AZTEC PERCUSSION INSTRUMENTS: THEIR DESCRIPTION AND USE BEFORE CORTES

by Norman Weinberg

I. MUSIC IN AZTEC CULTURE

The Aztec people, probably the most fascinating of all South American Indian tribes, arrived from Aztlan (the legendary region in the north) toward the beginning of the twelfth-century and settled in the fertile valley of Anáhuac in central Mexico.¹ The Toltecs, previous rulers of this area, were gradually dominated by these new tribes who brought their culture and manner from Puebla and northern Oaxaca.² This dominant tribe soon expanded through conquest and in 1325, founded the city of Anáhuac (present day Mexico City) as their center. In less than two hundred years, when Cortes reached Mexico, the Aztec nation had grown to include 182 tribes and stretched as far south as Central America.³ By this time, the city of Anahuac had grown to a population of nearly one hundred thousand.⁴

Several facets point to the belief that the Aztec nation had evolved a rigidly controlled and highly organized musical system. The city of Tezcuco was founded as the musical center of the nation, and here was housed the musical council established to encourage art and science, and especially to attend to the education of the youth.⁵

Although no written musical notation survives today, several terms about music appear in extant writings. Castellanos⁶ presents no fewer than fifty-eight Nahuatl terms that relate directly to music and its performance. Many of these terms are quite specific, including cuicaamatl, cuicachalani, cuicatlali, macehualcuiquiliztli, pilcuicatl, tecuicamaca, and yeccacuica, to mention just a few.⁷ Marti and Kurath,⁸ in their book about early dances of the central region of Mexico, list forty-two different dances and songs that were given special Nahuatl names as well as a classified listing of the same number of terms that relate specifically to specialized Aztec dance steps. One can assume that any culture creating such a multitude of words relating to a subject would manage that subject with respect and reverence.

Music of the Aztecs was linked directly to religious ceremonies and rites. Based on a nature worship with over three hundred gods in the Aztec pantheon, the Tonalpohualli (the sacred almanac) brought the power of each of these gods to the Aztec in daily life. So important was music to the religious service, that absolutely flawless performances were required. Imperfectly executed rituals were thought to offend the gods and errors could be punishable by death. 10

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To the Aztecs, the instruments themselves were thought to be holy. In an old nahuatl legend presented by Castellanos, the origin of music is revealed when he writes:

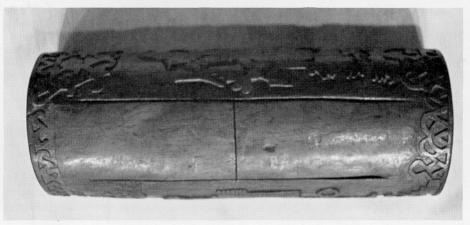
When the gods died in Teotihuacan, their priests began to wander around the world without any direction. One of them reached the sea and there Tezcatlipoca spoke to him instructing him to go ask the Sun for singers and instruments in order to honor the memory of the gods. The sea turtles and fishes formed a bridge over the sea upon which the priest walked. He went up to the Sun's living place and told him why he had come. But, the sun, not wanting to diminish his court had told all those around him not to answer this priest under penalty of being thrown down to earth. But, they were so moved by the begging of this priest that Huehuetl and Teponaztli could not resist. They answered and were thrown down to the ground. Ever since that time, man has had music.¹¹

From this legend, one can see why special significance was given to the instruments named huehuetl and teponaztli. Not only were they instruments to be played, but foremost they were gods.

II. IDIOPHONES; STRUCK, SHAKEN, OR SCRAPED

TEPONATZLI

This instrument is a hollowed hardwood log¹² with three slits cut into the side to form the shape of a vertically expanded letter H. This causes two tongues to form on the side which then becomes the playing surface or keys.¹³ A rectangular opening was cut into the opposite side of the instrument to permit access to the interior while carving out the sound chamber and tuning the keys.



Teponatzli - top view showing the two tongues.

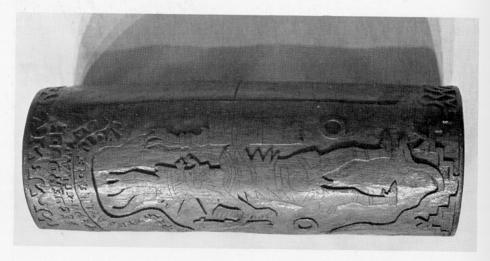
Castañeda and Mendoza, in their exhaustive analysis of the teponatzli of the Museo Nacional de Arqueologia, ¹⁴ give a chart showing the natural resonance of the sound chamber acting as the fundamental pitch while the tongues are tuned to members of that particular overtone series. The most common interval between the two tongues is that of a minor third, ¹⁵ with any interval between a major second and perfect fifth being possible.

