Ann De León and Tanya Ball University of Alberta

Catastrophe, Calamity and Chaos in the Pre-Modern World A Virtual Symposium on February 9, 2013:

Explaining Natural Catastrophes through European and Amerindian Archives in Chimalpahin's Seventeenth-Century New Spain Historical Annals

As is well known, the Spanish City of Mexico emerged from the remains of the ancient Mexica (popularly known as the Aztec) Capital. With this in mind, several Mexica neighborhoods became embedded with European elements throughout the colonial period. More specifically, these neighborhoods suffered variations of their own religious and political systems of organization (Lockhart 1992). By taking over pre-existing spiritual places from the Natives, the Spaniards translated their beliefs onto their physical space. This forced the Natives to negotiate new ways of representing themselves as colonial agents within a hierarchical society (Kagan 2000).

Despite this change, indigenous culture still persisted, particularly their tradition of historical record keeping. Prior to the Conquest of Mexico, historical records, or annals, were either preserved orally or they were painted in black and red ink in pictographic form. After the Conquest, the Nahua pictographic imagery began to be replaced by alphabetic writing (although it continued way into the 18th century) and the Nahua calendar, represented in pictographic form began to integrate alongside it the Christian calendar (Boone-Hill 2000).

When discussing the ancient Nahua calendar, one must acknowledge the works of Chimalpahin, a Christianized, and Native historian working within seventeenth century Mexico. In his alphabetic Nahuatl-Spanish annals, he was attempting to harmonize the Old and New Worlds. In regards to the calendar, Chimalpahin was proud to note how he successfully "adjusted and harmonized [the ancient count] with the Christian month count" (*Codex Chimalpahin Vol.* 2, 119). He even included European Zodiac signs as per his reading of Henrico Martinez or Heinrich Martin's (a German cosmographer's) popular *Repertorio de los tiempos* (1606) published in Mexico City.

In reconciling multiple systems of timekeeping, history, and cosmovision, Chimalpahin was no different than other New World Indigenous or Mestizo historians (such as Tezozomoc, Ixtlilxochitl, Guaman Poma, Garcilaso Inca). They too incorporated a variety of European Biblical and Classical sources. Where Chimalpahin stands out is in his inclusion not only of European cosmographies (which incorporated astrology and medieval views of the cosmos), but also the new sciences in their explanations of celestial phenomena such as eclipses.

Considering the historical works of Chimalpahin, part of the aim of this project has been to explore how different ethnic groups in Mexico City were affected by and reacted to different natural catastrophes. What is also of importance is to facilitate a greater understanding of how people in the seventeenth century explained these natural disasters, which were often attributed to Christian Divine wrath, Mesoamerican cosmic-eating landscapes, natural causes, or a hybridization of these. Finally, we would like to explore how these events are being represented as a fusion between the Old and New World traditions. In order to achieve these goals, it is necessary, then, to trace both the work of Chimalpahin and his use of transatlantic archives (i.e. the material culture, pictorial manuscripts, oral tradition, and alphabetic texts available to him in Mexico City).

As such a fascinating topic, it is no surprise that the concept of understanding the natural world has been explored in a variety of works on pre modern and early modern Mexico. To begin, it has been studied in the hybrid cartography of Mexican indigenous mapmakers (Mundy 2010, 1996), the Nahua-Greco-Roman inspired murals painted on the walls of Augustinian monasteries (Favrot-Peterson 1993), the appropriation of Nahua pre-Hispanic sacred sites for the construction of Christian Churches and the transformation of pre-Hispanic rituals into Christian plays (Edgerton 2001, Lara 2004, Curcio-Nagy 2004). It is also present in studies exploring the re-organization and manipulation of natural spaces such as the drainage of the lakes of Mexico City (Ivonne del Valle, Claudia Agostoni 2009), and the production of colonial indigenous pictorial manuscripts (Boone-Hill 2000).

Among the indigenous pictorial manuscripts is Friar Bernardino de Sahagun's *Florentine Codex* (1540-1579), the largest compendium of Mexica culture and religion created in the sixteenth century. In his analysis of Mexica rituals Philip Arnold (1999) explains that the *Florentine Codex* demonstrates the persistence, co-existence and adaptation of pre-Hispanic Nahua views on the natural world before and after the Conquest. In his anthropological and philological work, López-Austin (1988) explains the natural world seen as a site of communication and mediation between the Mexica and their Gods through a system of reciprocity, recycling and blood debt-payment. The representation of the natural world is also mentioned in fascinating multidisciplinary approaches to the representation of historical memory and sacred landscape in colonial pictorial manuscripts (Carrasco 2007,1999 and Leibsohn 2009). Furthermore, the representation of and reaction to natural catastrophes in colonial urban spaces, has also yielded fascinating information on how ethnically diverse populations have reacted to moments of adversity, revealing deeper societal issues with regards to ethnicity, class, gender, politics and religiosity (Walker, 2008).

