YEAR BURNING ICONOGRAPHY
IN POST CLASSIC MESOAMERICAN DIVINATORY CODICES

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CHAPTER I
INTRODUCTION

The well-known Aztec practice of drilling New Fire to bridge the divide between old and new cycles of time is an imperialist adaptation of an older practice, which may have been observed throughout Post Classic Mesoamerica during the five unlucky days of the calendar. While it is traditionally held that New Fire ceremonies were observed only every 52 years, I propose evidence this ceremony may have been practiced at an annual interval outside of the Aztec Triple Alliance Empire\(^1\). New iconographic evidence will also be presented that indicates the bundling and burning of years in Maya autonomous zones in the Yucatec peninsula. The presence of New Fire imagery in Maya codices demonstrates the ritualized drilling of New Fire may likely have been a ubiquitous practice in Post Classic Mesoamerica.

This thesis focuses on the practices and beliefs concerning temporal rituals recorded in extant Post Classic Mesoamerican codices (950-1521 A.D.) in pictographic and hieroglyphic form. Year burning iconography in Post Classic manuscripts is indicative of aspects of Mesoamerican beliefs and customs with greater zones of influence than other, more distinctive ritual prescriptions and regional cultural knowledge, also present in the illuminations. Examining pages in these manuscripts

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\(^1\) The term “Aztec” like “Mixtec” is a modern designation rather than an organic social construction. However, the term was used by the Aztec as an umbrella term encompassing all those who claimed origin in Aztlan. The term “Aztec” used here follows the contemporary understanding and encompasses the Nahuatl speaking peoples of Central Mexico, most of whom were united politically by the triple alliance empire (also referred to here the Aztec tribute empire) and shared common cosmology, ritual practices, and iconography. Citizens of the triple alliance empire would have considered themselves Tenochea, Texoca, and Chalca based on their altepetl or local kingdom, (the Tenoche additionally referred to themselves as the Mexica, thus Aztecs of Tenochtitlan are referred to as the Mexica)
which describe comparable periods of transition common throughout Mesoamerica provides valuable insight into how beliefs and practices described in each manuscript group conform to established regional trends, and how and where they depart from the calendrical conventions and the temporal ritual organization of contemporaneous civilizations. Iconography related to celebrations designed to renew time are investigated within the context of Post classic Mesoamerican art and culture.

It is the goal of this inquiry to gather surviving Pre-Conquest iconography that documents, illustrates or describes rituals and beliefs related to the cosmological and directional shift from one temporal cycle to another in order to discover relationships among the depictions used to indicate the performance of time renewing ceremonies in Post Classic Mesoamerica. The use of consistent iconography in Post Classic codices as well as historical accounts that illuminate the beliefs they depict are considered alongside parallel examples found in relief carving. Supporting information such as historical accounts and archeological evidence will also be referenced where little artistic evidence survives.

What is known regarding the customs and belief that bridge the divide between the Old and New Year will be examined in an informed context regarding the nature of the relationship between manuscripts and other artifacts, the differences and similarities in the ceremonies they describe, as well as their surrounding Post Classic context.

Civilizations explored in this inquiry include the Aztec, Mixtec², and Yucatec Maya³ of

² The term “Mixtec” will be used here to describe the inhabitants of the region La Mixteca. The term comes from the Nahuatl word mixtecah meaning "cloud people" The Mixtecs referred to themselves as ne'ivi davi. The Mixtecan languages constitute a segment of the Otomanguean language family closely related to the Trique and Cuicatec families. Depending on threshold of variance set there could be as many as 50 distinct Mixtec languages known today.
the Post Classic period. The regions discussed are indicated in figure 1, which provides a map of Mesoamerica, and major cultural boundaries as well as the zone of the Mixteca-Puebla horizon style sometimes referred to as the “international style”.

After ascertaining the degree of interaction, and extent of cultural influence between the communities that created distinct codices and related manuscript sets, this investigation will culminate in an examination and assemblage of almanac pages in the Aztec, Mixtec, and Borgia group of Highland Mexican codices associated with the period of five nameless days and New Fire ceremonies. The extent of possible influence and the nature of its content between Highland Mexican civilizations and Post Classic concomitant Aztec and Maya communities (currently under discussion in scholarship) will also be addressed, but grounded in an understanding of the nature and level of interaction and related materials and beliefs associated with calendrical transference rituals and the period of five nameless days.

The region La Mixteca includes the western portion of Oaxaca, as well as areas in Guerrero and Puebla. The regions while interdependent functioned politically independently and competed for resources against each other as well as Zapotec city-states in the disputed Oaxaca valley region. Before the arrival of the Spanish most Mixtec populations were taxed by the Aztec tribute empire, however many remained politically and culturally independent. Mixtec polities active in the Postclassic period include the central highland capital Tilantongo, as well as the sites of: Achiutla, Cuilapan, Huajuapan, Mitla, Tlaxiaco, Tututepec, Juxtlahuaca, Yucuñudahui, and the Zapotec capital Monte Albán after 1350.

3 The original colonial usage of the term Maya came into practice with the Spanish conquest of the Yucatec peninsula, and its original usage did not extend to sites located outside that region. However, its modern usage the term applies to ancient and contemporary inhabitants of the present-day southern Mexican states of Chiapas, Tabasco, and the Yucatán Peninsula states of Quintana Roo, Campeche and Yucatán. The Maya region also extended throughout the northern part of Central America, and includes the contemporary nations of Guatemala, Belize, western Honduras and extreme northern El Salvador.
Stylistic Context

There are a number of groupings or styles of manuscript painting identified in the Post Classic period. During the Spanish conquest the codices and what related ritual material that was seized was destroyed, most often by burning (Boone, 2007, p. 3). However, after the conquest a handful of Spaniards recognizing some value in the manuscripts they had retained and sent them back to Europe. As a result, there are some Aztec, Maya, and Mixtec-Puebla style illuminated manuscripts in existence today.

These codices show remarkable stylistic variation. The illuminated manuscripts of Central and Southern México employ a complex pictorial language variously termed the “Mixtec-Puebla” Horizon style after the geographic area where its use was most widespread by 1300 ad. (Boone, 2007, p. 3). The Aztec manuscript painting tradition from central Mexico is best exemplified by the Codex Borbonicus and Tonalamatl Aubin. Though both are believed to have been painted shortly after the conquest, they are least affected by European influence and most closely approximate the indigenous style, and are screen fold books made from bark paper.

In addition to these primary documents, there are numerous post conquest reproductions executed under Spanish patronage of divinatory almanacs previously lost for incorporation into colonial period encyclopedias. These reproductions were painted on European paper in the middle or second half of the sixteenth century and included in the Codices Tudela and Telleriano-Remensis and its copy the Vaticanus A (or Ríos), both reflecting the Aztec tradition.

The “Mixtec” group of codices can be reliably attributed to Mixtec kingdoms active in the Post Classic and after the conquest. Until relatively recently little was done
about the histories contained in this manuscript group, and what research and publications were carried out focused on interpreting the materials from the perspective of what knowledge of Aztec codices had been gained (Boone, 2000, p. 9). It wasn't until Alfonso Caso’s groundbreaking research on the Relacion Geografica map of Teozacoalco (1949) that the manuscripts were recognized to have emerged from a civilization culturally, linguistically, economically and politically distinct from that of the Aztec. From this point forward the manuscripts are universally recognized as the pictorial historical annals of the Mixtec dynasties. It is not surprising therefore that a gulf of terminology and perspectives has risen between Mixtec and Aztec scholarship since the second half of the 20th century. However, this attitude has itself become an obstacle to understanding the cultural context of the Borgia group of Highland Mexico codices.

The exact provenance of each of the Borgia manuscript group’s members remains the subject of some debate among scholars. However, there is considerable evidence according to Elizabeth Boone and Anawalt that the Borgia Almanacs come from diverse locals within the greater Tlaxcala-Puebla-Mixtec region (Boone, 2006, p. 11) The Mexican divinatory manuscripts as a whole are believed to reflect the calendric and divinatory practices and beliefs of the valley of Mexico, Puebla, Tlaxcala, and perhaps the Gulf Coast region. The divinatory codices could have been created by Mixtec, Nahua, Cuicatec, Chocho, or Otomi (Boone, 2007, p. 232).

The visual language employed by Aztec and Mixteca-Puebla horizon style codices in the Mixtec and Borgia group share a system of articulating complex abstract concepts as well as specific protocols in relational organization. While compositions from these Highland Mexico codices may appear deceptively simple when first considered, the
system of pictorial writing is simultaneously abstract, abbreviated, and exceedingly specific. However these protocols use the same symbolic vocabulary even when rendering styles differ between manuscripts.

According to Elizabeth Hill Boone (2007, p. 229-230) the clear continuity between iconography and cultural ideology and cosmology she terms the Mixteca-Puebla phenomenon, is best characterized as a system of interaction, where in

“Nahua, Mixtec, and many other peoples participated actively in economic and ideological exchanges. Within the region, polities like Cholula, Cuauhtinchan, Acatlan, Tehuacan, and Coixtlahuaca were linked by royal marriages (Pohl 2003d:244–247), and the rulers of Tlatelolco were married into royal families in southern Puebla (Gorenstein 1973:16)

Boone also notes the area where the Mixteca Puebla Style has been found include many of the most significant trade routes in Mesoamerica, including routs that go from the Basin of Mexico to Maya cultural zones as well as both coasts (Boone, 2007, p. 229-230). It is clear that mechanisms of cultural exchange were active in the Post Classic Period.

Finally, this study acknowledges that several types of cultural syncretism and authentication exist including the common cosmological underpinning of regionally distinct ritual practices, and the assimilation and cultural authentication of artistic conventions apart from traditions and beliefs. The autonomy of central Mexican pictorial manuscripts and the illuminated Mayan hieroglyphic texts is so complete that the continuity of sign and message in year burning iconography is striking and significant.

Any similarities of iconography describing New Fire ceremonies in material culture are believed to be the result of trade, cultural exchange, and shared heritage rather than direct social or political ties. The Maya belong to a fundamentally different tradition
wholly distinct from the Mixtec and Aztec. The four extant Maya manuscripts employ images differently than both the Aztec and Mixtec pictorial schemes. Unlike codices from Central and Southern Mexico, the information in Maya codices is primarily conveyed through hieroglyphic text read which reflects oral language. Therefore, Maya painted imagery performed the function of manuscript illumination, and did not carry the burden of meaning solely upon its shoulders (Boone, 2007, p. 17).

**Cultural Context**

The term “Mesoamerica,” was coined by the historian Paul Kirchhoff (1960, p. 2-11) to describe the cultural zone in which a shared set of cultural characteristics, customs, and common history existed between diverse groups of inhabitants with a complex system of interaction speaking in excess of sixty different distinct languages. The shared characteristics of Mesoamerica identified by Kirchhoff include attributes such as: (1) the widespread use of a 260 day divinatory calendar comprised of 20 x 13 days that intermeshed with a 365 day calendar composed of 18 months of 20 days and five additional days that approximated the solar year. (2) The development of written communication both hieroglyphic and pictographic and complex systems of book production. (3) The use of sophisticated bar and dot notation in the depiction of numbers. (4) Commonalities in architecture and architectural materials such as the inclusion of ball courts and stepped pyramids in many community centers as well as the widespread use of plaster as a preferred medium for floors surrounding ball courts (Kirchhoff, 1960, p. 8-9, 13). Since Kirchhoff’s early work, scholars have wrestled with the immense task of
uncovering the complex systems of trade, political and familial alliances that composed this complex anthropological designation “Mesoamerica”.

**Political and Economic Context**

Before discussing surviving codices in greater detail it is necessary to provide some background context for Mesoamerica and time in which the texts were created and used [figure 2]. It is the Pre-Columbian civilizations of the Post Classic\(^4\) period that are of paramount interest to this investigation. In the Post Classic period, the civilizations of Central and Southern Mexico rose to prominence. Foremost among these were the Toltecs, Mixtecs, and Aztecs. However, Maya civic centers experienced systemic decline leaving most centers abandoned by 900 A.D\(^5\). In the Epi-Classic period, the Nahua peoples began to displace speakers of Oto-Manguean languages as they moved south into central Mexico and Lake Texcoco.

The dominant cultures of the Early Post Classic in Mesoamerica include the Mixtecs of Oaxaca, remaining Maya strongholds at Chichén Itzá and Mayapán in the Yucatec Peninsula and the lowland Maya area, as well as the Toltecs in Central Mexico [figure 1]. The Toltec City-state Tula had dominated central Mexico until its gradual

\(^4\)The three major time periods used by anthropologists, archeologists, and art historians, to constrain and describe the development of civilization in Mesoamerica include: the Formative or Pre Classic period lasting from 1500 B.C. - A.D. 300, the Classic period extending from A.D. 300-950, Epi-Classical and 800-1200 A.D. and the Post Classic period extending from A.D. 950-1521 (figure 1). It is important to note that while these divisions of time are based on trends in Maya civilizations they are conventionally broadly applied to the region in its entirety.

\(^5\)This decline is generally attributed to a multitude of factors ranging from bloated bureaucracies, natural and man-made climate change, the exhaustion of natural resources, and other possible systemic and regionally distinct factors. Amidst the decline other Maya centers such as Uxmal, and Cacaxtla continued to flourish well into the Post Classic period in what is described as the Epiclassic.
decline from the ninth to thirteenth centuries. Aztec nobility intermarried with Toltec royalty and were absorbed into the Méxica by the mid fifteenth century. Before the arrival of the Spanish, the Aztecs of Central Mexico built a tributary empire covering most of central Mesoamerica [figure 3].

In general, the Post Classic period is characterized as (Evans & Webster, 2001, p. 597-598) consisting of commercially oriented regional power structures or city-states that replaced the larger states and empires of the Classic Period. Craft production became paramount and trading networks reached far up into the North American Southwest and South through Central and South America, funneling exotic, never before accessed goods and materials to economic elite in a “single Mesoamerican world system based on cultural and economic links” (Evans & Webster, 2001, p. 597-598), and as a result long distance trade and artistic interaction reached peaked in the Post Classic period.

A system of commercial political bodies grew amidst the economic boom (Evans & Webster, 2001, p. 597-598). These organizations were extremely concerned with cultivating their history and legitimacy. Writing and manuscript painting was a major avenue of burnishing cultural and historical legitimacy. As a result, the majority of pre-conquest Mesoamerican codices are concerned with dynastic histories. Mixtec and Aztec, two of five writing systems used in Mesoamerica developed during the Post Classic period. A simplified version of Maya writing also persisted in the Yucatan in the Post Classic. Two older scripts used in Mesoamerica are the Zapotec and Epi-Olmec systems (Evans & Webster, 2001, p. 598).
Cross Cultural Exchange and Interaction in the Post Classic Period

The level of interaction and influence existing in the Post Classic period between Nahuatl speakers, groups in the central highlands, and the Yucatec Maya has long been investigated by Mesoamerican scholars. This inquiry started with work by Cyrus Thomas (1884) and Eduard Seler (1904). Their studies drew comparisons between Maya codices and those of the Borgia group. Since this time great strides have been made with regards to uncovering the interchange that existed between a ruling class of intellectual elites including astronomers, priests, and scribes. Maya-Mexican interactions are believed to be the result of long-distance trade and the movement of intellectual and luxury commodities, food stuffs, and people (Vail & Hernandez, 2010, p. 1-7), and are believed to have taken place in both directions. More recently scholarship has paved the way for renewed investigation of possibly international iconography, making this a legitimate strain of contemporary art historical inquiry.

