

THE DIVINE GOURD TREE
Tzompantli Skull Racks, Decapitation Rituals, and Human Trophies in Ancient
Mesoamerica

By

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Abstract

The Mexica Aztec incorporated an eclectic range of cosmologically informed iconography and architectural arrangements into their civic-ceremonial precincts and religious monuments. Among the most notorious were the *tzompantli* skull or human trophy racks that once graced the principal ritual and administrative precincts of México Tenochtitlan and allied towns and centers. This paper will review the origins, archaeology, and ethnohistory of the Mesoamerican *tzompantli* in an effort to interpret the cosmological ecology of this most ostentatious and multicultural of pre-Columbian monuments devoted to conjuring the sacred interplay of war and blood sacrifice, decapitation rituals, and the plight of the Hero Twins as embodied within the symbolism of the Mesoamerican ballgame.

Introduction

Upon entering the Valley of Mexico and spying the great cities of México Tenochtitlan, Tlatelolco, and allied centers of the Mexica Aztec Empire in 1519, Hernán Cortéz and his comrades were soon overcome by the beauty, majesty, and sophistication of the ancient cues or towers and temples, masonry causeways, palaces, and a host of other alien encounters and enchanted wonders that they thought akin to those of the greatest cities of Europe and Asia. Upon entering the heart of the metropolis such early impressions were soon transformed and transfixed on the exponential scale of blood sacrifice and human heart excision performed on the many temples, and within the many shrines, of that very place that had, at first sight, appeared so enchanted. In the wake of their brutal exploits to subjugate the great Mexica Aztec city and people of México Tenochtitlan, and more

generally, the Aztec empire of *Anáhuac* (At the Edge of the Waters), the Spanish conquistadores soon began to chronicle what they had seen and experienced at first contact. Among those dimensions of the Aztec experience that the conquistadores had little hesitation using as a justification for the conquest were the many blood spattered temples upon which so many human beings had been dispatched in so unique, and yet so otherworldly, an act of mass human immolation and blood sacrifice.¹

Included in that constellation of technologies devoted to reifying human sacrifice and its aftermath was the so called *tzompantli*, "skull banner" or "skull rack," of which seven such structures stood within the main civic-ceremonial precinct of México-Tenochtitlan (Miller, 1999: 346-47). Many, many others have been documented from throughout Mesoamerica, and range from the Epiclassic (ca., 600-900) through early Postclassic (ca., 900-1250) "skull chambers" of the Northern Frontier (Mendoza 2001),² such as that identified at Alta Vista, Zacatecas (Pickering 1985; Coe and Koontz 2002), through to the elaborate masonry platform, replete with carved depictions of impaled human skulls, of the *Huey-tzompantli* or Great Skull Banner of Chichen Itzá, Yucatan, México (Coe 1999).³ Whereas the evidence for human trophy taking, and by extension headhunting, in Mesoamerica extends well into remote antiquity (Moser 1973), early antecedents of the Skull Banner or *tzompantli* have been recovered at Loma de la Coyotera, Oaxaca, in what may well constitute Late Preclassic or Protoclassic contexts (Spencer 1982: 234-242; Spencer and Redmond 1997: 520-524).⁴ Not surprisingly, then, Mesoamerican skull racks, and associated ball court features, have long been a source of scholarly and public interest and speculation since the time of the Spanish conquest of the Aztec in 1521 (Andrés de Tapia 1866; Baños Ramos 1990; Boone 1984; Cabrera Castro

1979; Carrasco 1999; Castro-Leal Espino 1972; Couch 1985; Dahlgren, et al., 1982; Díaz del Castillo 1956, 1982; Durán 1971; Duverger 1983; Fernández 1972; Furst 1978; Gillespie 1991; González Rul 1963; González Torres 1985; Graulich 1988; Guilliem Arroyo 1999; Gussinyer 1979; López Luján 1994; Matos Moctezuma 1972, 1979, 1984; Mendoza 2003; Miller and Taube 1993; Miller 1999; Najera C. 1987; Pagden 1986; Pasztory 1983; Pickering 1985; Pijoan Aguadé and Mansilla Lory 1997; Pijoan, Pastrana, and Maquivar 1989; Pijoan, Mansilla, and Pastrana 1995; Quiñones 2002; Read 1998; Sahagún 1950-69, 1970; Sánchez Saldaña 1972; Spencer 1982; Spencer and Redmond 1997; Stern 1949; Tezozomoc 1980). Significantly, therefore, the fundamental architectural and cosmological associations obtaining between ball courts and skull racks has long been recognized, albeit, only marginally understood and appreciated (Castro-Leal Espino 1972; Fox 1991; Miller 1999; Pijoan, Mansilla, and Pastrana 1995; Taladoire and Colsenet 1991).⁵

Skull Racks and the Art of Human Trophies

The many contact and early colonial era depictions and ethnohistorical narratives developed to describe and or explain Mesoamerican "skull banners" have since been supplemented by a host of works ranging from archaeological reports documenting the exhumation of well preserved *tzompantli* fixtures through to recent reviews concerned with associated architectural features (Miller 1999).⁶ Of particular note in this regard is that *tzompantli* fixture, replete with attendant human trophies, recovered by archaeologist Francisco González Rul from the site of Tlatelolco, Mexico (González Rul 1963; Sánchez Saldaña, 1972). Among other relatively recent reports and innovative approaches to the study of Mesoamerican *tzompantli* features are to be included the

critically significant works of Carmen Maria Pijoan Aguadé and Josefina Mansilla Lory (1997: 229-234) who completed a forensic analysis of 100 of 170 articulated (replete with mandibles and cervical vertebrae), and or partially disarticulated, and bilaterally perforated crania recovered from the *tzompantli* of Tlatelolco (González Rul 1963; Pijoan, Pastrana, and Maquivar 1989; Pijoan, Mansilla, and Pastrana 1995). The evidence from Tlatelolco is particularly significant to the understanding and interpretation of "skull banner" architecture in Mesoamerica, and that due in no small measure to the fact that the archaeological data corroborates key elements of contact era eyewitness accounts and commentaries deemed critical to the study of human trophies and their exhibition within public and civic-ceremonial venues (Andrés de Tapia, 1866; Díaz del Castillo 1956, 1982; Durán 1971; Pagden 1986; Sahagún 1950-69, 1970; Tezozomoc 1980).

Skewered Heads and Buried Secrets

The *Huey tzompantli* of Tlatelolco was described firsthand in some detail by both the conquistadores and a host of subsequent chroniclers (Andrés de Tapia, 1866; Duran, 1971; Sahagún 1950-1969). Recent findings by Carmen Maria Pijoan Aguadé and Josefina Mansilla Lory (1997) provide one of the few examples of forensic analysis yet attempted on human remains purported to have a connection to the question of blood sacrifice and decapitation rituals within any one of the allied centers of the Mexica Empire. The forensic analysis in question clarifies aspects of those methods and procedures undertaken to flay and butcher the flesh, and remove and prepare the facial skin-masks (Pijoan, Pastrana, and Maquivar 1989: 565) of those sacrificial captives immolated and decapitated atop a circular temple, and *tzompantli* platform, complex

dedicated to *Mixcóatl* – the Cloud Serpent of Tlatelolco (Bernal Díaz del Castillo 1972: 383; González Rul 1963; Guilliem Arroyo 1999).

Significantly, the circular “temple” platforms of Tlatelolco and México-Tenochtitlan were taken to constitute symbols, or architectural embodiments, of *Tonatiuh* the solar disk – and have, in fact, been construed as such from Late Classic or Epiclassic times (ca. 550-900 CE) through to the present (Sandstrom, 2001). The architectural antecedents of the circular platforms so noted have been identified among the Mexica, and their forbearers the Huasteca, Matlatzinca, Tolteca, and related Gulf Coast and Mexicanized Maya peoples since the earliest of pre-Hispanic times.

Mixcóatl's supernatural associations with primeval warriors and hunters, his incarnation as the primordial fire-borer and the planet Venus, as well as his direct identification with the Milky Way and those Star Warriors or *Centzon Huitznahua-ixiptla* (Four Hundred Southerners) dispatched yearly in the rites of the *Panquetzaliztli* Raising of Banners, and First Fruits, clearly warrants further consideration and scrutiny in this instance (Nicholson 1971: 426). Finally, *Mixcóatl*'s further identification with the Red *Tezcatlipóca* -- in turn identified with Xipe the Flayed One, and by extension, the *Ometeotl* Complex and its primeval Place of Duality – necessarily serves to link the Cloud Serpent to the primordial genesis of the gods themselves.

Finally, it should be noted that the ministers of the temples of *Mixcóatl* are documented to have demanded both male and female *ixiptla* deity impersonators for blood sacrifice. This fact was first corroborated by those archaeologically recovered *tzompantli* specimens examined by way of forensic analysis by Carmen Maria Pijoan Aguadé and Josefina Mansilla Lory (1997). In this instance, of the 170 decapitated

human heads recovered *in situ* from the *tzompantli* deposit at Tlatelolco by Francisco González Rul (1963), fully fifty-five percent represented the remains of the female cohort of those *ixiptla* dispatched and decapitated on behalf of *Mixcóatl* (Pijoan and Mansilla Lory 1997). Such rites were typically executed within the confines of the *Teotlachco* or Dark Ballgame Place – where the female captive was dispatched in much the same fashion as would characterize the butchering of a wild animal. After repeatedly bashing her head with a stone hand axe, the victim's ordeal culminated with the slashing of her throat and subsequent decapitation (Castro-Leal Espino 1972). Having presented her severed head as an offering to *Mixcóatl*, and his *tzompantli*, the victim's decapitated body was dragged (by one of the ministers) across the surface of the *Teotlachco* so as to bathe the ballcourt floor in human blood (Pijoan, Pastrana, and Maquivar 1989).⁷

Significantly, ball courts at Tlatelolco, Tula, and related central highland sites have been found to contain the buried heads of female deity impersonators or *ixiptla* (Castro-Leal Espino 1972). Many Mesoamerican sites, including those of the Maya region, as well as those of the Epiclassic (circa 600-900 CE) sites of Ranas and Toluquilla, Queretaro, Mexico, have been found to incorporate significant caches of severed human heads buried within ball court floors and associated platform features. At Ranas and Toluquilla, Queretaro, Mexico, relatively large caches of decapitated human heads have been exhumed during recent investigations. According to archaeologists of the Instituto Nacional de Antropología e Historia stationed at Toluquilla, as many as fifty severed human heads were exhumed from a single deposit located within the end zone of the ball court at that site (INAH, Personal Communication to Mendoza, June 10, 2004). Of equal significance in this regard is that the courts at Ranas are aligned quite precisely

on the Equinox (Vernal and Autumnal) sunrise and sunset, and this fact accords well with the notion that the ballcourts served as the Black Road of the sun's transit through the Place of the Ballgame Sacrifice, or Dark Ballgame Place, and thereby, the Underworld chasm of creation identified with *Mictlán* or *Xibalba*, and the Lords of Darkness.

