Music of the Ancient Maya: New Avenues of Research

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Introduction

Anthropologists who work in Mesoamerica often complain about the so-called "archaeological gaze:" the tendency by scholars to concentrate too much on the archeology of the ancient Maya at the expense of their modern descendants. Whatever the merits of this complaint, the reverse is actually the case in regards to music. Far more is known of the music of contemporary Maya groups in Yucatán, Chiapas, Belize and Guatemala than that of their ancestors, as numerous ethnomusicologists have conducted important studies on the music of the region over the last several decades. By contrast, relatively few studies of ancient music have emerged. Until the 1970s, knowledge of the music of the ancient Maya derived mostly from iconographic studies of murals and pottery, and consisted primarily of organological classifications. Little information could be gleaned from the thousands of glyphs that adorned hundreds of monuments, stelae, codices and ceramic vessels, for no one could understand this ancient form of writing. But after the deciphering of the so-called "Maya code", a massive re-evaluation of Maya culture and history began to take place, and anthropologists, linguists and epigraphers have undertaken important studies based on this new information.

These studies have uncovered avenues of research that have informed musical scholarship, some of which I explore in this paper. But it should be noted at the outset that the recent breakthroughs have revealed no actual music—no melodies or rhythms—and moreover that none are ever likely to be found. Maya music, like that of so many other cultures around the world, was undoubtedly transmitted orally, and no evidence has emerged that either rhythm or melody was ever notated.

Part 1: Maya Organology

Iconographic studies and the discovery of actual instruments has shed light on the nature and functions of music in Maya culture. Though I don't have time to address all of them here, they include research on conch shells, flutes, composite flute-maracas, trumpets, turtle shells, drums and metal bells. It is becoming increasingly clear that by the late Classic period (600-800 A.D.) and perhaps earlier, Maya metallurgy had developed to the extent that small bells and other instruments were fashioned from gold and copper. (See Figs. 1a, 1b) An image from the Madrid Codex (See Fig. 2) shows a dancing lord with jingle bells attached to his ankles, reinforcing similar figures found in various stelae and other monuments.



Figures 1a, 1b: Gold and Copper Bells, Santa Rita, Belize.



Figure 2: Dancing Lord with Jingle Bells, Madrid Codex.

The Maya used music in both royal and mythological contexts: warfare, human sacrifice, ballgame rituals, and to accompany dancing at court celebrations. These elaborate art forms undoubtedly had their counterparts among everyday people, though there probably would have been pronounced differences reflecting socio-economic status, the "high art"

and "low popular" traditions of their day. Thus, instruments in the shape of birds and animals were probably used as hunting calls and children's toys. (See Fig. 3)



Figure 3: Maya Flutes, Museo Nacional de Antropología, Mexico City.

The importance of music as a funerary element is also evident from various stelae and vases, where instruments such as trumpets, conch shells, rattles, and turtle drums are used to escort funeral processions. (See Figs. 4, 5)



Figure 4: Funeral Procession, with Three Trumpet Players (right), and Trumpet and Conch Shell Players (left), Kerr Vase 6317.



Figure 5: Funeral Procession, with Musician Playing a Turtle Drum (left) and Musician with Trumpet Striking a Turtle Shell (right-of-center), Kerr Vase 7613.

A recently discovered gravesite of two elite women in Pacbitun, Belize, contained several instruments, indicating that they were used in their funerals, and suggesting that the women themselves had been musicians, challenging the impression conveyed by painted and sculpted images that musicians were almost exclusively male.

The long-held assumption that there were no chordophones in pre-contact Mesoamerica (or, indeed, anywhere else on the American continent) is continually being reinforced, for we have yet to find even a single portrayal of a string instrument on any Maya stela, structure or codex. Yet one particular illustration has raised much speculation: a vase showing a court dancer with what was erroneously described as a string instrument by Linda Schele and Peter Mathews. (See Fig. 6)



Figure 6: Maya Friction Drum.

As John A. Donahue has pointed out, the instrument is in fact a friction drum, an instrument also thought to not have existed in pre-contact America. Its identification expands ancient Mesoamerican organology, raising questions regarding an instrument which was long thought to have been derived from African influences during the colonial period.

