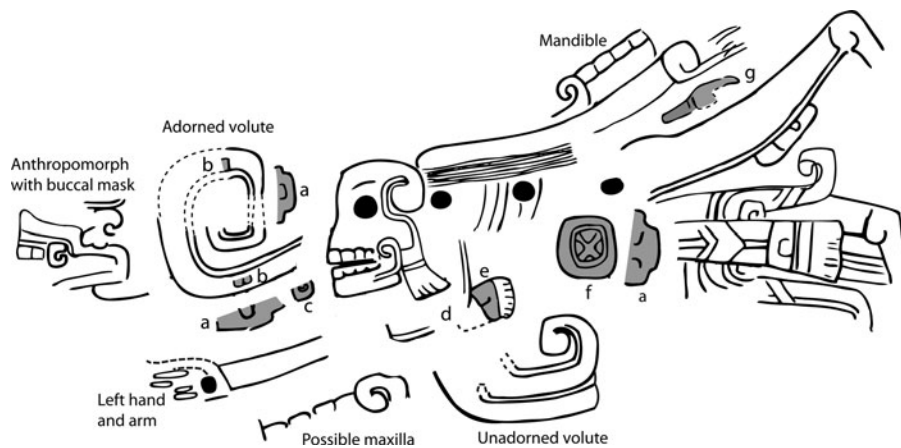


Figure 11. Graphic elements incised on Yugué flute: (a) trefoil, (b) paired dots, (c) U-infix motif, (d) pectoral, (e) mirror?, (f) crossed-bands, (g) handled implement.

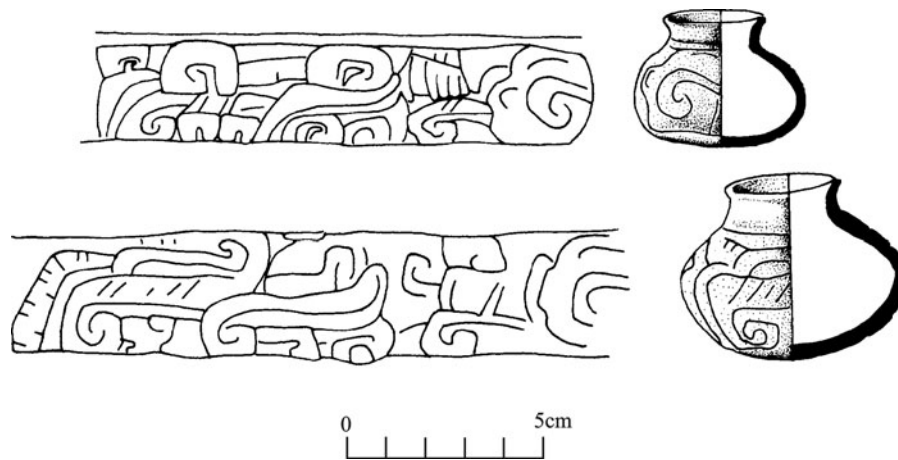


Figure 12. “Cluttered” image organization from late Terminal Formative period gray ware miniature jars, San Francisco de Arriba (Courtesy of Andrew Workinger; drawing by J. Cruz).

Oaxaca, and is rare in the Classic period (Boos 1966; Caso and Bernal 1952; Orr 1997; Scott 1978). However, there is a skeletal figure depicted on Izapa Stela 50 (Norman 1973:Plates 49–50). The crossed-band motif on the central figure’s loincloth also appears on five stelae at Izapa (2, 4, 11, 22, and 60) (Norman 1973), but it does not appear in Zapotec art until the Classic period, when it is modeled on ceramic urns (Sellen 2007). The buccal mask worn by the individual adhering to the central volute is typical of Zapotec imagery from the later Formative and Classic periods. Celestial jaws, which we argue below are indicated by the two anthropomorphic jaw bones on the Yügüé flute, are common in Formative period Mesoamerican art (Norman 1976; Smith 1984; see also Taube 1995) but do not appear in Zapotec art until the Classic (Marcus 1983d:137). The use of human-like teeth in celestial jaws occurs in Classic period Zapotec art (Urcid 2005b) but not in southern Mesoamerican art (Guernsey 2006: 79). Finally, the trefoil motif on the Yügüé flute closely matches Zapotec renditions of vegetation (Sellen 2007; Urcid and Winter 2003). We suspect that the mix of stylistic and iconographic conventions evident on the Yügüé flute is representative of a local artistic style, although defining such a style will require a larger iconographic database.