The Huey-Tzompantli of Huitzilopochtli

Of particular interest and curiosity to the contact-era Spanish conquistadores was the principal Great Skull Banner, or *Huey-tzompantli*, that stood immediately west of the *Huey-teocalli* or Great God House of México-Tenochtitlan (Cabrera Castro 1979; Cortés 1967; Tezozomoc 1980). Recent investigations indicate that the archaeological vestiges of the principal skull rack are situated immediately behind the Metropolitan Cathedral, and beneath the asphalt pavements of Guatemala Street (Cabrera Castro, 1979; Matos Moctezuma, 1987, Figure 1; López Luján, 1994, Figure 11). According to period chronicler Diego Durán (1971 [1579]: 78-79), of the seven distinct *tzompantli* platforms identified and described by Fray Bernardino de Sahagún (1950-69), the *Huey-tzompantli* or Great Skull Banner of Tenochtitlan was the largest and most complex, and consisted of a massive masonry platform comprised of "thirty long steps" measuring fully 60 *varas* [meters] in length by 30 *varas* [meters] wide at its summit, atop of which stood a wooden palisade and latticework of horizontal beams comprised of between sixty to seventy massive upright *vigas* or timbers that constituted the principal framework for suspending the tens of thousands of decapitated human heads once impaled thereon.

Described by Andrés de Tapia (1866) as a "great theater" or "*teatro grande*," the *Huey-tzompantli* was, in this instance, directly identified with the Templo Mayor or *Huey-Teocalli*, and the festivals of *Panquetzaliztli*; and as such, incorporated both

masonry "skull towers" and finely sculpted and lime plastered stairways extending both east and west at each end of the platform proper. According to Duran (1971: 79),

Along the center of this ample and long walk stood a finely carved palisade as tall as a great tree. Poles were set in a row, about six feet apart. All these thick poles were drilled with small holes, and the holes were so numerous that there was scarcely a foot and a half between them. These holes reached to the top of the tall, thick poles. From pole to pole, through the holes, stretched thin rods strung with numerous human heads pierced through the temples. Each rod held twenty heads.

Apparently, the giant palisade or superstructure at the heart of the *Huey-tzompantli* was framed, and thereby, reinforced or enclosed, at its eastern and western ends by the inclusion of massive skull and masonry towers embedded from base to summit with decapitated human heads cemented in place with lime mortar. According to the firsthand accounts of Andrés de Tapia (cf., Matos Moctezuma 1975: 103), the "two towers were fashioned from lime and the skulls of the dead, without the use of a single other stone, with teeth facing outward" (i.e., "*dos torres hechas de cal e de cabezas de muertos, sin otra alguna piedra, e los dientes hacia fuera*" [Translation Mine]). Each horizontal cross member was in turn used to skewer human skulls one adjacent to the next in monotonous succession for a total of between 80,000 (Durán, 1971) and 136,000 individual specimens in this single instance (Andrés de Tapia 1866; cf., Matos Moctezuma 1972: 103, 108); not including, of course, the corpus of decapitated heads forming the aforementioned "skull towers" located at each end of the *tzompantli* platform under consideration (López de Gómara 1964: 167; cf., Miller 1999: 345). Groupings of between five and twenty decapitated human heads are variously said to have been skewered on each and every individual two meter [*vara*] span of the otherwise finely crafted wooden palisade and

framework in question (Andrés de Tapia 1866; cf. Matos Moctezuma 1972: 103; Duran 1971: 79).⁸

In addition to seven *tzompantli* platforms located throughout the principal civic ceremonial precinct of México-Tenochtitlan, both Spanish and Mexica Aztec scribes acknowledge that the Templo Mayor was in turn pockmarked from floor to sanctuary summit with impaled human heads.⁹ Eyewitness accounts note that a virtually countless collection of severed human heads were embedded – *en masse* – within the walls and ramparts of the platforms, and those temple sanctuaries devoted to *Tlaloc* and *Huitzilopochtli* located at the summit of the Templo Mayor (Andrés de Tapia 1866; Duran 1971). In effect, the masonry surfaces of the Templo Mayor were studded with human skulls in a fashion that recalls the so-called “skull towers” of the aforementioned *Huey-tzompantli* of México-Tenochtitlan. The sacred Serpent Mountain was, in effect, the largest such 15th century monument devoted to the exhibition of human trophies in all of the Americas.

The Decapitated Heads

The freshly severed heads of the were typically flayed by ritual specialists or “ministers” of all flesh and muscle via the use of obsidian blades and chert knives. In exceptional circumstances the long, black, and blood-matted hair that once served as the last identifiable vestige of the life of the sacrificial victim remained to frame the skeletal visage and cavernous eyes of the deceased (Duran 1971: 79; Pijoan, Pastrana, and Maquivar 1989; Pijoan Aguadé and Mansilla Lory 1997). According to Motolinia (1979: 42), “*los cabezas de los que sacrificaban, especial de los tomados en guerra, desollábanlos, y si eran señores o principales personas los así presos, desollábanlos con*

sus cabellos, y secábanlos para las guardar." The fact that the decapitated heads of sacrificial victims taken in battle were emptied of their contents, flayed, and dried, but unlike the vast majority of other such human trophies, original hair or coiffures of elite personages so prepared were kept intact, is of particular interest in this instance. As hair was thought to constitute a primary conduit of one's *tonalli* (solar heat, irradiation, spiritual or cosmic essence), preserving the scalp hair or coiffure of the politically or supernaturally powerful assured that the cosmologically significant essence of the *tonal* or spirit essence was in turn preserved and fed to the monuments of the *axis mundi* of México-Tenochtitlan. In sum, for the Mexica Aztec, blood sacrifice and the acquisition of human trophies was deemed necessary to the maintenance and renewal of the cosmos; and as such, the offering of captives blessed with a powerful *tonal*, or spiritual essence, were construed as most sacred (Carrasco 1999).

So as to effect those modifications necessary for impaling freshly severed heads atop the *Huey-tzompantli*, portions of the temporal and parietal regions of each aspect of the cranial vault were perforated with an obsidian blade, bifacial knife, and or flint hand axe, and the 5.0 to 8.5 centimeter wide bilateral perforations were then trimmed to circular format with obsidian blades and or chert knives (Pijoan Aguadé and Mansilla Lory, 1997: 229). The decay and decomposition of both older skulls with, and *sans*, articulated mandibles, cervical vertebrae, and hair, and those freshly impaled heads obtained from decapitation rituals exercised within the ball courts of the ancient city, or derived of the *Veintena* festivals associated with *Panquetzaliztli*, necessarily produced a horrific stench not for the faint of heart (Duran 1971: 79).¹⁰ Moreover, the macabre spectacle of so many decomposing human heads and flayed skulls peering forth from

crowded masonry towers composed almost exclusively of such trophies, and the equally imposing timber palisade and latticework of death and decapitation, was singularly unique for its otherworldly purpose and the cosmic drama and mythic theater that it was intended to conjure and impart.¹¹

Significantly, among the Mexica Aztec ritual specialists were tasked with the duty of collecting and burning decomposed or heavily weathered crania and disarticulated post-cranial remains from the *tzompantli* platform areas (Duran 1967, 1971; cf., Pijoan, Pastrana, and Maquivar 1989: 563). In effect, it was the duty of said specialists to maintain the ritual viability of the *tzompantli*. As such, said specialists sought to refurbish or clear debris and decomposed crania on an ongoing basis from older sections of the timber latticework of the *tzompantli* on an ongoing basis for the purposes of impaling newly decapitated human trophy heads. According to Dahlgren, *et al.* (1982: 106), it was absolutely critical that any and all weathered or otherwise decomposed crania were replaced continuously so as to assure that the numerical and numerological integrity of the *tzompantli* platform was maintained intact. To do otherwise might serve to upset the delicate and critical balance of the cosmological framework in question. By contrast with the aforementioned pattern of continuous renewal, Burr Cartwright Brundage (1985: 171-172) has acknowledged that in anticipation of the mass immolation of 1487, in which some 20,000 to 80,400 war captives are thought to have perished, "Ahuitzotl ordered the skulls that were at the time displayed on the great skull rack to be burned and discarded, thus making room for the great addition to come."

Given the architectural and cosmological constructs in question, what then may be inferred about the origins and affinities of this and related structures that have since been

identified from throughout Mesoamerica? And, given the architectural and cosmological contexts within which such monuments were typically situated, what might a contextual and structural analysis of an older generation of Mesoamerican beliefs and associated ball court features have to offer our interpretive understanding of the devices and monuments in question? This assessment of the origins and affinities of *tzompantli* skull racks, and their symbolic, cosmological, and architectural associations is less archaeological survey and review, and more analysis, interpretation, and contextualization, of those dimensions of belief and ritual construed most relevant to advancing interpretations about human trophies, skull racks, and their respective otherworldly associations.