There is set of common symbols documented in both objects and murals found at sites such as Santa Rita, Tulum, and Mayapan in what has been termed the “International style” (Taube, 2006, p. 145-183). In addition, there are also occasional stylistic similarities between the Maya territory and the Mixteca-Puebla region (Vail & Hernandez, 2010, p. 3-4). Mexican gods appear in Maya codices and incensarios in Mayapan as well as other architectural forms and sculptural similarities. There is

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6 There are seven members of the Borgia group which includes the Pre-Colombian codices Borgia, Cospi, Fejérváry-Mayer, Laud, Vaticanus B, Aubin No. 20, and the post conquest Porfirio Diaz Reverse. There is considerable evidence according to Elizabeth Boone and Anawalt that the Borgia Almanacs come from diverse locals with the greater Tlaxcala-Puebla-Mixtec region (Boone, 2006, p. 11) The Mexican divinatory manuscripts as a whole are believed to reflect the calendric and divinatory practices and beliefs of the valley of Mexico, Puebla, Tlaxcala, and perhaps the Gulf coast region. The divinatory codices could have been created by Mixtec, Nahuatl, Cuicatec, Chocho, or Otomi (Boone, 2007, p. 232)
ethnohistorical and archeological data indicating a connection between Maya peninsular and highland Mexican trade networks via the Gulf coast (Gasco & Benard, 2003; Berdan et al. 2003). Some ethnohistorical evidence suggesting Nahuatl speakers were present in places within Maya territory. Data drawn from Borgia and Maya groups of codices evidences calendric, organizational, and iconographic influence such as Fejervary-Mayer page 1, Madrid 75-76 (plates 1-2) as well as the Venus table of the Codex Dresden and Borgia Group cognate Venus almanacs (Vail & Hernandez, 2010: p. 3-4). Finally, linguistic evidence of interaction can be found in Maya Classic and Post-Classic Hieroglyphic words of Nahua or Uto-Aztecan derivation has also been published (Vail & Hernandez, 2010, p. 3-4).

Maya influence can be detected as far away as central Mexico, more than 1,000 km (620 mi) from the central Maya area. The diverse influences found in Maya material culture are the result of trade and cultural exchange rather than direct social or political ties. The Maya belong to fundamentally different tradition wholly distinct from the Mixtec and Aztec. Discussion of Maya culture and material will be limited to The Post Classic Yucatec Maya New Year festivals practiced at the time of Spanish conquest (Taube 1988: 1-5). While there is evidence that some variations of New Year rights were enacted at least by the early classic if not Preclassic Maya in both the Highlands of Guatemala and lowland Yucatan (Stuart 2004: 1-6), the details of these practices and their relationship to Post Classic colonial Maya ceremonies remain unclear.
CHAPTER II
THE PAN-MESOAMERICAN CALENDAR SYSTEM

The calendrical system used through Mesoamerica was identified by Kirchhoff as being one of the most significant identifiers of the cultural zone he termed Mesoamerica (1960, p. 8-9, 13). Scholars have argued convincingly that the creation of a complex calendar paved the way for centralized leadership as it allowed systematized agricultural practices capable of supporting larger populations (Rice, 2008, p. 275-289). The systemization of food production allowed for urban populations in which specializations and class division begin to emerge. According to Druker, the calendar also served to integrate the individual into the society (Druker, 1987, p. 816) and legitimized offices of social and religious control (Rice, 2008, p. 275-289).

The particular mathematical system that governs the calendar is unique to Mesoamerica where it developed independent of outside influence. While less universal calendrical systems appear within Mesoamerica at different times and places, two are common to all recorded cultures in the region. The two calendars used through Mesoamerica include: (1) A sacred set of 260 unique combinations of day names and modifying numbers of divinatory import and no apparent connection to the agricultural year. (2) A set of 365 days used to document the tropical or solar year. When combined, these two widespread calendars define 52 years (or 18,980 uniquely described days) commonly referred to as the calendar round or 52-year cycle (Kirchhoff, 1960, p. 8-9, 13).
The 260-Day Divinatory Calendar

The sacred divinatory calendar has its roots in Mesoamerican antiquity as early as the Middle Formative Period in Oaxaca (Marcus, 1976, p. 45; Taube, 1988, p. 180). This calendar was termed Tonalpohualli in Nahuatl, and Tzolk’in in Yucatec Maya. Many names for the calendar likely existed, but most remain unknown. The calendar is comprised of 260 days divided into 13 months. Each of these months or trecena are composed of 20 uniquely named days modified by numbers 1 through 13 and each is under the auspices of a specific deity (Boone, 2007, p. 17).

It can be helpful to think of the 260 day calendar as that of the individual and the local community rather than the state. Individuals were named after the day in the sacred calendar on which they were born, and their fate could be glimpsed by those with knowledge of the calendar’s auguries. Rituals tied to the sacred calendar also tended to be more personal in nature than those tied to the agricultural year. It is believed by some that the sacred calendar is based on the average period of human gestation (266 days), however numerous other possible theories of origin have been proposed (Boone, 2007, p. 17).

Aztec and Mixtec Tonalpohualli

In the Post Classic period Aztec, Mixtec and smaller independent indigenous communities outside the Maya region shared the same day signs. A single Tonalpohualli appears to have been synchronized across all Nahuatl-speaking central Mexico as well as Mixteca, meaning a particular day name and modifier such as 1 serpent was observed in Tenochtitan, Tilantongo, and Tututepec as well as other locations throughout Nahuatl-speaking central Mexico and Mixteca (Boon, 2007, p. 17-18). The Aztec and Mixtec Day
signs include: Cipactli (Crocodile), Ehecatl (Wind), Calli (House), Cuetzpallin (Lizard), Coatl (Serpent), Miquiztli (Death), Mazatl (Deer), Tochtli (Rabbit), Atl (Water), Itzcuitli (Dog), Ozomatli (Monkey), Malinalli (Plant, Grass), Acatl (Reed), Ocelotl (Jaguar), Cuauhtli (Eagle), Cozcacuauhtli (Vulture), Ollin (Movement), Tecpatl (Flint or Obsidian), Quiahuitl (Rain), and Xochitl (Flower) [figure 4 and 5].

Maya Day signs

For the Maya The 260-day continuous tzolkin also consisted of thirteen numbers assigned to modify twenty days, which occurred in the prescribed order (Imix, Ik, Akbal, Kan, Chicchan, Cimi, Manik, Lamat, Muluc, Oc, Chuen, Eb, Ben, Ix, Men, Cib, Caban, Edznab, Cuac and Ahau) (Cassandra et al. 2000, p. 149). Because there are seven more day names than there are coefficients, the same combination of day and number will reoccur every 260 days (Rice, 2004, p. 59-60). For the Maya this ceremonial calendar was also used to divine the characteristics of days and years (Druker, 1987, p. 816) and was responsible for the schedule of rituals (Rice, 2004, p. 59; Taube, 1988, p. 180) [figure 5 and 6].

The 365-Day Solar Calendar

The sacred calendar interlinked with the solar calendar of 365 days [figure 7]. The 365 day calendar is divided into periods of 18 x 20 days. Unlike the 260 day calendar responsible for divination, an individual’s name, and rituals of personal and immediate community import, the 365 day calendar approximated the solar or seasonal year. Variously termed the Solar, Tropical or Vague Year in English. This calendar also likely
had many regional name variations, however some known relevant to this investigation include: *xihuitl, xiuuhpohualli* in Nahuatl (Boone, 2007: 17), *Tzolk'in* in Yucatec Maya.

Though political events were more commonly tied to the solar calendar, it was by no means purely secular. Rituals and feasts tied to the vague year were often more public in nature- sponsored by socially or politically prominent individuals in the community on behalf of the state. For these reasons Boone describes the 365 day cycle as a civic rather than secular calendar (Boone, 2007, p. 16-18). This solar calendar was also divided into months or *veintenas* of twenty named days, which in turn were composed of 4 units of five days. After 18 sets of twenty days each have passed (18 X 20 = 360), an irregular set of five days must be added to approximate the solar year of 365 days.

**Bearers of the Quadripartite Universe**

According to Taube (1988, p. 183, 187), the Aztec, Maya and other Mesoamerican civilizations conceived of time as distance both cosmic and literal. They believed that the turning over of the year and its patron deity constituted a cosmological transference from one cardinal direction of the cosmogram to another [fig 41]. The four directions of the cosmogram are defined as units of revolving time, and are associated with colors, deities, and actual physical directions. In a cyclical fashion the transference of time from one direction (North, West, East or South) to the next, was replicated in greater and greater cycles on progressively larger scales (Taube, 1988, p. 187). A *Xiuhpohualli* or solar year was designated by the name of its first or last *Tonalpohualli* day and conceived of as a Year Bearer. While the Aztec, Mixtec, and Maya all conceived
of Year Bearers, the divisions of time they bore and the verbal and stylistic connotations implied in their depictions varied.

The day name of the 260 day divinatory calendar that fell immediately before or after the five unlucky days of the vague year gave its name to the subsequent 365 day vague year. For the Maya, Epi-Olmec, Zapotec, and some Mixtec it is the first day of the new divinatory calendar, and the last for Aztec, Mixtec under Aztec influence, as well as at the Olmeca-Xicallanca center Xochicalco. In historical and divinatory codices, the Year Bearer was signified by a date identified through stylistic inventions as a Year-Bearer. Regardless of whether the first or last day is selected as the cardinal day of the year, only four days in the veintena can serve as Year Bearers in any year count system employing the Pan Mesoamerican calendar system. This is due to the fact that successive Year Bearers are divided by multiples of 365 days—five days more than a multiple of 20 (Milbrath, 2013, p. 5).

The Year Bearer is often described as a ruler in Mesoamerican languages and art. Zapotec hieroglyphic writing provides the most likely precedents for the practice, which appears common to Central Mexico. Zapotec terms for political office appear both in the context of time and rulership. The headdress used to elevate and draw attention to names of Zapotec rulers also differentiates Year Bearers. The AO sign bearer symbols in Central Mexico might descend from this Zapotec headdress of office [figure 8]. The glyph may represent a proto-Zapotec word kokki meaning “lord”. Boone describes this sign as a Oaxacan pictorial motif for a 365 day year also referred to as the AO sign for the interlaced shapes that form it (Boone, 2007, p. 216, 219; 2000 p. 41) Nuahtl and Mixtec
Year Bearers are: Rabbit, Reed, Flint, and House\textsuperscript{7} [figure 9] (Boone, 2007, p. 229; Milbrath, 2013, p. 10). Despite sharing the same schedule of 20 days the Mixtec and Aztec did not share the same Year Bearer coefficients. The Mixtecs chose a day forty days earlier than that of the Aztecs to be their Year Bearer. Therefore the year count was not synchronized, as were the days. For example the year 1 Reed in the Mixtec city-state Tilantongo was equivalent to the year 2 Reed in the Aztec capital Tenochtitlan (Boone, 2007, p. 17).

Among the Maya there also exists some discrepancy as to which of the twenty day names occupied these four seats. During much of the Classic Period these were: Akbal, Lamat, Ben, and Etz’nab’ (Rice, 2004, p. 60). However, Taube notes that beginning in the Late Classic period, the Puuc area of the Yucatan Peninsula pushed these forward by one day to Ix, Cuac, Kan, and Muluc (Taube, 1988, p. 181). These were the Year Bearers observed by Bishop Landa (William, 1937, p. 60-61).

Despite variation in which group of four repeating days carried the New Year, there is a body of evidence for each set that suggests much of their responsibilities and attributes remained relatively consistent and that certain assigned characteristics such as direction and color continued from the classic to the post classic at many sites (Taube, 1988, p. 183). One of these consistent attributes is the ageing anthropomorphized year. The Maya anthropomorphized Year Bearers and represented them as supernatural personalities who literally bore the weight or responsibility of the year on their back. Thompson writes:

\textsuperscript{7} The Cuicatecs and Tlapanecs instead used Deer, Grass, Movement, and Wind (Boone, 2007, p. 255, n. 17)
The Maya conceived of the divisions of time as burdens which were carried through all eternity by relays of bearers. During the Initial Series Period these bearers were the numbers by which the different periods were distinguished; each number carried the period with which he was associated over his allotted course...time was not portrayed as the journey of one bearer and his load, but of many bearers, each with his own division of time on his back. (Thompson, 1960, p. 59).

This interpretation by Thompson is supported by visual evidence in period ending glyphs at Copan stela D [figure 10]. This Classic period stela is a remarkable example of Maya full-figure glyphs sculpted as low relief, a less common and more time intensive naturalistic type of illustrative rendering that was no longer practiced in the Post Classic period. According to Thompson, the date depicted is 19. 15.5.0.0 10 Ahua 8 Ch’en, and the numbers themselves are depicted as the bearers and burdens of time. This monument represents the time when periods- illustrated as processing porters, come to an end at the lub. The term lub in Colonial Yucatec described the transitional point where porters relieved themselves of their burdens, and also described the distance between these resting places, and to the Kekchi lub means “tired” or “weary” (Thompson, 1960, p. 59).

The inscriptions from stela D found at Copan depict the numbers nine and fifteen as tiered porters enjoying a temporary respite in this temporal relay, while the others have reached their lubay. On the top row both nine and fifteen rest with their loads still strapped to their backs via a trumpline, supporting the load and sweeping across his forehead as he continues to bear the baktun. The deity five will hand off his burden to six to bear the weight of the tun and the number one will likewise take up the load from the uinal and kin relieved from the backs of the completed bearers (Thompson, 1960, p. 59).

The rope termed a trumpline in this description by Thompson is used to carry the year symbol and is also a component in designating Year Bearers in calendrical notations.
at Xochicalco. The use of rope imagery in Year Bearer symbols may be based on this Maya metaphor. Again, the association of the year with a reigning personality is present in both traditions. However it is rather more abstract and linguistic association for the Maya as opposed to the use of overt symbols of rulership such as the Zapotec use of a headdress. In the colonial period Yucatec Mayan *ah cuch ja’ab*, translated as the bearer of the ja’ab, *cuch* literally translates as a burden as it is used in describing public office, responsibility, guilt, or in its most literal usage, a heavy physical weight (Taube, 1988, p. 187).

**Five Unlucky Days**

The period of five nameless days straddling the divide between the Old and New Year is a shared component of the calendrical system used throughout Mesoamerica. Due to the fact that the 18 *veintenas* of the Vague Year only account for 360 days (18 X 20 = 360), the remaining five days immediately follow the last *veintena*, and proceed the first *veintena* on the New Year; the period of five days thereby defines and joins the beginning and end of the year, and it follows logically that new year ceremonies likely began during this period. These days were denoted by circumlocutions, most of which employ descriptive epithets translating to: “barren,” “worthless,” “empty,” “nameless,” or “useless,” rather than by individual names.