Another instrument whose absence has provoked much speculation is the marimba. Its wide-spread prevalence among modern Maya communities in Chiapas and Guatemala has prompted claims that the instrument must have been of pre-Columbian origin. But those claims have long been challenged by archeologists and ethnomusicologists who point to the lack of marimbas among the hundreds of depictions of Maya instruments, and who instead embrace the more commonly accepted theory that marimbas were derived from African instruments such as the balafon and introduced to the Americas as a result of the slave trade.

Nevertheless, one instance of an ancient marimba-like instrument has emerged. In the tomb of Yax Nuun Ayiin, ruler of Tikal from 379-425, a wooden frame was found on which five turtle shells had been placed in a linear arrangement of decreasing sizes. (See Fig. 7)

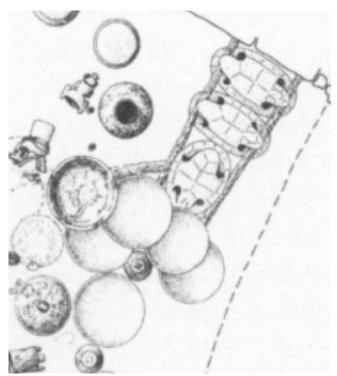


Figure 7: Turtle Shell Marimba, from Burial 10, tomb of Yax Nuun Ayiin, Tikal.

Though the Maya's use of turtle-shells as percussion instruments has long been known, they are usually depicted as a single instrument. What is unusual in the Tikal tomb is the arrangement of several shells placed in sequence on a frame, ordered and combined as a

more complex instrument, capable of producing many pitches in quick succession—in other words, a marimba. The turtle shell marimba links Yax Nuun Ayiin to the spiritual world, and emphasizes his personal and spiritual connection to music. Moreover, it suggests that he himself was a marimba player, the earliest known on the American continent. Though African xylophones were undoubtedly also an important contributing influence, contemporary Mayas can now look to their own ancestry as a source for the instrument that is most popular in present-day Chiapas and Guatemala.

Part 2: Maya Dance

Various scholars including, Nikolai Grube and Matthew Looper, have also undertaken exploration of Maya dance, with telling results for music scholars. Dancing was an essential element in the ritual and cultural expressions of the Maya, and there is undoubtedly a correlation between the meaning and function of both art forms.

Analyses of functional architecture at sites such as Tikal, Copan and Chichen Itza has redefined our understanding of performance venues and of the relationship between audiences and performers. Ceremonial spaces such as dance platforms and ball courts are often intimate venues, clearly not meant for large public spectacles, and their location and architectural organization indicate that the rituals performed therein were small, private events for elite audiences. But large public spectacles with music and dancing on extensive platforms were also part of Maya culture, a form of political and religious propaganda designed to impress the population.

As Nikolai Grube put is, "dances were performed in various contexts, both cosmological and socio-political," for "warfare, dynastic events, and royal visits, as well as supernatural contact and sacrifice." Dance, visually representational, would have conveyed intellectually the intended political or divine message, to assert political authority and to show the ruling class's connection to the divine. Music, often non-referential but emotionally powerful, would have provided an expressive complement that might have had an even bigger communicative impact on Maya audiences.

Specific Maya Dances were named after animals such as jaguars, monkeys, motmot birds, deer, etc. Given that each dance had specific functions and idiomatic characteristics (such as steps and costumes), they would also have had their own particular music, rather than "generic" accompaniment, perhaps reflecting the dance's animal characteristics.

There is also evidence that Maya dance practices survived into the Colonial period, and contemporary Maya dances reveal information regarding the dance practices of their ancestors. Matthew Looper identifies several commonalities between the dance traditions of ancient and contemporary Mayas in terms of ritual, aesthetic models, socio-economic and political issues, and community identity. We can infer from Looper's findings that those commonalities also extend to the role of music in these societies.