Serpent Mountain and the Tree of Gourds

Not surprisingly, then, the most intensive period of archaeological investigations yet conducted at the Templo Mayor were in fact first undertaken when a massive sculpted monolith – representing the decapitated and dismembered goddess *Coyolxauhqui* – was recovered at the foot of the southern stairway of the dual or bifurcated main temple, or Templo Mayor (Gussinyer 1979; Matos Moctezuma 1979, 1984). Recovered at the foot of that half of the staircase, and associated temple sanctuary, devoted to *Huitzilopochtli* – the Mexica Aztec tutelary guardian, solar disk, and harbinger of war, death, and destruction, *Coyolxauhqui* (replete with lunar associations and an identification with the Milky Way) is portrayed at the moment of her annihilation and decapitation at the hands of *Huitzilopochtli* (López Austin 1996; Smith 1998: 209). As a result of relatively recent investigations, a significant number of new monuments, including a *tzompantli* platform replete with 240 individual masonry depictions of human skulls stacked like cord wood (Structure B), were recovered immediately to the north, and adjacent to the northwest

corner of the Templo Mayor proper (Matos Moctezuma 1979, 1984; Miller, 1999: 344). With its staircase oriented to the west, or the place of the descending or setting sun, much of the content of the monument, and the location of Structure B within the larger civic-ceremonial precinct of México Tenochtitlan, indicate a broader pattern of associations with the mythic and supernatural landscapes of the Mexica cosmos. Recovered from within the masonry core of said *tzompantli* were the skeletal remains of a jaguar (oriented to the west) with a large jade or greenstone sphere clutched within its jaws (López Luján 1999). Significantly, the specific orientation of Structure B is in turn manifest in the western orientation of the *tzompantli* platform exhumed at Tlatelolco (Guilliem Arroyo 1999).

The Tzompantli as Cosmic Portal

The immolation and burial of a jaguar devouring a greenstone sphere, itself the embodiment of the life force, sun's light and energy, or *tonalli*, conjures yet another dimension of Mexica Aztec cosmology identified with *Ocelotonatiuh* as the Jaguar or Night Sun – the first of four primeval suns in this instance extinguished and devoured by ferocious jaguars in the first age of humankind (Nicholson, 1971: 398-99). Leonardo López Luján's (1994) insight-filled contextual and structural analysis of those offerings recovered from within the Templo Mayor necessarily corroborate key elements of contact era chronicles (such as that of the *Leyenda de los Soles*) that affirm the associations of the jaguar with the Nahua underworld of *Mictlán*, death, bones, caves, and the "rain spirits" of the sacred Serpent Mountain (Nicholson, 1971: 398-99). These latter aspects of the Nahua cosmos are cached within the masonry core of the Structure B *tzompantli* situated at the foot of the Templo Mayor, and in this instance include musical instruments for the

conduct of the "flower songs" or *xochisones* offered during the pilgrimage to the summit of the sacred Serpent Mountain (Sandstrom 2001: 2). Other offerings cached therein include conch shells, marine creatures, *Tlaloc* or *tlaloctli* "divine wine" vessels and statuary, costume paraphernalia, and paper offerings depicting "rain spirits" (López Luján 1994; Sandstrom, 2001: 7).¹²

Taken together, the contents of the Structure B *tzompantli* (located immediately north of, and adjacent to, that portion of the Templo Mayor identified with *Tlaloc*) provides *in situ* contextual evidence for the identification of the skull rack or Tree of Gourds with the cleft, chasm, or portal to that otherworldly realm identified with the Nahua *Mictlán* or Maya *Xibalba* – in each instance taken to represent the Place of Fright, darkness, death, decomposition, decay, stench, and the ballcourt-centered underworld of the Lords of Darkness.¹³ For both the Mexica Aztec of México-Tenochtitlan, and the Quiché Maya of the *Popol Vuh*, decapitation was the primordial or first act of human sacrifice that took place in the *Teotlachco* or Place of Ball Game Sacrifice (Castro-Leal Espino 1972: 458). Significantly, this first act of blood sacrifice (centered as it was on the ball court field of play) is cross-culturally identified with the Underworld (*Mictlán* or *Xibalba*), death, conflict, supernatural forces, lunar and solar cults and deities, Venus, goddess worship, maize gods, ritual bathing, apotheosis, fertility and or the carnal act, phallic symbols, rebirth, regeneration, and concomitantly, ball courts, decapitation, and skull racks (Castro-Leal Espino 1972: 460; Miller and Taube 1993: 43). Accordingly, for the Nahua inhabitants of Tenochtitlan the ball court was in turn conceived of as the *Itzompan*, or Place of the Skull (Tezozomoc 1980: 228-229; Stern 1949: 54; cf., Gillespie 1991: 323), whereas, throughout Mesoamerica, "the identification of trophy heads with

ballgame belts concerns the wider association of decapitation with the ballgame" (Miller and Taube 1993: 173). The cult associations in question are widespread, and clearly permeate the iconography of ballcourt paraphernalia and features originally diffused throughout Mesoamerica by way of the Gulf Coast lowlands (García Payón 1971). Ultimately, as noted by Miller and Taube (1993: 43), Mayan ballcourt markers "frequently bear a quatrefoil cartouche," thereby signifying the direct or essential cosmological identification of the ballcourt with the portal to the Underworld, and thereby, its physical embodiment as the *axis mundi*.

The Mixcoapan Tzompantli

The abundance of "rain spirit" and *Tlaloc* offerings and iconography may well support the association of Structure B with that identified in the *Florentine Codex* as Structure 6 of the *Recinto Ceremonial* of México Tenochtitlan (Sahagún, 1956; cf., Matos Moctezuma, 1972: 104). According to Sahagún (1956), said structure was known as the *Mixcoapan tzompantli*, and was dedicated for those offerings and sacrifices made to propitiate the Cloud Serpent *Mixcóatl*, the purported paternal primogenitor most directly identified with those clouds, stars, or offerings of eagle down, that planted the seed that impregnated the goddess *Coatlicue*, and thereby set the stage for the primordial conflict and conflagration to follow (Fernandez 1972).

Mixcóatl's respective identification with Venus as the Morning and Evening Star or *Tlahuizcalpantecuhtli* the Lord of Dawn, the Cloud Serpent or Milky Way (Miller and Taube 1993: 115), and the souls of dead warriors transformed into stars (Nicholson, 1971), necessarily provides a pivotal point of departure for identifying those skulls impaled on the *Huey-tzompantli* or Tree of Gourds with stars, and thereby, the Star

Warriors of the Night Sun and Milky Way. According to H. B. Nicholson, "Mixcoatl-Camaxtli's attire in pictorial representations so closely resembles that of Tlahuizcalpantecuhtli, the Venus deity, that his stellar affiliation seems certain. Preeminently as a warrior and hunter, a case has been made...for his association, with the soul of the dead warrior transformed into the star, which ties in with the man-star role of the prisoner destined for sacrifice" (H. B. Nicholson 1971: 426). Mixcóatl's identification with the cult of the Star Warrior, therefore, constitutes an equation that I will seek to make explicit via those accounts of blood sacrifice, and related ritual (or theatrical) reenactments or cosmological dramas, conducted within the context of Mexica rites celebrating the *Panquetzaliztli* fixed feast First Fruits festival.

Skulls, Gourds, and First Fruits of the Popol Vuh

The *tzompantli* -- like the calabash or *jicara* tree, or Tree of Gourds, described in the Quiché Mayan *Popol Vuh* -- thrusts skyward, and sprouts directly from the root of that cleft or "broken place" identified with *Xibalba*, or the Place of Fright, and in turn, *Pucbal Chaah*, Place of the Ballgame Sacrifice (Schele and Freidel 1991; Tedlock 1996: 97). The chasm, cavern, or cleft earth so noted in turn manifests itself in the topography of the ball court (Gutierrez, 1993: 3), and has been interpreted by a host of scholars and epigraphers to constitute the Mesoamerican portal to the netherworld, or Black Road to the place of the Lords of Darkness, death, and decomposition; and by contrast, that of the Lords of Light, life, and rebirth (Schele and Freidel 1991). According to Schele and Freidel (1991), "both [title and location] lead down the Black Road, through the Cleft in the Milky Way (Tedlock 1985: 38), from the ballcourts of the Maya to the Court of

Creation in the Land of Death. For in the last analysis, it is clear that the ballcourt, real or metaphysical, is a portal to the Otherworld."

By extension, the sacrifice and bloody decapitation of the Maya primogenitors, or Hero Twins, 1 Hunter / *Hun Hunahpu* or First Hunter and 7 Hunter / *Vuqub Hunahpu* (Schele and Freidel 1991), by the Lords of *Xibalba* was in turn followed by the placement of the severed head of *Hun Hunahpu* within the branches of the long dead calabash tree or Tree of Gourds. The calabash tree – upon which the severed head of *Hun Hunahpu* was impaled – in fact stood at the Place of the Ballgame Sacrifice (Tedlock 1996: 98). It was there in the ball court or "ash pit" that the Quiché Mayan accounts of the first death or sacrifice by decapitation, and the rebirth and regeneration of the gods, was achieved. According to the *Popol Vuh*, upon impaling the head of *Hun Hunahpu* in its branches, the Tree of Gourds soon blossomed, and subsequently, bore First Fruit. Not long thereafter, the talking skull of *Hun Hunahpu* called forth a young maiden by the name of *X'Kik* or Blood Moon -- the daughter of Blood Gatherer, one of the Lords of Death. And, it was there that Blood Moon was impregnated by spittle or saliva spat from the mouth of the impaled skull of *Hun Hunahpu* (Tedlock 1996: 99). Of particular significance in this regard is the fact that ball courts and their attendant iconographic ensemble and ritual repertoire incorporate or proclaim both lunar or terrestrial, and stellar or celestial, themes and supernatural associations (Castro-Leal Espino 1972).