These five days represented a delicate, dangerous time when the precise performance of rituals by highly trained specialists is required to navigate the divide between old and new cycles of time. This period of uncertainty was referred to as the *Nemontemi* by the Aztec and *Wayeb’* or *Uayeb* by the Yucatec Maya. It is not known
what these irregular days were called by the Mixtec. However, evidence suggests that some conceptual aspects of the five nameless days were observed in a manner relatively consistent with concomitant Aztec practices until the day count diverged between these civilizations subsequent to the fall of Tenochtitlan (Boone, 2007, p. 17).

Despite the fact that individual rituals performed during this time were regionally distinct, evidence suggests the irregular month of five days was not only mathematically universal, but many of the most basic beliefs governing the period may also have exercised influence beyond the cultural boundaries of individual civilizations. Evidence suggests this irregular month was considered to be a particularly dangerous time by those who employed any version of the Mesoamerican calendrical system (Boone, 2007, p.17). In particular, I suggest the anthropomorphic representation of the year and activities and materials involved in retiring it have parallels in indigenous funerary practices and have a broader applicability within Post Classic Mesoamerica than previously recognized.

Aztec: Evidence suggests no business was carried out by the Aztec who fasted quietly and stayed inside until the start of a new xihuitl. Descriptions of the Nemontemi festivals by cultural outsiders can be found in Sahagun (Book 2 of the Florentine Codex), Duran, and Motolinia, among others.

Mixtec: Scholars have argued Mixtec beliefs and practices surrounding the period shared a strong affinity with Aztec practices but grew increasingly distinct after the fall of Tenochtitlan as the result of the fragmentation of ritual practices and artistic production that followed the loss of its influence in the region.
Maya: New Years Rituals described by Bishop Diego De Landa and corresponding New Year Pages demonstrate that rituals tied to the turning over of the 365 day year to a new patron deity likely took place among Post Classic Yucatec Maya. These period ending rituals appear centered around the five day Maya *Uayeb* and are corroborated by surviving Maya manuscripts. Maya ceremonies in preparation of the turning over of the year are believed to be observed before, during, and after the five nameless days of the calendar.

**The 52-Year Cycle or Calendar Round**

When combined, the 260 and 365 day wide spread calendar types define 52 years (or 18,980) uniquely described days commonly referred to as the calendar round, or 52-year cycle (Kirchhoff, 1960, p. 8-9, 13). The revolution of 52 uniquely named days is a mathematically universal element of the calendar used throughout Mesoamerica, however its cosmological sociopolitical significance and prescribed observation differ between neighboring civilizations within Mesoamerica. Observance of rituals tied to the 52-year cycle appear to have been of primary importance to the Aztec, no evidence proves the Maya employed the 52-year cycle to schedule any period ending points, though they used the calendar to anchor events in time.

While these divisions of time are consistent across civilizations throughout Mesoamerica, the glyphs representing the days in both calendars vary along with the specific regional cosmological knowledge that informs them (Evans & Webster, 2001, p. 598). The mathematics behind the calendar may thus be viewed as the most international system of communication in Mesoamerica. This is not to say that variations in regional
practices of rituals and beliefs tied to the calendar were not decidedly unique. What is consistent is the mathematics behind the groupings. Therefore, material culture discussing beliefs and rituals tethered to this universal mathematical framework are best equipped to illuminate differences between related civilizations as well as enigmatic similarities between unrelated ones within Mesoamerica.

The relationship between cosmological beliefs and ritual expressions of these beliefs were recorded by the Mixtec, Aztec, and Maya in book form. Of those that remain, several manuscript pages document esoteric divinatory knowledge as well as specific ritual prescriptions addressing the five-day period of the culminating solar year. However, due to the systematic destruction of all but a few examples that survive today, it is difficult if not impossible to ascertain a complete picture of the relationship between the regional practices discussed in these extant illuminations. Therefore information will also need to be drawn from written accounts to corroborate the little visual and stylistic evidence available.
CHAPTER III
THE AZTEC NEW FIRE CEREMONY

The best-known ceremonial practice directly associated with the commemoration of the completion of a calendrical cycle tied to the seasonal year is the Aztec New Fire ceremony; however, the Aztec ritual commemorates the completion of 52 solar years, rather than one 365 day cycle. The histories of the Aztecs frequently refer to New Fire Ceremonies (Tena, 1987). The Franciscan friar and colonial chronicler Bernardino de Sahagún is the only one to provide a detailed description of the ritual (1950-1982, bk. 7:25-32). However, the practice is referenced by numerous historical accounts (Códice Tudela, 1980, folio 83v–84r; Durán, 1967, Book II, p. 453–454; Gómez de Orozco, 1945; Motolinía, 1951). A number of scholars have also provided their own analysis of the ceremony and its significance to the Mexica (Broda, 1982; Brundage, 1985; Carrasco, 1999; Moedano, 1951; Nicholson, 1971; Sáenz, 1967). In addition, while less thoroughly documented, many have argued a smaller scale version of the ceremony may have been enacted across central Mexico during the Late Post Classic (Elson & Smith, 2001; Boone 2000, 2007; Von Winning, 1977, 1978).

Sahagún’s descriptions of the Aztec New Fire Ceremony (1950-1982, bk. 7:25-32) explicitly document public and domestic practices surrounding the ritual in the year 1507. People in the central valley of Mexico began the 52-year cycle on the year 2 Reed (Boone, 2000, p. 41). Political activities took place under the direction of the emperor only once every 52 years. At the Imperial level, all fires in the city were extinguished five days before the ceremony was to take place, during which time the citizens waited for the
possible end of the world. I argue this period of five uncertain days is similar to the 
Nemontemi period observed by the Aztec and the Uayeb of the Yucatec Maya.

After these five dangerous days had passed the New Fire was ignited inside the
open chest cavity of a high status sacrificial victim and priests subsequently carried the
flame produced to ignite a stack of bundled wood on a platform in the temple (Elson &
Smith, 2001, p. 158). The same fire was then carried with flaming torches to reignite the
fires in important ritual centers, and subsequently temples of lesser importance before
finally being spread to homes until all the fires put out before the ritual were
Domestically individuals offered incense, cleaned/swept their hearth, and ritually
destroyed and replaced personal and familial effects including: house hold gods, mats,
clothes, hearthstones, incensarios, furniture and cooking utensils and containers:

First they put out fires everywhere in the country around. And the statues, hewn in either wood or stone, kept in each man’s home and regarded as gods, were all cast into the water. Also (were) these (cast away)—the pestles and the three hearth stones (upon which the cooking pots rested); and everywhere there was much sweeping—there was sweeping very clean. Rubbish was thrown out; none lay in any of the houses (Sahagún 1950-1982, bk. 7:25) (Sahagún, 1953, Florentine Codex p. 25).

Sahagun’s description is also evidenced by artifact middens or refuse piles analyzed by
Elson and Smith, (2001, p. 159)\(^8\). The people are described as fasting and lamenting with

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\(^8\) Elson and Smith cite three previously identified middens which scholars have interpreted as archaeological remains of New Fire celebrations, through the characteristics of simultaneous destruction of sets of household ceramics. Two sites of the New Fire deposits are located in the Basin of Mexico on either side of Lake Texcoco. The third proposed New Fire midden is located in western Morelos. Artifact deposits at Chiconautla and Nonoalco along Lake Texcoco were identified as New Fire deposits by Vaillant (1937, 1938). Second, Smith (1992) “rock piles” at the site of Cuexcomate in Morelos excavated a number of, which he has interpreted as New Fire deposit. Third, Tenochtitan excavated by Eduardo Noguera (1968) Volador offering interpreted as a New Fire deposit (Elson & Smith, 2001, p. 159-162)
ominous trepidation as they wait for the possible ending of the world (Townsend, 1992, p. 130, 131) which would take place should the drilling of New Fire not renew the Sun.

According to Sahagún if the fire was not drawn:

\[ \text{… the sun would be destroyed forever. All would be ended, there would} \]
\[ \text{evermore be night. Nevermore would the sun come forth. Night would} \]
\[ \text{prevail forever, and the demons of darkness}^9 \text{ would descend, to eat men} \]
\[ \text{(Sahagún, 1953, Florentine Codex p. 27).} \]

The citizens purportedly rejoiced to see the new fire lighted and some performed autosacrifice while others blistered themselves in the temple fires. This underlines the theme of renewal stressed by the ritual (Elson & Smith, 2001, p. 158).

The purpose or intention of this count is to renew, every fifty-two years, the covenant, contract or vow, to serve the idols. Because at the end of the fifty-two-year (cycle) they observed a very solemn feast and made a new fire, and extinguished all the old (fires). And all the provinces of this New Spain took of this new fire. Then they renewed all the statues of the idols and all of their adornment, as well as the intention of serving them for the next fifty-two years. And also they had a prophecy or oracle of the devil that at (the end) of one of these periods the world would come to an end (Sahagún, 1957, bk. 4, p. 138).

Once the fire had been successfully inaugurated, the renewal of all personal familial and community effects followed (Sahagún, 1953 bk. 7, p. 31; 1957, bk. 4, 144). However there was more behind the ritual that is investigated in this thesis.

In particular, the clear association of the gathered reeds with the year they represent:

\[ \text{When it was evident that the years lay ready to burst into life, everyone} \]
\[ \text{took hold of them, so that once more would start forth-once again-another} \]
\[ \text{(period of) fifty-two years (Sahagún, 1953; bk. 7, p. 25).} \]

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^9 Tzitzimime, in particular have been identified as a likely demon poised to descend should humans be unable to bring forth New Fire. Tzitzimime appear in the Codex Borgia and Tudela and are believed to be associated with women who died in childbirth.
These bundles represented used and aged time, and were closely associated with sickness and the disease of age. Therefore, a fundamental component of the Aztec manifestation of the New Fire ceremony is the funeral for the corruption of the old year. The ritualized death of the year disposes of malign forces disallowing them from carrying their influence into the subsequent cycle of time:

Thus it was said that truly the year newly started. There was much happiness and rejoicing. And they said: "For thus it is ended; thus sickness and famine has left us” (Sahagún, 1953, bk. 7, p. 31).

Instances where New Fire iconography occurs in Aztec codices are plentiful. Several Aztec historical sources refer to eight New Fires (Boone, 2000, p.166–173; Elson & Smith, 2001, p. 169) listed in table 1.

**Aztec New Fire Ceremony Symbolism and Iconography: Bundling the Years & Drilling Fire**

The following examples of New Fire iconography are not exhaustive but are presented as representative of the major motifs known to indicate the well-documented Aztec practice of drilling New Fire and burning Year bundles. Examples drawn from the Mapa Sigüenza, and the codices Borbonicus, and Mendoza discussed here demonstrate the variety of the reed bundle motif in codices of explicit Aztec provenance. Reed bundles in the Mapa Sigüenza appear more naturalistically than those in Preconquest period codices. While they differ greatly stylistically, the motif of bundled years and fire drilling is used here to indicate the performance of a New Fire ceremony in historical time as documented in calendrical portions of codex’s, narrative scenes in the Codex Mendoza, as well as in a map of time in the case of the Mapa Sigüenza both of which provide illustrative mythologized histories.
The Mapa Sigüenza [figure 11]\textsuperscript{10}, does not have a definitive date but is believed by many to have been created in the early 16th century. Little has been published interpreting the map which depicts 400 years of the migration story of the Aztecs since their mythologized departure from Aztlán through to their arrival in Tenochtitlan. Not all time periods receive equal attention and some receive added emphasis (Boone, 2000, p.166-171). This selectivity in the single extended narrative representation lends the weight of significance to those events selected for representation, indicating they held a high place in Aztec national identity.

Over the course of the journey from Aztlán to Chapultepec (Grasshoper Hill), eight reed bundles document New Fire ceremonies carried out as part of the 52-year cycle. The Burning ceremonies occur along the path taken by the Aztec tribes and indicated here with footprints. The Aztec initially depart from Aztlán, located in the middle top right quadrant and travel roughly counter clockwise down towards the lower right and finally up to the left to Chapultepec (Grasshoper Hill) the largest and most detailed place sign at the center left. Under Chapultepec, the scene turns upside down to indicate a shift from a narrative of the journey to the visual layout of southern Lake Texacoco (Boone, 2000, p.166-168).

These bundles, highlighted by yellow rectangles in figure 12, represent reeds bundled together tied with a prominent knot motif. Somewhat uncharacteristic of Preconquest Mexica style, the reeds are depicted as whole green plants including naturalistic foliage root and root ball bound together with horizontal knotted rope (Boone, 2000, p.166). The naturalistic depiction of the living reeds in the Mapa Sigüenza being

\textsuperscript{10} Or as María Castañeda de la Paz proposes to rename \textit{La pintura de la peregrinación} (the painting of the pilgrimage)
somewhat atypical is indicative of possible post conquest European influence. However, as discussed later, the use of the rope and knot motif illustrates continuity with indigenous iconography for New Fire rituals predating Aztec use.

Like The Mapa Sigüenza, the Codex Borbonicus also explicitly depicts the New Fire Ceremony on page 34 [figure 13]. Here an easily discernable mountain glyph with a fire drill indicates the place and date (2 acatl). Four priests wielding bundles of sticks signifying years (a xiumohpilli or atado de afios) tend the New Fire in the temple. Unlike the Mapa Sigüenza, the reeds gathered and bundled in Codex Borbonicus are more rectangular and stylized, suggestive of its earlier date by the absence of European taste for naturalism. Though some artistic conventions differ when depicting the bundles, even within Aztec manuscripts, most characteristics, such as the even length of the gathered rods tied with knotted rope is a consistent characteristic in the rendering of year bundles.

This helps to identify bundles of counted time as opposed to bundles of spears, arrows, and feathers. Quivers and spears include tips and are usually partially colored (often red and white stripes) [figure 14] and usually appear combined with a shield motif indicating war at some point in each manuscript [figure 15]. The most difficult to distinguish iconography is of feather bundles. Feather bundles tend to be thinner and longer and often include a curvature at one end to illustrate the flexibility of the material [figure 16 and 17]. However, the green coloration is also consistent with some depictions of reed stalks, as in the case of the post-conquest style of naturalistic green shoots pictured in the Mapa Sigüenza. Feathers and reeds can usually be distinguished when they appear stacked alongside one another in compound offerings. In stacked offerings feathers as well as rubber depicted as a circle.
The next phase of the ceremony is illustrated on page 36 [figure 18] of the same manuscript. This page illuminates the ritual disposal, arguably the funeral for this cycle of time. Again, the ceremony is indicated by a firewood bundle [figure 19]. The base design of the firewood bundle is considered a “standard” form of representation for the binding of the years by Hasso Von Winning (1977, p. 26). However, the representation of this symbol becomes more significant through the anthropomorphic headdress (matching that worn by the priests’ pictures on page 34 [figure 13] and funerary accouterments added to the bundle [figure 20]. The scribe’s use of high social status regalia such as a headdress in the rendering of the bundle suggests the death of a living and reigning cycle of time (Caso, 1967, p. 129-140; Nowotny, 1974, p. 22-23).