Like the *Florentine Codex*, the sixteenth-century Mexican *Codex Telleriano-Remensis* displays an obvious coexistence between the Old and New World traditions, particularly in its representation of the natural world (Quiñones Keber 1995). For instance Figure 1, folio 39V

depicts a celestial phenomenon, which was translated into Spanish as a comet. While the European tradition is present through the usage of Spanish text it also incorporates the Mexica tradition by incorporating the traditional pre-conquest indigenous pictograph of a caterpillar with spines. This was done in the traditional Mexica way by being suspended in the blank page in an abstract manner as opposed to representing this phenomenon in a European manner, which would have anchored the "comet" into a scenic or three-dimensional background in the Renaissance tradition.



Figure 1. Representation of a "comet" or spiny caterpillar (meteor) in the *Codex Telleriano-Remensis*.

While the above image presents both European and Mexica tradition in harmony, there still exists a sort of tension between these two worlds. This tension manifests itself through a lack of understanding of this celestial phenomena from a European perspective, which led to a mistranslation of the Mexica pictograph. While the figure is clearly labeled in Spanish text as "cometa", it is not a comet, but in fact a meteor if we go by the correct translation of this Mexica pictograph. This mistranslation is apparent when considering Mexica representations of comets, or "smoking stars" as they called them. These comets are represented as the name suggests, as stars that are emitting smoke. This is evident in Figure 2. folio 44R, which demonstrates the appearance of Halley's comet in 1531, along with a solar eclipse.



Figure 2. Representation of a comet or "smoking star" and a solar eclipse in the *Codex Telleriano-Remensis*.

Apart from mistranslation, this tension between two systems of representation is also present in the image of the mistranslated (spiny caterpillar) or meteor. As previously mentioned, the meteor is symbolically represented in the Aztec worldview by a spiny caterpillar pictograph. By choosing the caterpillar to symbolize the meteor though a pictographic symbol, the Aztecs capture exactly what happens when a meteor hits the earth. According to Köhler, "the Aztecs considered falling stars to be dangerous; if these stellar arrows hit an animal or human, an *ocuili*, a maggot or caterpillar, would be left in the wound" (3). Thus, caterpillars or maggots were interpreted by the Aztecs as a result of meteorites. This is a direct reflection of the Mexica cosmovision where the meteor as a caterpillar/maggot shows an intricate connection to nature and its effect upon humans. That is, the Mexica based their symbols on how they interacted and connected to the natural world, demonstrating that they held nature at the top of their hierarchy of being. Europeans, on the other hand, viewed plants and animals as lower on the hierarchy of being and at the disposal of man.

Another example of natural phenomena appears with the solar eclipse of 1476, which is shown in Figure 3, folio 37R of this same codex. Like the previous image, the eclipse showcases European tradition by using Spanish alphabetic text. On the other hand, the Aztec perspective is present through the use of the traditional pictograph for eclipse as the sun literally being eaten (a cannibalistic landscape) represented in an abstract style. In other words, it is similar to the "comet" previously discussed because it is suspended in the blank page as opposed to being a part of a larger scenic or three-dimensional scene.



Figure 3. Representation of a solar eclipse in the *Codex Telleriano-Remensis*.

As the timeline in the manuscript progresses, the European influence becomes more apparent. This is evident when faced with the solar eclipse of 1496, represented in Figure 4 in folio 40V. This eclipse is particularly detailed. According to Quiñones-Keber, "the image combines a pre Hispanic solar symbol with European-style pointed stars and a crescent moon that blots out a part of the solar symbol. Also European is this more scenic type of depiction, with both the sky and earth represented." (227)



Figure 4. Representation of a solar eclipse in the *Codex Telleriano-Remensis*.

This shift in representation from Mexica to European is more clear when it is compared with the previous representation of the solar eclipse. Stylistically, in Figure 5, the first image (on the left) is more representative of the Mexica culture in representing an eating landscape (where the sun is literally eaten), while the second (on the right) is more European in representation due its scenic imagery. However, despite their differences in style, what is important is that both depictions are present within the same manuscript, further proving the notion of the transformation and coexistence between the two cultures, ways of writing and representing natural phenomena.