These drums are often elaborately carved in bas-relief in anthropomorphic or zoomorphic styles and range in size from 335 millimeters long by 104 wide, to 780 millimeters by 240 wide. The Spanish chronicler Clavigero stated, "The size of the instrument is various, some are so small as to be hung around the

neck, some of middling size and some upwards to five feet long."17

The teponatzli was at times laid on a braided straw mat called the icpalli and the player would either squat behind it or use a low stool. If it was to be played standing up, as was done most often, a tripod type support called the teponazt-zatzaztli was used so that the instrument would have more resonance. 18 The sticks used for playing the teponaztli were usually covered in rubber, but sometimes sticks of human tendons or cotton wrapped in leather were used. 19 Stevenson 20 claims that only sticks of rubber were used and he later quotes Sahagun's description of a festival where, ". . .; the leader. . told them what kind of rubber sticks they were to use in playing the teponaztli. "21 The Codex Becker, however, shows a player of the teponatzli with small sticks having no covering of any type. 22

The teponatzli's function was varied and although it was most often included as an essential element in almost every religious and patriotic festival, it was also used as a call to arms,²³ and as a means of auditioning slaves for the eating table.²⁴ Recently, this instrument has been included in the scores of Stockhausen's *Zyklus* and Berio's *Circles*.



Teponatzli - side view of anthropomorphic carvings.

TECOMPILOA

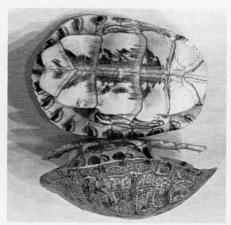
This instrument is quite similar to the teponatzli. Small gourds, similar to those used for drinking water, were suspended below a small teponatzli and functioned as resonators. This was then held under the arm and played with the same sticks as the teponatzli.²⁵

The tecompiloa was used for the feast of the young corn which was during the eighth month of the Aztec calendar. A young maiden who would impersonate Xilonén (the goddess of tender maize) would play the tecompiloa during the march to the sacrificial altar where she would give her life for the hope of a good crop.²⁶

AYOTI

The ayotl was the shell of a small turtle which was held under one arm. The two different plastrons of the shell would emit different pitches when played with a stag's antler.²⁷ Sachs claims that, "It certainly was erroneous to interpret this playing as a gonglike striking; on miniatures as well as on clay figures the antler is represented as being so close to the shell that it must have been used to scrape the uneven surface rather than to strike it.²⁸ Paetkau holds the same view,²⁹ but the Codex Becker³⁰ shows a player of the ayotl using a forked antler being held about six to eight inches from the shell. A clay figure in the collection of Howard Leigh³¹ shows the player holding the ayotl and using a stick having a large rounded ball at its end. A stick of that shape would not normally be employed for scraping.

Its use seems to be very common to ancient Mexicans, as Sahagun describes its use at, ". . .the death feast, at the feast in honor of the raingods on the Etzalqualiztli, at the feast to the mountaingods in the Atemoztli, at the dance of the women, . . . , and on other occasions." 32



Ayotl - showing the two plastrons as well as top and bottom.

TETZII ACATI

There seems to be no common view as to what this instrument is or exactly what function it had in Aztec culture. According to Seler, this was, ". . . an instrument made of copper, which was beaten at the dance; nothing exact is known concerning its form." In Alva Ixtlilxochitl's Historia Chichimeca, it is described as a concave sheet of metal struck with a metal hammer and sounding like a bell.³⁴

AYACACHTLI

Shakers played a very important role in Aztec music. Much thought and care was given to the construction of shakers. Marti explains: Each quality, timbre, and sonority respond to a determined purpose and it is thought out for its character according to its use in the ceremony or dance.³⁵ The ayacachtli is a gourd or gourd-shaped rattle with an attached handle, similar to the maraca.³⁶



Ayacachtlis - similar to maracas.

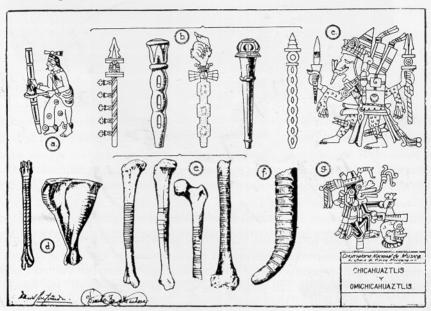
The head of this shaker was often shaped to look like a flower or poppy and at times had tassels attached to the top.³⁷ It was often used to accompany dances and during the height of the Aztec empire, ayacachtlis made of gold were used for royal occasions.³⁸ This was one of the few instruments that was allowed in both religious and secular musical ensembles.³⁹



Ayachachtli - this shaker is decorated with feathers.

