at the conclusion of the fifty-two-year cycle. Thus, along with the glyph for the celebration of Panquetzaliztitl, it is clear that the sculpture represents the xiuhmolpilli (Binding of the Years). However, while Reed functioned as a yearbearer in the Mixica calendar, 1 Reed did not correspond to the conclusion of the fifty-two-year period. Moedano Koer (1951), who first published research on the monument, proposed that the date was commemorated according to the Mixteca calendar, in which 1 Reed is particularly important, as often seen in the Codex Vienna (Furst 1978b). Given these examples, it seems plausible that different calendars were in use even within the same great capital of the Aztecs.

The crossover of symbolic and historical dates may seem rather confusing, but perhaps this is precisely the lesson to be learned from Mexico chronology: timekeeping is a cultural construct. The understanding and ordering of astronomical phenomena are necessarily constrained by the intellectual and mathematical means employed. The predictive and suggestive symbolism of the tonalpohualli implies that measuring time may and should lead to new interpretations of the events and people involved. In other words, if it is true that different calendars were in use throughout Mesoamerica, the fact that the surviving monuments that commemorate the xiuhmolpilli were purposefully carved in the same style and placed within the same sacred precinct in Tenochtitlan suggests that the possible misinterpretation of year dates, day signs, and day names was actively pursued in the carving of the sculptures to allow future generations to further decipher and engage with them.

5.2. The Christian and Mesoamerican calendars

Alfonso Caso (1967, 41–50) established the synchronisation between the Christian (Julian) and Mesoamerican (more specifically, Mexico) calendars used today. While also relying on previous studies, the Mexican scholar calculated the correlation largely based on the fall of Tenochtitlan, which is recorded in both Spanish and Nahua sources according to their respective calendars. The Christian date is August 13, 1521, while historical accounts of the same event in Nahua sources give the date as day 1 Serpent, year 3 House. Once a fixed date is established, the counting is projected backwards and forwards.

The fall of Tenochtitlan is not the only event that was consistently documented according to both calendars. Prem (2008, 209–232) provided a detailed summary of the main events and respective dates as they appear in the sources. For example, Cortés’ arrival in the Mexica capital on November 8, 1519 is frequently mentioned in Spanish accounts. However, two dates are given for the event in Nahua sources: either day 8 or 1 Wind, year 1 Reed (Prem 2008, 213–218). Furthermore, as Prem (2008, 227) noted, neither one matches the correlation based on the dates of the fall of Tenochtitlan. The author (2008, 228) recapitulates the arguments made by Seler, Caso, and, more recently, Tena to explain such discrepancies. While Seler and Caso believed that there was a mistake in the sources and corrected them accordingly, Tena maintained that the existence of a leap year in the Mesoamerican calendar accounted for the error. As explained in Chapter 3, the existence of a periodic readjustment in the tonalpohualli is unfeasible because the counting of the 260 days is based on an uninterrupted correlation between thirteen numerals and twenty day names that repeat according to predictable patterns. As Caso (1967, 33, 48) himself explained, adding one day to the tonalpohualli would be like adding a day to a week during a random month. Moreover, the astronomical observation of a day change (or slip) needs not to be reflected in the 260-day cycle, which in any case is unrelated to the solar year.

The other option espoused by both Seler and Caso—that of a simple clerical error in the sources—also raises several questions. Among them, how can we account for the fact that all sources consistently mention the same day for the fall of the city and either 1 or 8 Wind for Cortés’ arrival in the city two years prior? The fact that Spanish and Nahua sources were not independently redacted but rather relied on information provided by the same primary source should not be underestimated. Both Seler and Caso fixed the inconsistencies by choosing 8 Wind as the day of the meeting between Cortés and Motozintzintzina on November 8, 1519 because this allowed for a smaller mistake of only one day when counting backwards from the later date of the fall of Tenochtitlan on August 13, 1521 (Caso 1967, 52). It should be noted that the other day for the event, 1 Wind, falls twenty days before 8 Wind, which seems to indicate that the Nahua historian counted twenty by twenty, as one would expect from someone accustomed to the Mesoamerican calendar. At any rate, the dates are inconsistent.