Figure 5. Two representation of a solar eclipse in the *Codex Telleriano-Remensis*.

In his historical works Chimalpahin also wanted to reconcile and negotiate Mexica and European ways of representing the natural world. However, before analyzing his historical texts, it is prudent to consider his own, personal history. Again, Chimalpahin was a Christianized non-

elite Native Mexican historian employed as a fiscal at the Dominican run church of San Anton de Abad in the southeast quarter of Mexico City during the 17th century. There, he produced the largest corpus of alphabetic writings made by any single Native Mexican Nahua in his mother tongue, Nahuatl (alphabetic Aztec). Unlike other elite Native Mexican or Mestizo historians of the time (such as Alva Ixtlilxochitl or Alvarado Tezozomoc), Chimalpahin was not trained in the prestigious Imperial *Colegio de Tlatelolco* where the male children of the conquered Native elite received a Renaissance education from the Franciscans (Cortés 2008). Rather, he only received a primary school education from the Dominicans in his hometown of Chalco and was by and large self-taught.

Coming from Chalco, Chimalpahin like other indigenous historians often sought to highlight his own lineage and hometown (*altepetl*) literally meaning water-hill. As a result, he felt a need to connect the origins of his indigenous ancestors to the Old world. Chimalpahin does this by explaining that his ancestors "were carried away by the great deluge that flung their canoes perhaps by Gods design, and that although he does not know with certainty from where they parted from, Asia, Africa, or Europe a great Sage called Heinrich Martin *Nahuatlato* [meaning in this context a court interpreter] for the holy Inquisition in Mexico, who had been to many countries said that he met in a province of Europe called Curlandia [currently Latvia] in the domains of the kings of Poland, the inhabitants of those regions, which according to him look like us [the indigenous peoples], and whose bodies, spirit, and demeanor are like our own" (*Las ocho Relaciones*, our English translation, 309).

By connecting himself and his ancestors to the Christian "great deluge", Chimalpahin was reconciling European explanations of the origins of New World inhabitants. This explanation; however, is obviously Eurocentric. It comes from a Christian tripartite vision of the world, which was forced to make space and account for the American continent and its inhabitants. Given that Europe placed itself on the top of this tripartite hierarchy (followed by Asia and Africa and later America), it might not surprise us that Chimalpahin, a native of the America's would aim to link the origins of his ancestors to the Old world and Europe.

In this instance, what stands out are Chimalpahin's choice of sources. By basing his lineage on a Christianized history, by citing the German Heinrich Martin and keeping in mind his Native Chalcan ethnicity, Chimalpahin's globalized perspective comes to the fore. By placing his ancestors origins in Europe and writing from the cosmopolitan Mexico City he has aimed to bridge the gap between the Old and New worlds. Chimalpahin's cosmopolitan vision can also be explained by the plurality of people he witnessed in the capital city on a day-to-day basis as noted in his annals. Mexico city attracted non-Spanish and non-Christian European immigrants, Jews and Portuguese, "heretical Lutheran pirates" i.e. English, Dutch, and Germans; the arrival of the first delegation of Japanese merchants to Mexico City, and people of African descent (as dependents or slaves of their Spanish masters).

Besides focusing on his indigenous Chalcan lineage, Chimalpahin also recorded Native American perceptions of Spanish ecclesiastics such as the establishment of new religious orders and places of worship in the city. In his depiction of a religiously charged landscape, Chimalpahin also highlighted intra-religious rivalries between friars and secular priests (Schroeder 1989). What becomes clear in reading Chimalpahin's works is how the indigenous peoples appropriated religious Christian art and symbolism as expressions of their Nahua identity, thus making us rethink binary categories of Spanish-Indigenous identity during the colonial time period (Pardo 2007). As such, Chimalpahin embraced Christianity as part of his Nahua indigenous identity but also appropriated it in a new manner.