Part 3: Flower Mountain

Students of Maya music can also draw from recent studies that have examined Maya aesthetic ideals, which are often connected to nature. Karl Taube has identified a marked relationship between beauty and nature among the ancient Maya, especially concerning birds and flowers, which are used as a metaphor for music, color and landscape, as well as a link to the spiritual world. Taube defines the concept of "Flower Mountain", a mythological place of origin that was linked to "the sun, heat, music, and brilliant or iridescent colors...Flower Mountain served both as an abode for gods and ancestors, and as a means of ascent into the paradisal realm of the sun." (See Fig. 8) Flower Mountain iconography often portrays a living mountain or mountain cave, adorned with flowers or flower symbols of various kinds.



Figure 8: Flower Mountain (left), Female and Male Figures with Offerings (center), Maize God with Breath Scrolls Emerging from his Mouth (right), San Bartolo, Guatemala.

Of specific interest is the concept of the *breath soul*, a vitalizing life force that sustains the spiritual world, and which becomes an important metaphor for both the physical environment and the supernatural world-view. Since music was an essential means of conjuring gods and other mythological beings, the breath soul is expressed by music and the sweet-smelling aroma of flowers, both carried by air and wind.

Two Mayan deities are particularly prominent in Flower Mountain iconography: the Maize God, seen in Fig. 9 striking a turtle shell, and especially god H—the Wind God, since music and sound are carried by wind and air.



Figure 9: The Resurrected Maize God Strikes a Turtle Shell with a Bird Talon, San Bartolo, Guatemala.

According to Taube, the wind god, already identified with flowers and the breath soul, is also the god of music. Several illustrations portray the wind god singing and playing musical instruments, including conch shells and even non-wind instruments such as drums and rattles. (See Fig. 10)

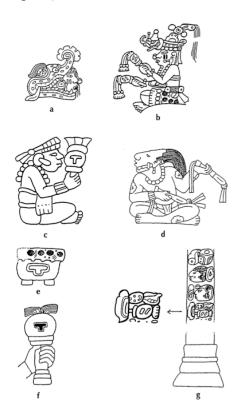


Figure 10: The Relation of the Classic Maya Wind God to Music.

(Illstrations by Karl Taube, reproduced with his permission).

- **a.** Wind god emerging out of mouth of crocodile with conch trumpet snout, detail of Early Classic incised vessel.
- **b.** Wind god shaking rattles ornamented with blossoms from same

Early Classic vessel.

- **c.** Wind god as personified form of the number three holding rattle marked with ik' sign, detail of text from carved bench, Copan.
- **d.** Wind god as patron on the mouth Mak shaking rattles and apparently singing, detail of Palace tablet, Palenque.
- **e.** Drum with *ik* 'sign, detail of Early Classic incised vase.
- **f.** Rattle with *ik* 'sign, detail of sculpture from Temple 11, Copan.
- **g.** Bone handle of rattle with text mentioning the wind god and a glyphic compound containing the rattle sign, detail of unpublished carved bone from Burial 116, Tikal.

In Maya iconography, two sings in particular have a strong connection to wind, flowers and music. The first is the ik' sign, a T-shaped glyph which symbolizes wind and the Wind God. (See Fig. 11) The ik' sign appears on numerous depictions of musical instruments, including significantly non-wind instruments such as rattles, drums and even the friction drum discussed earlier.

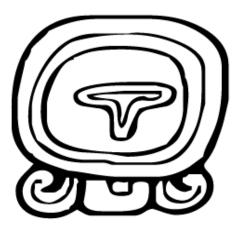


Figure 11: ik' Sign

The second important sign is the breath scroll, which can take the form of two curving arcs, symbolizing flowers, quetzal feathers, jade beads or serpent heads, and often emerging from the mouths or noses of Maya deities. Taube argues that the breath sign was an indicator of music, or at least of song. (See Fig. 12)

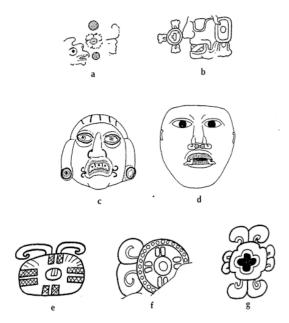


Figure 12: Portrayal of breath in Classic Maya iconography.