Visual evidence suggesting Aztec reed bundles personified a dying cycle of time can be read by the prevalence of death imagery and ritual practices surrounding the period in which an old year is retired characterizing it is a living thing that dies. Funerary reed bundle and death gods appear associated in the Codex Borbonicos (Caso, 1967, p. 129-131). Von Winning (1978, p. 17) argues the New Fire ceremony was essentially comprised of two separate rituals, both of which are evidenced in Aztec codices. These are the drilling of the new fire inside the chest cavity of the sacrifice, and the burial of a stone-carved firewood bundle at a different site.

Actual bundles of sticks or reeds likely existed. As Von Winning points out, this practice would have been a practical way for priests to count the years. In this scenario, priests may have collected a reed after each year and bundled them after a larger unit of ritually significant time had accumulated. The actual wooden bundles used for counting would have been burned in the ensuing New Fire ceremony. However, these bundles
were commemorated in stone before the New Fire ceremony, and the stone version was buried (Von Winning, 1978, p. 17) similarly to funeral bundle.

Excavations in Mexico City have uncovered multiple carved stone firewood bundles buried in ceremonial fashion in a funerary context [figure 21] (Batres, 1979, p. 153; Elson & Smith, 2001, p. 170-171; Von Winning, 1978, p. 17). Stone sculptural representations of the 52-year bundles have been uncovered in excavations at the Templo Mayor, the primary temple of the Aztec capital city Tenochtitlan. The carved stone firewood bundles or Xiuhmolpilli sculptures [figure 22] depict stylized but relatively naturalistic wooden rods of identical length gathered into a cylindrical bundle tied with rope and the day sign for new fire included in front. Figure 23 is an example of a stone year bundle displaying the date 2 Reed- when New Fire ceremonies are believed to have taken place for the Aztec.

Codex Aubin page 17 [figure 24] illustrates the other major pictorial representation used to signify the binding of the years. Here a knotted rope motif is used rather than the rods themselves as the primary signifier of the bundling or binding of time. The date represented is Year 2 acatl and a knotted cord indicates the completion of 52-year cycle. The use of knot to specify New Fire ceremonies is present in Teotihuacan iconography. The exact pattern of which varies with the artistic medium employed be it relief, ceramics etc. (Von Winning, 1978).

A third universally representative symbol for New Fire in the context of Aztec material culture is a fire drill or mamalhuaztli along with the date 2 acatl. In Aztec

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11 Xiuhmolpilli sculptures are also alternatively referred to by Seler reed bundles (Seler 1902-1915, p. 874-879) and Caso termed them, haz de cañas, likely due to the associated calendar glyph acatl translated as Rohr or caña (Caso, 1967, p. 130).
codices this regularly appears in the portion of the illustrated manuscripts dedicated to
calendar notation (Von Winning, 1978, p. 17). Folio 2r of the Codex Mendoza [figure
25] exemplifies this method of signifying the Aztec New Fire ceremony and documents
the last such ritual on the date 2 Reed (1507 AD). The Mid-16th century Aztec codex
depicts the founding of Tenochtitlan, and the conquest of Colhuacan and Tenayucan and
typifies the use of a simplified drill to indicate New Fire. Figure 26 provides a detail of
the glyph which is highlighted in the margin indicating the greater significance of this
ritual compared to the dates surrounding the symbol that forms a blue frame around the
scene. All together, the calendrical portions of the Codex Mendoza document four New
Fire ceremonies observed prior to the arrival of the Spanish (A.D. 1351, 1403, 1455,
1507 Table 1 ) (Von Winning, 1978, p. 17).

While large catalogues of signs and motifs are proposed as linked the lighting of
New Fire (Von Winning, 1977, 1978; Fash et. al. 2009), the most well documented and
unchallenged within the context of Aztec Art are the appearance of equal length bundles
of gathered reeds or wood, knotted rope around a bundle, and the act of drilling fire.
However such representations also appear in the traditions of cultures outside the triple
alliance empire, often in areas where no evidence suggests observance of New Fire
ceremonies to commemorate a 52-year cycle. This makes the association between the
iconography in different cultural contexts more tenuous than in known Nahuatl speaking
territories under the Aztec empire.

Though the cycle of 52 years is a calendrical unit believed common to all
Mesoamerican calendar systems during the Classic and Post Classic period, it is
extremely unlikely communities outside the triple alliance empire observed the 52-year
time table for the New Fire ceremony. However, the relationship between concomitant civilizations both within the broader Mixteca Puebla region, Veracruz, and the Yucatec peninsula is complex, multifaceted, and in many ways still unresolved by current scholarship. Of particular importance is the provenance of manuscripts in the Borgia group and their relationship to Aztec and Mixtec manuscripts as well as their possible cultural exchange with some remaining Maya cites in the late Post Classic. Therefore it is important to try to understand precedents for what appears to be a later Aztec reinterpretation of an ancient and widespread practice as well as parallels in Mixtec, Borgia and Maya codices in order to understand what may be more universal about the ritual, its possibly international iconography, as well as distinct regional practices.

**Origins of the Aztec New Fire Ceremony in Teotihuacan**

Archeological, historical and art historical evidence exists indicating the widespread observance of New Fire Ceremonies in the Post Classic period throughout Central Mexico. While it is not clear where exactly the Aztec acquired the ritual and its symbolic depictions, evidence suggests they may have adapted New Fire imagery from Teotihuacan. As discussed in the previous section, the Aztec had an elaborate ceremony in which they buried the bundle of years. This is generally believed to have taken place during Tititl, the penultimate venta festival for most Aztec calendars (Milbrath, 2013, p. 10). However, its explicit link to the closing and opening of 52-year cycle appears to be a later Aztec dynastic foundation rite.

Christina M. Elson and Michael E. Smith argue that the New Fire Ceremony was a pervasive ancient ritual observed throughout Post Classic Mesoamerica. They contend
the common practice was appropriated by the Aztec empire and reinterpreted as part of a framework of cultural authentication designed to legitimize a political program of imperialism (Elson & Smith, 2001, p. 170). Elson and Smith provide analysis of unpublished artifact dumps excavated by Vaillant at Chiconautla and Nonoalco in the Basin of Mexico and by Smith at Cuexcomate in Morelos that evidence the New Fire Ceremony was an “ancient and widespread ritual in Post Classic central Mexico that was appropriated by the Aztec empire as part of its program of ideological legitimization and control” (Elson & Smith, 2001, p. 157).

In his *The "Binding of the Years" and the "New Fire" in Teotihuacan*, Hasso Von Winning (1978) argues iconographic evidence indicates the symbol for the 52-year cycle employed by the Aztec known as the “bundling of the years,” has its origin in the early classical period of Teotihuacan, where the cycle was represented ideographically by the compound signs of wood, cords, twists and knots. Elson and Smith (2001, p. 169, 52) also argue the international iconographic symbol for the pan-Central Mexican practice was a fire drill with flames, the same iconographic language as employed in the Codex Mendoza [Figure 26]. According to the authors, the first straightforward instance of the symbol appears on a Xochicalco stone relief from the early post classic predating any Mexican use of the symbol by two hundred years or more (Elson & Smith, 2001, p. 169, 52) [figure 27]. The argument that the first New Fire ceremony was recorded at Xochicalco was made by Saenz (1967), who initially discovered the carving.

The Xochicalco stone clearly displays the same iconographic symbol of the vertical drill into a horizontal firewood bundle or drilling board accompanied by flames later employed by the Aztec [figure 26]. Saenz and Orozco y Berra give the carving the
date c. 675 AD (Von Winning, 1977, p. 18-19). The subtractive relief records the date 1 tochtli (Rabbit) and 2 coatl (Serpent). César Sáenz (1967, p. 52) cites the two nested concentric circles as proof the date indicated the first 52-year New Fire Ceremony. This has been subject to some controversy as Post Classic people in the central valley of Mexico began the 52-year cycle on the year 2 acatl (Reed) (Boone, 2000, p. 41).

To explain this incongruity Anderson and Dibble (1953, p. 23) cite historical sources describing disasters such as famine that took place during 1 tochtli (Rabbit) years to support the argument the ceremony was deliberately moved to the subsequent 2 acatl (Reed) out of superstition. However Von Winning (1978, p.18-19) challenges the reading of the concentric circles as indicative of one to begin with. He points out convincingly that the practice of ascribing an ordinal number to mark the beginning of rituals projected to be performed in the future according to an interval of 52 years has no basis or precedent in Mesoamerican art or cosmology (Von Winning, 1978, p.18-19).

The argument that some version of the New Fire ritual, likely representing shorter periods than 52 years, recorded with the same iconography subsequently was employed by the Aztecs is also supported by stylistic evidence and corroborating preferences for the artistic conventions of powerful early Post Classic communities. The Xochicalco relief has been stylistically analyzed by Kenn Hirth (2000) in his archaeological research at Xochicalco, in which Hirth argued the style of carving (particularly with regard to the frame or cartouche surrounding the date glyphs) reflects the sculptural style of Xochicalco around 650–900 ad (Hirth, 2000; Elson & Smith, 2001, p. 169). Other scholars have also cited evidence to indicate the artistic conventions of Xochicalco,
Teotihuacan and Tula were intentionally adopted by Mexica artists (Umberger, 1987, 1996; Klein, 1987).

There are numerous other examples of the practice and use of this symbol before Aztec usage. Another indication of an older observance of New Fire can be found in a Teotihuacan Xolalpan style base relief panel [figure 29] (from Bolz-Augenstein 1970. Pl. 20, 70). This relief clearly depicts a high status individual in profile wearing a frontally depicted elaborate feather headdress. The identity of the individual as a celebrant in a New Fire ceremony is indicated by the four burning bundles of wood within the composition (highlighted by the author in yellow rectangles in the figure provided).

Two of the bundles are held as torches by the priest, one in each hand. The other two burning bundles appear depicted frontally in a heraldic arrangement within the headdress still grasped by hands where they are balanced on either side by the Zapotec day sign of the pan-Mesoamerican calendar (termed Glyph A) highlighted in blue rectangles. The main element within Glyph A is a knot motif rather than a specific day in the Tonalpohualli evidenced by the lack of any modifying number\(^\text{12}\). The knot is also used as a symbol for binding time by the Aztec as evidenced by the Codex Aubin, page 17 [figure 24], and may therefore represent another conceptual and stylistic precedent for the iconographic form. The glyphs are further connected with the concept of binding the years by the fact they are connected by a rope. Von Winning argues that the flames protruding from the ends of the bundles refer specifically to sacred fire and may have

\(^{12}\text{When the knotted rope motif constituting Zapotec Glyph A is used to indicate a specific day in the Tonalpohualli rather than the idea of the calendar itself it must include a modifying number that distinguishes the date.}\)
been lit from the ritualized drilling of fire marking the completion of a cycle of time (Von Winning, 1978, p. 22).

Like the motif of fire drilling and bundles of wood identified at Teotihuacan by Von Winning (1977 and 1979), a rope motif characterized by a twisted and knotted cord has also been identified as a visual indication of bound time and consequently New Fire ceremonies by Caso (1927) and Nicholson (1966) according to James Langley (1997). Examples of the rope and knot in Aztec New Fire iconography may be found in figure 24 from the Codex Aubin. Which evidences the sign is part of the Aztec glyphic system.

Nicholson first argued that the generalized year-sign of looped rope used at Xochicalco recalled the tumpline used by Maya Year Bearers carrying their burdens of time (Langley, 1997). Figure 28 provides an example of the twisted chord or rope in sculpture from Teotihuacan identified in 1905 by Leopoldo Batres (1906, p. 25). The images pictured in figure 28 display two similar stone slabs identified as flaming bundles.

According to Langley (1997):

...one can construe the elongated rectangle as a firedrill (Nahuatl 'tlequauitl') within its ritual folded paper. The Xiuhmolpilli is invoked in the twisted cord here superimposed on the presumptive woodblock. With flames above and (on the slabs) to either side of the woodblock, this combined imagery relating to the two rituals is more powerful evidence for their existence at Teotihuacan than would be the Xiuhmolpilli alone. This hypothesis is rendered all the more plausible by the usage of New Fire symbolism in the inscriptions of highland sites such as Xochicalco in the immediate post-Teotihuacan period (Saenz 1967), thus partially bridging the time gap between Teotihuacan and the post-classic Aztecs.

However, while these examples illustrate the antiquity of the practice of binding the years before ceremonially burning them, they do not explain the method of transmission by which the Aztec encountered the ritual they subsequently tied to a 52-
year cycle. Elson and Smith stress that the process of cultural authentication in which Tenochtitlan acquired cultural beliefs surrounding the New Fire Ceremony from Xochicalco remains unknown (Elson & Smith, 2001, p. 169). However, they argue that the practice was pervasive in Mesoamerica during the Post Classic period. Some have postulated the rationale by which the Aztec incorporated the ritual into their imperial identity.

Aztec civilization took an inclusive approach to the religious and cosmological beliefs of conquered territories. They acquired the beliefs of the civilizations they incorporated for their own ends rather than destroying or suppressing them. Artistic representations, like the ceremonies they represented would likewise have been appropriated by the empire:

“One of the characteristics of Aztec imperialism is that the empire made little or no effort to impose Aztec religion on conquered peoples. Instead, Aztec religion was actively inclusive, incorporating numerous gods and rituals from conquered peoples. Idols of foreign gods were brought to Tenochtitlan and displayed in a special temple.” (Elson & Smith, 2001, p. 170-171)

Ross Hassig (2001, p. 118) argues the Aztec moved the spiritually significant New Fire Ceremony in order to enhance its social visibility in place and time. According to Hassig, these ceremonies likely did not take place on the date or in the location recorded in Aztec codices. Moreover, Hassig contends the earliest of these, recorded as having taken place before the migration into Mesoamerica from the North [figure 11 and 12] did not take place at all (2001, p. 114). While acknowledging the prolific use of iconography depicting the drilling of New Fire, Hassig argues New Fire glyphs do not document actual events (2001, p. 114). Rather he contends and proposes the ceremony
was only observed in the most politically powerful calendrical centers including
Tenochtitlan and Tlaxcalla, and not their subordinate cities (2001, p. 118).

Though it would be tempting to read all iconography known linked to the well
documented Aztec New Fire ceremony as evidence of the penetration of an Imperial
Aztec ritual throughout Mesoamerica in the late Post Classic, I believe this would be a
mistake. Nor is it useful to artificially divorce remarkably consistent artistic iconography
suggestive of New Fire rituals from how the same signifiers are evaluated in Aztec art. It
is far more likely the ceremony was ubiquitous throughout Mesoamerica before the
Mexica encountered the practice.