### ICONOGRAPHY OF THE YÜGÜÉ FLUTE

The central figure on the flute bears elements pertaining to both death and fertility, embedding it within widespread Mesoamerican rain, wind, and agriculture deity complexes (Nicholson 1971:414, 416; Vail 2000). It is possible that the figure represents a human in the midst of a ritual transformation, however most partially-skeletal male figures in Mesoamerican iconography have been interpreted as depictions of a death god analogous to Aztec Mictlantecuhli (Bernal et al. 1968:26; Byland 1993; Gutiérrez Solana and Hamilton 1977:41, Figure 1; Jansen 1981:110, Figure 5; Schellhaus 1904; Taube 1992). Both Mictlantecuhli and Maya God A, also a death divinity, were associated with sacrifice (Nicholson 1971:427; Taube 1992:13). While the skeletal features of the central figure on the flute and perhaps the handled object near the right hand could suggest a connection with death or sacrifice; skeletal characteristics can also indicate generative capabilities (Furst 1982:220; Klein 2000:11; Norman 1976:147). Several



Figure 13. Carving used to create low relief, late Terminal Formative period gray ware plate, Yügüé.

pre-Columbian divinities that were not specifically representative of death had skeletal permutations or features, including: Quetzalcoatl (Nicholson 1971:429, Figure 46), Cihuacoatl (Milbrath 1996), the Cihuateteo and Tzizimime (Klein 2000), and the creator gods in the Mixtec *Codex Yuta Tnoho* (Furst 1982: 209; Jansen and Pérez Jiménez 2007:71, Figure 3.2).<sup>3</sup> A Late Formative period (400 B.C.–A.D. 250) example comes from Izapa Stela 50 (Norman 1973:Plate 50; 1976:145, Figure 3.35), on which an umbilicus extending from the rib cage of a skeleton is held by a fleshed winged figure (see also Miller 1974). The umbilicus is an explicitly life-giving organ, and on Izapa Stela 50 it is adorned with serpentine motifs that connect the scene to rain and fertility.

<sup>3</sup> The *Codex Yuta Tnoho* is also known as the *Codex Vindobonensis* (Jansen and Pérez Jiménez 2007:21).



On the Yügüe flute, agricultural fertility and life-giving phenomena like rain and wind are referenced in several ways. Trefoil motifs are attached to the loincloth and the sound scroll extending from the mouth of the skeletal figure (see Figure 11). Trefoils have long been recognized as representations of vegetation, particularly maize, in Zapotec iconography (Boos 1966; Caso and Bernal 1952; Sellen 2007; Urcid and Winter 2003). Hanging from the skeletal figure's loincloth is a trefoil with two interior curved lines, which Sellen (2007:244) has identified specifically as a maize kernel in Zapotec iconography.

An anthropomorph wearing a buccal mask is attached to the central volute on the Yügüe flute. Buccal masks were an important signifier of *Cociyo*, the Zapotec deity credited in Colonial and Historic period accounts with controlling clouds, rain, wind, thunder, and hail (Caso and Bernal 1952; Marcus 1983e; Masson 2001; Seler 1904; Sellen 2002b; Taube 2001; Urcid 2001, 2009; von Winning 1987). We follow Sellen and others (Masson 2001; Sellen 2002a, 2002b, 2007) in identifying *Cociyo*, and the Chatino equivalent *Tyoo* (Urcid 2009:30), as deities related to the buccal-masked central Mexican and Mixtec gods Tlaloc, Ehecatl, and Lord 9 Wind (Jansen and Pérez Jiménez 2007:74; Nicholson 1971:414; Sellen 2002b:6) rather than just the name given to the animating force within lightening (Marcus 1978, 1983e). As we discuss below, we also recognize the significance of animism in pre-Columbian Chatino religious belief and assert that both divine and more generalized animate forces are referenced on the Yügüe flute iconography.

