Here it is. A Nahuatl translation of European cosmology : context and contents of the Izcatqui manuscript in the Royal Tropical Institute, Amsterdam

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Chapter Three - Translations of the *reportorio* genre in Nahuatl, Otomí, and Yucatec Maya

The *reportorio* genre was not unfamiliar to certain groups of indigenous readers from the early colonial period onwards. Alongside Izcatqui, there are a handful of texts that we know of that were inspired by the Spanish almanac and have survived until the present. Because the almanac itself is inseparably related to the calendar, there are plenty of calendrical texts that can also be linked to the *reportorio*. In this chapter, however, I consider only those colonial texts that have a clear reference to the *reportorio*. As will become clear, these texts were written in a variety of indigenous languages, and so in the interest of clarity I will systematically provide an overview of each of these texts in chronological order in the subsections below. Moreover, I will also augment the study of these individual texts by providing a general overview of these texts as a single genre.

By providing a general overview of these texts as a single genre, I aim to achieve two goals. Although the corpus is small, I would first like to give a provisional answer to the question of whether or not it is possible to track a certain development of the genre as a whole on two levels. The first level is the selection of the content of the Spanish text to enter the indigenous text. The second level is the mode of translation of the source text; or, put differently, the question of how certain concepts were translated by the scribes. My second goal is to give an answer to the question of whether the small corpus allows for an analysis of regional differences between the two levels described above.

In the following, I begin with the oldest text known to have been inspired by a *reportorio*: a handwritten addition to a Doctrina Cristiana in Nahuatl by Pedro de Gante. These fragments are followed by the Codex Mexicanus, a document from the sixteenth century that combines the tradition of indigenous central Mexican pictography with handwriting in the Roman alphabet. Then, I consider two texts from the seventeenth century: one in Nahuatl and the other in Otomí (also spoken in central Mexico). From the peninsula of Yucatan, I consider the books of Chilam Balam that were written in the eighteenth and nineteenth centuries. Of the nine Chilam Balam books, three books in the Yucatec Mayan language have a significant number of pages highly inspired by and translated from the Spanish almanac.

3.1 A r*eportorio* in an edition of the Doctrina cristiana en lengua Mexicana, by Pedro de Gante [1553]

Among the religious documents that were printed in Mexico as a means to teach the indigenous population a new religion was the catechism by Franciscan fray Pedro de Gante, who was originally from Flanders, the Southern Netherlands (now Belgium). His text – a doctrinal work in the Nahuatl language – was possibly printed before 1528 in Belgium and sent overseas, because the printing press was yet to be introduced into Mexico (De La Torre Villar, 1974: 30). It was not until around 1547 that De Gante's text was printed in Mexico City itself (*ibid.*: 30). A second edition – which is particularly relevant to what I have to say here – was published in the Mexican capital in 1553 by the house of Juan Pablos. One of the copies of this printed text includes eight handwritten pages;[56] their transcriptions and

[56] Both recto and verso contain writing; the pages themselves are unnumbered.

translation were established and published by Alfredo López Austin in 1973. He had received copies of the handwritten pages from Ernesto de la Torre Villar, director of the National Library in Mexico City at the time. Today, these pages are preserved in the national archive (Archivo General de la Nación) in Mexico City. De la Torre Villar noticed the remarkable additional pages (López Austin, 1973: 285). López Austin was the first to notice that the added handwritten fragments derived from two different genres of texts: a *reportorio* and a *huehuetlatolli.* The latter, meaning "words of the elders" or "ancient words", is a genre of texts that reflect oral narrative and didactics. The *huehuetlatolli* discourse instructed young people preferred moral behavior and social conduct. The scribe of the *huehuetlatolli* as part of a copy of De Gante's catechism was able to select from a *huehuetlatolli* that could have been used in either a social, political, or religious context (Ruiz Bañuls, 2013: 270). The *huehuetlatolli* that was added to De Gante's work, was one dedicated to women who lost their lives during childbirth (López Austin, 1973: 285).