As the use of the ritual to commemorate a 52-year cycle is the most obvious
Imperial Aztec edition, it follows the drilling of New Fire and burning of dying bundled
years took place at shorter intervals, perhaps at the end of the five unlucky days common
to Mesoamerica. Therefore arguments that New Fire ceremonies may have been held for
shorter period of time outside Aztec Imperial territory will be considered. The next
chapters will explore less obvious instances of New Fire iconography within the wider
region of Post classic Mesoamerica to discover their possible relationship to pre and post
Aztec use of the practice.
CHAPTER IV
NEW FIRE ICONOGRAPHY IN HIGHLAND MEXICAN CODICES

Mixtec Group

In order to ascertain if consistent New Fire iconography is present in regions independent of the Aztec Empire it is useful to search for similar motifs in Highland Mexican Codices. Scholars have traditionally divided the surviving corpus of Highland México Codices (aside from the separate body of Aztec codices with clear provenance) into two distinct groups based largely on content as well as style and material. The so termed “Mixtec” group of codices is considered largely historical and more dynastic in nature than the overtly cosmological interest of the so-called “Borgia” group (Boone, 2000, p. 42; 2007, p. 231). The system of articulating complex abstract concepts alongside concrete details in a system of relational organization is the strongest similarity uniting the regional variations present between surviving codices from Highland Mexico. It is this shared trait that makes the esoteric knowledge and ritual precision present in the texts so difficult for scholars to interpret. Compositions from these Highland Mexico codices can appear deceptively simple when first considered, however the system of pictorial writing is simultaneously abstract, abbreviated, and exceedingly specific. To add to uncertainty, there are several indications of a relationship existing between common depictions and regional language, calling into question the traditionally held conception of these manuscripts as illustrative rather than pictographic.

Examples of New Fire being drilled occur in numerous Mixtec codices (Boone, 2000, p. 94–160) as well as in the Historia Tolteca-Chichimeca (Boone, 2000, p. 180–181; Kirchhoff et al. 1976, folios 32v–33r) indicating its ubiquity among the eastern
Nahua peoples of Southern Puebla (Elson & Smith, 2001, p.170). While Aztec use of New Fire iconography is relatively clear, the relationship between drilling and bundling and the calendar in Mixteca Puebla manuscripts is more complicated.

Within the Mixtec group chiefly concerned with historical and political accounts, the iconography of drilling fire appears in association with rights of foundation and accession; however when fire is drilled to found a polity or authority the bundling of years is rarely indicated. When iconography for bundled years does occur in Mixtec codices it is not a major attribute such as the sacred bundle or bouquet of herbs, and the gathered reeds occur in the context of stacked offerings, however sacred bundles with round cloth or hide bases are most often including identifying attributes are part of the narrative. This demonstrates the practice of drilling New Fire had a more general applicability within the highland region to induct a new period be that of time, place or for a new ruler. For example, while the Aztec practice of the Ritual closed and opened the new cycle of 52 years, the Mixtec practice of the New Fire ceremony also facilitated a process of renewal (Elson & Smith, 2001, p. 170). However, the time to enact the ritual was very much different. Examples of fire drilling discussed include: Mixtec Codex jjVindobonensis, Zouche-Nuttal, Bodley, and Seldon.

According to Boone, the ritual, while still regularly present, appears far less often than in Aztec codices. The major iconography associated with the Mixtec New Fire Ceremony are: drilling sticks, a fire board, a sacred bundle, and staves of power making their assertion of rulership and political authority quite plain (Boone, 2007, p. 207). Here fire drilling iconography appears in association with foundation rites, rather than iconography that would underline a reading that sacred bundles represent the “binding of
the years” such as stacked equal length rods tied with string. Unlike the Aztec use of New Fire, the painters of the Mixtec group do not appear to have associated the ritual with the calendar round. However in both manifestations the New Fire Ceremony was a rite of renewal (Elson & Smith, 2001, p. 170). Examples of iconography associated with the drilling of New Fire can be found in the Codex Vindobonensis (Vienna), Zuche-Nuttal, Bodley, Colombino, Egerton, Seldon, Lienzo, the Mapa de Teozacoalco, as well as in several manuscripts believed to originate in the Coixtlahuaca Valley (Boone, 2000, p. 94-160).

18ab-17a and 32d-31 of the Mixtec Codex Vindobonensis or Vienna (Boone, 2000, p. 94-96, 99) describes rituals carried out to establish new polities. The intent of the last 22 pages of the Vienna obverse, according to Boone, is to establish the organization of Mixteca land and people into mutually exclusive polities. This is accomplished by articulating a standard Mixteca foundation ceremony nine times in a row, and each instance of foundation is also accompanied by some regional variation. According to Boone the common organization of the rites of foundation occur universally in the following order:

The use of a symbolic date and the composite glyph cradle board, animal tail, and platform symbolizing the birth of the new polity. An identified deity makes an offering, an indicator of AO pictorial motif for a 365 day year (Boone, 2007, p. 216, 219; 2000 p. 41) [figure 9] along with one disk (representing the beginning of the counting of time) initiate construction of the city that takes place in six recognizable stages and always in the same order. A new date begins the third section where a deity identified by name drills fire whilst another holds a bouquet of three identifiable and consistent herbs tied
with a streamer made from paper. In the final phase of Mixtec foundation a series of
locations including temples is provided (Boone, 2000, p. 95).

Page 18 of the Mixtec Codex Vindobonensis depicts fire drilling as part of this
ritual which is highlighted by a yellow rectangle in [figure 30]. The version of fire
drilling that appears in Mixtec foundation rituals does not take place upon a sacrifice as it
does in Aztec accounts but rather upon a fire board as it does in glyphic representation in
the Codex Bodley. It is accompanied not by bundled years, but rather distinctive ritual
objects used in foundation rituals. Boone argues that the system of representing
foundation rights employed in pages 18ab-17a served as an archetype for later
representations surviving the same function appearing in the following codices that share
the same ritual foundation objects:

Page 18b in the Codex Zouche-Nuttal [figure 31] illustrates the cult objects of
foundation brought to new territories by deities and cultural heroes. The component
necessary for the ritual displayed include a cult bundle or temple used to establish the
new city, elaborate drill for drilling the New Fire, a distinctive staff of rulership
“quincunx”, and less fundamental accouterments that never the less further identify the
ritual as political and foundational as they are known elements in Mixtec foundation
rituals such as a conch shell, a purse of incense, and a sacrificial quail.

Pages 8-10 of the Codex Bodley provides an illustrative account of the life of
Lord Eight Deer and includes explicit renderings of the cult bundles illuminating their
visual differences with year bundles on page 9a [figure 32] (Boone, 2000, p. 99). Lord
Eight Deer’s biography focuses on his performance of rituals with help from priests and
deity impersonators. In the conclusion of the biography (section 10-9-ii) Lord Eight
Deer’s sacred bundle and staff of rulership are placed at Tilantongo (Boone, 2000, p. 96-99). The explicit objects of power he places here are highlighted by a blue rectangle in figure 31 and include: the staff of rulership, the precise shield, gathered arrows and the sacred bundle he had previously venerated now placed inside the temple (Jansen & Jimenez: 2005: 63).

Pages 3-4 of the Codex Seldon [figure 33] also demonstrates clearly the differences between the sacred bundles pictured in Mixtec foundation rituals and those indicative of the binding of the years. Here, as is the case in the Bodley illustration, the sacred bundles are round and bound with cloth as well as rope. At the beginning of the scene we see the bundles being tied by the priest Ten Lizard and the priest Three Flower. The sacred bundles often appear topped with identifiers such as Lady Eight Rabbit and "reptile eye” surmounting the bundles pictured in the lower right quadrant of the page (Boone, 2000, p. 99, 155-157) A stylistic equivalent to the round bundles of the Mixtec annals appears on page 53 of the Codex Borgia [figure 34] on the right hand of the splayed deer pelt on which the day names are placed providing evidence these sacred bundles differ from reed bundles in meaning rather than style.

In Mixtec codices, high status individuals in the guise of deities (as indicated by their human heads emerging from supernatural costumes) drill New Fire to signify the founding of a new community (Boone, 2000, p. 94–160; Furst 1990). The argument that the New Fire ceremony began to be used in rights of investiture and foundation has been under investigation by scholars. Guilhelm Olivier (2007, p. 281-302) provides a strong argument that the New Fire was utilized in a variety of ceremonial contexts through the
region of Mesoamerica. Olivier (2007, p. 301) believes the central theme tying together apparently disparate manifestations of the practice is that of marking a new era.

The occasions that can be linked to the essential iconography of sacrifice, sacred bundles and drilling fire include the beginning of a social identity in which a people leave their place of origin (Chicomoztoc), the procurement of characteristic traits during the pilgrimage to a new place, the foundation of a polity, the initiation of a house (Sahagún 1950-82, p. 194) or temple (Anales de Tlatelolco 1980, p. 40; 1999, p. 86-87; Codex Telleriano Remensis, folio 39r); accession to power of a new authority or the foundation of a new lineage after a conquest, and finally the creation of a new temporality (Olivier, 2007, p. 299-301). I argue the more specific implementation of drilling New Fire can be found and analyzed within a more restrictive context in which New Fire iconography occurs in conjunction with funerary imagery, bundled years, anthropomorphized cycles of time, and in codex pages previously proven to be illustrative of the five periods of nameless days observed throughout Mesoamerica.

**Borgia Group**

While cosmological rituals are unlikely to have been selected for representation in Mixtec manuscripts grouped for their more secular content, codices the Borgia group\(^\text{13}\) do illustrate New Fire ceremonies tied to renewal of time. The exact provenance of the group’s members assembled for their continuity of cosmological underpinning rather than

\(^{13}\) The Borgia Group, named after the Italian family who owned the most famous manuscript of the set (the Codex Borgia), includes seven codices sent back to Europe.
style remains the subject of some debate among scholars. Boone describes the difficulty of assigning the exact origins of the members of the Borgia group of codices thus:

The exact provenience of the divinatory codices has been so hard to determine because they contain very little that is local. In contrast to the historical documents, which tend to reflect the politics and perspectives of their particular towns, the books of fate are largely silent about their own origins. They include no named humans, no named polities, no concrete historical events (except possible celestial phenomena), and no specific place signs other than the cardinal directions. Even when the cardinal directions are represented by individual place signs, as they are in Aubin No. 20 and the Codex Porfirio Diaz Reverse, these signs refer not to political entities governed by known families but to sacred locations relevant to many peoples. The divinatory codices do not seem to present local or regional realities; rather they participate in a broadly shared ideological system that concerns the cycles of time and the gods and forces linked to these cycles (Boone, 2006, p. 231).

However, there is considerable evidence according to Boone that the Borgia Almanacs come from diverse locals within the greater Tlaxcala-Puebla-Mixtec region (Boone, 2006, p. 11) The Mexican divinatory manuscripts as a whole are believed to reflect the calendric and divinatory practices and beliefs of the valley of Mexico, Puebla, Tlaxcala, and perhaps the Gulf Coast region. The divinatory codices could have been created by Mixtec, Nuuatl, Cuicatec, Chocho, or Otomi (Boone, 2007, p. 232).

There are seven members of the Borgia group. These include the Pre-Columbian codices Borgia, Cospi, Fejérváry-Mayer, Laud, Vaticanus B, Aubin No. 20, and the post conquest Porfirio Diaz Reverse. With the exception of the hide Aubin No. 20, they are all screenfold\textsuperscript{14} books made from a single long page folded like a screen or accordion (Boone, 2007, p. 5). Despite obvious differences in style indicating they were painted in

\textsuperscript{14} A screen fold book is a manuscript on a single long piece of material such as bark paper that is folded like an accordion to delineate the pages.
different places, the manuscripts are profoundly similar in content despite the fact that members of the Borgia group were likely created at diverse locales by adversary nations.

The manuscripts share a common system of iconography, system of divination, as well as pictographic modes of representation (Boone, 2007, p. 232). The consistency in the cosmology illustrated in diverse styles provides strong evidence that a pervasive continuity of meaning behind ritual practices did exist across Central and Southern Mexico in the Post Classic period. I believe this suggests the temporal New Fire ceremonies described may have been practiced in areas where the previously discussed Mixtec group codices were made, as they share a common artistic tradition and were grouped by content rather than local.

Both iconography for drilling new fire as well as bundles of reeds burned as offerings are present in most if not all of the codices in the Borgia group. Again I believe this is consistent with the characterization of the manuscripts as less historical and more divinatory and cosmological in nature, concerned more with the performance of rituals and reading of auguries than the histories of kings and wars. Therefore the depictions of fire drilling found in the codices are more likely associated with temporal rituals than those of the Mixtec group previously discussed. Fire drilling in the Borgia group also differs from that in the Mixtec group in its strong directionality conveyed by the object or sacrifice into which New Fire is drilled as well as other iconography connections intimating the role the ritual performed in renewing the sun and therefore temporality.

The Codex Borgia begins with an eighteen page cosmogony followed by ritual protocols. Fire drilling can be found on pages 34, 46, 49b-52b. Page 34 of the Codex Borgia [figure 35] provides an account of a primordial sacrifice used to bring about the
birth of the sun, personified here as the red Xolotl (Nowotny, 2005, p. 28). Xolotl is a god who always figures in Mexican cosmology surrounding the birth of the sun, though sometimes playing different integral roles in the narrative.

Inside the red temple in the lower center of the page, a warrior painted black drills New Fire from the breast of Tonacatecuhtli. The drilling takes place in front of a large red solar disk illustrating its connection with the sun. The smoke produced forms a solar being who is then enthroned directly right of where he emerged from the drill (Boone, 2007, p. 188). However this reading is still under discussion\textsuperscript{15}.

On page 46 of the same manuscript in the eighth episode and the close of the creation narrative [figure 36] we see Quetzalcoatl drill new fire onto the chest of Xiuhtecuhtli the fire god who is engulfed by a fire serpent. The smoke drawn from the drilling of New Fire conveys four directionally colored fire spirits, propelling them towards their assigned directions (Nowotny, 2005, p. 33). Like the New Fire that opened the narrative of page 34, drilling fire at the close of the cosmic narrative on 46:

...signals the beginning of a cycle of time and perhaps also the beginning of a community and realm. Normally a sign of beginning, the fire drilling functions in the Borgia to close out the creation narrative. It is the last supernatural act of the story, but it is an act that establishes a time and place that will now belong to humans (Boone, 2007, p. 208-209).

The strong directional emphasis present indicated by the flight of the fire spirits on page 46 is the most telling aspect of the iconography of these compositions. This emphasis on the directional association of the illuminations evidences their connection to the transference of time from one cardinal direction to the next. The directional emphasis

\textsuperscript{15} Susan Milbrath (2013, Plate 6 commentary) identifies the deity being renewed as a lunar god symbolizing the new moon or the 1\textsuperscript{st} crescent moon to the West, ad the pages have been historically analyzed by Seler as recounting the travels of Venus.
is indicated by the fact that the fire spits are color coded, and seek one of four directions of the cosmogram (North, South, East and West) in their flight. According to Boone “…the count of the days creates a steady continuum that journeys from one direction to another..” (Boone, 2007, p. 114). The association between cardinal directions and time is made explicit in figure 41 Page 1 of the Codex Fejérváry-Mayer.

On page 34 and 46 of the Codex Borgia, New Fire births and renews the sun (Nowotny, 2005, p. 33) or the moon as some have argued (Milbrath, 2013, p. 82) though this reading is less in keeping with contemporaneous Aztec practices believed to have a strong relationship with the cosmic narrative of the Borgia. Regardless, the emphasis on renewing a celestial body I believe underscores the practice’s temporal significance and role in navigating the divide between cycles of time. Though the ritual is grounded by actors performing a ceremony at an explicit location the cosmological significance of the cosmic narrative of creation displayed in the Codex Borgia clearly articulate the difference in context between the fire drilled here and that drilled in the Mixtec histories.