A *Cociyo*-like deity is identifiable in Zapotec script and ceramic urns prior to 300 B.C. (Caso and Bernal 1952:25; Urcid 1992; 2005b:Figure 1.21) and was the Zapotec expression of a broader group of Mesoamerican rain divinities that extended back to the Middle Formative period (800–400 B.C.) (Covarrubias 1957; Taube 1995). By the Early Classic period (A.D. 300–500), there was a well-established set of conventions pertaining to *Cociyo* both in texts and on other media such as Zapotec ceramic urns and tomb murals (Marcus 1983c, 1992a; Masson 2001; Sellen 2002b; Urcid 2005a, 2005b). *Cociyo* was usually characterized by a short, straight or up-turned buccal mask, fangs, a bifid tongue, and an orbital plaque or elaborate eyebrows (Boos 1966; Caso and Bernal 1952:17; Marcus 1983c; Sellen 2007; Urcid 2001: Figure 4.13, 2009). The individual from the Yügüe flute shares several of these characteristics, notably the straight buccal mask, fang, and possibly the orbital plaque. The adornment above the

eye is indicated by the line curving upward from the circular eye-opening. While the anthropomorph on the Yügüe flute is one of only four incised renditions of anthropomorphic faces from the Terminal Formative period in the lower Río Verde Valley (Figure 14), the unadorned, almond-shaped eyes of those individuals could mean that the divergent eye form on the flute was intentional.

Together, the buccal-masked figure, the trefoils, the paired dots, and the “U-infix medallion” (Guernsey 2006:102) describe the sound generated by the skeletal male as life-giving and beautiful. The buccal-masked individual indicates that the sound is imbued with rain and wind while the trefoils indicate that the sound bears with it life in the form of vegetation. Paired dots frequently appear on sound volutes in Zapotec iconography (Marcus 1983a: Figure 7.4, 1983d:Figure 5.7; Urcid 2005b:Figures 5.14, 5.30, 5.45) and are common in visual art throughout Mesoamerica during the pre-Columbian era (see Houston et al. 2006; Houston and Taube 2000:274–275). Houston and Taube (2000:275) argue that these elements depict either flowers or jade beads. In other words, the dots describe the beauty, purity, potency, or nobility of the sound (see Taube 2004). The beauty of the sound may also be indicated by the U-infix medallion just in front of the skeletal figure's mouth, which Guernsey (2006:102) argues indicates flowery attributes on winged figures on Izapa stelae 4 and 60. Flowery or beautiful sound descriptors for flute music are in keeping with ethnohistoric evidence. In a study of musical terms from sixteenth-century dictionaries, Stanford (1966) found that “clear” and “high-pitched” sounds like those of a flute were preferred for voices and for instruments. The Mixtec term *ndadze*, for instance, means “ugly” but also “low-pitched,” and the word *nahuatl* means both “sonorous” and “high-pitched.” The adornments on the sound volute can be compared with the lack of adornments on the volute located next to the figure's rib cage. While the dorsal area of the flute has been damaged, the latter volute appears to emanate from the figure's pectoral. We believe that the lack of adornments here indicates that a different phenomenon is being depicted, probably smoke.