Prem (2008, 228) explained the discrepancy in a more convincing manner. He attributed it to the use of a European perpetual calendar (reportorio in Spanish) to establish a correlation between the two calendars. The two days in question, Cortés’ arrival in Tenochtitlan and the final fall of the city, happened in 1519 and 1521, respectively. The year 1520, which fell between the two, was a leap year in the Julian calendar; therefore, one more day was counted in the tonalpohualli when reconstructing the events with the use of a reportorio. I find this to be the simplest and most logical explanation. The reliance on a European perpetual calendar also implies that Nahua sources were reconstructed a posteriori based on an already established correlation between the two systems, which considered the Julian leap year. It is quite probable that the dates given in early colonial chronicles were already the product of an established synchronisation, not independently gathered factual historical data.

The dates of both Cortés’ arrival and the fall of Tenochtitlan were given in the Christian calendar by Cortés (1986) himself in his second and third letter, which were dated 1520 and 1522, respectively. The earliest
corresponding dates in Nahua sources are possibly from the *Anales de Tlatelolco*, a manuscript whose exact dating is problematic. Although it claims to be from 1528, internal linguistic evidence suggests a later date, possibly in the 1550s (Lockhart 1993, 40). Cortés’ letters, which were a sort of journal of the events of the invasion and conquest of Mexico, were likely the primary source for all subsequent historical accounts, both Spanish and Indigenous.

The only pictographic document that depicts the Spaniards’ arrival in Tenochtitlan and subsequent events with specific dates is the Codex Vaticanus A (ff. 89r–89v; Fig. 5.8 and 5.9), a copy of the Codex Telleriano-Remensis that, however, lacks the folios in question. Assuming that the Codex Vaticanus A is a faithful copy of the Codex Telleriano-Remensis, it remains the earliest source with both pictographic and alphabetic information regarding the conquest of Mexico. In the two folios that depict the three pivotal events of the enterprise of conquest (i.e., Cortés’ arrival in Tenochtitlan, the Toxcatl massacre, and the surrendering of the Mexica), days and veintenas are also indicated in a way that is unique to these pages. The encounter between Cortés and Motecuhzoma is given as day 1 Wind, year 1 Reed, a date consistent with other Nahua sources, as discussed above. What follows in the year 2 Flint is the infamous carnage perpetrated by the Spaniards in the Templo Mayor during a time of celebration for the Nahua. Lastly, folio 89r depicts the death of Motecuhzoma (Anders and Jansen 1996b, 354–357). A series of veintena glyphs run directly underneath these events. The sequence begins with Quecholli, the veintena that, according to most historical sources, was celebrated during the arrival of Cortés (Prem 2008, 214–245). The ninth glyph corresponds to Toxcatl, in the following solar year; this glyph is placed underneath the massacre that apparently occurred in the sacred precinct during the celebration of this veintena. Finally, the death of the tlatoani during the month of Huey Tecuilhuitl is marked by its characteristic glyph, a colorful rosette (see also folio 46r in the same manuscript). On the reverse page (f. 89v), the year 3 House depicts Cortés again, this time carrying a weapon and riding a horse against a Mexica soldier in full armor. The serpent in a green square seen on the back of the Spanish conquistador is usually understood to be a reference to the day Serpent but without a numeral; it corresponds to 1 Serpent, the day of the fall of Tenochtitlan. The five veintena glyphs at the bottom are identifiable as Toxcatl, Etzalcualiztli, Tecuilhuitontli, Huey Tecuilhuitl, and Micaihuitontli; they probably correspond to the last five months of confrontation and siege before the final capitulation of Tenochtitlan, which occurred on day 1 Serpent, year 3 House during the veintena of Micaihuitontli, according to other sources, as seen above.

The unusual display of the veintenas’ emblem glyphs and the fact that the day of the capitulation was not given in full but only as Serpent, without the numeral necessary for the
correct identification of the day in the tonalpohualli, may indicate a failed attempt at reckoning with discrepancies in the sources. Indeed, the count does not add up. Previously, I noted the correction of the veintena dates in the Codex Telleriano-Remensis, from which Vaticanus A was copied. The painter-historian of the Codex Vaticanus A—or more likely, the author of the original Codex Telleriano-Remensis—proceeded chronologically from the date of the initial contact and relied on the veintenas count to keep track of the days, only to realize that the count was erroneous and consequently decide not to write a fixed numeral for the day Serpent. Modern scholars since Seler and Caso have opted to count backwards from the fall of Tenochtitlan.