New Fire drilling also appears in the lower right quadrant of section b in pages 49b through 52b of the Codex Borgia [figure 37-40] (Boone, 2007, p. 121, 124-126, 242). These enigmatic pages are still not fully understood by scholars. One of the murkiest questions is what exactly the act of drilling fire signifies in this context. Boone tentatively identifies the fire drilling in Borgia 49b-52b as related to the “…founding of polities or cults or the occupation of new homes” (Boone, 2007, p. 129). However, I believe the fires drilled illustrate a component of New Years ceremonies held at the close of the 365 day year. I contend the drilling in 49b through 52b is a component of a Pan Mesoamerican practice observed at the close of a universal period of five dangerous days
of the solar calendar. I do not claim the period was observed at the same date throughout Mesoamerica, nor that this was the only use of drilling New Fire, or that other longer periods of time were not traversed by the same practice. To evaluate this new reading it is necessary to understand the page’s organization and content.

The Borgia pages 49b through 52b share an identical organization indicating they illustrate the same ritual practiced at different times along a regular cyclical interval [figure 37-40]. The shared iconographic elements on these pages identified by Boone (2007, p. 124) in ordinal reading order included: (1) a cosmic tree with a bird perched on it, (2) a deity making an offering to a temple, (3) animals attacking (4) two figures descending from above (in this case Macuiltonaleque (Boone 2007, p. 127) Tonolenque, or Personified Nemontemi figure holding weapons and Cihuateteo with a sacrificial rope (Nowotny, 2005, p. 33-36) (5) another deity drilling New Fire, (6) a tree of sacrifice, (7) an anthropomorphized day name, (8) a cosmic marriage, (9) an enthroned year, (10) the god or day number five as argued by Boone (2007, p. 123-124), 5 deer masquerading as one of the five Tonaleque as identified by Nowotny (2005, p. 33-36), or as I will suggest, a personification of the five days of the Names Unlucky period of Nemontemi before New Fire is drilled.

Directionality is of paramount concern in these pages. The most significant directional indicators present according to Boone are the world tree and bird perched inside. Each of the trees sprout from the breast of earth goddesses with sculled heads many identify as Cihuacoatl. Borgia page 49 [figure 37] depicts the cardinal direction East and has a quetzal bird perched in a tree made of jewels and chord decorated with emblems of war such as shields (Boone, 2007, p.123). The iconography of birds and
cosmic trees is echoed in partial cognates found in the Codex Fejervary-Mayer page 1
[figure 41], Tudela pages 97-124, and Vaticanus B pages 17-18 [figure 42] (Boone, 2007:
123). Fejervary-Mayer page 1 is a significant parallel as Year Bearers are clearly
indicated in circles within the birds, demonstrating the connection between bearers of
time that revolve according to a 365 day year and the directional emphasis illustrated by
pages 49-53 in the Codex Borgia.

Other directional indicators include temple offerings and animal attacks, both of
which have cognates or partial cognates in other almanacs. For example, the temple
offerings made are echoed in Fejérváry-Mayer p (33b-34b) [figure 43]. While the gods
and temples are virtually identical the offerings differ in a way I believe may serve to
illuminate a more specific intent of the fire drilling that appears in the cognate Borgia
page. In the Fejérváry-Mayer these deities bear geometric bundles of even length rods
that can be identified as bundled wood or reeds. These bundles are topped with a rubber
ball surmounted by a feather. The bundles shown offered in the Codex Fejérváry-Mayer
have numerous comparisons through the entire Borgia group corpus discussed in the
following section. They can easily be read as an offering when they are presented to
temples; however this is not the only context in which they are found.

Finally, the Macuiltonalequete (Boone 2007, p. 127) Tonolenque (Nowotny,
2005, p. 33-36), or personified Nemontemi figure holding weapons have directional
significance as well as indicated by their color and their readings are compared in table 2.
While Boone identifies both the first figure in the descending pair above the fire driller,
and the figure she calls god of the day number five as having a directional emphasis
indicated by color, Nowotny only recognizes the figure standing near the enthroned year as having a directional color.

Pages 49b – 53b have been interpreted as an artistically invested presentation of the *Tonalpohualli* in terms of the four directions (Nowotny, 2005, p. 33-36; Boone, 2007, p. 121). According to this reading the pages represent twenty trecenas divided into four cardinal directions leaving five trecenas in each direction. According to this reading the trecenas are indicated by the initial day signs under the large top cell and oriented with twelve red disks to the right functioning as spaces. Boone reads the fifth trecena as the fifth cosmic tree at the center on page 53b every fifth trecena indicates the east as the trecena pages circle through until a completion of the 260 days of the sacred calendar (Boone 2007: 122).

However, the day sign that appears under the sky bearer (Nowotny, 2005, p. 33-36) might instead be read as Year Bearers as in the same location. On pages 49-52, we see the signs for each of the four Aztec/Mixtec Year Bearers (Rabbit, Reed, House, and Flint). This is not the only indication of the Year Bears. Explicit Year Bearer dates appear encased in the Oaxacan pictorial motif for a 365 day year also referred to as an AO sign for the interlaced shapes that form it (Boone, 2007, p. 216, 219; 2000 p. 41) [figure 9] located hovering in between an enthroned Year and the god or day number [figure 44]. These are the opposite Year Bears from the ones depicted under the sky bearers. The directional association of these Year Bearers is believed to be illustrated on the first page of the Codex Fejérváry-Mayer [figure 41].

Finally the placement of the unquestionable Year Bearer dates explicitly used to reference the 365 day solar calendar rather than the 260 day sacred calendar between an
enthroned year and an enigmatic figure whose only clear identifying feature is the number five suggests the figure may personify the *Nemontemi*, or period of five nameless days of the calendar. Nowotny (2005, p. 33-36) tentatively identifies the figure as Tonaleque. Boone provides the following definition for the enigmatic deities in the glossary as follows: "Five Tonaleque": five solar beings associated with feasting, of whom Macuilxochitl ("Five Flower") is the most prominent. Attributes: white handprint around the mouth; appears in a group of five" (Boone, 2007, p. 42).

Because only a single figure is present I don't believe a reading of the deity as Tonaleque or Macuilxochitl is warranted here. Also, several figures appear with various color handprints over their mouths including the fire drillers on pages 49 and 50 and the left descending figures of 49-52, not all handprints are the typical white of Tonaleque or Macuilxochitl. Finally, the series of pages total four, so interpreting each single figure of one Tonaleque in an extended narrative of five is also not possible. However if the figure is instead interpreted as the *Nemontemi* preceding the directional shift to a new Year Bearer, the appearance of the figure associated with five on the same page as New Fire drilling takes place makes perfect sense as these are four Year Bearers, thus one *Nemontemi* figure for each of them.

Bound Years in the Borgia Group

Reed bundles frequently appear in the Borgia group codices in a few different contexts including: alone, stacked with other offerings, in the context of counting time, receiving sacrificial blood, burning, upside down as ashes, being extinguished and with the symbol for crossroads. They can easily be read as an offering and they are presented
to temples. However, I believe the reed bundles are an element in themselves combined in a compound meaning in these offerings. These bundles can be read as a counted and constrained amount of time. They enhance the meaning of the scenes they appear in by suggesting a unit of time that would have been immediately recognized and understood by its audience of scribes and priests.

Reed bundles alone appear on pages 28 and 30-32 of the Codex Laud [figure 45]. Those on page 28 are held in the hands of two figures holding a captive and likely sacrificial victim while the bundles on pages 30-32 appear as autonomous symbols floating on the background and also in sacrificial bowls. The difference in the use of vertical or horizontal lines likely imparts significance not yet understood. The placement of the knot, be it at the top, center, or bottom of the bundle is also significant and will be discussed.

Numerous examples of bundles stacked with other offerings abound in the Borgia group codices. Some examples include pages 9-12, 14-16, 25, 41-44 of the Codex Laud and 3-6, 9-12, 14, 19, 22, 26, 27, 30, 31, 33, 34, 40 of the Codex Fejérváry-Mayer. Figures 46 and 47 provide some details of these bundles in both codices to exemplify the variety of style and forms that stacked bundles can appear in. The green shoots that curve have been interpreted as reeds but also as feathers. Their greenish hue certainly supports an identification of these bundles as reeds; however the appearance alongside other bundles conspicuously missing this feature contributes to a reading of feathers. Because it is clear that bundles of sticks were combined with other more obvious offerings I contend the bundles displaying both the iconography of knotted reed bundles and that of feathers
indicates both separate objects are present and being combined in a way to enhance or specify their meaning.

Bundles identical to those found stacked with rubber and feathers also appear alone in organizations that suggest they count units of time. Examples of such compositions occur frequently in the little understood Codex Laud of the Borgia group. Examples of this context are provided in [figure 48]. The reed bundles here are fully geometric and not filled in with color. The fact that half the page is taken up by the bundles of varying thickness placed alongside bar and dot enumeration suggests they convey mathematical portions of time. It is also evident that the same style of bundles is used elsewhere, and indicates the iconography of bundled time was combined with other signifiers to create composite meanings.

Bundles alongside bar and dot enumeration occurs multiple times in Borgia group codices. In the Codex Fejérváry-Mayer bundles with emendation occur on the pages: 5, 6, 8, 9, 10-14, 19, 22, and 43. However, unlike the reed bundles in the previous example from the Codex Laud, these bundles are burning [figure 49]. This provides clues as the purpose of all bundles depicted in the Borgia group, despite being somewhat larger than the typical bundles, which incidentally appears to the left of a burning bundle on page 13. Burning bundles also appear in the Codex Laud pages 39, 40 [figure 50]. The reading that these bundles are burning rather than simply placed in an elaborate sacred bowl as some have suggested is confirmed by images in which the bundles are blackened having been reduced to ash or extinguished with water.

Examples of blackened ash bundles can be found on page 8 of the Codex Fejérváry-Mayer, where it is shown being extinguished. Bundles are also extinguished on
page 33 of the same manuscript [figure 51]. While it may not be clear that the green organic looking flow is water, the pouring act depicted on page 46 of the Codex Laud makes this explicit [figure 52]. After the reed bundle is extinguished it receives auto sacrifice while in a hole shaped like caiman jaws. According to Nowotny (2005, p. 46) the reed bundle pictured receiving sacrifice on page 45 [figure 53] is upside down with its knot at the bottom to signify it has been burnt and is now ashes. The bundles with knots at the foot of the last register of Laud 46 may likewise represent burnt bundles following this logic.

According to Nowotny (2005, p. 46), the series of events surrounding the bundle on pages 45 and 46 clearly represent a burial ritual described by Sahagún in which the corpse is burnt to ash. Next the flames are quenched and the ashes are transported and buried in a hole and receive sacrifices. Then they are subsequently moved again as indicated by the footprints leading from the burial.

Finally the last significant composition involving reed bundles that occurs in the Borgia group codices involves scenes in which these bundles appear with crossroads. According to Boone (2007, p. 60) crossroads represent one of most common symbols of danger. The motif is composed of two roads crossing at a 90-degree angle forming an ‘‘X’’ shape [figure 54]. When this symbol appears in codices, it clearly indicates menace. According to Sahagún, Aztecs considered crossroads to be dangerous places, where the Cihuateteo (the souls of women who died in childbirth) would descend to harm travelers; especially children (Sahagún, 1953-1982, bk. 4, p. 41).

Crossroads frequently appear in compositions with or near reed bundles. Instances when crossroads are combined with read bundles in compound signifiers support the
claim these bundles were a personification of the death and disease of accumulated time. Through proper sacrifice and funerary disposal these bundled years could be prevented from corrupting newly inaugurated time. Bundles with crossroads appear on page 15 and 43 of the Codex Laud [figure 55] and pages 2-4, and 43 of the Codex Fejérváry-Mayer [figure 56]. Though this is a common symbol for danger, it is interesting to note that explicit crossroads appear few times without reed bundles placed onto or nearby indicating the two may be associated. This likely association is further confirmed by page 43 Fejérváry-Mayer [figure 57] in which three clearly articulated bundles appear overtop of the crossroads motif.

It is clear at least that the essential iconographic forms used to indicate New Fire ceremonies are employed by Post Classic communities in the broader Mixteca-Puebla region as well as within the confines of the Mexica triple alliance empire. However, in order to determine if related versions of the New Fire ceremony may have been observed throughout the entirety of the region of Mesoamerica, it is necessary to discover if these ceremonies also may have taken place in Maya autonomous cultural zones. To discover if this is the case this investigation will review scholarship surrounding the context and beliefs that informed the Maya New Years ceremonies, as well as possible new fire and bundling iconography in surviving Maya codices.
CHAPTER V

MAYA YEAR BEARER CEREMONIES

Another one of the characteristics of temporal ceremonies that manifest in a consistent pattern across Post Classic Mesoamerica concern the quadripartite universe in which four directions radiate from a center. These directions are associated with time as well as color and Year Bearer. According to Taube (Taube, 1988, p. 183, 187), the Maya as well as other Mesoamerican civilizations conceived of time as distance both cosmic and physical/literal. They believed that the turning over of the year and its patron deity was as a physical and cosmological transference from one cardinal direction of the cosmogram to another. In a cyclical fashion this transference of time was replicated in greater and greater cycles on progressively larger scales (Taube, 1988, p. 187).

For example, from one day to the next there was a counterclockwise closed cycle which led every fourth day to align with the same cardinal direction as the day four days previous. One direction manifested four times equated a Maya month of twenty days. These months as mentioned previously accumulated until eighteen had passed, at which time the five nameless days were added and a greater physical shift to a new cardinal direction and a new Year Bearer for the next 365 days accumulation until each carried its year and eighteen months thirteen times culminating in the completion of a 52-year cycle (Taube, 1988, p. 187).

The directions associated with the Year Bearers are also recorded by Bishop Diego De Landa:

Among the multitude of gods worshipped by these people were four whom they called by the name Bacab. These were, they say, four brothers placed by God when he created the world, at its four corners to sustain the heavens lest they fall. They also say that these Bacabs escaped when the world was destroyed by
the deluge. To each of these they give other names, and they mark the four points of the world where God placed them holding up the sky, and also assigned one of the four Dominical letters to each, and to the place he occupies; also they signalize the misfortunes or blessings which are to happen in the year belonging to each of these, and the accompanying letters. (William, 1937, p. 60-11).

Diego de Landa Calderón, a Spanish bishop of the Roman Catholic Archdiocese of Yucatán recorded these Bacabs and their requisite directions. His description of the Sky Bearers demonstrates their close kinship with year-bearer deities. Taube argues that except in specific and infrequent contexts, these deities and their roles where synonymous (Taube, 1988, p. 191). The conception of the Year Bearers as anthropomorphic personalities that conveyed a heavy load through time and space is also evident in Bishop Landa’s account of New Year rituals in the post Classic Yucatan. His account also describes in greater detail both the common and specific rights of each of the four beginning years as dictated by the unique needs of their bearers.

According to Bishop Landa (William, 1937, p. 60-61) the Yucatec Maya had four types of New Year’s rituals corresponding to each of the four Year Bearers, which according to the Bishop were Kan, Muluc, Ix, and Cauac in the Yucatan at the time of his observations. These ceremonies shared many marked similarities. Interestingly, Bishop Landa describes these rituals as commencing before the five-day liminal period and continuing into the first month of the New Year, though admittedly he also observed the rituals as concentrated within the month of the Uayeb (Cassandra et al. 2000, p. 152).