The skeletal figure, and by extension the sound he produces, enters the mundane world from the celestial realm through a portal represented by the mandible and possible maxilla next to his arms (Figure 15). Portals between existential realms were frequently depicted as jaws in Formative period Mesoamerican art (Grove 2000; Taube 1995:93–94). Images of figures descending

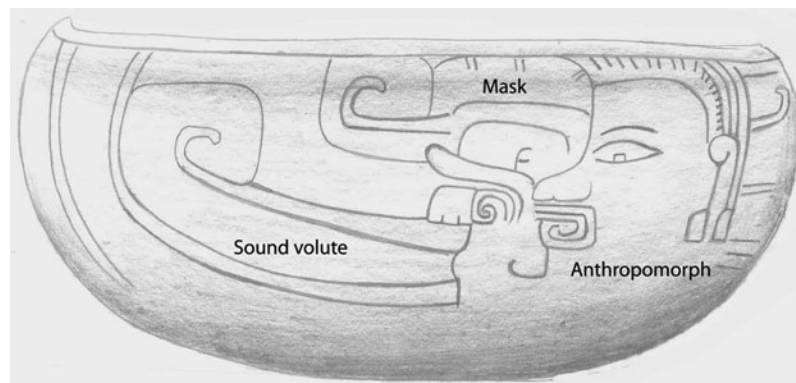


Figure 14. Incised image of anthropomorph wearing mask and producing sound, late Terminal Formative gray ware bowl, Yügüe (Drawing by J. Cruz).

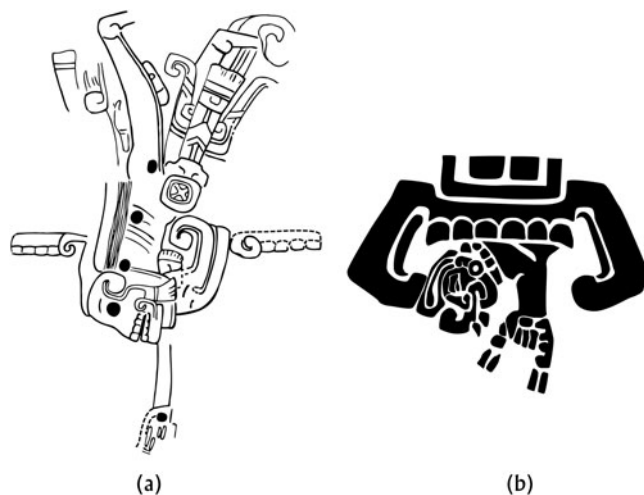


Figure 15. Idealized image of (a) Yugüie flute, and (b) descending figure on Late Classic period Stela MNA 6-6059, Monte Alban [from Caso 1928:Figure 8f]; redrawn by W. Bayuk].

from celestial jaws are found on stone monuments from Late Formative Izapa and Kaminaljuyu (Guernsey 2006:78–79, 92) and in Oaxaca during the Late Classic and Postclassic periods (Caso 1928; Hermann Lejarazu 2008; Marcus 1992a:238, 1992b:232–234; Sellen 2007:296; Urcid 1992:193, Figure 4.105; 2001). In general, celestial jaws had zoomorphic features likened to those of a jaguar, serpent, bird, or some combination thereof (Caso 1928; Guernsey 2006; Marcus 1983d:140; Norman 1976:23; Quirarte 1973:17; Sellen 2007:297; Stirling 1943:62; Taube 1995:93; Urcid 2005b:53–54). While the anthropomorphic jaws on the flute are unusual in comparison to portal imagery elsewhere in Mesoamerica, we believe that the mandible and maxilla are nonetheless celestial referents. A link between celestial portals and human jaws in some Zapotec art is evidenced by the presence of dental modification on the teeth of celestial jaws carved into the interior door jambs of Late Classic Cerro de la Campana Tomb 5 (Urcid 2005b:Figures 5.24,5.25). Urcid (2005b:79) observes that the modification depicted matches that found archaeologically in human teeth. The crossed-bands motif on the loincloth provides an additional indicator of the skeletal figure's celestial origin. Although crossed-bands can simply indicate portals or openings (Grove 2000:288–289), the motif also has strong celestial connotations in many contexts. The winged figure painted at Oxtotitlan, Guerrero, wears a crossed-band motif on his chest (Grove 2000:Figure 8). All of the winged figures from the corpus of depictions on stelae at Izapa bear this motif in their wings (Norman 1973:Plates 3–4, 7–8, 51–52); it appears in the avian headdress of a ruler on Kaminaljuyu Stela 11 (Guernsey 2006:92), in the wings of an avian figure from Takalik Abaj Altar 30 (Guernsey 2006: Figure 5.3), and on a celestial band from Altar 13, also from Takalik Abaj (Guernsey 2006:Figure 5.17).