As López Austin has already observed, the handwritten folios are from one and the same clear hand, and its paleography is characteristic of that of the sixteenth century (*ibid*.: 285). This seems to suggest that the printed catechism and the handwritten material were combined early after the catechism was printed. If this is right, then this manuscript would be the earliest known *reportorio* in an indigenous language. The first paragraph of the manuscript is in Spanish and its errors of grammar and spelling hint at a writer who did not master the Spanish language completely:[57]

[p.1][58]	
¶ Cumiença er Reperdorio	Comienza el Repertorio
delos dienpos mochas cosas: nosepones	de los tiempos, muchas cosas no se ponen
aqui que nohua prouechas nalus	aqui que no aprovechan a los
yndio ynnentehter deenero auh	indio[s] inicalmente[59] de enero y
yzcatqui aquirios	aqui está Acuario

A text is never just equal to the contents that it contains. It lives because of and within a context of production and (re-)use. As a result, the *tlacuilo* who creates a text also informs us about those elements that have been presented in a deliberate effort to convey what he believes is important through that text.

Consider first the element of interpretation and reinterpretation of a source text. The second sentence in the fragment above claims, without further specification, that things which are not of interest to an indigenous readership are not included in the text. By doing this, the *tlacuilo* justifies his (possible) alterations of the original source text. Now consider the element of the creation of the text for a specific readership. Through the reference of a Nahuatl text that excludes any type of information unfamiliar to local people, the *tlacuilo* directs the text to a specific Mesoamerican readership. The content of the text after its translation and editing into Nahuatl, may not be familiar at first sight to an indigenous reader. However, as the *tlacuilo* continues to argue, he believes it is full of information relevant to the Nahua reader.

It is not uncommon for authors to explicitly leave out what they consider to be irrelevant information during the consultation of textual sources. Still, in the case of this particular *reportorio* it is

[57] See López Austin (1973: 287) for more on the erroneous use of Spanish *and* Nahuatl by the *tlacuilo.* A sentence in Latin, however, has been written perfectly – presumably it was copied directly from another text.
[58] In accordance with López Austin's article, I not only reproduce a transcription of the Spanish paragraph as it is in the Doctrina christiana, but also provide my own version of of the text to indicate how it would read in correct Spanish.
[59] *ynnentehter* has been transcribed as *yn nentehter* by López Austin (1973: 288) and corrected to *inicialmente* (ibid.: 292).

striking that the one sentence so persuasive in attracting a Nahuatl native reader is written not in Nahuatl but in Spanish. And not only is it written in Spanish, but it is also written by a *tlacuilo* who does not seem to have mastered the Spanish language completely – at least not in writing. The catechism was studied in a context of Spanish friars who taught Christian discourse to indigenous Nahuatl students. Both parties were in the process of learning each other's language; Spanish and Nahuatl (wo-)men[60] both functioned as teacher and student at the same time. The going back and forth between two languages is reflected in this Nahuatl text, which is preceded by a Spanish introduction. Both languages, although in varying degrees, were comprehensible to both Spanish and Nahuatl speakers.

The text is organized into subsections – one for each of the twelve months – followed by two short religious paragraphs. All subsections, except the one for January, are introduced by a header in the form of the name of the corresponding month in a mixture of Latin and Spanish.[61] The Spanish word *de* or "about" precedes the months of March, April, and May. When the *tlacuilo* wrote his paragraph on December, he realized he was copying the text of October and crossed out the six lines he had written so far. On the following page, he formulated the paragraph on the month of December as it should have been. The two short paragraphs that follow the final month of the year are:

¶ *Auh yniquac gomocelili*[62] *ynteopixqui yninacayotzin into[tecuiyo] Jesux[ris]po yzcatqui anquitozque*	and when the priest received the beloved body of our Lord Jesus Christ, here is what you [pl.] will say
¶ *Domine no[n] sum dignus vt in tres subtectum meum sed tantum dic verbo et sanabitur Anima*[63] *mea.*	Sir, I am not worthy that you will come to me but one of your words will suffice to cure my soul[64]

Since the work by López Austin includes a reliable transcription and translation of the complete handwritten text, I will not include one myself here. Instead, I will focus on the content of the *reportorio* and add my own comparative analysis of possible Spanish source texts, which López Austin's short commentary does not include. From the Nahuatl text, it immediately becomes clear that the *tlacuilo* selected fragments that highlight three types of information:

1) agricultural advice;
2) medical advice;
3) Zodiacal information and its influence on people's personality.