CHICAHUAZLI

This instrument was played only in religious ceremonies and most often by a priest.⁴⁰ The chicahuazli is a long rattle stick ending in a sharp jagged point. Sachs⁴¹ states that the instrument was pounded on the ground and Izikowitz⁴² suggests that hawks-bells were fastened around the top of the stick. It was always associated with the rain and water gods and would be played in ceremonies that asked those gods for rain.⁴³



Chicahuazlis and Omichicahauztlis from the Mendoza papers.

CACALACHTLI

The cacalachtlis are not really musical instruments, but objects that had other functions to which shakers were added. José Alcina in his article about ritual shakers describes them as tripod vases with hollow legs that contained clay pellets which rattled when they were moved about.⁴⁴ As many as twenty-two percent of the approximately fifteen hundred pre-contact vases that survive to-day are standing on these rattling feet.⁴⁵

Another type of cacalachtli are the stamps used for marking the skin during religious ceremonies. Clay stamps with a raised picture on one side have a handle which is also hollow and filled with beads. Although less than one percent of these stamps are cacalachtli, there existence is significant. ⁴⁶ Alcina claims that as soon as any non-musical object betrays itself as any type of musical instrument, one can be sure that its use was religious. ⁴⁷

COYOLLI

Coyolli are simply jingles of various types. Clay, nutshells, dried fruit, gold, copper,⁴⁸ or cocoons filled with sand⁴⁹ could be considered coyolli. They were often strung together and worn by dancers around their necks, wrists, or ankles.⁵⁰



Coyolli - nutshells strung on leather bands.

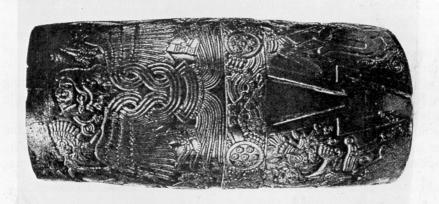
OMICHICAHAUZTLI

This notched bone scraper was made most often from the femur of a human or deer. It was used almost exclusively in the funeral rites of kings and principle warriors.⁵¹ Marti's reproduction of an omichicahauztli from the Vienna Codex,⁵² shows the god Quetzalcoatl singing the song of Miccacuicatl. He has in his hands an omichicahauztli held atop a human skull which is used as a resonator.

III. MEMBRANOPHONE

HUEHUETL

The huehuetl, the second of the god-instruments and the only membranophone used by the Aztecs, was so important to all musical situations that the term huehuetitlan came to mean any gathering of singers or musicians as well as the sacred spot where instruments and masks used for the dances were stored.⁵³ Clavigero described the huehuetl as, "... a cylinder of wood more than three feet high, curiously carved and painted on the outside, covered above with the skin of a deer, well dressed and stretched, which they tightened or slackened occasionally, to make the sound more sharp or deep."⁵⁴ These drums often had stories carved into them in bas-relief. The huehuetl from Malinalco shows: "... a group of captured warriors being forced to dance to music of their own making just before having their hearts torn out and waved aloft as offerings to the war god Huitzilopochtli."⁴⁵ This drum, housed at the



The huehuetl from Malinalco.

Toluca Museum, is the most famous of all huehuetls. It is ninety-seven centimers high and forty-two centimeters in diameter, and is carved from a single piece of sabino wood.⁵⁶ The lower portion of the drum is fashioned to form three feet which acted both as support for the huehuetl and as acoustic slots. Three sizes of huehuetl are known and their use seems to have been specialized. Gallop states, "When Montezuma's subjects heard the simple deerskin-covered huehuetl, they trouped out gladly from their homes to dance. The sound of the tlapanhuehuetl, covered with panther skin, was familiar to them as a call to war, and when they heard the sinister throb of the great teohuehuetl, drum of the gods, they knew that human victims were being sacrificed." ⁵⁷

This footed drum is played in a vertical position and most often with the hands and fingers.⁵⁸ A small clay figure⁵⁹ shows Macuilxochitl (the god of music) playing a tlapanhuehuetl with his hands, but he is sitting astride the instrument instead of playing it upright.

Exactly how these instruments were played and what techniques were used is still a matter of speculation. Several writers⁶⁰ have done studies but none of them are conclusive. These investigations are based on a syllabification of vowel and consonant sounds that have survived in song texts.