The body position of the skeletal figure and its orientation on the flute further support the interpretation that the individual is descending through a celestial portal. The skull is perpendicular to the torso, one arm is extended, the legs are slightly separated and one knee is bent. Izapa Stelae 2, 4, and 23 all depict anthropomorphs descending from celestial jaws (Norman 1973:Plates 4, 8, 38; Smith 1984:10). On Stela 4, the descending figure is shown

with its head rotated perpendicular to its torso (Norman 1973: Plates 7, 8) while Stela 23 shows a descending male figure wearing a loincloth set between slightly separated and bent legs (Norman 1973:Plates 37 and 38). Figures descending from celestial jaws with a rotated head and extended arm are common in later Zapotec and Mixtec art (Caso 2002:296, 299; Hermann Lejarazu 2008:53, 57; Marcus 1983a:194, Figure 7.4; Urcid 2005b: 126–127). In addition, the skeletal figure would have appeared in a descending position when the instrument was held in the bell-down playing position. Because it is a vertical flute, the Yugüie flute could be played most comfortably with the bell of the instrument pointing towards the ground (Barber et al. 2009). Although playing postures are in part culturally defined, the *Dresden Codex* provides a pre-Columbian depiction of the bell-down playing position for an external-duct flute (see Figure 8a). Of course a portable object can be moved, making it possible for the instrument's player to place the central figure in a flying position (when the bell was parallel to the ground) or an ascending position (when the bell was skyward) although both playing positions would have been uncomfortable to sustain.

Taken together, the Yugüie flute's iconography presents a complex of intertwined elements that are tied not only to the incised design, but also the artifact's function and raw material. The skeletal figure whose body extends almost the entire length of the flute provides an anthropomorphized portrait of the instrument's animating force. The figure is oriented on the flute such that the volute that depicts his breath or voice extends towards the bell of the instrument, thus indicating that the figure's breath/voice was the music of the flute. In addition, the sound production mechanism of the instrument is literally incorporated into the figure's body. His eye orbit is unquestionably a stop, and the probable stop on the underside of the instrument was incorporated into what may have been the palm of the figure's left hand. The other three stops are located near potent (Houston et al. 2006: 134–179; Marcus and Flannery 1996:18–19; Schele and Miller 1986:110) parts of the body: the neck (possibly the larynx), beneath the ribs (the heart), and between the legs (the genitalia). Producing musical notes with the flute would have required the player to touch different parts of the skeletal figure's body; covering his eyes, holding his hand, touching his heart, and so on. Finally, the figure's skeletal mien could be in part a reference to the fact that the flute was made of bone.

The flute's music, indicated by the adorned sound-scroll, makes manifest a second entity. That the buccal-masked figure and the skeletal figure are separate beings is evident in the placement of the former on the sound scroll. If the skeletal figure were wearing the anthropomorphic entity as a mask, the mask would have been depicted immediately in front of the skull and the sound scroll would have extended from the mouth of the mask. For instance, a contemporaneous bowl from Yugüie depicts a masked figure with a sound volute extending from the combined mouths of the mask and anthropomorph (see Figure 14). The avian-costumed anthropomorph from Oxtotitlan also wears a mask painted immediately in front of his face. Because it is located on the sound scroll rather than in front of the skull, the buccal-masked entity probably represents a deity related to the later Chatino rain god *Tyoo* that was made manifest through music.