Although seldom considered, the fact that the year did not begin at the same time throughout Mesoamerica may have been a great source of confusion when attempting to establish a basic year-to-year correlation between the two systems. For example, it is a well-established fact that the Mixtec calendar year was one numeral off compared to the central Mexican count; that is, the Aztec year 1 Reed corresponded to 13 Reed in the Mixtec count (Jiménez Moreno and Mateos Higuera 1940, 69–74). Kirchhoff (1954–1955) proposed that a different calendar was in use in Tlatelolco, the twin city of Tenochtitlan on Lake Texcoco, largely based on the discrepancies that appear in Nahua documents related to the events of the conquest from the two cities. A correlation study by Caso (1967, 39, 71) posited that the yearbearer (i.e., the day that would give the name of the year) was the last day of the year, which, according to his calculations, coincided with the last day of the veintena of Titi.t. This assumption is still generally
accepted, despite its being arithmetically untenable and the beginning of the ceremonial and veintena cycle differing in the sources (Kubler and Gibson 1951, 51, Nicholson 1971). Considering that the tonalpohualli does not adjust to the solar year, the day of the yearbearer was tied to its corresponding year only in a conventional manner despite early assertions by Seler and, eventually, Caso and Tena that its position was fixed (Prem 2008, 88–89). The same holds true for the celebration of the veintenas, which Caso believed occurred on the last day of each period, although there is a lack of consistent information on the matter in the sources.

An interesting excerpt from the Florentine Codex (Sahagún 1950–1982, bk. 12, ch. 3) states,

Then the year changed to the one following, 13 Rabbit, and when it was nearly over, at the end of the year 13 Rabbit, [the Spaniards] made an appearance and were seen once again … He thought and believed that it was Topiltzin Quetzalcoatl who had landed. (Lockhart 1993, 62)

The text indicates that the arrival of the Spaniards on the shores of Veracruz equaled the return of Quetzalcoatl, a prophecy that some scholars claimed (Gillespie 1989, 173–207, Townsend 2003) was concocted in colonial times. This correlation is quite telling. If the return of Quetzalcoatl is a post-conquest myth, could the day mentioned in the source also be a matter of retroactively casting a specific episode into a larger historical and prophetic framework? Cortés, the earliest historical source, does not provide the date of the fateful encounter in San Juan. It was Díaz del Castillo (2010, ch. 38), a much later eyewitness source, who established the precise day. The author, who was part of Cortés’ expedition, placed the event during Holy Week, which fell in the third week of April in 1519, according to the Julian calendar still in use in the early sixteenth century. By contrast, Cortés (1896) himself not only failed to mention the specific day but also did not even refer to this important religious occurrence in the Christian calendar when writing about the event in his first letter. It was already dark when the Spaniards heard people approaching, but they waited until the next day to disembark and meet the visitors. This detail coincides with the account by Díaz del Castillo, who mentioned that the ships arrived onshore on the night of Maundy Thursday but that their occupants only disembarked on Holy Friday. For his part, Cortés did not even mention that emissaries had been sent by the Mexica emperor, Motecuhzoma. One can only imagine that a later readjustment on the part of both the Nahua and the Spanish cast what had been a rather uneventful encounter into a historical moment with religious overtones.

Conversely, if it was factually accurate that Cortés and his men arrived in San Juan de Ulúa around the third or fourth week of April 1519, as in Díaz del Castillo’s account, then this event occurred right before day 1 Reed, year 1 Reed in Caso’s chronology. The Nahua text of the Florentine Codex presented above states that the year 1 Reed was just beginning. This suggests that the year began when the yearbearer entered. I think that this could again be a case of a later adjustment and purposeful agreement on the part of Nahua and Spanish historians to fix the Mesoamerican and Christian Julian calendars to one another based on eventful occurrences. In other words, the Mesoamerican counting of the years was retroactively established based on the correlation with the foundational event of the encounter. The agreement on a correlation, which implies locking the Mesoamerican and Christian calendars, in turn generated all the aforementioned inconsistencies and contradictions, including the existence of a leap year (Prem 2008, 303–305). There was perhaps no agreement in pre-contact Mesoamerica as to when the year or even days or periods began and ended. Not only was the yearbearer possibly different in each community, but the year may have been perceived as slowly entering until the day of the yearbearer was reached and slowly dying or exiting after the second passing of the yearbearer.