The handwritten material attached to the *Doctrina Cristiana* is derived from a *reportorio* and, more specifically, copied from fragments that follow a calendar of the twelve months and every celebration

[60] It is often presumed that the gender of the scribe is male, however in reality we don't know.
[61] The transcription of the headers of the months are as follows: febrero, demartios, deabril, demayus, Junius, Julius, Aogosto, Sediember, OCtumber, nouember, December [sic].
[62] According to López Austin this is to be translated as "to receive" (an orthographical explanation is lacking). The morphological composition of the word could then be *oc mocel[ia]li.* It seems to be more plausible that it should be composed of qui-mo-celi-li (3SG.OBJ-REFL-receive-APPL-RET) 'he received (it)' (S. Wichmann, personal communication).
[63] López Austin transcribed the word with a lower case letter 'a.'
[64] My translation from López Austin's Spanish *"Señor, yo no soy digno de que vengas a mí; pero una palabra tuya bastará para sanar mi alma."* (*ibid*.: 296)

of a Saint's day throughout the year.[65] The *Doctrina Cristiana* combines advice on agriculture and medicine with descriptions of an astrological nature. In a *reportorio*, the astrological descriptions are typically part of the discussion of the twelve Zodiac signs and do not follow the Saint's calendar. From this we can conclude that the *tlacuilo* of the short Nahuatl *reportorio* selected and combined fragments that he saw as fit for his text.

Below I will compare the text of the month of January from the short *reportorio* in the *Doctrina* with the content of the same month in the *reportorio* by Sancho de Salaya (Granada 1542).

In the month of January, it is appropriate that they prune, so that they are clean, all the trees. They will cut the branches. And as they spread much, the branches of the tree, it is appropriate that they will bury them in the garden. And it is appropriate to graft the fruit trees. And it is very appropriate that they bury them [what is unclear] at the feet of the vineyard, so that they will prune the roots, and cut the roots of all stems and with them they are to be planted. And also [they sow] *ayecote* [a type of large bean]. And perhaps they [the beans] will lose weight: is necessary to throw water, that they are irrigated. And it is appropriate in this month of January that people bathe themselves in the *temazcal*. And it will be consumed, hot food. It will be appropriate with lukewarm water. Cut yourself with obsidian if you have an ulcer: as such it will heal. The sign of the month is Aquarius. Those who are born from him will not be tall; some will be very short. They will love women very much.	*En aq[ue]ste mes siendo vieja la luna:deues alimpiar los arboles q[ue] pierdan la hoja:y es tiempo dispuesto para trasplantar y enxerir : para cauar las viñas:los rosales: y los gezmines : paraer y entrecauar el alfalfa; y boluer los bauechos:y para pla[n]tar qualquier generacion de legumbres. Deues vsar en aq[ues]te mes los baños y las sangrias: y los manjares y potajes claros y calientes de su natura: y no deues sufrir q[ue] seluante el estomago dela mesa con sed.* [other page on Aquarius] *[…] el que nasciere en aqueste signo sera hombre pequeño:triste de condicion amara mucho las mugeres.*
López Austin (1973: 292-3, my translation from his Spanish translation)	Sancho de Salaya [Granada 1542]

In the following subsection, I will investigate by which means the *tlacuilo* tried to accomplish his aim to fit the text to a Mesoamerican context and readership.

3.1.1 Examples of cultural translation

The comparison of the month of January illustrates that the *tlacuilo* was familiar with a *reportorio* and reinterpreted the original text with the intention to create a text that would make sense to an indigenous readership. So instead of mentioning non-native flowers and herbs – such as the rose, jasmine, and alfalfa – the *tlacuilo* included local *ayecotes* (large beans). And through the use of Nahuatl *tema* "to bathe in a sweathouse" (Karttunen, 1983: 221) to a type of bathing undertaken in the Mesoamerican *temazcalli* or steam bath for ritual and medicinal purposes (Katz, 1993: 175-183). The use of the expression *mitzminaquiuh* to explain the reader the action of cutting is revealing, because it is composed of *mitz* [you singular], *mina* [to shoot an arrow], and *–quiuh* [inbound purposive]. The inbound purposive

[65] Note that the first pages of the *Doctrina cristiana* [1553] contain a complete Saint's calendar, which is, apart from some celebrations, almost completely the same as for example the calendar in the *reportorios* by Andrés de Li [1495] and Sancho de Salaya [1542].

suffix means “to come in order to” (Hill & Hill, 1986: 259). Therefore, *mitzminaquiuh* [*mitzminatiuh*] probably refers to the act of cutting one with an arrow/sharp object, in order to relieve and ultimately cure an ulcer.