As with the Mexica Aztec story of *Coatlicue*, and her impregnation by way of eagle down collected at the summit of Serpent Mountain, upon her encounter with the calabash tree, *Hun Hunahpu* spat into the hand of the maiden, and she too was impregnated. However, in this instance, the virgin maiden bore First Fruits in the form of

the second generation of Hero Twins, *Xbalanque* and *Hunahpu*, the sons of *Hun Hunahpu* in turn borne of the Tree of Gourds. These Hero Twins challenged the Lords of *Xibalba* to a ballgame within the Place of the Ballgame Sacrifice, and in like fashion, *Hunahpu*, the son of the First Father, *Hun Hunahpu*, was in turn deceived and decapitated. However, in this instance, a calabash or *jicara* plucked from the otherworldly Tree of Gourds replaced the head of *Hunahpu*, and in this way, both *Xbalanque* and *Hunahpu* ultimately defeated, decapitated, and dismembered the Lords of *Xibalba*. Unlike the First Father, *Hun Hunahpu*, thereafter identified with the planet Venus and the ball court portal to the Underworld (Schele and Freidel, 1991), upon their victory against the Lords of *Xibalba*, the Hero Twins – both *Xbalanque* and *Hunahpu* – underwent transmutation and apotheosis, and thereby, ascended into the heavens in their guise as the moon or Venus, and sun, respectively.¹⁴

Serpent Mountain as Cosmic Axis Mundi

As a place of pilgrimage and long-term blood sacrifice or *uemmana* (scattered offerings),¹⁵ the sacred Serpent Mountain, or *Huey Teocalli* (Great God House), was believed to constitute the *axis mundi* incarnate (Carrasco 1991). As such, it was the object of intense veneration and yearly offerings to the rain spirits and the spirits of fire and light embodied in the guise and essence of *Tonatiuh* the solar deity. The cosmic cleft, or chasm, while fundamentally identified with caves – particularly in their respective roles as portals to the Nahua underworld and the house of *Mictlāntecuhltli* as Lord of Death – was in this instance identified with the broken, bifurcated, or twisted summit of the sacred Serpent Mountain embodied in the form and content of the *Huey Teocalli* or Templo Mayor.¹⁶ In this instance, the cleft was reconstituted at the summit of

the Serpent Mountain by virtue of the cosmological and architectural embodiment of opposed, albeit, complementary, supernatural forces rendered incarnate in the corpus of tandem temples, with monstrous reptilian *Tlaltecuhltli* Earth Lord portals or cavernous doorways framed as gaping maws to the underworld of *Mictlán*. The towering temples situated at the summit of the Templo Mayor were in turn dedicated, in the first instance, to *Tlaloc* the ancient Lord of Rain and mountain spirits, and in the other, to *Tonatiuh* the Lord of Light and the avatar of that cosmic essence identified with the *tonal* or *tonalli*. From this place on high, the Lord of Rain, and thereby, thunder and lightning, and the "sun spirit" or Lord of Dawn in his guise as *Tonatiij*, *Tonatiuh*, or *Huitzilopochtli*, rained down both precious rains, and that primordial source of light, heat, and life or *tonalli*, necessary to sustain the Mexica Aztec cosmos and its centripetal role and place as the Foundation of Heaven.

For the Nahua, whereas *Coatepec*, *Coatepetl*, or Serpent Mountain constituted the physical and metaphysical embodiment of the sacred place in which primordial conflict sparked the genesis of the Mexica cosmos, *Culhuacan* or Twisted Hill (aka: *Chicomoztoc-Culhuacan*) symbolized the common point of origin and departure for those tribal peoples who migrated to the Valley of Mexico to become the peoples of México-Tenochtitlan (Townsend 2000: 59-60). Once again, both sacred mountains, or mountain spirits, and the Seven Caves of creation, or *Chicomostoc*, constitute that duality of light and darkness, and celestial and terrestrial points of binary opposition and centripetal force, necessary to the maintenance of the Nahua cosmos (Carrasco 1999).

Ultimately, only via human sacrifice and the taking of human trophies – such as those represented by way of the offering of human hearts, blood, severed heads and other

body parts deposited at the heart of the city and center of México-Tenochtitlan – were the opposing and centripetal forces of the *axis mundi* of the Mexica cosmos reconciled, fed, and reinvigorated (Ortiz de Montellano 1990: 54-55). In effect, a prime mandate of the cult of blood sacrifice was the feeding of the cosmic portal or *axis mundi* embodied in the Templo Mayor of México Tenochtitlan. To that end, Hernán Cortés (1967 [1519-1540]) “documented the execution of some 4,000 captives per annum in his efforts to calculate the sheer number of sacrificial victims dispatched in México-Tenochtitlan in any given year” (cf., Mendoza, 2004: 22). With each new conquest and expansion of the empire came the growth and reinvigoration of the cosmic portal or *axis mundi* – embodied in the masonry and human substance of the *Huey Teocalli* (Great God House) and *Huey-tzompantli* (Great Skull Banner) – in turn fed with newly acquired tribute, and enemy captives destined for blood sacrifice, obtained by force of arms. As such, as the empire grew, so too, then, did the massive frameworks of the *Huey Teocalli* and *Huey-tzompantli* of México Tenochtitlan.

Nowhere is this fact more cogently demonstrated than it was via the mass immolations and blood sacrifice of 1487. In that year, the *Huey Tlatoani* Ahuitzotl’s imperial exploits, and territorial acquisitions, were soon followed by the expansion, rededication, and consecration of the Templo Mayor via the blood sacrifice of some 20,000 to 80,400 war captives taken in battle (Leonardo Lopez Lujan 1994: 283).¹⁷ According to López Luján (1994: 283), ceremonies (dedicated to the consecration of the Templo Mayor) convened on the first day of the festival of *Tlacaxipehualiztli* in 1487 entailed the simultaneous deployment of some twenty individual groups of executioners, including the *Huey Tlatoani* Ahuitzotl, and the Lords Tlacaelel, Nezahualpilli, and

Totoquihuatzin, each of whom participated in dispatching captives and letting blood over the course of a four day harvest of human souls.¹⁸

Cosmic Terror Revealed

Excavations undertaken at the original site of the *Huey Teocalli* of México Tenochtitlan by Eduardo Matos Moctezuma (1979, 1984), his predecessors (Batres 1902), and colleagues (Cabrera Castro 1979; Gussinyer 1979; López Portillo, León Portilla, and Matos Moctezuma 1981; Martos López and Pulido Méndez 1989; López Luján 1994; López Luján and Mercado 1996; Román Berrelleza 1990), have produced significant new revelations about the cosmological landscapes of a city consumed by blood sacrifice, and both human and divine immolation, on an unprecedented scale. The recovery of yet another "skull rack" in this instance was found to correlate with its respective position to the north of, and immediately adjacent to, the *Huey Teocalli* or Templo Mayor, itself a Mexica incarnation of *Coatepetl*, *Coatepec*, or Serpent Mountain, atop which *Huitzilopochtli* (Hummingbird on the Left) was born from the decapitated and dismembered corpse of his mother *Coatlicue* (She of the Serpent Skirt). Though few monuments of the goddess *Coatlicue* survived the conquest, perhaps one of the most masterful, and at the same time horrific, such images consists of a three-meter tall monolith exhumed near the Metropolitan Cathedral in 1790. According to Miller and Taube (1993: 64), "Writhing coral snakes appear in place of her head and hands, denoting gouts of blood gushing from her severed throat and wrists. The two great snakes emerging from her neck face one another, creating a face of living blood. A monument of cosmic terror, Coatlicue stands violated and mutilated, her wounds mutely demanding revenge against her enemies." It was in fact atop Serpent Mountain that the newborn god

set about the task of avenging his mother's murder by way of defeating, decapitating, and dismembering his ruthless sibling, *Coyolxauhqui*, the Mexica moon goddess and incarnation of the Milky Way, and her brothers, the *Centzon Huitznahua* or Four Hundred Southerners (Miller and Taube, 1993: 64).¹⁹

Skull Banners of the Panquetzaliztli

The Mexica Aztec festival devoted to the *veintena* calendrical celebration of the *Panquetzaliztli*, or the Raising of Banners and First Fruits (Quiñones Keber, 1995: 147-49; Folio 5R), was a 20-day period dedicated to the devotions of *Tezcatlipoca* (Smoking Mirror) and *Huitzilopochtli* (Hummingbird on the Left).²⁰ During this ritual cycle, the foregoing cosmological and mythological narrative regarding the death of *Coatlicue* and the birth of *Huitzilopochtli*, and the concomitant decapitation of *Coyolxauhqui*, and the sacrifice of the *Centzon Huitznahua* is reenacted with intensity, ferocity, and dispatch (Taube 1993: 45-49). Those to be sacrificed were bathed with waters collected from the spring of *Huitzilatl*, itself located within the cavern of *Huitzilopochco* – the Place of *Huitzilopochtli*.²¹ The 400 captives chosen to portray the *Centzon Huitznahua* in their respective roles as *ixiptla*, or "deity impersonators," were embellished with paint and dress in the guise of the *Centzon Huitznahua* – their eyes framed in black paint so as to portray the night sky and the stars themselves (Carrasco 1999).²²

The *Ixiptla*, dressed in the insignia of the *Centzon Huitznahua*, were then led from the foot of the *Huey-tzompantli* to the summit of *Coatepec* – Serpent Mountain, and back again. On the day of the mass immolation and blood sacrifice of the *Centzon Huitznahua-ixiptla*, an impersonator of *Painal*, or *Paynal* (*Huitzilopochtli*'s double, the Hasty One) descends the steps of the *Huey Teocalli* and enters the arena of the

Tezcatlachco, or *tezca tlachtlico*, Dark Ballgame Place, otherwise referred to as the *Teotlachco*, or Sacred Ballcourt located at the heart of México Tenochtitlan's civic-ceremonial precinct (Martos López and Pulido Méndez 1989). From there, *Painal-ixiptla* hastily departed on a foot race toward Tlatelolco, and allied cities and places, including Nonoalco, Chapultepec, Coyoacan, and back again to Acachinanco, and the *Tezcatlachco* or Dark Ballgame Place situated before the *Huey-tzompantli* or Great Skull Banner, and *Huey Teocalli* of México-Tenochtitlan (Nicholson, 1971; Table 4). Along the route of the *Paynal-ixiptla* the *Centzon Huitznahua-ixiptla* engaged in mock battles only to disperse with the arrival and passage of the *Painal-ixiptla*. Upon the return of *Painal-ixiptla* and the *Centzon Huitznahua-ixiptla* to the courtyard before the *Huey Teocalli* of México Tenochtitlan, the reenactment of the battle and massacre of *Coatepec* or Serpent Mountain commenced with the descent of the images of both *Painal* and the *Xiuhcoatl*, or Turquoise (Fire) Serpent "disguise" of Huitzilopochtli, from the summit of Serpent Mountain.