Although correlation efforts since the pioneering work of Caso (1967) have consistently posited that every community or political and social group in Mesoamerica was on the same day of the tonalpohualli, it is more reasonable to assume that this was not the case. Unlike in Europe, where the Catholic Church was officially in charge of timekeeping across several nations and states, there was no religious, political, or otherwise all-encompassing authority in Mesoamerica that enforced such standards. Even in Europe, when Pope Gregory XIII introduced the correction of the Julian calendar in 1582, states whose governments had officially embraced Protestantism did not immediately adopt the change and did so independently over the course of a few centuries. In contrast, the fixed periodicity of the tonalpohualli did not require every community to be on the same day. Calculations in the tonalpohualli can be relatively simple matter for those accustomed to a vigesimal system. The ways in which the tonalpohualli can be divided are constant, therefore creating predictable patterns that can be easily applied regardless of the specific day involved. Put differently, work schedules are programmed in modern society according to a weekly calendar because the seven-day period is fixed and unchangeable. The same is not true for the yearly calendar, which given the irregularity of the months’ duration, cannot produce usable or manageable patterns. For the most part, weekly schedules are used to plan future activities, while fixed dates in the month and year are relevant for retroactively reckoning with historical events. While planning a vacation, we may need to remember the day of the week to avoid missing a plane, but the month and period of the year subsequently become the virtual repository of our vacation memories. Historical sources compiled generations after the narrated events offer a particularly complex picture. As historians, we privilege a specific order and placement of events and are perhaps unaware at times of the larger historical significance that we bestow on them after the fact.
Historians are mostly interested in causality. On the one hand, the unequivocal correlation between the Christian and Mesoamerican calendars enabled Western historians to easily keep track of reconstructed events. I believe that this is the reason why Caso’s chronology, for all its inconsistencies, has not been reevaluated. On the other hand, by adjusting Mesoamerican chronology for the sake of clarity, we may correctly establish facts but miss out on the complexity of the Mesoamerican calendar and its many variants, adaptations, and implications. The fact that dates may be assigned a different value for every occasion is an indication that the work of the diviner was not a matter of straightforward interpretation but rather a quest to envision different outcomes and solutions to the problems posed by the client.

The aforementioned reflections arise from the need to rethink not the narrated events, but the Mesoamerican conception of time. As a preliminary conclusion, I propose reconsidering some aspects of the Mesoamerican calendar. First, it seems reasonable to assume that not every community or group was on the same day and year. This is in light of—and not despite—the fact that there is only one calendar, the tonalpohualli, which functions according to arithmetically predictable patterns. Backward and forward counting was always inscribed in the tonalpohualli’s inexorable arithmetic, which sometimes created confusing inconsistencies when faced with the variable durability of astronomical time, such as the apparent movement of the sun and Venus. Such inconsistencies were openly exploited in both pictorials and carved monuments to signify that calendrical knowledge, for all its predictability, could always lead to different and new interpretations. Pictography and the calendar are as much a self-contained and coherent language that can explain the world as they are an open and self-generating expression that creates the world.
Prophecy, Patronage, and Purpose in the Ancient Religious Manuscripts

The Codex Borbonicus was used as a reference in the preceding chapters to understand divinatory practices, ceremonies, and calendrics in the ancient manuscripts. The importance of the document lies in the historical information that it provides on the xiuhmolpilli celebrations in the year 2 Reed in Tenochtitlan. Although it is likely that the manuscript was created to commemorate such an occasion, the Codex Borbonicus dates to the colonial period. Therefore, it is either an early post-conquest copy of a now-lost sixteenth-century pre-colonial manuscript or an original colonial document that was intended to commemorate an important event that had taken place before the conquest (Nowotny 1974, 11).