In Appendix E, I have juxtaposed the *tlacuilo*’s agricultural advice, medical advice, and astrological information given in the short Nahuatl text with the same information from Sancho de Salaya’s *reportorio* from 1542. The data remains inconclusive as to which Spanish *reportorio* or *reportorios* was or were the source text(s) of the Nahuatl *reportorio* in the *Doctrina Cristiana*. At first sight, however, the short Nahuatl *reportorio* seems to resemble the editions of Sancho de Salaya [1542] and Andrés de Li [1495] more so than the more theoretical and longer *reportorio* by Jerónimo de Chávez.[66] Figure 22 is an overview of elements in the Nahuatl text that were deleted from Sancho de Salaya’s text and the novel additions that sometimes replace deleted elements.

Month in Nahuatl *reportorio*	Deletions	Additions
January	alfalfa, pods, roses	*ayecotes* or beans
February	checking of beehives the phase of the moon	fruit trees, quinces difficulty in curing sick people[67]
March	Herbs the phase of the moon	
April	alfalfa, hemp, and cutting of beehives	
May	filing nails with iron	
June	millet, sorghum, cabbage, fig tree, a reference to Palladius who wrote a book about farming in the 4th century AD the phase of the moon	mustard, sickness in the bile
July	cypress branch, garlic is medicinal	to take garlic with salt is bad born under the sign of Leo will lead to baldness
August	sow cabbages during Quaresma, Brussel sprouts and turnips, the company of women is dangerous	sowing of garlic, pomegranates and figs, it is very necessary and good to have intercourse with women
September	the phase of the moon, pains in the kidneys and buttocks are most dangerous	maize, wounds will not deteriorate if relieved with obsidian on the flanks, forearms and buttocks
October	the phase of the moon	

[66] The edition by Jerónimo de Chávez was imported to Mexico in the 1570s. It is likely, however, that the genre was imported sooner after the Spanish arrival in 1519-1521. If the short reportorio was added to the Doctrina Cristiana after its printing in 1553, then there must have been a Spanish edition of a reportorio that was imported to Mexico prior to the 1570s. This imported reportorio thus would not necesarrily have to be the edition by Chávez, but could very well have been one edited by another author, such as De Salaya or De Li.

[67] Whenever the Spanish text says that it is dangerous to have a certain condition, the Nahuatl text changes this into it being difficult to cure.

November	the phase of the moon, myrtle, pains in the feet are very dangerous, it is safe to let blood or to take a bath	appropriate to cure a hurting mouth, it is dangerous to bath or cut oneself when calves hurt
December	phase of the moon, cutting reed and withy, all warm things are good	eating bird meat will be very bad

Figure 22. Table of alterations and local elements in the short Nahuatl reportorio and omissions from a Spanish reportorio.

The *tlacuilo* deleted all the phases of the moon that in the Spanish text were attributed with a positive effect on certain agricultural activities. Several of the trees, herbs, and flowers from an Old World descent were deliberately left out of the text. The references to cypress, alfalfa, hemp, millet, and rose were substituted by references to *ayecotes* or beans native to Mexico. All activities with beehives are omitted. There is evidence that certain local types of bees were domesticated and their honey was collected in Mesoamerica, both in the pre- and colonial period (Crane, 1999: 361). The Maya area is particularly rich in information on beekeeping, both from archaeological excavations and from the famous beekeeping pages in Codex Madrid (Źralka et.al,. 2014, see particularly 96-101). Therefore, it is unclear why the *tlacuilo* omitted fragments related to the beehives.

Furthermore, the *tlacuilo* made changes in the interpretation of *consejos* for particular months. He changed the conditions that are said to be dangerous from a Spanish perspective, to be difficult to cure in the Nahuatl text. The Spanish *reportorio* suggested that it is medicinal to consume garlic during the month of July, but, with the Nahuatl context in mind, the *tlacuilo* stated that consumption would have malign effects. Even more curiously, the *tlacuilo* changed the advice for the month of August from the source text. Rather than warning his (male) readers to be with a woman during this month, he writes that it is beneficial and even very necessary.