At this point in the ceremony, each and every one of the 400 *Centzon Huitznahua-ixiptla* impersonators ascended the steps of the Serpent Mountain so as to be dispatched by way of an intense episode of blood sacrifice and human heart excision. Each of the lifeless bodies of the 400 *Centzon Huitznahua-ixiptla* impersonators was then tumbled down the steps of the *Huey Teocalli*, and subsequently decapitated and dismembered atop the *apetlac*, or a projecting masonry apron at the foot of the main staircase designed for that purpose (Brundage 1985: 169-170). Portions of the flesh of each human offering were then distributed for consumption in the rituals of the *Panquetzaliztli* (*veintena*) Fixed Feast festival. The decapitated heads of each of the *Centzon Huitznahua-ixiptla*

were then flayed and emptied of all contents by the "ministers of the temple" (Pijoan, Pastrana, and Maquivar 1989). The bilateral perforations required to skewer the heads atop the principal *Huey-tzompantli* located adjacent the *Tezcatlachco* or Dark Ballgame Place was then effected with prismatic blades and bifacial knives, and chert hand axes (Pijoan Aguadé and Mansilla Lory 1997). Long thereafter, the *Huey-tzompantli* provided the platform or theater atop of which the severed heads of the *Centzon Huitznahua* Star Warriors recall and conjure the mythic origins of the *Ocelotonatiuh*, or Night Sun of the first world age, and concomitantly, the betrayal, death, and decapitation of the First Mother *Coatlicue* (She of the Serpent Skirt). For it was she, the decapitated goddess *Coatlicue*, who sired those Star Warriors whose blood and severed heads were ultimately destined for a hallowed place in the vault of the Tree of Gourds, and thereby, the Milky Way galaxy.

Significantly, the monumental representation of the dismembered, decapitated, and disarticulated remains of the goddess *Coyolxauhqui* – exhumed at the base of the southern half of that portion of the *Huey Teocalli* dedicated to *Huitzilopochtli* – appear to symbolize the cosmological drama that first inspired the sacrifice of the *Centzon Huitznahua-ixiptla* deity impersonators (Taube 1993: 45-49). *Ixiptla* "impersonators" dispatched yearly during the rites of the *Panquetzaliztli*. The yearly sacrifice of the *Centzon Huitznahua-ixiptla* in turn served as a rite of intensification clearly intended to reinvigorate and relive the very act that fueled the first creation of the Mexica cosmos, and by extension, the empire of the sun.²³

Concluding Comments

Thus, blood sacrifice, decapitation, and the sacred spaces of the ballcourt and *tzompantli*, were called forth during the festivities of the *Panquetzalitzli* so as to conjure the cosmological landscapes and sacred arenas within which the blood drenched battlefields of the *atl-tlachinolli*, or Burning Waters, were recaptured at the Heart of Heaven. In this way the Mexica Aztec reenacted and conjured forth those primeval forces that engendered the cataclysmic birth of the Mexica Aztec nation state, empire, and the Foundation of Heaven. Ultimately, the sacrifice and decapitation of the *Centzon Huitznahua-ixiptla* was but one further means by which to capture and control the *tonalli* or "tutelary genius," life force or "cosmic excretions," of those centripetal and "opposed forces" that lay at the very heart of the Mexica cosmos and its state apparatus (Carrasco 1999).²⁴ Significantly, therefore, the aforementioned cosmological framework is reified via those tangible interrelationships obtaining between the sacred Serpent Mountain, *Teotlachco* ballcourt, and *Tzompantli* Skull Banners of México Tenochtitlan. The cosmogony in question is immortalized via the impregnation and subsequent decapitation of *Coatlicue*, the bloody retribution of *Huitzilopochtli*, the mass immolation of the *Centzon Huitznahua* Star Warriors, the decapitation and dismemberment of *Coyolxauhqui* – in her guise as the Moon goddess or embodiment of the Milky Way (Carmen Aguilera; cf., Taube 1993: 47), veneration and celebration of *Mixcóatl*, and the First Fruits flowering of the central Mexican *Tzompantli* tree (sp. *Erythrina corallodendrum*). Each of the aforementioned actions and reactions were fused into the cosmological framework of that massive wooden palisade or Skull Banner that ultimately captured the primordial essence, or *tonalli*, excreted from the countless *tzontecomatl*

"scalp pots," and or *atecomatl* calabash gourds, impaled or borne of this otherworldly Tree of Gourds.

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References Cited

- Anders, Ferdinand, Maarten E. R. G. N. Jansen, and Luis Reyes García. 1993. *Los Templos del Cielo y de la Oscuridad: Oráculos y Liturgia, Libro Explicativo del Llamado Códice Borgia (Museo Borgia P.F. Messicano 1) Biblioteca Apostólica Vaticana*. México, D.F.: Fondo de Cultura Económica; Graz, Austria: Akademische Druck-und Verlagsanstalt.
- Baños Ramos, Eneida. 1990. Elementos de Juegos de Pelota Mexicanas en la Ciudad de México, D. F. *Mexicon* 12 (4): 73-75.
- Batres, Leopoldo. 1902. *Archaeological Explorations in Escalerillas Street, City of México: Year 1890*. Mexico City: J. Aguilar Vera and Company.
- Benson, Elizabeth P., and Anita G. Cook (eds.). 2001. *Ritual Sacrifice in Ancient Peru*. Austin: University of Texas.
- Boone, Elizabeth Hill. 1984. *Ritual Human Sacrifice in Mesoamerica: A Conference at Dumbarton Oaks, October 13th and 14th, 1979*. Washington, D.C.: Dumbarton Oaks Research Library and Collection.
- Browne, David, Helaine Silverman, and Rubén García. 1993. "A Cache of 48 Nasca Trophy Heads from Cerro Carapo, Peru." *Latin American Antiquity* 4(3): 274-294.
- Cabrera Castro, Rubén. 1979. Restos arquitectónicos del recinto sagrado en excavaciones del métró y de la recimentación de la catedral y sagrario. In *El recinto sagrado de México-Tenochtitlan, Excavaciones 1968-69 y 1975-76*, Costanza Vega Sosa (coordinador), pp. 55-66. México, D.F.: Instituto Nacional de Antropología e Historia.
- Cabrera Castro, Rubén. 1990. El Proyecto templo de Quetzalcoatl y la practica a gran escala del Sacrificio humano. In *La época clásica: Nuevos hallazgos, nuevas ideas*, edited by Amalia Cardós Mendez, pp. 123-146. México, D.F.: Instituto Nacional de Antropología e Historia.
- Carlson, John B., and Linda C. Landis. 1985. Bands, Bicephalic Dragons, and Other Beasts: The Skyband in Maya Art and Iconography. In *Fourth Palenque Round Table, 1980*, edited by Elizabeth P. Benson, pp. 115-140. San Francisco: Pre-Colombian Art Research Institute.
- Carrasco, David. 1999. *City of Sacrifice: The Aztec Empire and the Role of Violence in Civilization*. Boston: Beacon Press.

- Castro-Leal Espino, Marcia. 1972. "La decapitación y el juego de pelota." In *Religion en Mesoamerica, XII Mesa Redonda, Sociedad Mexicana de Antropología*. Pp. 457-462. Jaime Litvak-King and Noemi Castillo Tejero, editores. Mexico: Sociedad Mexicana de Antropología
- Coe, Michael D. 1989. The Hero Twins: Myth and Image. In *The Maya Vase Book: A Corpus of Rollout Photographs of Maya Vases*, vol. 1, by Justin Kerr, pp. 161-184. New York: Kerr and Associates.
- Coe, Michael D. 1999. *The Maya*. London: Thames & Hudson.
- Coe, Michael D., and Rex Koontz. 2002. *Mexico: From the Olmecs to the Aztecs*. London: Thames & Hudson.
- Cortés, Hernán. 1967. *Cartas de Relación*. 3rd Edition. México: Editorial Porrúa.
- Couch, N. C. Christopher. 1985. *The Festival Cycle of the Aztec Codex Borbonicus*. B.A.R. International Series, 270. Oxford, England: B.A.R.
- Dahlgren, Barbara, Emma Pérez Rocha, y Lourdes Suárez. 1982. *Corazón de Copil: El Templo Mayor y el Recinto Sagrado de Mexico-Tenochtitlan según fuentes del siglo XVI*. México: Instituto Nacional de Antropología e Historia.
- Demarest, Arthur A. 1984. Overview: Sacrifice in Evolutionary Perspective. In *Ritual Human Sacrifice in Mesoamerica*, organized by Elizabeth P. Benson, and edited by Elizabeth H. Boone, pp. 227-243. Washington, D.C.: Dumbarton Oaks Research Library and Collections.
- Díaz del Castillo, Bernal. 1956. *The discovery and conquest of Mexico, 1517-1521*. New York: Farrar, Straus, and Cudahy.
- Díaz del Castillo, Bernal. 1982. *Historia Verdadera de la Conquista de la Nueva España*. Edited by C. Sáenz de Santamaría. Madrid: Instituto Gonzalo Fernández de Oviedo.
- Dunning, Nicholas P. n.d. Report on a Tzompantli Platform and Associated Sculpture at Nohpat, Yucatan. Manuscript.
- Durán, Fray Diego. 1971. *Book of the Gods and Rites and the Ancient Calendar*. Translated and edited by Fernando Horcasitas and Doris Heyden. Norman: University of Oklahoma Press.
- Duverger, Christian. 1983. *La Flor Letal: Economía del Sacrificio Azteca*. México: Fondo de Cultura Económica.