(Illstrations by Karl Taube, reproduced with his permission).

- **a.** Breath depicted as flower with pair of breath scrolls, detail of Late Classic vessel.
- **b.** Patron of the month Pax deity exhaling *ik*' sign element with blossoms, Ouirigua Stela C.
- **c.** Human face with breath emanation at corners of mouth, detail of Early Classic Tikal figurine
- **d.** Calakmul jade mask with breath carved in white shell emerging from nostrils and corners of mouth.
- **e.** Early Classic flower with breath scrolls, detail of text from carved conch trumpet.
- **f.** Early classic blossom with breath scrolls.
- **g.** Late Classic Flower in form of quatrefoil cave with breath scrolls.

Much Maya scholarship has emphasized the darker, bloodier side of the culture, including human sacrifices and grotesque portrayals of Xibalba, the Mayan underworld. But Maya culture was in fact much more oriented towards the flowery realms of beauty, both earthly and celestial. A big part of that cultural orientation was music, which, as Taube puts it: "although fleeting and immaterial, served as means of returning at least temporarily to the ancient realm of the gods and ancestors. Although dark and chaotic Xibalba figures prominently in Classic Maya thought, they were not subject to the aesthetic relationship between beauty and nature." Aspects of the physical world that were deemed ordered and beautiful were more closely related to "the shining paradisal realm of flowers and beauty" than to the stench and decay of the "threatening forest wilds."

This conception dovetails well into Jacques Attali's theories regarding music production modes in traditional cultures. In the first of Attali's four musical stages, a traditional culture, relying on oral tradition, will identify the threatening and chaotic elements of nature—decay, death and destruction—with "noise." By contrast, music is "the channelization of noise" or "the sublimation of violence" which drives and sustains the human and cultural heritage through memory and ritual. The Maya's advanced aestheticization of nature, most notably in the form of Flower Mountain, is perhaps the best representation of Attali's theories, for in Maya society, where control of nature was such a dominant concern, the parallel goal of controlling "noise" must also have been paramount, and must have led to an equally sophisticated musical system.

Part 4: Narrative Structure

Another avenue of exploration for the student of Maya music is the structural complexity of Maya language, poetry, and narrative. Theorists such as Theodor Adorno and Leonard G. Ratner have long commented on the close relationship between music and language in terms of character, structure and syntax, albeit from a western perspective. Though a similar correlation cannot be assured in a system as far removed as that of the ancient Maya, the structure and organization of language and writing undoubtedly had some relationship to that of music, particularly language that was associated with religious observances and narratives.

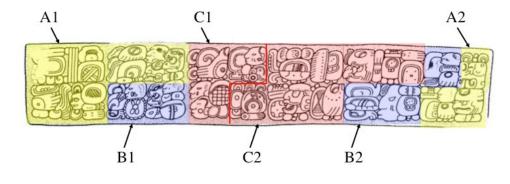
In this respect, we are aided by several literary studies of ancient, colonial and contemporary Maya texts and languages, notably those by Nicholas Hopkins and Kathryn Josserand, which have yielded very illuminating conclusions: "One feature of culture that distinguishes modern Maya communities from other Mesoamerican groups is the richness of their oral tradition. The Maya not only have a rich inventory of tales to tell, they also tell them very well. The stories...are well crafted. There is a strategy to the telling, and a rhythmic, repetitive style of narration that is characteristically Mayan."

These linguists and epigraphers have also examined ancient writings, in the process identifying precise rules of syntax and grammar, which turn out to be extremely subtle and complex. A key discovery is that the literary artistry found in contemporary traditions can also be found in colonial accounts such as the *Popol Vuh* and the *Books of Chilam Balam*, and, most interestingly, in the Classic hieroglyphs.

Hopkins and Josserand found that an important formal device, used in all of these Maya narrative traditions, is the use of couplets: "A couplet is a pair of similarly structured words, phrases, or sentences, which differ only slightly in meaning. For us, rhyme is phonological rhyme, playing one word or syllable against another that sounds almost like it. For the Maya, rhyme is semantic, and they play words against one another for their meaning, not for their sound."