White states that the huehuetl was tuned by "... means of tourniquets, one of the earliest methods of controlling the tension of a drumhead." While there is no evidence to prove this, (tourniquets require the use of a counter hoop and flesh hoop) Motolinia does say that the pitches were changed when, "... the singers shifted from one tune to another, the huehuetl was retuned to match." The most logical way to tune a drum of this type is explained by Castellano when he states that the huehuetl was tuned, "by means of hot coals, probably because of its relation to Huehuetl (god of Fire) and of the butterfly, the symbol of fire." This would seem to be right, as the heat from the coals would dry the skin and cause the pitch to rise. It is possible that the pedestal legs evolved as a result of adding or removing coals during performance, and of wanting some of the heat to escape so that the drum itself would not be damaged. Since no surviving

huehuetls show any sign of mechanical tensioning, the only way to lower the pitch of the skin would be to apply moisture.

The tlapanhuehuetl in the Becker Codex⁶⁴ shows the player standing on a small stool and using both hands, while a small huehuetl used for the dance of Netotiliztli is held in the player's left hand and only struck with the right hand.⁶⁵ One of the huehuetls pictured in the Borgia Codex⁶⁶ is played while sitting down. Another shows the player using his right hand to play the huehuetl while in his left he holds an ayacachtli.⁶⁷

The huehuetl is still used today in the ceremony of homage to the earth by the Otomi Indians,⁶⁸ and has recently been included in the score of *Xochipilly* by Carlos Chavez.

CONCLUSION

Since so few materials survive today, due in part to time and Cortes' wars with the Aztec culture, it is difficult to establish any exact information about the performance of percussion instruments before his arrival. The extant codices and eyewitness observations contradict each other in many respects. Perhaps the future will bring more information to light and maybe over the years, we may come closer to the truth.

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Note: The photos appearing in this article are of reconstructed instruments, not authentic instruments. The photos are provided by the author.

FOOTNOTES

Gilbert Chase, A Guide to Latin American Music, (Washington, D.C.: The Library of Congress Music Division, 1945), p. 167.

²George C. Vaillant, Aztecs of Mexico: Origin, Rise and Fall of the Aztec Nation, rev. Suzannah B. Vaillant (Garden City, New York: Doubleday and Company, Inc., 1962), p. 75.

³Frederick H. Martins, "Music in the Life of the Aztecs," Musical Quarterly, 14 (August 1928):413.

*Chase, Guide to Music, p. 167.
*Richard Wallaschek, Primitive Music: An Inquiry Into the Origin and Development of Music, Songs, Instruments, Dances, and Pantomimes of Savage Races (London: n.p., 1893; reprint ed., New York: Da Capo Press, 1970), p. 49.

⁶Pablo Castellanos, Horizontes de la Música Precortesiana (Mexico: Fondo de Cultura Economica,

1970), pp. 91-93.

7In the order presented, these would be; book of songs, he who sings out of tune, composer of music, dance with songs, nobleman's song, to put the singers in tune, and to sing well and softly. 8Samuel Marti and Gertrude Prokosch Kurath, Dances of Anáhuac: The Choreography and Music of Precortesian Dances (Chicago: Aldine Publishing Company, 1964), pp. 217-224.

9Vaillant, Aztecs, p. 75.

¹⁰The New Grove Dictionary of Music and Musicians, s.v. "Aztec Music," by Robert Stevenson.

11 Castellanos, Horizontes, p. 47.

¹²The stone teponatzli (see Martí, Horizontes, p. 134.) dedicated to Macuilxochitl (patron of games, dances, and sports) is the only surviving instrument of this type not made of wood. If the future reveals more teponatzli of this construction, they would need to be included under a separate lithophone class.

¹³A teponatzli with three keys (see Eleanor Hague, Latin American Music: Past and Present [Santa Fe, Calif.: Fine Arts Press, 1934], illustration following p. 36.) from Girolamo Benzoni's Historia del Mundo Nuevo of 1565, is a rare exception to the two-tongued instruments which are much more

common and still survive today.

¹⁴Daniel Castañeda and Vincent Mendoza, "Los Teponaztlis on las Civilizaciones Precortesianos," in Anales del Museo Nacional de Arqueologia Historia y Etnografia, Tomo 8, Cuarta Epoca (Mexico: Talleres Graficos Del Museo National de Arqueologia, Historia y Etnografía, 1933), pp. 5-80.

15lbid., lamina 8 following p. 80. 16lbid., figure 5 following p. 76.

¹⁷D.F.S. Clavigero, The History of Mexico, vol. 2, n. 4, quoted in Hague, Latin American Music, p. 4. (see n. 13 above)

¹⁸Robert Stevenson, Music in Aztec and Inca Territory (Berkeley: University of California Press, 1976), p. 71.