The three-dimensional volute at the bell of the flute represents the culmination of the musical experience. Extending from the mouth of the buccal-masked figure, the second volute wraps

around the bell of the instrument and is located exactly where sound was emitted. Thus the imagery on the flute can be interpreted as depicting an animating essence of celestial origin (the skeletal figure) whose voice makes manifest a *Tyoo*-like divinity (the buccal-masked figure). The voice of the divinity, in turn, is audible in the flute's music.

### LIFE, DEATH, AND MUSIC AT YUGÜE

Burial 14-Individual 16 was the multiple burial of two animate beings: a human and a flute. The life essence of the flute had a celestial, non-human origin. As several scholars have noted, Mesoamerican animating essence was not coherent and discrete (Furst 1995; Houston et al. 2006; Houston and Stuart 1996, 1998; López Austin 1990:137, 1997). It could be divided, broken, shared, and transferred (Furst 1995). One means of sharing animating essence was through portraiture (Houston et al. 2006; Houston and Stuart 1996, 1998; López Austin 1990:137–139; Stuart 1996). Houston and colleagues (2006:74) observe an “essential sameness between image and subject in Maya belief” that was likely pan-Mesoamerican and that had considerable time-depth (see also Houston and Stuart 1996, 1998). Furst (1995:95) sees the identical practice among the Mexica, who “[in] fixing the image of the gods or ancestors...may have held and kept available for their own use the spirits’ vitalizing power and animating force.” To bear the image of an animate being was, to some degree, to *be* that being—what Monaghan (2000:29) calls a “focus on surfaces” in Mesoamerican conceptions of divinity. Further, as a sound-producing entity the Yugüe flute was doubly-endowed with vital force. In Mesoamerican ontologies, to have a voice is to be alive (Houston et al. 2006:36; Houston and Taube 2000; Monaghan 1995:98; Taube 2001).

The Yugüe flute was not a being independent of its player, however. When B14-I16 died, so did the instrument; it was buried rather than kept aboveground to be played by someone else. The flute's interment also indicates that the instrument had been enplaced much like a dead human being. The flute sat atop six fragments of stone similar to those that had been set under the crania of several individuals in BA1. None of the other portable objects in the cemetery had been as carefully placed nor did they have stone fragments beneath them.

If B14-I16 contains the remains of not one, but two once-living beings, it begs the question of what kind of relationship obtained between them. The bones of B14-I16's left hand were not clutching the instrument across the diaphysis of the bone, a configuration that would have covered the portrait. Instead, the flute was set against B14-I16's forearm with the incised skull facing up. His hand cupped the bell, cradling the instrument much as an adult female (Burial 8-Individual 8) elsewhere in the cemetery was interred cradling an infant (see Table 1 and Figure 3). We believe that both the iconography and the deposition of flute and human imply the existence of a social relationship between the two that was more like the relationships that existed between people than like the kinds of subject-object relationships often assumed for the buried dead and associated offerings. Rather than a musician buried with the flute they owned, we see in B14-I16 the interment of an inextricably linked pair each of whom was capable of both acting and causing action. Indeed, it was such a potent relationship that one could not live without the other. We do not mean to imply that either B14-I16 or the flute became inert or “essenceless” once they had been interred. Indeed, both human and instrument were treated

with considerable care for some time after their burial. Despite six subsequent interments in the superimposed sediment, B14-I16 remained fully articulated and the flute remained in his grasp. Most other individuals in the cemetery were partially or significantly disarticulated by later burials (Barber 2005; Mayes and Barber 2008). There is considerable evidence from elsewhere in Oaxaca (Feinman et al. 2010; Lind and Urcid 2010:Chapter 6; Middleton et al. 1998) and Mesoamerica (McAnany 1995:60–63) that the physical remains of the dead continued to interact with and serve as points of reference for the living. Post-interment efforts to keep B14-I16 intact indicate that his physical remains and the flute had continuing significance for Yugüe's Terminal Formative period residents.