In this respect, Chimalpahin is comparable to Latin America's first "best-seller", 17th-century *mestizo* (half indigenous half Spanish) Peruvian historian, Inca Garcilaso de la Vega translator of Sephardic León Hebreo's *Dialogos de Amor* (1535) into Spanish. Like Chimalpahin, he was a translator and mediator between two worlds. That is, Garcilaso tried to make intelligible the radical differences of Inca culture to a European mind by exploring the limits of mutual intelligibility across cultural differences and epochs. In this vein, it is useful to think of Indigenous and mestizo cultural intermediaries such as Garcilaso and Chimalpahin as "Indio-Ladinos" or "twice-ethnographers" in the sense that as indigenous or mestizo agents writing in a complex colonial situation they had to negotiate multiple cultural, linguistic, political, and religious identities (Rolena Adorno 1994).

What differentiates these two historians, however, is their intended audience. Garcilaso's revisionist historical texts on the Incas of Peru (authorized by his bicultural and multilingual background) were targeted for a Castillian reading audience. Chimalpahin, on the other hand, through his exclusive use of alphabetic Nahuatl and his re-writing of Spanish Conquest narratives and scientific texts into Nahuatl (Chimalpahin 2010) implies the presence of a Nahuatl alphabetically literate and powerful target audience in New Spain (which would be limited to the presence of mostly elite Nahua intellectual circles and some missionaries), thus disrupting the perceived hegemony of Castilian as the sole language of power and Empire—at least in the case of New Spain. This also points to the prestige that surviving Nahua noble houses still possessed, a group that Chimalpahin did not belong to by birth but one he aspired to be a part of through his historical writings where he could fashion himself as a descendant of noble Chalcans.

Keeping in mind his intended audience and his role a mediator between the Old and New Worlds, we must consider Chimalpahin's *Ocho Relaciones*. In this work, he employs alphabetic Nahuatl to record his date of birth. However, he combines both indigenous and European traditions, applying the Mexica calendar and the Christian calendar. On the Mexica calendar, he was born in the year of 9 Reed. [It is worth noting that these Mexica pictorial calendar dates were also represented in the *Codex Telleriano Remensis* previously discussed]. This Mexica date

is equivalent to the Christian date of May 1579 under "the [zodiac] sign of Gemini or Love" (*Las Ocho relaciones*, 249).

This particular citation embodies Chimalpahin's vision of harmony between both worlds. Not only is he trying to reconcile the two worlds by including both Mexica and European calendars, but he also embodies the spirit of reconciliation and love through the medieval zodiac sign of Gemini, with each twin representing the Old and New World. One could also speculate whether choosing to include his European zodiac sign taken from Henrich Martin's popular work *Repertorio de los tiempos* (1606) was a way for him to reinvent the traditional calendrical animal name and number traditionally given to babies in pre-Hispanic Mexica time through the *tonalphohualli* or day count (Boone-Hill 2007, Tavárez 2002, 70).

The inclusion of the zodiac sign and the scientific work of Heinrich Martin in Chimalpahin's *Ocho Relaciones*, leads us to ask the question: Why was Chimalpahin suddenly interested in science? Moreover, why is it that Chimalpahin held the work of German Cosmographer Heinrich Martin in high regard? The answer to this question is perhaps clarified by further investigating Martin, who is often presented as a mysterious, yet particularly fascinating figure within Mexican history.

As an interpreter for the Mexican Inquisition, Heinrich Martin was privy to information and confiscated items. Among these confiscated items was a Dutch printing press, which was given to him thanks to his previous knowledge of the printing craft. This allowed him to produce and distribute a variety of works including his famous *Repertorio de los tiempos* (1606) where in six treaties he explored the concept of the universe in part from a scientific perspective including topics such as the creation of the earth, moon phases, astrology, political geography, the Mexican calendar, the influence of climate on the humors, complexion of the natives, and the causes of the plagues.

Repertorio de los tiempos in itself was a very worldly piece. It was influenced by numerous Indigenous sources, but also by Jesuit natural historian José de Acosta's *Historia natural y moral de las Indias* (1590). It was this global perspective that intrigued numerous copyists including Chimalpahin who were increasingly interested in the history of Europe and the world in general, and who were trying to find a place for an indigenous world view. As French historian Gruzinski notes "It was not by chance that a few years later an attentive reader of [Heinrich] Martin, the indigenous chronicler Chimalpahin, drew on the *Repertorio* for material that would enable him to put the history of his ancestors in an Atlantic and planetary context" (89).

As previously mentioned, then, Heinrich Martin's scientific perspective has manifested itself in the work of Chimalpahin, particularly in the representation of natural phenomena. Susan Schroeder has noted in passing that Chimalpahin's

"portrayal of natural phenomena and in particular natural disasters, his split personality in terms of upholding indigenous traditions versus embracing modernity comes to the fore [...] Ultimately, church processions replace ancient Mexica rituals as a means of coping with natural disasters in the annalist's accounts" (*Annals of His Time* 8).