The following is brief description of these rituals as Bishop Landa observed them: At the end of Cuac years the rituals of Kan years began with creation of a hollow clay effigy named Kan u Uayeyab- Kan meaning yellow, suggesting—though not explicitly
described by Bishop Landa—that the model was painted yellow. This model was carried to one of two erected alters (described as heaps of stone) at the Southern corner of the city. Another image, this one named Bolon-tz’acab was also placed in a position of public access either in or in front of a prominent family’s house, possibly the house sponsoring the festival (William, 1937, p. 62-63).

Subsequently Bishop Landa describes the men of the town (including those of high social and political rank) preparing the city for the procession of these effigies by cleaning and repairing the southern road, and constructing arches either with or in conjunction with green branches. Landa also reports that the citizens of the town would gather together around the statues “devoutly” though he does not describe any of their specific activities during this observance. He goes on to recount how the priest incensed the statue with a mixture of forty-nine grains of ground maize (called sacah) along with his incense in combination with incense added by other individuals of standing in the community he records as chahalté. (William, 1937, p. 62-63)

They then sacrificed an unspecified type of bird after which they carried the statue on a standard they called kanté along the road they had prepared previously to the house where the Bolon-tz’acab was being displayed. (William, 1937, p. 62-63) There they reportedly imbibed ritual picula kakla composed of 415 grains of toasted maize, as well as fish and venison for the priests. After which men anointed the figures with blood drawn through the practice of auto sacrifice, as well as other offerings and incense throughout the five day period of Uayeb, a practice Landa believed was designed to ward off sickness and misfortune; then, and in the coming year.
Finally, at the end of the five nameless days, they carried the effigy of Bolon-tz’acab to a temple and the statue of the year Kan-uvayeyab to the east entrance of the city to a stone altar where it would remain for the duration of the ensuing Kan year before the process would begin again. Four deity impersonators kindled New Fire in a temple courtyard (Tozzer, 1941, p. 151-153). For each New Year the Year Bearer ceremonies would take place with some variation in specific rituals, such as the stilt dancing described in Muluc New Year ceremonies and the practice of coal walking for Cuac years. Similarly, the nature of the objects offered and sacrificed remained specific to the requisite year, as did the type of misfortunes they thought to avoid. However, despite these differences the overall structure of the event remained largely the same for each of the four Year Bearers.

The similarities across Yucatec Maya New Year rituals included the effigies of the personified Year Bearers were transported from the cardinal point of which they reportedly governed to the center and then to the direction location at which they resided for the duration of the coming year. The effigies traveled in a counter-clockwise rotation of cardinal directions whose physical locations corresponded to the cosmogram, Uayeb rituals always commenced with the confrontation of the effigies of the complete year and of the year not yet begun at altars placed in entrance to the city, the names given to these effigies suggest they were of consistent color which was echoed by all their trappings of ritual and processional objects and which presumably denoted aspects of the personality of the Year Bearer to which they had been assigned. They created another statue, which was attended to by the public in association with a prominent family, which was subsequently processed to the temple wherein it resided for the duration of the year.
Offering of auto sacrificial blood, and other offerings were made and participants incensed the figures and imbibed ritual drinks and food while congregated in a public place (Cassandra et al. 2000, p. 155-157).

Unfortunately, none of the effigies used in these ceremonies have survived, as they were viewed as demons or ‘idols’ by the Spanish Franciscan presence in the Yucatan. Bishop Diego de Landa, whose account is almost all that remains of these important rituals, singlehandedly ordered the burning of over five thousand effigies as well as the texts used by the priests to execute the rituals correctly (William, 1937, p. Introduction). However some of the pages in the Maya New Year pages seem to show effigies being created. Pages 65 and 96 of the Codex Madrid New Years pages [figure 58] illustrate the constructions of Uayeb idols similar to pages in the Borgia group Codex Laud page 29 [figure 59] and Fejérváry-Mayer pages 23-25 [figure 60].

While much of our understanding of the New Year ceremonies of the Post Classic Yucatec Maya are based on the colored observances of an outsider who regarded these rituals as absurd and unnatural, Bishop Landa’s reports of New Year ceremonies are corroborated by many of the almanac pages in the few surviving Maya codices. Many scholars, including: Cyrus Thomas (1882), Edward Seler (1923, p. 485-486) Bruce Love (1994) and Karl Taube (1988, p. 262-263) have analyzed the Madrid Codex’s myriad almanac pages and found descriptions of New Year ceremonies. Many of these scholars have cited correlations between them and Bishop Diego De Landa’s descriptions of conquest Yucatec ceremonies (Cassandra et al. 2000).

Cyrus Thomas was the first scholar to recognize and document the continuities between the images and descriptions on pages 34-37 of the Madrid Codex and (Codex
Tro-Cortesianus 1967) Bishop Landa’s account of Year Bearer rituals observed in the Yucatan (Tozzer, 1941, p. 136-149; Cassandra et al. 2000). Thomas’s early investigations and attempts to confirm dates in Pre-Columbian manuscripts with Bishop Landa’s record of events, lead him to forge comparisons between these documents, and subsequent scholars have gained similar insights into comparable pages in both the Dresden (Codex Dresdensis 1975) and the Paris Codex (Codex Persianus 1968) (Cassandra et al. 2000, p. 149).

Figure 61 illustrates page 25 from The Förstemann scan of the Codex Dresden (Förstemann, 1892, p. 25). The folio refers to the Kan-uvayeyab ceremonies at the East (William, 1937, p. 62-63). On this page, the figure of the opossum Year Bearer with the anthropomorphized year deity on his back is shown at the top section of the page represents the last day of the old or dying year which will soon transfer its burden. According to Taube, the lower two thirds of the page illustrate the events of New Years Day such as the sacrifice of a bird, as described by Bishop Landa which can clearly be seen in the bottom most division of the page (Taube, 1988, p. 221-245).

Significantly, the Maya Year Bearer’s approaching period ending dates are frequently depicted visually as aged and weary under their growing burdens of time (Taube, 1988, p. 193-215). Linguistic evidence also seems to support the assertion that the Maya conceived of the Uayeb as the death of the old year (Taube, 1988, p. 193-215). The term hidz translates as death agony in Colonial Yucatec and was used in conjunction with the completion of a cycle of time. For example, it appears in the phrase uhidzil katun Thompson translates as “death throes of the katun” (Thompson, 1950, p. 189). The visual evidence recounted by Thompson (Thompson 1960, p. 59) as well as the observances of
Bishop Landa and correlating and supplementary information regarding New Year ceremonies in the Dresden, Madrid and Paris Codices (Cassandra et al. 2000, p. 149) exemplify the basic nature of these temporal festivals. Like Nahuatl and Mixtec-Puebla Nemontemi, Yucatec Maya Uayeb festival was a dangerous period fraught with malign forces. In a similar fashion residents cleaned and swept and renewed household effects and hoped the performance of necessary rituals could renew the world for another cycle of time.

Maya Iconography Indicating Drilling Fire and Bundling the Years

While there is no evidence for 52-year celebrations in Post Classic Maya codices or Classic inscriptions (Elson & Smith, 2001, p. 170), it is documented in Maya codices that celebration bridging the divide between the old and the new year did take place on an annual basis following the five nameless and unlucky days of Uayeb. These celebrations have many visual and iconographic parallels with the New Fire Ceremony (also preceded by five dangerous days). This is quite possible given previously discussed evidence suggesting the tying of the practice to specifically commemorate a 52-year cycle rather than the seasonal year may have been a late Aztec addition to what had been an ancient and widespread practice of renewing time after a period of five unlucky days through Mesoamerica.

Tokovinine and William and Barbara Fash argue the crossed bundled wood featured in the Aztec Codex Borbonicus shares strong visual similarities with the Classic Maya hieroglyphic inscriptions that have been read as involved with bundling, burning, and time. Glyph T6oo, in the Thompson (1962) catalog [figure 62] (Fash et al. 2009, p.
Previous scholars such as Von Winning have found that the equal length of the gathered rods is among the most significant stylistic indications that the bundle indicates gathered years. This is the essential similarity between the more detailed rendition in the Codex Borbonicus and the more distilled essential form illustrated by the crossed equal length bundles in T6oo.

According to Tokovinine, William and Barbara Fash “Both the iconographic and the phonetic readings of the T6oo sign emphasize crossed bundles of wood, the most literal rendering possible of building devoted to New Fire Ceremonies.” (Fash et al. 2009, p. 213). In support of his identification of the Maya glyphs indication of New Fire, Fash provides iconographic, archaeological, and epigraphic evidence to support his hypothesis that the investiture of Classic period rulers took place at the Sun Pyramid in Teotihuacan, in conjunction with New Fire Ceremonies (Fash et al. 2009, p. 201-301)\(^\text{16}\).

Other Maya glyphs have been associated with New Fire. Beyer (1937, p. 71) argued glyph T563a [figure 63] represented a bundle of wood within the context of the fire glyph. The so called Comb-And-Bar sign (C&B) is read as an abstraction of the firewood bundle sign [figure 64] and represent the "binding of the years" as a bundle of sticks and at the close of time periods (Von Winning, 1978, p. 17). The visual resemblance between the C&B symbol and the Maya glyph T563a has been widely recognized.

The combination of the sign with flame occurs with glyph 122 [figure 65]. Many scholars have confirmed the glyph indicates burning wood or fire (Seler 1902-1915, 1:397; Beyer, 1937, p.71; Zimmermann, 1956, p. 129; Von Winning 1978 p. 17).

\(^{16}\) Iconography related to the binding of years and New Fire is discussed further in chapter three of this thesis.
However even more significantly, both variants of Thompson’s glyph T563a and T563b specifically indicate a sacred fire or bundle of firewood (Thompson, 1962, p. 186). This restricted reading is confirmed by instances in which glyph T563 appears alongside more naturalistic images of fire drilling and torch bearers signifying the fire wood bundles ceremonial significance and sacred context (Von Winning 1978: p. 17).

Figure 66 illustrates glyph 122: T563 in context in the Maya Codex Madrid. The glyph appears once on page 38a and four times above the heads of God D and God B on 38b, both of whom are drilling fire. Naturalistic depictions of fire drilling also appear on the third register of the same page 38c. Representational fire drilling also appears on page 51a of the Codex Madrid, in which two deities sit together and drill New Fire into a Fireboard [figure 67]. Fire drilling may also be taking place on 99c [figure 68]. However as no red flames are indicated this new identification may be incorrect. Altogether the glyph T122: T563 appears on pages 11b, 13b, 38, 43b of the Codex Madrid [figure 69]. However, due to loss the glyph on page 43b cannot be fully identified. In all cases the glyph appears alongside either naturalistic depictions of Fire boring, or directly above flaming torches as is the case on both 11b and 13b.

The glyph is also present in the Codex Dresden. It can be identified on Dresden pages 19c, 40b, and 58 [figure 70]. It appears again above an image of a deity wielding flaming torches as illustrated by 40b. In 19c it does not appear in the context of drilling fire or burning bundles. However a figure bearing the glyph 563, believed to indicate bundled years is carried on the back. The glyph on page 58 appears in a vertical column with no naturalistic illustrations to speak of. Finally the glyph also appears at least once in the Paris Codex [figure 71]. The glyph may have been recorded on more pages,
however due to the condition of this manuscript, more cannot be identified. A torch appears to be held in the hand of the rightmost figure on Paris 6, again, due to damage this reading is questionable.

Maya fire glyphs have been investigated by Kelley (1968, p. 141-157) who concentrated on discerning the difference between T563a and T563b. Kelley questioned the reading that these glyphs connoted only "sacred fire" eventually concluding "there is still no satisfactory reading for T122:T563a". Others have proposed the bundles connote a 65 x 28 = 1820 day cycles (five years) recently discovered by in inscriptions at Xochicalco and these Maya codices Prem (1974, p. 357) According to Kelley these fire glyphs occur in texts describing the 819 day count and are "highly reminiscent of making a new fire at the beginning of a 52-year cycle" (Kelley, 1968, p. 144). Subsequent scholars have recognized (Barthel, 1974, p. 186) T563 can be read as zi, "firewood bundle".

To conclude, the close resemblance between T563 and the Comb-And-Bar sign indicate T563 likely represents a firewood bundle. More significant to an identification of New Fire is the fact that T563 occurs only in a ritual context, indicating it likely connotes sacred fire as opposed to a more utilitarian use of flame. Finally, Von Winning argues the glyph appears in conjunction with the ceremonial Maya cycle shorter than the 52-year period which is believed to only be observed by the Aztec. Von Winning contends “It can be concluded that the Teotihuacan firewood bundle signs are related to the completion of time periods of, as yet, undetermined length.” (1977, p. 16).

It is possible the sign was used to indicate a type of ritual enacted at the end of the five nameless days of Uayeb in New Year ceremonies as described by Bishop Landa.
CHAPTER VI

CONCLUSION

This thesis demonstrates that the ritualized burning of bundled time was a common practice through the region of Mesoamerica including the Maya region of the Yucatec Peninsula. The New Fire ceremony has traditionally been believed to be a Central Mexican practice not observed in any Maya territories. However, evidence of New Fire iconography in ritual contexts in previously identified New Year pages of Maya codices calls this interpretation into question. I contend the practice of drilling fire may have place during the period of five dangerous days common to all civilizations employing the Mesoamerican calendar system. I have shown the ritual functioned as an induction of new time as well as a funeral for the old dying year. Together, these two fundamental components of the New Fire ceremony served to navigate the liminal period between the old year and the new by renewing time.

Manuscript iconography and ritual material associated with the best documented ritual transference from one cycle of time to another—the Aztec New Fire Ceremony—differs in significant ways from the context in which New Fire arise in manifestations pre-dating Aztec usage of these symbols. The 52 year time frame of commemoration appears intrinsically part of Aztec political propaganda. However, while it would be tempting to read all iconography known linked to the well documented Aztec New Fire ceremony as evidence of the penetration of an Imperial Aztec ritual throughout Mesoamerica in the late Post Classic, this is not the case. Nor is it useful to separate remarkably consistent artistic iconography suggestive of New Fire rituals from how the
same signifiers are evaluated in Aztec art. It is far more likely the ceremony was ubiquitous throughout Mesoamerica before the Mexica encountered the practice.

The Aztec New Fire Ceremony represents a new manifestation of an older practice in Central Mexico employed in a program of political theater. Although no explicit mechanism by which the Aztec first absorbed the ritual has been found, it is likely they encountered iconography used to communicate the drilling of New Fire to retire old time and inaugurate a new era from Teotihuacan where the ritual most likely took place at much shorter intervals. Evidence suggests the Aztec adapted Teotihuacan iconography indicating the New Fire Ceremony for political ends. Other cultural groups in Central Mexico outside the Aztec Triple Alliance empire also appear to have observed the ceremony. The community that employed the codices in the Borgia group also appear to have celebrated the ritual at shorter intervals than the 52-year cycle. I have argued pages 49-51 of the Codex Borgia provide an indication that the lighting of New Fire may have been observed at the end of the five nameless days of Nemontemi.