Robertson (1959, 89–90) first noted that the red outline of the cells in the tonalamatl section on pages 3–20 of the manuscript left room for explanatory glosses to be placed next to the days and corresponding deity representations. This is a clear indication not only that the Codex Borbonicus was drafted after the conquest but also that a Spanish audience that required specific explanations was intended and expected. Later, colonial religious manuscripts such as the Codices Telleriano-Remensis and Tudela were created to illustrate Indigenous religion to a faraway European audience who would never travel and know the New World firsthand, and contained lengthy written explanations. Pre-Hispanic manuscripts, such as the religious Codices Borgia, Vaticanus B, Cospi, and Laud, were also taken to Europe soon after the conquest as gifts to popes and other dignitaries throughout the continent (Domenici 2017).

The Codex Borbonicus may also have been created to bridge the geographical and cultural distance between the two sides of the Atlantic. However, it is unique and distinct, as it is neither an object intended for a cabinet of curiosities, like the pre-Hispanic codices, nor a document that claims to illustrate a vanquished and vanished Nahua religion, like colonial religious manuscripts produced under missionary guidance. The Codex Borbonicus was produced after the fall of Tenochtitlan (1521) but before the establishment of the Colegio de la Santa Cruz in Tlatelolco and other conventual schools that would become the intellectual sites of manuscript production in New Spain by the mid-1530s (Robertson 1959), a topic that is thoroughly discussed in the following chapters.

Unlike all colonial religious manuscripts, the Codex Borbonicus maintains the physical features of a teoaamoxtli (an ancient sacred book), such as the amate paper support and the accordion folding of its pages. However, in contrast to them and the pre-Hispanic codices of the Borgia Group, human sacrifice and other rituals that involve bloodletting are conspicuously absent, which likely indicates that traits of Indigenous religion that were more easily misunderstood and condemnable by a non-Indigenous audience were purposefully obliterated. In other words, the Codex Borbonicus betrays a post-conquest production and a Spanish-intended audience, but it was conceived within an Indigenous intellectual circle that was not condemning but instead had a profound understanding of Mesoamerican religion.

6.1. The patronage of the Codex Borbonicus

Jansen (2002, 300) noted that the Codex Borbonicus was inventoried among the books in the possession of King Philip II of Spain at El Escorial in 1600. It was described as a “book in large folio format of the caciques of Mexico and the days that they sacrificed in the week, handmade and painted with retouched figures; cardboard binding covered with red velvet and colored banners” (libro en folio mayor, de los caciques de México y de los días que sacrificaban en la semana, de mano, pintado en colores con figuras retocadas; encuadernado en papélon cubierto de Terciopelo carmesi con cintas coloradas; Zarco Cuevas 1924–1929, vol. 3, 553). The “caciques of Mexico” were likely the patrons of the Codex Borbonicus, which may have been commissioned as a gift to the King of Spain (Jansen and Pérez Jiménez 2017, 398). I suggest that the document itself contains several clues about its patrons’ identity.

As extensively remarked in the scholarship (Couch 1985, ch. 2, Nicholson 1988, Anders et al. 1991, 51–58), the Codex Borbonicus likely hails from the southern shores of Lake Texcoco and the towns of Iztapalapa, Colhuacan, or Xochimilco (Map 2). Glosses throughout the veintena section repeatedly mention the chinampas, raised fields on the fertile fresh waters of the southern lake. The goddess Cihuacoatl, who plays a leading role in the yearly ceremonies in the second part of the manuscript, was worshiped as a town patron in Colhuacan and Xochimilco. The New Fire ceremony during Panquetzaliztli is said to have taken place in the Cerro de la Estrella near Iztapalapa.

The priest impersonator of Cihuacoatl appears on pages 23 and 37, along with another priest dedicated to Xiuhtecatl and identified by a gloss as the tlatoani Motecuhzoma II. This strongly suggests that the Cihuacoatl priest was the historical cihuacoatl, the main priest and chief administrator of the Mexica state. According to Chimalpahin (Schroeder 2016, 131–132) the office of cihuacoatl at the time of