Thus, a study of the representation of natural catastrophes enables us to gain more insight into how indigenous colonial historians viewed their world and how they struggled to reconcile and integrate both European and Indigenous archives and worldviews (Tavárez 2002). Furthermore, it can help us shed light on how religious colonial authorities through their interpretation and reactions to natural phenomena promoted a culture of control through fear and through the discipline and punishment or purification of the body through rituals or public events (Rabasa 225).

As Schroeder notes, this tension can be seen in Chimalpahin's depiction of religious processions, which he describes at large. Why Chimalpahin dedicated a great portion of his work to this particular tradition is apparent when considering the purpose of the religious processions. Religious processions and the use of sacred symbols (i.e. local representations of Saints, the Virgin Mary, or Christ etc.) were carried out to appease, please, or petition God's mercy in the case of natural catastrophes (Walker 2008, Christian 1981, Freedberg 1989).

While natural catastrophes were often read as God's wrath, they were sometimes attributed to the devil. It was also believed that God sometimes allowed the devil to intervene in the sub lunar sphere in order to test people's faith (Cervantes 1994). With this in mind, it was thought that the Mexica's had given into the devil's temptations. Consequently, this lead to the hunt for pre-Hispanic idols and the persecution of Nahua ritual and agricultural practices and incantations after the Conquest of Mexico as evidenced by Hernando Ruiz de Alarcón's Seventeenth-century Mexican treatise (1984). This partially explains why, after the Conquest of Mexico, indigenous practices and beliefs began to be replaced by a more Christianized vision.

This vision is seen throughout Chimalpahin's annals and his discussion of natural phenomena. For example, he recorded in his annals an earthquake that took place in Mexico City near Tetzcoco on July 1st, 1611 at three in the morning. Chimalpahin noted how an earthquake shook the water on the lake surrounding Mexico City, waking up people who ran out of their houses in confusion and fear for the duration of the earthquake. Church bells rang to warn people and also to remind them that any destruction incurred from this natural catastrophe was either the result of God's wrath for sinful behavior or in some cases a sign of God's mercy in the guise of miracles. It is worth quoting Chimalpahin at length:

"Some [Spanish women] were just in shirts, some came out naked into the patios, some then came out into the road. It was as though we had all gotten drunk, we were so afraid" [...] "wherever such things happen to people as have happened to us here in Mexico now, happens because of our [sins], perhaps through his anger, and it is fitting"[...] "it was said that this woman, when she realized the earth was shaking and saw that her house was coming down on her, was falling in on her and she could no longer be saved, cried out to him to help her. And it came to pass that he helped her, so that she did not die..." [...] "but the archbishop and viceroy did not stop watching the bulls then; even though he was sad when he heard the bells ringing, he did not therefore halt the bullfighting, but the bullfighting kept on until nightfall....but it was said that he began to get ill as soon as he entered his bedroom in the palace when the bullfighting endedthey heaped shame on him, especially the inquisitors, so that afterward they prohibited bullfighting in the corral any longer and tore down all the wooden enclosures he had set up there." (*Annals of his Time* 187-93).

What upset Chimalpahin the most was the lack of response provided by archbishop and viceroy Fray García Guerra who did nothing to appease God in the guise of processions or prayers to atone for sinful behavior. Instead, the archbishop decided to hold a bullfight in the plaza in order to entertain himself, even while the second aftershock occurred. Echoing in part the Christian beliefs passed on to him from his Dominican mentors, Chimalpahin believed that God through natural catastrophes had punished the archbishop and judges of the Royal *Audiencia* (who had attended the event) because of their sinful ways and was especially happy when the Inquisitors condemned the archbishop and prohibited further bullfights from taking place.

Many other natural phenomena and catastrophes were recorded by Chimalpahin in his annals spanning the years (1577-1615). They all indicate how he struggled to reconcile multiple interpretations of these events filtered through a Christianized perspective or what Rabasa would describe as the two-way street of memory where the function of the chronicler is precarious in that s/he [Chimalpahin] has to both preserve and negate Mesoamerican history and worldview. One of the most famous descriptions of natural phenomena is Chimalpahin's description of the solar eclipse that occurred in Mexico City on the 10th of June 1611.