While there isn’t evidence of New Fire used in the context or renewing time in the Mixtec group of Highland Mexico Codices, it is likely such content was selected for representation in the divinatory books of the Borgia group of codices rather than the Mixtec group manuscripts chronicling dynastic histories. Therefore, I do not believe that lack of New Fire drilling in the context of retiring periods of time in the Mixtec group of codices is evidence the people that painted these manuscripts did not observe a New Fire ceremony to unite cycles of time. There is considerable evidence that temporal rituals involving the drilling of fire took place at shorter intervals in Central and Highland Mexico than have previously been acknowledged. I argue Post Classic inhabitants outside
the Aztec Empire likely observed New Fire rituals in conjunction with the period of five days straddling the gap between an old and new year on an annual basis apart from the closing or opening of the 52-year cycle.

Year burning and bundling iconography also exist in Maya manuscripts on previously identified New Year pages. While the Yucatec Maya Year Bearer ceremonies are less well known than the Aztec New Fire ceremony, historical accounts describing the drilling of fire during the five unlucky days of Uayeb are provided by Landa, and corroborated by glyphs identified as burning bundles in Maya codices. It is unlikely this evidences any direct influence from the Aztec New Fire ceremony, as the cultural areas are so distinct. Therefore the presence of year bundling and burning motifs present in Maya manuscripts and practiced at the end of Uayeb provide strong evidence the practice of burning bundled time with ritually drilled fire was ubiquitous in Mesoamerica by the Post Classic period if not earlier.

Despite the fact that most rituals performed during celebrations to renew time throughout Mesoamerica are regionally distinct, evidence suggests the irregular month of five days was not only mathematically universal, but many of the most basic beliefs governing the period likely exercised influence beyond the cultural boundaries of individual civilizations. I contend the funerary context of the New Fire ceremony fits into a larger scheme depicted as the death of the unit of time; a metaphor of broad resonance within Mesoamerica. Evidence suggests this irregular month was considered to be a particularly dangerous time by those who employed any version of the Mesoamerican calendrical system and the anthropomorphic representation of the year and activities and
materials involved in retiring it have parallels in indigenous funerary practices and have a broader applicability within Mesoamerica than previously recognized.
FIGURES

Figure 1

Timeline of Mesoamerican Civilizations after Miller (2006, p. 6).
Figure 3

Provinces and major tributaries under the Aztec Triple Alliance Empire lead by Tenochtitlan just before the arrival of the Spanish circa 1519 after Solanes (2000).
The day signs in the Aztec Codex Borbonicus and the Borgia Group’s Codex Fejérváry Mayer. Drawings of Fejérváry-Mayer by Heather Hurst, drawings of Borbonicus by John Montgomery (Boone 2007, p. 15, 37, fig 12).

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<tr>
<th>Day Sign</th>
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The Sacred calendar of twenty days names and 13 coefficients.

L: The 260 day solar calendar composed of 20 day names and 13 coefficients in Aztec naming System. The 52 year cycle is like two gears The date shown is 1 light, the next day is 2 wind


R: The 260 day solar calendar composed of 20 day names and 13 coefficients in Maya naming System
Figure 6

Figure 7

The 260 day solar calendar interlinking with the 365 day solar year (Maya day names) Funktionsprinzip des Maya-Kalenders (Schele, Freidel, 1994).
Figure 8

Oaxacan pictorial motif for a 365 day year also referred to as AO sign for the interlaced shapes that form it. Illustration by John Phol ©John Pohl, courtesy of FAMSI.  

Figure 9

Nuaha and Mixtec Year Beares are: Rabbit, Reed, Flint, and House Illustration by John Phol ©John Pohl, courtesy of FAMSI.  
Figure 10

Full-Figure Glyphs, Copan, D. The IS reads 9.15.5.0.0 10 Ahau 8 Ch’en.
Photograph of cast specially taken for this publication by Department of Ethnography, British Museum (Thompson 1960, 59).
Figure 11

The Mapa Sigüenza retrieved from
http://isites.harvard.edu/icb/icb.do?keyword=k18992&pageid=icb.page99516
Figure 12

Figure 13

Page 34 of the Codex Borbonicus.

This and all subsequent images of the Codex Borbonicus
Bibliothèque Du Palais Bourbon - Codex Borbonicus (Loubat 1899) retrieved from FAMSI
http://www.famsi.org/research/loubat/Borbonicus/thumbs0.html
Examples of Quivers and spears include tips and are usually partially colored (often red and white stripes)

Bundles of arrows on Codex Borbonicus page 18

Quivers and spears combined with a shield motif indicating war on Codex Borbonicus page 1

Aztec Feathers under bundled spears with shield folio 67r Codex Mendoza

This and all subsequent images from the Codex Mendoza downloaded from the Public Domain Review A Project Of the Open Knowledge Foundation

http://publicdomainreview.org/collections/codex-mendoza-1542/
Figure 17

Bundles that represent feathers in combination with bundles of years from the Codex Laud page 41 annotated by the author.

This and all subsequent images from the Codex Laud retrieved from FAMSI http://www.famsi.org/research/pohl/jpcodices/laud/
Figure 18

Page 36 of the Codex Borbonicus annotated by the author.
The base design of the firewood bundle is considered a “standard” form of representation for the binding of the years (Von Winning, 1977, p. 27, fig. 1m).

The complete design of the firewood bundle surrounded with motifs suggestive of death (Caso, 1967, p. 130, fig. 2).
Stone sculptural representations of the 52-year bundles, Xiuhmolpilli, excavated at the Templo Mayor (Caso, 1967, p. 135, fig. 6).

Stone sculptural representations of the 52-year bundles, Xiuhmolpilli drawing (Caso, 1967, p. 139, fig. 11).
Figure 23


Figure 24

Left: Codex Aubin in which a knotted rope motif appears instead of the traditional drill, from Codex Aubin 17 (Von Winning 1977, p. 53 fig. 27g)  
Knotted rope motif highlighted in a blue rectangle by the author.

Right: Relief on lower right front of Teocalli de la Guerra Sagrada, drawing by Emily Umburger (2010, p. 4)
Figure 25
Folio 2r of the Codex Mendoza. Depicts the founding of Tenochtitlan, and the conquest of Colhuacan and Tenayucan. Annotated by the author.
L: detail of glyph from the Codex Mendoza signifying the last Aztec New Fire ceremony in 2 Reed (1507 AD).
R: The final Aztec New Fire Ceremony in the year 2 Reed (1507 AD), during the reign of Motecuhzoma Xocoyotzin (Elson & Smith, 2001, p. 169, fig. B)
Figure 27


Drawing of Xochicalco stone commemorating New Fire Ceremony (Elson & Smith, 2001, p. 169, fig. A)
Figure 28

Left: One of two similar stone slabs with flaming bundles, related to Batres' Xiuhmolpilli sculpture from Sun Pyramid at Teotihuacan, drawing by Batres (1906, p. 25; Von Winning, 1978, p. 15, fig. 2j)

Right: One of two similar stone slabs with flaming bundles, related to Batres' Xiuhmolpilli sculpture from Sun Pyramid at Teotihuacan (Langley, 1997)
Figure 29

Teotihuacan Xolalpan style base relief panel (Von Winning, 1978, p. 18, fig. 5a) drawing by Bolz-Augenstein (1970, plate. 20, 70).
Figure 30

Page 18 of the Mixtec Codex Vindobonensis depicts fire drilling on 18a as part of this ritual which is highlighted by a yellow rectangle by the author. Note where the drill is placed.

This and all subsequent images from the Codex Vindobonensis where retrieved from Akademische Druck - u. Verlagsanstalt – Graz FAMSI http://www.famsi.org/research/graz/vindobonensis/thumbs_0.html
Figure 31

Codex Zouche-Nuttal page 18 illustrating the cult objects of foundation brought to new territories by deities and cultural heroes, the most distinctive and fundamental cult objects are highlighted in a blue rectangle on 18a by the author.

This and all subsequent images from the Codex where retrieved from Akademische Druck - u. Verlagsanstalt - Graz Codex Zouche-Nuttall (British Museum ADD.MSS 39671) FAMSI http://www.famsi.org/research/graz/zouche_nuttall/thumbs_0.html
Figure 32

Codex Bodley page 9a annotated by the author.

This and all subsequent images from the Codex Bodley where retrieved from John Pohl's Mesoamerica, FAMSI [http://www.famsi.org/research/pohl/jpcodices/bodley/bod09.jpg](http://www.famsi.org/research/pohl/jpcodices/bodley/bod09.jpg)
Figure 33

Codex Selden page 3 annotated by the author.

This and all subsequent images from the Codex Selden where retrieved from John Pohl's Mesoamerica, FAMSI http://www.famsi.org/research/pohl/jpcodices/selden/selden03.jpg
Figure 34

Bundle on pages 53 of the Codex Borgia. Image annotated by the author.
Fire drilling can be found on pages 34 of the Codex Borgia. Image annotated by the author.
Fire drilling can be found on pages 46 of the Codex Borgia. Image annotated by the author.
The shared iconographic elements on these pages identified by Boone (2007, p. 124) in ordinal reading order included: (1) a cosmic tree with a bird perched on it, (2) a deity making an offering to a temple, (3) Animals attacking (4) two figures descending from above (in this case Macuiltonalequete (Boone 2007, p. 127) Tonolenque, or Personified Nemontemi figure holding weapons and Cihuateteo with a sacrificial rope (Nowotny, 2005, p. 33-36) (5) another deity drilling New Fire, (6) a tree of sacrifice, (7) an anthropomorphized day name, (8) a cosmic marriage, (9) an enthroned year, (10) the god or day number five as argued by Boone (2007: 123-124), 5 deer masquerading as one of the five Tonaleque as identified by Nowotny (2005: 33-36), or as I will suggest, a personification of the five days of the Names Unlucky period of Nemontemi before New Fire is drilled.
Figure 38

Figure 39

Figure 40

Page 1 of the Codex Fejérváry-Mayer.

This and all subsequent images from the Codex Fejérváry-Mayer where retrieved from John Pohl's Mesoamerica, FAMSI [http://www.famsi.org/research/pohl/jpcodices/fejervary_mayer/]
Figure 42

Pages 17-18 of the Codex Vaticanus B.

These and all subsequent images of the Vaticanus B from Universitätsbibliothek Rostock - Codex Vaticanus 3773 B (Loubat 1900) Retrieved from FAMSI http://www.famsi.org/research/loubat/Vaticanus%203773/thumbs0.html

Page 17

Page 18
Figure 43

Pages 33-34 of the Codex Fejervary-Mayer.

Page 33

Page 34
Details from pages 49-52 of the Codex Borgia

Detail page 49

Detail page 50
Figure 45

Pages 28, 30-32 of the Codex Laud

Page 28

Page 30
Figure 46

Details of numerous examples of bundles stacked with other offering from pages 9-12, 14-16, 25, 39-44 of the Codex Laud.

Details of bundles on pages 9-12 in page order.

Details of bundles on pages 15, 25, 40 in page order.

Details of bundles on page 39
Details of bundles on pages 42 and 44

Figure 47

Details of bundles on page 3 of the Codex Fejérváry-Mayer.
Figure 48

Reed Bundles in the context of counted years on page 3 of the Codex Laud
Reed Bundles burning in the context of counted years on pages 5-6, 9-10, 13-14 of the Codex Fejérváry-Mayer.
Figure 50

Burning Bundles on pages 39 and 40 of the Codex Laud in page order.
Figure 51

Examples of a blackened ash bundles on pages 8 and 33 of the Codex Fejervary-Mayer.

Page 8

Page 33

Figure 52

Examples of clearly extinguished bundle on page 46 of the Codex Laude.
Figure 53

Funeral for bundles years on page 45 of the Codex Laud.

Figure 54

Examples of Crossroads motif in Mixteca-Puebla style drawing by Boone (2007, p. 60, fig. a and b).
Figure 55

Instances of Crossroads with bundled years on pages 15 and 43 of the Codex Laud.

Page 15

Page 43
Figure 56

Instances of Crossroads with bundled years on pages 2-4 of the Codex Fejérváry-Mayer.

Page 2 annotated by the author.
Figure 57

Instances of Crossroads with bundled years on page 43 of the Codex Fejérváry-Mayer.
Figure 58

Uayeb idols being created in the Codex Madrid pages 96d, 97ab, and 99

Page 96d

Page 97ab
Possible Nemontemi idol on page 29 of the Codex Laud.
Figure 60

Possible Nemontemi idol on pages 23-25 of the Codex Fejérváry-Mayer.

Detail Page 23

Detail Page 24

Detail Page 25
Figure 61

Page 25 of the Codex Dresden, showing the Kan-uvayeyab ceremonies at the East.

This and all subsequent images from the Codex Dresden where retrieved from:
Fürstemann, Ernst (1892) Photochromolithographic editions scan pdf of the Dresden Codex,
http://www.famsi.org/mayawriting/codices/dresden.html
Figure 62

Classic Maya hieroglyphic inscriptions including glyph T600, in the Thompson (1962) catalog (Fash et al. 2009, p. 207, fig. 4).

Figure 63

Glyph T563a represented a bundle of wood within the context of the fire glyph (Von Winning, 1977, p. 37, fig. 11a).

Figure 64

Comb-and-bar sign (C&B) is an abstraction of the firewood bundle sign (Von Winning, 1977, p. 27, fig. 1d).
Figure 65

Glyph T122: T563 (Von Winning, 1977, p. 37, fig. 11c).
Figure 66

Glyph T122: T563 on page 38a and 38b of the Maya Codex Madrid.

This and all subsequent images in the Codex Madrid from the combined Brasseur de Bourbourg and Léon de Rosny, Madrid Codex retrieved from FAMSI
http://www.famsi.org/mayawriting/codices/madrid.html
Figure 67
Fire Drilling on page 51a of the Codex Madrid.

Figure 68
Possible Fire Drilling on page 99c of the Codex Madrid.
Figure 69

Details annotated by the author of the glyph T122: T563 as it appears on pages 11b, 13b, 38, and 43 of the Codex Madrid.

Detail from page 11b

Detail from page 13b

Detail from page 43b
Figure 70

Details annotated by the author of the glyph T122: T563 as it appears on pages 19c, 40b, and 58 of the Codex Dresden.

Detail from page 19c

Detail from page 40b

Detail from page 58
Details annotated by the author of the glyph T122: T563 as it appears on pages page 6 of the Codex Persianus from photographs of the Paris Codex by the Bibliothèque Nationale de France retrieved on FAMSI [http://www.famsi.org/mayawriting/codices/pdf/paris_love.pdf](http://www.famsi.org/mayawriting/codices/pdf/paris_love.pdf)
TABLES

Table 1

New Fire Ceremonies in Mexica historical accounts (Elson & Smith, 2001, p. 169).

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Table 2

Figures Macuiltoualeque (Boone 2007, p. 127) Tonolenque (Nowotny, 2005, p. 33-36), or personified Nemontemi figures.

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Baker, T. S.

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Beyer, H.

Bill, C. R.

Bolz-Augenstein, I. and Disselhoff H. D.

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