- Fernández, Justino. 1972. *Estética del arte mexicano: Coatlicue; El retablo de los reyes; El hombre*. Estudios de arte y estética, 12. México: Instituto de Investigaciones Estéticas, Universidad Nacional Autónoma de México.
- Fox, John W. 1991. The Lords of Light Versus the Lords of Dark: The Postclassic Highland Maya Ballgame. In *The Mesoamerican Ballgame*, edited by Vernon L. Scarborough and David R. Wilcox, pp. 213-238. University of Arizona Press, Tucson.
- Freidel, David A., and Linda Schele. 1988. Symbol and Power: A History of the Lowland Maya Cosmogram. In *Maya Iconography*, edited by Elizabeth P. Benson and Gillett G. Griffin, pp. 44-93. Princeton University Press, Princeton, New Jersey.
- Freidel, David A., and Linda Schele. 1989. Dead Kings and Living Mountains: Dedication and Termination Rituals of the Lowland Maya. In *Work and Image in Maya Culture*, edited by William Hanks and Don S. Rice, pp. 233-243. Salt Lake City: University of Utah Press.
- Freidel, David, Linda Schele, and Joy Parker. 1993. *Maya Cosmos: Three Thousand Years on the Shaman's Path*. New York: William Morrow.
- Furst, Jill Leslie. 1978. *Codex Vindobonensis Mexicanus I: A Commentary*. Albany: Institute for Mesoamerican Studies, State University of New York at Albany.
- García Payon, José. 1971. Archaeology of Central Veracruz. In *Handbook of Middle American Indians*, vol. 11, pp. 505-542. Austin: University of Texas Press.
- Gillespie, Susan D. 1991. Ballgames and Boundaries. In *The Mesoamerican Ballgame*, edited by Vernon L. Scarborough and David R. Wilcox, pp. 317-345. Tucson: University of Arizona Press.
- González Rul, Francisco. 1963. "Un Tzompantli en Tlatelolco." *Boletín INAH*: 3-5, Mexico.
- González Torres, Yólotl. 1985. *El Sacrificio Humano Entre los Mexicanos*. México: Instituto Nacional de Antropología e Historia/Fondo de Cultura Económica.
- Graulich, Michel. 1988. "Double Immolations in Ancient Mexican Sacrificial Ritual." *History of Religions* 27(4): 393-404.
- Guilliem Arroyo, Salvador. 1999. *Ofrendas a Ehécatl-Quetzalcóatl en Mexico-Tlatelolco: Proyecto Tlatelolco, 1987-1996*. México, D.F.: Instituto Nacional de Antropología e Historia.

- Gussinyer, Jordi. 1979. La arquitectura prehispánica en los alrededores de la catedral. In *El recinto sagrado de México-Tenochtitlan. Excavaciones 1968-69 y 1975-76*, Costanza Vega Sosa (coordinador), pp. 67-74. Mexico, D.F.: Instituto Nacional de Antropología e Historia.
- Gutierrez, Mary Ellen. 1993. "Ballcourts: The Chasms of Creation." *Texas Notes on Precolumbian Art, Writing, and Culture*, no. 53, pp. 1-3, May. Center for the History and Art of Ancient American Culture, Department of Art, University of Texas, Austin.
- Humes, Edward. 1991. *Buried Secrets: A True Story of Serial Murder, Black Magic, and Drug-Running on the U.S. Border*. New York: Dutton.
- King, Mark Barnard. 1988. *Mixtec Political Ideology: Historical Metaphors and the Poetics of Political Symbolism*. Ph.D. Dissertation, University of Michigan, Ann Arbor.
- López Austin, Alfredo. 1996. *The Rabbit on the Face of the Moon: Mythology in the Mesoamerican Tradition*. Translated by Bernard R. Ortiz de Montellano and Thelma Ortiz de Montellano. Salt Lake: University of Utah Press.
- López Luján, Leonardo, and Vida Mercado. 1996. "Dos esculturas de Mictlántecuhlti encontradas en el Recinto Sagrado de Mexico-Tenochtitlan." *Estudios de Cultura Náhuatl*, vol. 26, pp. 41-68, México.
- López Luján, Leonardo. 1994. *The Offerings of the Templo Mayor of Tenochtitlan*. Translated by Bernardo R. Ortiz de Montellano and Thelma Ortiz de Montellano. Niwot: University Press of Colorado.
- López Portillo, Jose, Miguel León Portilla, and Eduardo Matos Moctezuma. 1981. *El Templo Mayor*. Epilogue by Dominique Verut. Mexico: Bancomer, S.A.
- Martos López, Luis Alberto, and Salvador Pulido Méndez. 1989. "Un juego de pelota en la ciudad de México." *Arqueología* (2a. época) Enero-Junio: 81-88.
- Matos Moctezuma, Eduardo. 1972. "El Tzompantli en Mesoamerica." In *Religion en Mesoamerica*. XII Mesa Redonda, pp. 109-116. Sociedad Mexicana de Antropología, México.
- Matos Moctezuma, Eduardo. 1979. *Trabajos arqueológicos en el Centro de la Ciudad de México*. Eduardo Matos Moctezuma, Coordinador. México: Secretaría de Educación Pública – Instituto Nacional de Antropología e História.
- Matos Moctezuma, Eduardo. 1984. "The Templo Mayor of Tenochtitlan: Economics and Ideology." In *Ritual Human Sacrifice in Mesoamerica: A Conference at Dumbarton Oaks, October 13th and 14th, 1979*. Edited by Elizabeth Hill Boone.

- Pp. 133-164. Washington, D.C.: Dumbarton Oaks Research Library and Collection.
- Mendoza, Ruben G. 1975. "The Nahuatl Temples and Their Relationship to Cosmology: The Testing of an Hypothesis." *Southwestern Anthropological Association Newsletter*, Vol. XV, No. 1, pp. 3-8.
- Mendoza, Ruben G. 1977. "Worldview and the Monolithic Temples of Malinalco, Mexico: Iconography and Analogy in Precolumbian Architecture." *Journal de la Société des Americanistes* 64: 63-82.
- Mendoza, Ruben G. 1992. *Conquest Politics of the Mesoamerican Epiclassic: Circum-Basin Regionalism, A.D. 550-850*. Unpublished Ph.D. Dissertation, University of Arizona, Tucson.
- Mendoza, Ruben G. 1994. "War Cult Caches of the Central Highland Oloman." Paper originally prepared for an edited volume on Mesoamerican dedicatory caches by Shirley Mock. Unpublished manuscript on file with the author.
- Mendoza, Ruben G. 2001. Mesoamerican Chronology: Periodization. In *The Oxford Encyclopedia of Mesoamerican Cultures*. Volume 2, pp. 222-226. David Carrasco, Editor. New York: Oxford University Press.
- Mendoza, Ruben G. 2003. "Mexika Militarism and Blood Sacrifice: Explorations on the Formation of a Discourse and Epistemology of Denial." Invited Symposium Paper, American Anthropological Association, Chicago, Illinois, November 19, 2003.
- Mendoza, Ruben G. 2004. "The Divine Gourd Tree: Tzompantli Skull Racks, Decapitation Rituals, and Human Trophies in Ancient Mesoamerica." Invited Symposium Paper, Society for American Archaeology 69th Annual Meeting, Montreal, Canada, April 3, 2004.
- Miller, Mary, and Karl Taube. 1993. *The Gods and Symbols of Ancient Mexico and the Maya*. Thames and Hudson Ltd, London.
- Miller, Mary Ellen. 1986. *The Murals of Bonampak*. Princeton, N.J.: Princeton University Press.
- Miller, Virginia E. 1999. "The Skull Rack in Mesoamerica." In *Mesoamerican Architecture as a Cultural Symbol*, edited by Jeff Karl Kowalski, pp. 340-360. New York: Oxford University Press.
- Nájera C., Martha Ilia. 1987. *El Don de la Sangre en el Equilibrio Cósmico: El Sacrificio y el Autosacrificio Sangriento Entre los Antiguos Mayas*. México:

- Universidad Nacional Autónoma de México, Instituto de Investigaciones Filológicas, Centro de Estudios Mayas.
- Ojeda Díaz, María. 1990. *Ritual de Desmembramiento humano en Cholula*. México: INAH, Biblioteca Nacional de Antropología e Historia.
- Ortiz de Montellano, Bernard R. 1990. *Aztec Medicine, Health, and Nutrition*. New Brunswick: Rutgers University Press.
- Pagden, Anthony (ed.). 1986. *Hernan Cortes: Letters From Mexico*. New Haven: Yale University Press.
- Pasztory, Esther. 1983. *Aztec Art*. Norman: University of Oklahoma Press.
- Pickering, Robert B. 1985. "Human Osteological Remains from Alta Vista, Zacatecas: An Analysis of the Isolated Bone." In *The Archaeology of West and Northwest Mexico*, edited by Michael S. Foster and Phil C. Weigand, pp. 289-326. Westview Press, Boulder, Colorado.
- Pijoan Aguadé, Carmen María, and Josefina Mansilla Lory. 1997. "Evidence for Human Sacrifice, Bone Modification and Cannibalism in Ancient México." In *Troubled Times: Violence and Warfare in the Past*. Debra L. Martin and David W. Frayer, editors, pp. 217-239. Amsterdam, The Netherlands: Gordon and Breach Publishers.
- Pijoan, C. M., A. Pastrana, and C. Maquivar. 1989. "El Tzompantli de Tlatelolco. Una Evidencia de Sacrificio Humano." In *Estudios de Antropología Biológica*, C. Serrano and M. Salas, eds. Pp. 561-583. Mexico: UNAM-INAH.
- Pijoan, Carmen María, Josefina Mansilla, and Alejandro Pastrana. 1995. "Un Caso de Desmembramiento. Tlatelolco, D.F." In *Estudios de Antropología Biológica*, vol. 5, ed. Rosa María Ramos Rodríguez and Sergio López Alonso, pp. 81-90. México: Universidad Nacional Autónoma de México.
- Preciado, Rosana. 1995. *Cannibals in the Chronicles: Francisco López de Gómara's Conquista de Méjico and Bernal Díaz del Castillo's Historia Verdadera*. Ph.D. Dissertation, Yale University. [See also Ann Arbor, Mich.: UMI Dissertation Services, 1997]
- Quiñones Keber, Eloise. 2002. *Representing Aztec Ritual: Performance, Text, and Image in the Work of Sahagún*. Boulder: University Press of Colorado.
- Read, Kay Almere. 1991. *Binding Reads and Burning Hearts: Mexico-Tenochca Concepts of Time and Sacrifice*. Ph.D. Dissertation, University of Chicago.