B14-I16 and the flute were a pair with exceptional capabilities. The flute, as we have already discussed, was an instrument with a celestial essence that shared its voice with a divinity. In indigenous ontology, it was a liminal entity (Chase and Chase 2009) existing in both the celestial and terrestrial realms of existence. It served as a link between these two realms by making the voices of celestial entities audible to listeners in the terrestrial world. Mirrors were similarly endowed with the ability to connect different realms of existence, particularly the terrestrial and subterranean realms. Both Taube (2002) and Olivier (2003:240–265), in their extensive discussions of the iconography and ethnohistory of mirrors in central Mexico, observe that mirrors could provide passageways or openings between different planes of existence. At times analogous to eyes (Olivier 2003:249–250; Taube 2002:181–182), mirrors could serve as windows through which deities or ancestors could view the living and vice versa. Mirrors sometimes were understood to be the surface of water or the earth (Olivier 2003:260–261; Taube 2002:186–189), or caves (Taube 2002:194), all of which were important transition points between the terrestrial and subterranean realms. Mirrors were related to fire (Carlson 1981; Taube 2002) and “the ‘nocturnal and watery’ aspect of the sun” (Olivier 2003:262). Together, human, flute, and mirror would have existed at the intersection between the various planes of existence, embodying the universe itself.

Liminal spaces were incredibly important and dangerous locations for a human being (Monaghan 2000:36; Viveiros de Castro 2004), making B14-I16's youth and presence at a small site like Yugüe particularly interesting. While ethnohistoric documents describe a wide range of ritual practitioners (Klein 2000; López Austin 1967; Nicholson 1971), archaeological studies of the topic have focused on the capabilities and responsibilities of rulers and/or elites (Lohse 2007). Given the presence of the mirror and flute, B14-I16 was almost certainly a ritual practitioner. It is unlikely that he was a member of the lower Río Verde Valley's ruling elite, however, since he was buried in a collective burial area at a small site. Instead, he appears to have been an individual of high status in the context of Yugüe; a local or intermediate elite (see papers in Elson and Covey 2006). Both flute and mirror attest to B14-I16's access to socially-valued items with restricted circulation. Mirrors were consistently associated with elites across Mesoamerica from the Formative period through the Postclassic (Miller and Martin 2004; Schele and Miller 1986; Taube 2002). The nearest sources of iron-ore and lime for making plaster were the Oaxaca highlands (Pires-Ferreira 1976), and the mirror pectoral worn by B14-I16 is the only such item currently known from Oaxaca's coast. The flute is also a unique item because it would have required specialized knowledge and skill to produce (Inomata 2001, 2007). Mesoamerican elites from at least the Middle Formative period

fostered both long-distance economic relationships (Graham 2002; Hirth 1992) and relationships with non-human entities and ancestors in the celestial realm and underworld (Guernsey and Love 2005:41; Joyce 2000; McAnany 1995). So B14-I16 had social relationships that spanned not just the various existential realms but also more mundane geographic and economic spheres, situating him in the broader context of pre-Columbian status relations as a local elite with significant ritual capacity and responsibilities. His burial reiterates that in the Terminal Formative period lower Río Verde Valley, at least, some ceremonial abilities were not exclusive to rulers.

The exact nature of such ceremonial acts must remain conjectural. However, the iconography of the flute implies that communication with celestial entities, and particularly a *Tyoo*-like rain divinity, took place within range of the flute's sound. As an animate, liminal entity the flute would have been a fundamental and engaged participant in ritual at Yügüe. Music produced by the flute (and its player) was not just sound accompaniment to some other kind of ritual action. This music was itself the ritual action: part of a conversation between the everyday and the divine. B14-I16 was not a performer providing sound to a passive audience. Like later Aztec musicians, he was an "expert [mediator...who] established a form of communication with the spiritual world that helped the voices of the gods to be heard" (Both 2005b:6270). He was distinct from those later musicians in that the complex institutional framework through which Aztec temple music was produced likely did not exist in the Terminal Formative period lower Río Verde Valley. Aztec temple instruments, also animate, generally were stored in special facilities separate from the people who played them (Both 2007:97). The relationship between the Yügüe flute and player was far more intimate, resulting as it did in shared death and burial. B14-I16 was likely a ritual specialist who also had non-musical expertise, as evidenced by his mirror pectoral. While the flute has occupied much of