Couplets can be used to elaborate on the meaning of a passage, or to increase or decrease its importance. They often appear in sets that demarcate structural sections, and can be nested within other couplets, resulting in complex internal repetitions and "bookends within bookends." Pairs of couplets can appear as AABB, ABBA or ABAB. More elaborate formal plans can be charted, such as ABBCCDD...A, or ABCCBA, or various

other combinations. Another rhetorical device is the use of triplets, a three-part AAB sequence in which the variation of the third line highlights its content. For example, nested couplets shape the narrative in Lintel 23, from Yaxchilan. (See Fig. 13)



A1 On 20 March, 724 was dedicated the doorway of the house of Lady Xok.

B1 [She is] the sister of Lady Pakal Xok, Lady Ajaw.

C1 [She is] the child of Great Lady, Holy Lady Xibalba.

C2 [She is] the child of 1 K'atun Chief Aj K'an Xok.

B2 [She is] the sister of Lady Tajal Tun, Lady Bakab.

A1 Lady Xok is the mother of Aj Tzik.

Figure 13: Nested couplets in Lintel 23, Yaxchilan. (Analysis by Kathryn Josserand and Nicholas Hopkins, reproduced with permission.)

On a larger scale, Maya narratives often have complex organizational structures, with nested units embedded at several stages: at the highest level, there are broad sections. In one contemporary Chol example, these are labeled "the Setup, the Development, the Peak, and the Conclusion." Each section then contains several episodes, with a central theme or character, and each episode contains a series of related events. Each event might then be described by one or several sets of couplets. Important passages are brought to the reader's attention by repeating key words, by emphasizing titles of nobility, or by employing unusual word order.

Hopkins and Josserand relate this analysis of to a Classic hieroglyphic text, the Tablet of the Slaves from Palenque. (See Fig. 14) Here, "the text is formally segmented by breaks in the time line into four episodes, each of which is composed of three or four sentences. Not all Maya writings follow this formula, but enough of them do to identify a stylistic convention." The authors are careful to point out that: "[a]lthough we make no claim that this particular characterization can be applied equally to all traditional narratives, similar thematic divisions seem to be characteristic of this kind of narration. And while we do not argue for a mechanistic numerological analysis of the texts, we note that the number of sections which occur in a text, like the number of episodes which occur in a section, is very often four."

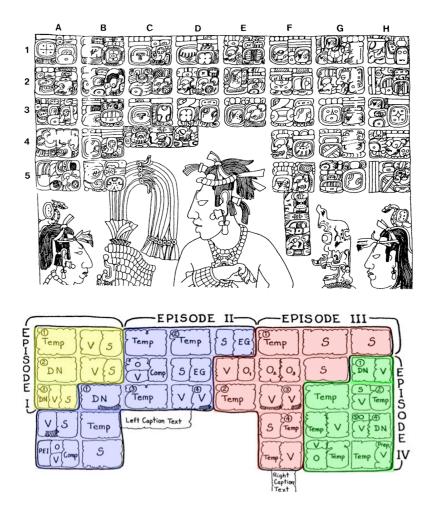


Figure 14: Structural analysis of the Tablet of the Slaves, Palenque. (Analysis by Kathryn Josserand and Nicholas Hopkins, reproduced with permission.)

Another important device in both contemporary and ancient writings is "the peak event", a climactic section which includes the most important part of the narrative. This climax is often marked by increased metaphorical complexity or unusual imagery, language or syntax, in what linguist Robert E. Longacre has referred to as "the zone of turbulence surrounding the peak." Hopkins and Josserand expand on the concept: "It was long recognized by epigraphers that just when an [ancient] text seemed to be approaching the most important events the text got harder to read. This problem was finally understood only when we brought to the epigraphers' attention some of the observations that had been made from studies of modern storytelling among the Maya...At or near the peak event of a narrative, special effects set in. There may be unusual syntax, deletion of seemingly important information, or other deviations from the expected that mark this event as the peak of the narrative."