- Read, Kay Almere. 1998. *Time and Sacrifice in the Aztec Cosmos*. Bloomington: Indiana University Press.
- Román Berrelleza, Juan Alberto. 1990. *Sacrificio de Niños en el Templo Mayor*. México, D.F.: Instituto Nacional de Antropología e Historia, GV Editores: Asociación de Amigos del Templo Mayor.
- Rosaldo, Renato. 1980. *Ilongot Headhunting, 1883-1974: A Study in Society and History*. Stanford: Stanford University Press.
- Sahagún, Fray Bernardino de. 1950-69. *Florentine Codex: General History of the Things of New Spain*. Translation by A. J. O. Anderson and C. E. Dibble. Santa Fe: The School of American Research and The University of Utah.
- Sahagún, Fray Bernardino de. 1970. *Florentine Codex: General History of the Things of New Spain, Book 1 -- The Gods* (Number 14, Part II). Translation by A. J. O. Anderson and C. E. Dibble. Santa Fe: The School of American Research and The University of Utah.
- Sánchez Saldaña, Patricia. 1972. El tzompantli de Tlatelolco. In *Religion en Mesoamerica, XII Mesa Redonda de la Sociedad Mexicana de Antropología*, edited by Jaime Litvak King and Noemi Castillo Tejero, pp. 387-392. México, D.F.
- Sandstrom, Alan R. 2001. Nahua Blood Sacrifice and Pilgrimage to the Sacred Mountain Postectli, June 2001. *FAMSI: Foundation for the Advancement of Mesoamerican Studies, Inc.*, <http://www.famsi.org/reports/01001/>. Posted: August 9, 2001. Accessed January 14, 2004.
- Scarborough, Vernon L., and David R. Wilcox (Ed.). 1991. *The Mesoamerican Ballgame*. Tucson: University of Arizona Press.
- Schele, Linda, and David Freidel. 1990. *A Forest of Kings: The Untold Story of the Ancient Maya*. New York: William Morrow.
- Schele, Linda, and David A. Freidel. 1991. The Courts of Creation: Ballcourts, Ballgames, and Portals to the Maya Otherworld. In *The Mesoamerican Ballgame*, edited by Vernon L. Scarborough and David R. Wilcox, pp. 289-315. Tucson: University of Arizona Press.
- Schele, Linda, and Mary Ellen Miller. 1986. *The Blood of Kings: Dynasty and Ritual in Maya Art*. Fort Worth: Kimbell Art Museum.
- Smith, Michael E. 1998. *The Aztecs*. Malden, Massachusetts: Blackwell Publishers, Inc.

- Spencer, Charles S. 1982. *The Cuicatlán Cañada and Monte Albán: A Study of Primary State Formation*. New York: Academic Press.
- Spencer, Charles S., and Elsa M. Redmond. 1997. *Archaeology of the Cañada de Cuicatlán, Oaxaca*. American Museum of Natural History Anthropological Papers, No. 80. New York.
- Stern, Theodore. 1949. *The Rubber-Ball Game of the Americas*. Monographs of the American Ethnological Society, No. 17. New York: J. J. Augustin.
- Sugiyama, Saburo. 1995. *Mass Human Sacrifice and Symbolism of the Feathered Serpent Pyramid in Teotihuacán, Mexico*. Ph.D. Dissertation, Arizona State University [See also Ann Arbor, Mich.: UMI Dissertation Services, 1997]
- Taladoire, Eric, and Benoit Colsenet. 1991. "Bois Ton Sang, Beaumanoir": The Political and Conflictual Aspects of the Ballgame in the Northern Chiapas Area. In *The Mesoamerican Ballgame*, edited by Vernon L. Scarborough and David R. Wilcox, pp. 161-174. Tucson: University of Arizona Press.
- Talavera González, Jorge Arturo, Juan Martín Rojas, Enrique Hugo García Valencia. 2001. *Modificaciones Culturales en los Restos óseos de Cantona, Puebla: Un Análisis Bioarqueológico*. México, D.F.: Instituto Nacional de Antropología e Historia.
- Tápia, Andrés de. 1866. Relación...sobre la conquista de México. In *Colección de Documentos para la Historia de México*. Joaquín García Icazbalceta, ed., vol. 2, pp. 554-594. Antigua Librería, México.
- Taube, Karl. 1993. *Aztec and Maya Myths: The Legendary Past*. London: British Museum Press/Austin: University of Texas Press.
- Tedlock, Dennis. 1985. *Popol Vuh: The Definitive Edition of the Mayan Book of the Dawn of Life and the Glories of Gods and Kings*. New York: Simon and Schuster.
- Tedlock, Dennis. 1996. *Popol Vuh: The Definitive Edition of the Mayan Book of the Dawn of Life and the Glories of Gods and Kings*. Rev. Ed. New York: Simon & Schuster.
- Tezozomoc, Hernando de Alvarado. 1980. *Crónica Mexicana*. Mexico, DF: Editorial Porrúa.
- Townsend, Richard F. 2000. *The Aztecs*. Revised Edition. London: Thames & Hudson, Ltd.

Ubelaker, Douglas H. 1992. "Hyoid Fracture and Strangulation." *Journal of Forensic Sciences* 37(5): 1216-1222.

Verano, John W. 2001. "The Physical Evidence of Human Sacrifice in Ancient Peru." In *Ritual Sacrifice in Ancient Peru*, Elizabeth P. Benson and Anita G. Cook, editors. Pp. 165-184. Austin: University of Texas.

Wilkerson, S. Jeffrey K. 1991. And Then They Were Sacrificed: The Ritual Ballgame of Northeastern Mesoamerica Through Time and Space. In *The Mesoamerican Ballgame*, edited by Vernon L. Scarborough and David R. Wilcox, pp. 45-71. Tucson: University of Arizona Press.

¹ See Demarest (1984) for an evolutionary perspective on the role of ritualized violence in the Americas. Demarest's analysis in this regard was a response to those contributions to the study of ritual violence in the Americas convened at Dumbarton Oaks (Boone 1984). It is not my intention in this context to speculate on the *cause celebre* that spawned the development of the earliest "skull racks" in Mesoamerica. Nor is it my intention to present a complete analytical treatment to support my contention that the ballcourts of the Maya, and those of highland central Mexico, are cosmologically and thematically linked by the *Popol Vuh* and its emphasis on death, regeneration, and rebirth. Because the ballgame was an early, and clearly pan-Mesoamerican, development shared by peoples from throughout Middle America, I contend that the iconographic vocabulary was similarly international in character, and as such, ethnographic analogs obtaining between the Maya and Mexica are clearly more appropriate than one might think.

² I use the term "skull chamber" in this instance as the so-called skull rack of Alta Vista, Chalchihuites, Zacatecas, Mexico, consisted of a room or chamber filled with human crania suspended from wooden beams or varas by twine or cords strung through a perforation made at the apex of each and every one of the approximately three hundred crania recovered therein.

³ See Nicholas Dunning (n.d.) for a discussion on the archaeological recovery of the skull platform or tzompantli of Nohpat, Yucatan, Mexico.

⁴ See Mendoza (2001) for a review and discussion of Late Preclassic (circa 300 BCE – 1 CE / 300 CE) or Protoclassic (circa 1 – 300 CE) chronological considerations, and Spencer (1982) for a specific description of the "skull rack" recovered at the site of Loma de la Coyotera.

⁵ The Anders, Jansen, and Reyes García (1993) publication of the Codex Borgia is replete with a significant number of skull rack and or skull frieze fixtures and decapitated human heads. For other pre-Hispanic New World and recent examples of decapitation, human trophies, and religious violence see Benson and Cook (2001), Browne Silverman, and García (1993), Cabrera Castro (1990), Humes (1991), King (1988), Mendoza (1992, 1994), Miller (1986), Ojeda Díaz (1990), Preciado (1995), Sugiyama (1995), Talavera González, Rojas, and García Valencia (2001), and Verano (2001). For an ethnographic account of contemporary and recent headhunting practice, including discussions of the role of rage, retribution, retaliation, and bloodlust in a recent historical context, see Rosaldo (1980).

⁶ Miller (1999: 359) cites Frances Karttunen (Personal Communication, July 1993) in noting that the term *tzompantli* signifies "skull banner" or "flag," and does so on the basis of the terms *tzontecomatl* or "scalp pot," a Nahuatl metaphor or allusion to the human cranium, and *pantli* or "banner." Interestingly, the ritual cycle identified with the *Panquetzaliztli* (Raising of Banners) Fixed Feast festivals required the posting or unfurling of banners, including those pertaining to the "feeding" of the principal "skull banner" or *tzompantli* of México Tenochtitlan.

⁷ Compare this practice to those "scattering" rites associated with the spilling of human blood within ball courts by the Classic Maya. Related ball court iconography depicts captives bound up as human balls and rolled or tumbled down the steps of the ball court so as to feed the "chasms of creation" embodied in the cosmological landscapes and topography of the Mayan ball court (Schele and Freidel 1991).