Here, Chimalpahin attempted to explain this celestial phenomenon through a Mesoamerican interpretation of eating landscapes, Western science, and Christianity. The incorporation of Western science into Chimalpahin's description of this event has been noted by historians. Gruzinski, for example, speculates that given that there were many libraries giving the literate public access to the texts that were imported by printers and booksellers; that Chimalpahin could have had access or read Copernicus' *On the Revolutions of the Heavenly Spheres* (1543) (41). As noted in Chimalpahin's annals:

"when this happened **our forefathers called it the sun being eaten,** in which they were confused, for they did not know how the heavens go, how they are made, so that each one lies across the other as they go along revolving and crossing one another, "[...] "He [father fray Juan Bautista] also took it from the statements of those who know the heavens, the philosophers and astrologers who had said how it happens, how the sun disappears and is eaten" (*Annals of his Time* 177-79).

Chimalpahin then inserts his alphabetic Nahuatl translation of fray Juan Bautista's castillan explanation of the eclipse. [Fray Juan Bautista it should be noted taught theology and metaphysics at the convent of San Francisco in Mexico]:

"Each of the heavens rotates separately. When it happens that the moon places itself in front of the sun...this statement...was composed and thought out by the great scholars, the philosophers and astrologers, who considered and wrote all about all earthly matters and the nature of everything that we see and behold. And our forefathers, the ancients who were still idolaters, called pagans, were not able to find out anything about this because they lived in confusion" (*Annals of his Time* 177-79).

Chimalpahin explains to us that during the eclipse people began to shut themselves up in their houses and that the streets were empty because people were afraid given the negative predictions of some astrologers who (following in the medieval tradition of reading some natural phenomena as evil omens and also influenced by the predictions of Heinrich Martin) claimed that it was a sign that a great city would perish or that a noble prince would die. Some people, Chimalpahin notes, went to Church to confession and to have communion to prepare themselves spiritually, while others paid no heed, others wept and some were even murdered:

"[Astrologers] first said and warned people that when Friday the 10th of the month of June should come, the surface of the sun would be covered and it would get dark...no one should look upward, everyone should guard well against it. They should all stay in their houses; nor would anyone be permitted to go about on the roads because at that time a bad air would be passing by, and also during that time no one should eat, drink, or sleep until it should get light again" [...] "Some Spaniards said they are just lying about what they announce, maybe what the scholars and astrologers said is just drunken talk" [...] "The sun began to weaken, so that it began to get dark. And so that all of us people here in New Spain could see how only our omnipotent lord God can perform all his miracles, for he does what he wants to do, and shows people here on earth as he can manifest" [...] "and also when the solar eclipse was over, it began that here in the city of Mexico many people were killed by stealth, we commoners and Spaniards were stabbed." (*Annals of his Time* 181-85).

While Chimalpahin was clearly influenced by the Christianized and western perspectives of his time, it is worth noting that in the year 1577 (or 7 House) he recorded the appearance of a comet and noted how even at this late post-Conquest date when the Mexica practice of sacrifice was banned, that it supposedly persisted.

"And in this year there clearly appeared a comet with a very distinct tail...and at this time striping [for gladiatorial sacrifice] was performed as it was in ancient times; with it they honored the rulers" (*Annals of his Time* 27).

Given that Chimalpahin was not even alive during the time of this recorded event (he was born in 1579) and that he most likely did not begin compiling and recording his *relaciones* and annals observations after 1594 (according to Rabassa) or 1608 (according to Schroeder)—one must wonder if the gladiatorial sacrifice he records was in fact indicative of the persistence of banned pre-Hispanic rituals, a tamed modification of a practice or the persistence of its memory passed down. If Chimalpahin obtained this information from the oral testimony of elders it might indicate the anxiety over sacrifice that still persisted after the Conquest of Mexico. Although sacrifice was banned after the Conquest, indigenous pre Hispanic rituals still persisted given that in their worldview they needed to still "feed" the sun through blood sacrifice in order to ensure the proper movement of the cosmos or else face natural catastrophes and destruction.

In either case, Chimalpahin's constant reference to pre-Hispanic archives and sources throughout his work (eg. material culture, pictorial indigenous manuscripts (codices) and the oral testimonies of elders etc.) indicate the survival and persistence of indigenous memory. As Rabasa notes "Memory in Chimalpahin does its work in a private space for a future Nahua collective identity that will find the possibility of remembering the past in an archival configuration organized by this author who claims property as owner and custodian of pictographic and alphabetical records of Mesoamerican antiquities" (207). Taking on the role of historian Chimalpahin's ultimate goal was to preserve both New and Old world archives and explanations of natural phenomena, but specifically in a way that attempted to reconcile two world views for the surviving indigenous Mexica elite.