Distinctive types of couplets are used to highlight events throughout the narration, and

are at their heaviest around the peak event. "Perhaps the most extreme examples of syntactic turbulence are those instances in which an entire sentence is inserted into the middle of another sentence, as in the text from the Sarcophagus Rim, Palenque." (See Fig. 15) Each episode or section might have a peak event, but there will also be an overarching peak event that usually occurs near the end of the account, and which contains the moral of the story.

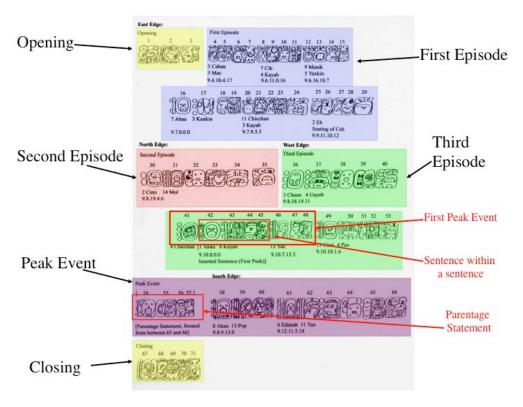


Figure 15: Analysis of Sarcophagus Rim, Palenque. (Analysis by Kathryn Josserand and Nicholas Hopkins, reproduced with permission.)

Integration of the Arts

Recent studies have also identified a marked correlation between the language, architecture and visual art of the ancient Maya. Both the couplet and the three-part sequence discussed above have architectural and artistic parallels. Other studies point to artistic considerations regarding the placement of the text on stelae and monuments that affected its writing. The physical interrelationship between image and text are all considerations that the artist/writer had to address. The combination of literary and visual elements heightens the artistic expression, and thus the aesthetic experience for the viewer/reader.

The realization that the hieroglyphs were not just meant as visual art, or even as language, but also as crafted literature, is one of the great leaps forward in Maya studies. If we consider the Maya achievement of extraordinary techniques in mathematics, astronomy, painting, sculpture, ceramics, architecture, writing, and literature, and we add to these their predilection for spectacle, for celebration, and for dance, we can then begin

to truly comprehend the vast artistic accomplishments of the ancient Maya. Even more impressive is that these art forms were not pursued independently; rather all available artistic media were often carefully combined and integrated, resulting in what can only be described as a Mesoamerican *gesamtkunstwerk*.

Music had an important part to play in this aesthetic. It was an integral part of Maya activities of the royal and priestly classes, to the point where professional musicians occupied an elevated status in the social hierarchy. Since the Mayas favored complexity and sophistication in the other arts, their concept of music undoubtedly followed many of those aesthetic and formal principles. Moreover, the integration of literature with the other arts suggests a similar integration of music and language, and of music and art. Flower Mountain and the Breath Soul, as well as the cults of the maize and wind gods, were undoubtedly subjects of Maya songs and other musical works, and must have somehow been represented in melody and rhythm, as they were in dance. The formal implications are also worth considering: literary phrase structures probably had their counterpart in musical phrases, and musical forms undoubtedly mirrored literary devices and formal plans such as nested couplets, four-part sequences and zones of turbulence.

There is one final source to examine for information on the music of the ancient Maya, and that is the music of their living descendants. It has long been assumed—not without justification—that the music of contemporary Mayas could not have any relation to that of their ancestors who lived one or two thousand years ago. The ravages of time, the brutality of the Spanish conquest, relentless Christian evangelism, ongoing cultural assimilation, the vagaries inherent to systems of oral transmission, and myriad other factors must have destroyed all vestiges of this ancient music. Yet in many cases, as Looper put it, "Maya culture persisted from the Prehispanic period to the present, by the systematic incorporation of new concepts into a symbolic and conceptual framework that remained essentially Maya." Indeed, as we have seen, elements of both the Maya literary and dance traditions—which also relied on oral transmission—survived all those obstacles to the present day. Oral musical traditions might thus also have endured, and might still be present in the musics of contemporary Maya communities. To determine if they did, we would need a comprehensive ethnomusicological overview of music from the Maya lands that would seek to identify musical commonalities of structure, melody, rhythm, instrumentation, narrative and rhetorical devices. That daunting task will hopefully be the goal of future studies.