¹⁹Castellanos, Horizontes, p. 49.

²⁰Stevenson, Music in Aztec Territory, p. 63. ²¹Bernardo de Sahagún, Florentine Codex: General History of the Things of New Spain, bk. 8,

quoted in Stevenson, Music in Aztec Territory, p. 104.

²²Códice Becker o Manuscripto del Cacigne, Pictografia ritual Prehispánica de la Civilizacion Mixteca, que se conserva en el Museo Etnográfico de Viena (Mexico: G.M. Echaniz Libreria Anticuaria, 1944), p. 8.

²³E. Mosley Campe, "Mexico," in The American History and Encyclopedia of Music, gen. ed. W.L. Hubbard, vol. 5: Foreign Music, introduction by Frederick Starr (London: Irving Squire, 1908), p. 66.

²⁴Stevenson, Music in Aztec Territory, p. 68.

²⁵To this author, a case can be made for presenting the tecompiloa as a precursor of the modern day marimba.

²⁶Stevenson, Music in Aztec Territory, pp. 61-62.

27lbid., p. 20.

²⁸Curt Sachs, The History of Musical Instruments, (New York: W.W. Norton and Company, Inc., 1968), p. 195.

²⁹David H. Paetkau, The Growth of Instruments and Instrumental Music (New York: Vantage Press, 1962), p. 33.

³⁰Códice Becker, p. 9. ³¹Samuel Martí, Instrumentos Musicales Precortesianos (Mexico: Instituto Nacional de Antropologia, 1955), p. 31.

³²Sahagun, Florentine Codex, bk. 2, n. 15, quoted in Stevenson, *Music in Aztec Territory*, p. 27. ³³Edward Seler, "Altmexicanischen Knochenrasseln," Globus 74, p. 86, quoted in Stevenson, Music in Aztec Territory, p. 79.

34"Un artesón de metal que llamaban tetzilacatl que serviá de campana, que con un martillo asimismo de metal le tañián, y teñiá casi el mismo tañido de una campana" Fernando de Alva Ixtlilxochitl, Historia Chichimeca, bk. 2, n. 169, quoted in Stevenson, Music in Aztec Territory, p. 79.

35 Martí, Instrumentos, p. 38.

36Stevenson, Music in Aztec Territory, p. 20.

37lbid., p. 35.

38lbid.

39lbid., p. 38.

40lbid.

⁴¹Sachs, Musical Instruments, p. 194.

⁴²Karl Gustav Izikowitz, Musical and Other Sound Instruments of the South American Indians: A Comparative Ethnographical Study, Göteborgs Kungl. Vetenskaps = och Vitterhets = Samhälless Handlingar Femte Följden. Ser. A Band 5. No. 1. (Göteborg: Elanders Boktryckeri Aktiebolag, 1935), p. 118.

⁴³It is possible that these long tubes would have been filled with many small beads. If that was the case, one can imagine the sound that would result with a slow up-ending the stick. Its relation to that

of falling rain might be the reason for the chicahuasli's use.

⁴⁴José Alcina, "Sonajas Rituales en la Ceramica Mejicana," Revista de Indias 13 (October-December 1953): 530.

45 Ibid.

46lbid., p. 528. 47lbid., p. 537.

48Stevenson, Music in Aztec Territory, p. 40.

49Rodney Gallop, "The Music of Indian Mexico," Musical Quarterly 25 (April 1939):221. 50Stevenson, Music in Aztec Territory, p. 40.

⁵¹James Blades, Percussion Instruments and Their History, rev. ed., (London: Faber and Faber Limited, 1975), p. 41.
⁵²Marti, *Instrumentos*, p. 41.

53Castellanos, Horizontes, p. 92.

54Clavigero, History, quoted in Hague, Latin American Music, p. 4. (see n. 13 and 17 above.)

55Grove, s.v. "Aztec Music." 56Martí, Instrumentos, p. 216.

57Gallop, Music, p. 216.

58Blades, Percussion Instruments, p. 444.

59 Martí, Instrumentos, p. 24.

60 For an excellent discussion of several views, refer to Stevenson, Music in Aztec Territory, pp.

61 Charles L. White, Drums Through the Ages: The Story of our Oldest and Most Fascinating Musical Instruments, (Los Angeles: The Sterling Press, 1960), p. 103.

62Toribio de Motolinia, Memorials, n. 212, quoted in Stevenson, Music in Aztec Territory, p. 97.

63Castellanos, Horizontes, p. 54.

64Códice Becker, p. 8.

65 Martí and Kurath, Dances, p. 64.

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