Bibliography:

Acosta, José de. *Natural and Moral History of the Indies* (1590). Ed. Walter Mignolo. Durham: Duke University Press, 2002.

Adorno, Rolena. "The Indigenous Ethnographer: The 'Indo Ladino' as Historian and Cultural Mediation." In *Implicit Understandings: Observing, Reporting, and Reflecting on Encounters between Europeans and Other Peoples in the Early Modern Era*, ed. Stuart B. Schwartz, 378-402. Cambridge: Cambridge University Press, 1994.

Agostoni, Claudia. Monuments of Progress: Modernization and Public Health in Mexico City,

- Arnold, Philip P. *Eating Landscape: Aztec and European Occupation of Tlalocan*. Colorado: University Press of Colorado, 1999.
- Boone, Elizabeth Hill. Cycles of Time and Meaning in the Mexican Books of Fate. Austin: University of Texas Press, 2007.
- ---. Stories in Red and Black: Pictorial Histories of the Aztecs and Mixtecs. Austin: University of Texas Press, 2000.
- Carrasco, David and Scott Sessions. Eds. *Cave, City, and Eagle's Nest: An Interpretive Journey through the Mapa de Cuauhtinchan No. 2.* Albuquerque: University of New Mexico Press, 2007.
- Carrasco, David. *The City of Sacrifice: The Aztec Empire and The Role of Violence in Civilization*. Boston: Beacon Press, 1999.
- Cervantes, Fernando. *The Devil in the New World: The Impact of Diabolism in New Spain.* New Haven and London: Yale University Press, 1994.
- Chimalpahin Cuauhtlehuanitzin, Domingo Francisco de San Antón Muñón, James Lockhart, Susan Schroeder, and Doris Namala. *Annals of his time: Don Domingo de San Antón Muñón Chimalpahin Quauhtlehuanitzin*. Stanford, California: Stanford University Press, 2006.
- Chimalpahin Cuauhtlehuanitzin, Domingo Francisco de San Antón Muñón, Arthur J. O.
 Anderson, Susan Schroeder, and Wayne Ruwet. *Codex Chimalpahin: Society and Politics in Mexico Tenochtitlan, Tlatelolco, Texcoco, Culhuacan, and Other Nahua Altepetl in Central Mexico: the Nahuatl and Spanish Annals and Accounts Collected and Recorded by Don Domingo De San Antón Muñón Chimalpahin Quauhtlehuanitzin.*Norman, Oklahoma: University of Oklahoma Press, 1997.

- Christian, William A. *Local Religion in Sixteenth-Century Spain*. Princeton: University Press, 1981.
- Cortés, Rocío. "The Colegio de Tlatelolco: Nahua Intellectuals and the Spiritual Conquest of Mexico" in *The Blackwell Companion to Latin American Literature and Culture*. Ed. Sara Castro-Klarén. Malden, MA: Blackwell Publishing (2008): 86-105.
- Curcio-Nagy, Linda. *The Great Festivals of Colonial Mexico City: Performing Power and Identity*. Albuquerque: University of New Mexico Press, 2004.
- Edgerton, Samuel. *Theatres of Conversion: Religious Architecture and Indian Artisans*. Albuquerque: University of New Mexico Press, 2001.
- Favrot-Peterson, Jeannete. *The Paradise Garden Murals of Malinalco. Utopia and Empire in Sixteenth-Century Mexico*. Austin, Texas: University of Texas Press, 1993.
- Freedberg, David. *The Power of Images: Studies in the History and Theory of Response*. Chicago: The University of Chicago Press, 1989.
- Gruzinski, Serge. *What Time Is It There? America and Islam at the Dawn of Modern Times*. Cambridge: Polity, 2010.
- Hebreo, León. *Diálogos de amor* (1590). Translated from the Italian into Spanish by Garcilaso Inga de la Vega. Madrid : V. Suárez, 1949.
- Kagan, Richard L. *Urban Images of the Hispanic World 1493-1793*. New Haven and London: Yale University Press, 2000.
- Köhler, Ulrich. "Meteors and Comets in Ancient Mexico" in *Catastrophic Events and Mass Extinctions: Impacts and Beyond.* Eds. Koeberl, Christian, and Kenneth G. MacLeod. Boulder, Colorado: Geological Society of America, 2002.
- Lara, Jaime. City, Temple, Stage: Eschatological Architecture and Liturgical Theatrics in New Spain. Notre Dame: University of Notre Dame Press, 2004.