the discussion here, the mirror may have had equal significance in terms of ancient ritual action. We believe that B14-I16 was a local conduit, someone who could contact both celestial and underworld entities on the behalf of either his kin group or the broader community of Yügüe. His age and his burial at a small site emphasize that significant social responsibilities fell not just on rulers or adults. B14-I16 hints at the diversity and complexity of Terminal Formative period ceremonial practices in the lower Río Verde Valley.

## CONCLUSION

The music of the Yügüe flute was a creative and transformative phenomenon enabling both humans and non-human beings to shift experiential perspectives in such a way that each could interact with the other (Viveiros de Castro 2004). It delimited an aural space that was shared by the living and the divine. The creation of such spaces was fundamental to the successful completion of a wide range of social transactions in pre-Columbian Mesoamerica, from petitioning for rain to human sacrifice to enthronement to war (Both 2007; Houston et al. 2006; Miller 1988; Olivier 2002; Stanford 1966). Musical instruments were not inert objects manipulated by musicians during these transactions, but rather active participants. Many, if not all, pre-Columbian musical instruments probably were animated by virtue of their voices and any images they carried on their surfaces. The Yügüe flute is an unusual example because of its elaborate incising, archaeological context, and raw material, but the many more mundane instruments found in middens or domestic interments may have held a similar place in pre-Columbian ontologies. These variations in context, instrument type, and instrument elaboration merit further exploration because music was fundamental to the ancient Mesoamerican lived experience.

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## RESUMEN

Este documento examina el contexto social de la música e instrumentos musicales en la Mesoamérica precolombina por medio del detallado análisis de un entierro del sitio de Yügüe, en el valle inferior del río Verde de Oaxaca. El entierro (E14-I16) contenía un sub-adulto de género masculino con una flauta de hueso inciso y un espejo de hematita con escayola en la parte trasera. La flauta de Yügüe es uno de los objetos portátiles más elaborados que se conoce en la parte baja del valle del río Verde inferior y es la flauta de hueso documentada como la más antigua en Mesoamérica. Las incisiones en el instrumento representan a una figura masculina parcialmente esquelética que desciende a través de un portal celestial. La voz de la figura está representada como una espiral adornada con íconos que indican fertilidad, lluvia y belleza. Hemos interpretado la figura esquelética como la entidad que anima la flauta y cuya voz se escuchaba cuando se tocaba el instrumento. El estilo de las incisiones y los elementos iconográficos presentes revelan influencias de los zapotecas de las tierras altas y de Mesoamérica del sur.

En base al contexto arqueológico del instrumento y su incisión elaborada, pensamos que la flauta fue categorizada durante la ontología precolombina como un objeto animado que participaba activamente en la acción ceremonial de Yügüe. Mientras que la naturaleza de tal ceremonia permanece poco clara, las incisiones en la flauta nos indican que el instrumento era capaz de manifestar las fuerzas divinas afiliadas con la lluvia, el viento y la fertilidad agrícola. Una representación inciso de un cuchillo en el instrumento sugiere que el sacrificio también tomó parte del ritual durante el cual se tocaba la flauta. El instrumento, el espejo y el individuo con el cual estos elementos fueron enterrados formaron parte de una acción ceremonial, la cual era esencial para la supervivencia de la pequeña comunidad a la cual todos pertenecían. Su conexión con la vida y la muerte, nos sugiere que la música no era un simple acompañamiento auditorio para el ritual, sino un aspecto fundamental del mismo.

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