⁸ The head counts per *vara* attributed to Andrés de Tapia (1866), and by contrast, those documented by Fray Diego Duran (1971: 79) and Juan de Tovar (1972), and more recently discussed by Eduardo Matos Moctezuma (1975: 103), may well vary due to confusion had by Andrés de Tapia in distinguishing the tzompantli rack at Tlatelolco from that encountered by the conquistadores at México-Tenochtitlán. Whereas, both Tovar (1972) and Duran (1971) report that each *vara* within the *Huey Tzompantli* of México-Tenochtitlán held some 20 heads per span, only Andrés de Tapia reports that each span held five human heads. According to Pijoan, Pastrana, and Maquivar (1989: 563), "Matos comentó la coincidencia de la referencia que da Tapia con respecto al hallazgo de Tlatelolco que presentó los cráneos en grupos de cinco, y aunque desafortunadamente no se cuenta con evidencias arqueológicas suficientes, resulta interesante una possible relación (Matos 1978: 138)." Given the coincidence (noted by Eduardo Matos Moctezuma) that Andrés de Tapia's headcounts in fact correspond quite well with that archaeological data recovered from the tzompantli structure at Tlatelolco, it now appears likely that Andrés de Tapia's account confused the spans from México Tenochtitlán with those of Tlatelolco.

⁹ Ceramic models, and related codex depictions, of Mexica Aztec and other Mesoamerican temples and monuments provide secondary confirmation of the use of human crania as architectural embellishments. For the Templo Mayor, and the monuments of the Codex Borgia, for instance, the "skull frieze" is typically identified with the upper façade or vault of the temple sanctuary or *sancta sanctorum*, as well as with the lower ramparts and platforms of the main mass of such monuments.

¹⁰ The archaeological recovery of the tzompantli of Tlatelolco was replete with evidence that many of those human heads impaled on the skull racks of that site in fact were impaled with the first through third cervical vertebrae intact (Pijoan, Pastrana, and Maquivar 1989: 581). This would thereby serve to corroborate in part the Spanish claim that the heads were severed from living victims or fresh kills given that desiccated crania rarely if ever retain such post cranial elements in their assemblage. Concomitantly, Pijoan, Pastrana, and Maquivar (1989: 581) report that the recovery of temporo mandibular joints or mandibles lends further credence to the idea that the crania constitute fresh kills. It may well be the case that the *tzompantli* of Tlatelolco represents the hasty (Hispanic contact era) skewering of severed heads that were only partially defleshed, or impaled *sans* the proper flaying and treatments accorded those noted for skull racks of México Tenochtitlán. Otherwise, see Ubelaker (1992) for a discussion on hyoid fracture and the evidence for strangulation versus cutting and decapitation in forensic analysis.

¹¹ Whereas carved monuments at a host of Classic Maya sites – ranging from Copan, Honduras to Bonampak, México, and Tikal, Guatemala – depict severed human heads affixed to ballgame belts worn by *Ahau* Lords and Kings, cached offerings recovered archaeologically make clear the traditional interment and deposit of decapitated human heads in ball court floors and attendant features. It is likely that the attachment of a severed human head to the ball game belt worn by dynasts was intended to signal the bearer's respective identification with the Hero Twin of the calabash tree, *Hun Hunahpu* or 1 Hunter, in his guise as culture hero and as the avatar of those regenerative forces identified with rebirth, agricultural fertility, and the conquest of death. In the final analysis, the King's regalia was clearly intended to signify the celestial vault and or Tree of Life, replete with icons denoting *Itzamna* the Sky Serpent, *Kinich Ahau* the Sun, Venus, the *Kawil* Vision Serpent, *Yum Caax* the Maize God (God E), and the Earth Lord. As such, the placement of the head of *Hun Hunahpu* on the belt of the *Ahau*, or Great Lord, himself the embodiment of the Maya cosmos, *par excellence*, is as such not surprising.

¹² Sandstrom's (2001) analysis of contemporary Nahua mountain pilgrimage rituals is particularly germane to this discussion as contemporary veneration and offerings devoted to Mount Postectli are remarkably akin to those identified with those devotions had at the sacred Serpent Mountain of México Tenochtitlán. The erection of altars, replete with rain spirit and solar cult iconography signals the perpetuation of pre-Columbian patterns of religious ceremonialism.

¹³ I here use the reference to the "Tree of Gourds" as an allusion to the Calabash Tree upon which the head of *Hun Hunahpu* was impaled by the Lords of Darkness referred to in the Quiché Mayan account of the *Popol Vuh*. Similarly, Graulich (1988: 403) notes that severed heads were "exhibited on skull racks...which undoubtedly represented trees." He goes on to cite examples of such depictions from the Codex Borgia and the Ixtapantongo rock paintings where *tzompantli* skull racks are in fact depicted as trees. Moreover, while I acknowledge that the *Popol Vuh* represents the Quiché version of the Mayan cosmos and Underworld realm, a formidable cadre of scholars has since documented the fact that the *Popol Vuh* clearly constitutes a pan-Mayan, and Gulf Coast lowlands, recounting of an ancient cosmogony and account for the creation of the Mesoamerican world (Boone 1984; Carlson and Landis 1985; Coe 1989, 1999; Fox 1991; Freidel and Schele 1988, 1989; Freidel, Schele, and Parker 1993; Gutierrez 1993; Scarborough and Wilcox 1991; Schele and Freidel 1990; Schele and Miller 1986; Taube 1993; Tedlock 1985, 1996; Wilkerson 1991).

¹⁴ Graulich (1988: 403) contends, "decapitation was a sacrifice on behalf of the earth in order to nourish and fecundate her."

¹⁵ Kay Read (1991: 260-300; cf., Townsend 2000: 162) interprets *uemmana* to derive from the terms *uentli* (offering) and *mana* (to spread out). Among the ancient Maya, the term for sacrifice, particularly autosacrifice, is consonant with the idea to "scatter" blood and other offerings. I would contend that the terms are roughly equivalent in that regard.

¹⁶ *Coatepec* or *Coatepetl*, Serpent Hill or Mountain, has been identified with a hill in the region of Tula, Hidalgo, Mexico. Interestingly, the Mexica Aztec are known from both ethnohistorical and archaeological evidence to have settled temporarily in or near Tula or Tollan during the course of their epic migrations to the Valley of Mexico. Their inferred Mexica Aztec presence in the region of Coatepec has in turn been correlated with that period identified with the sacking and burning of the ancient city of Tollan, and thereby, the decline and fall of the ancient Toltec capital in question.

¹⁷ Leonardo López Luján (1994: 483-484) acknowledges that figures cited for this singular event by varying sources differ by the tens of thousands. Whereas the *Anales de Cuauhtitlan* (1975: 58) report 80,000 sacrificial captives dispatched on that first day of Tlacaxipehualiztli; Torquemada (1969: v. 2, 168) cites the figure of 60,000; whereas the *Códice Telleriano-Remensis* (1964-1967: pl. 121; see also, Quiñones Keber 1995) reports 20,000 victims (cf., Mendoza 2004: 22-23).

¹⁸ According to López Luján (1994: 283), "At the top of the Templo Mayor, Ahuitzotl, assisted by five priests, began to sacrifice the first group of prisoners, who were lined up along the Itzamal highway. In the Cuauhxicalli, Tlacaelel and five helpers took out the hearts of the captives in a line going toward the Tetzaco landing. Nezahualpilli, lord of Acolhuacan, and five priests...were in the Yopico, slaying prisoners lined up along the Calzada de Tepeyacac. Totoquihuatzin, Huey Tlatoni of the Tepanec, and his five assistants...were in the Huitznahua Ayauhcaltitlan with a line of humans along the Tlacopan road. Sacrifices were held simultaneously at sixteen other places in the city."

¹⁹ Interestingly, Elizabeth Boone (2000: 150, 158) notes the identification of human skulls with the south in representations of directionality in the Lienzo de Tequixtepec, and place signs denoting southern orientations in the Selden Roll. The *Centzon Huitznahua*, or "Four Hundred Southerners," in turn symbolize or constitute stars identified with both the south and the skulls of the *Huey tzompantli* of México Tenochtitlan.

²⁰ The *veintena* calendar consists of eighteen 20-day months specific to the central Mexican agricultural year and festival cycle. Each of the eighteen months entailed the celebration of agricultural festivals, including that pertaining to the *Panquetzaliztli* or Raising of the Banners and First Fruits harvest festival.

²¹ The spring that fed this water source was purportedly located beneath the Templo Mayor itself (Duran 1971). That this may have been the case reinforces the significance of the site for the placement of the

most sacred monument identified with the *Altepetl*, *atl tepetl*, or "water mountain" deities of *Tlaloc* and *Huitzilopochtli* (Carrasco 1999).

²² According to Graulich (1988: 395), the *Centzon Huitznahua-ixiptla* impersonators were festooned with attributes specific to Mixcóatl the Cloud Serpent. These attributes included "black stellar painting called the night" around their eyes, the red color around their mouths, the chalk stripes covering the body, the down balls on the head, the occipital ornament composed of two heron or eagle feathers, the red leather headband."

²³ This apocalyptic genesis and First Fruits harvest ceremony was very likely relived throughout the Mexica empire atop monuments dedicated to Huitzilopochtli, solar cults and the transit of the sun, and or the immolation and sacrifice of the *Centzon Huitznahua-ixiptla* Star Warriors of the first world age. See Taube (1993: 45), who argues, "Although of central importance to the Aztec, it is unlikely that Huitzilopochtli enjoyed a widespread and enthusiastic following outside the Valley of Mexico. Indeed, representations of him are notably rare in the art of ancient Mesoamerica." By contrast, I beg to differ with Taube's (1993) assessment that neglects to take into account cult monuments at Malinalco and Calixtlahuaca (México), Teopanzalco (Morelos), and related circum-Basin regions. My studies of the cosmological framework of the monolithic temples at Malinalco (Mendoza 1975, 1977) elucidate the Nahua solar cult affinities of that site with a regional or hybrid Matlatzinca cosmogony of clear Mexica Aztec affinity and origin.

²⁴ See David Carrasco (1999) for an in depth discussion and analysis of those centripetal and opposed forces that fueled the cosmological dynamics of the Mexica world system. By contrast, Townsend (2000) argues against the idea that such opposed or centripetal forces were of any tangible significance to the core dynamic of the Mexica cosmos.