- Leibsohn, Dana. Script and Glyph: Pre-Hispanic History, Colonial Bookmaking and the Historia Tolteca Chichimeca. Dumbarton Oaks Research and Library Collection, Washington D.C. Harvard University Press, 2009.
- Lockhart, James. *The Nahuas After the Conquest: A Social and Cultural History of the Indians of Central Mexico, Sixteenth Through Eighteenth Centuries.* Stanford: Stanford University Press, 1992.
- López-Austin, Alfredo. *The Human Body and Ideology: Concepts of The Ancient Nahuas*.

 Translated by Thelma and Bernard Ortiz de Montellano. 2 vols. Salt Lake City:

 University of Utah Press, 1988.
- Martinez, Henrico. *Repertorio de los tiempos e historia natural de esta Nueva España* (1606). Mexico: Cien de Mexico, 1991.
- Mathes, Valerie L. "Enrico Martínez of New Spain." *Academy of American Franciscan History* 33 no. 1 (Jul., 1976): 62-77. http://www.jstor.org/stable/979987.
- Mundy, Barbara E. "Aztec Geography and Spatial Imagination" in *Geography and Ethnography:*Perceptions of the World in Pre-Modern Societies. Eds. Kurt A. Raaflaub and Richard

 J.A. Talberta. UK: Wiley-Blackwell, 2010.
- ---. The Mapping of New Spain: Indigenous Cartography and the Maps of the Relaciones Geográficas. Chicago: University of Chicago Press, 1996.
- Pardo, Osvaldo F. *The Origins of Mexican Catholicism: Nahua Rituals and Christian*Sacraments in Sixteenth-Century Mexico. Michigan: The University of Michigan Press, 2007.
- Quiñones Keber, Eloise. *Codex Telleriano-Remensis: Ritual, Divination, and History in a Pictorial Aztec Manuscript*. Austin: University of Texas Press, 1995.
- Rabasa, José. "In the Mesoamerican Archive: Speech, Script, and Time in Tezozomoc and Chimalpahin." In Without History: Subaltern Studies, the Zapatista Insurgency, and the Specter of History, 205-229. Pittsburgh: University of Pittsburgh Press, 2010.

- Ruiz de Alarcón, Hernando. *Treatise on the Heathen Superstitions That Today Live Among the Indians Native to This New Spain (1629)*. Eds. J. Richard Andrews and Ross Hassig. Norman: University of Oklahoma Press, 1984.
- Sahagún, fray Bernardino de. *Florentino*. 3 vols. Biblioteca Medicea Laurenziana, Italia/Archivo General de la Nación. Mexico City: Giunti Barbera Florencia, 1981.
- San Antón y Muñón Chimalpahin Quauhtlehuanitzin, Domingo Francisco de, and Rafael Tena. *Las ocho relaciones y el memorial de Colhuacan I.* Las Ocho Relaciones Y El Memorial

 De Colhuacan. México, D.F.: Consejo Nacional para la Cultura y las Artes, 1998.
- Schroeder, Susan. "Chimalpahin's View of Spanish Ecclesiastics in Colonial Mexico," in Susan E.Ramirez, ed., *Indian-Religious Relations in Colonial Spanish America*. Syracuse, N.Y: Syracuse University, 1989.
- Tavárez, David. "Letras Clandestinas, Textos Tolerados, Colaboraciones Lícitas: La Producción Textual de los Intelectuales Nahuas y Zapotecos en el Siglo XVII." In *Elites Intelectuales y Modelos Colectivos: Mundo Ibérico (Siglos XVI-XIX)*. Eds. Mónica Quijada y Jesús Bustamante. Madrid: CSIC, (2002): 59-82.
- Valle, Ivonne del. [work in progress] Searching for Pantitlan: Technology and Knowledge about Water in the Formation of a Colonial State. UC Berkeley.
- Vega, Inca Garcilaso de la. *Royal commentaries of the Incas, and a general history of Peru* (1609) Ed. H.V. Livermore. Austin: University of Texas Press, 1966.
- Walker, Charles F. Shaky Colonialism: The 1746 Earthquake-Tsunami in Lima, Peru, and Its Long Aftermath. Durham: Duke University Press, 2008.