This short *reportorio* in Nahuatl is proof of an (early) interest in the Spanish almanac tradition. The translation must have been made to enable indigenous Nahua speakers to read a selection of the *reportorio* in their own language. It was not the goal of the *tlacuilo* (it is uncertain if he or another individual commissioned the text) to represent the full content of a *reportorio* nor to represent the content of a *reportorio* veraciously. Rather, advice on agricultural practices, medicinal and other *consejos*, as well as Zodiacal information (dispersed in a Spanish almanac) were all concentrated in a single, shortened text. The *tlacuilo* deconstructed the Spanish source text and reconstructed it so as to fit in parts of Mesoamerican ecology and language use.

3.2 Codex Mexicanus

One of the most remarkable references to a *reportorio* in Mexico's colonial literature is the late sixteenth century Codex Mexicanus [Bibliothèque Nationale de France, n^{o} 23-24]. In 1952, German Mesoamericanist Ernest Mengin, working in Copenhagen, Denmark, was the first to publish a complete study of this beautiful 66-page miscellaneous manuscript. Later his German colleague Hans J. Prem in turn commented on the article by Mengin as he felt that Mengin's work lacked a solid explanation of the calendrical data of the first 15 pages (1978: 267, see also his thesis on the correlation between the Mesoamerican and European calendar systems in Prem, 2008: 153-158).

According to Mengin's argumentation (1952: 391), Codex Mexicanus was probably produced in the period 1571-1590 and likely authored by an indigenous *tlacuilo* who knew both the Mesoamerican and European calendar system. Hans Prem argued that the codex was produced no later than 1583 as

several events and dates in the document itself would suggest (1978: 283-284; 2008: 153). Prem argues that even though the pictorial calendar continues until 1590, the final event registered in the calendar is the death of Viceroy Lorenzo Suárez de Mendoza on the 29th of July 1583 (1978: 283). Also, the complete absence of a reference to the introduction of the Gregorian calendar in October 1583 in Mexico may lead one to think that the manuscript was produced before that date (*ibid.*: 283-284). Lori Diel, who published an article on the genealogical pages of the codex, also dates the manuscript between the late 1570s to the early 1580s (2015: 121).

The contents of the manuscript are diverse and of a calendrical, mantic, and historical nature. Codex Mexicanus depicts various astronomical and astrological phenomena inspired by both the Spanish literary tradition and local historical narratives, such as the narrative of the Mexicas leaving Chicomoztoc and establishing themselves in Tenochtitlan in Central Mexico. In this sense, the manuscript represents a combination of European and Mesoamerican perspectives, as is evidenced by the use of both European and Mesoamerican writing systems. Moreover, the manuscript belongs to a period in which alphabetic and pictorial writing were combined to form a single document.

3.2.1 Content derived from the *reportorio* genre and its interpretation

The first 34 pages of the Codex Mexicanus contain a large amount of information which, as previous studies have concluded (Diel, 2015: 123; Diel, 2018: 57-73; Prem, 2008: 153; Spitler, 2005: 209-220), originates from a Spanish *reportorio*. Susan Spitler's and Lori Diel's (2018) work has most extensively established the presence of data from a *reportorio* and the interpretation of the *tlacuiloque* of Codex Mexicanus. Following up on their analysis, I will provide an additional comparison of the Codex Mexicanus and the *reportorio* genre.

3.2.1.1 Pages 1-8: the Saint's calendar and Dominical Letters

The first eight pages of the Codex Mexicanus represent the days of the months of May to December according to their relative position within the seven-day cycle of the Dominical Letters A to G (see Figure 23). The implementation of the Dominical Letter was a tool that was used to determine the weekday on which a particular Catholic feast was to be celebrated. According to the Dominical Letter, each weekday is assigned one of the first seven letters of the Roman alphabet (January 1st being letter "A"); the letter of the first Sunday of the year would be the Dominical Letter for that year. The first eight pages of the document provide a visual representation of the Julian (liturgical) calendar by depicting the days of the year according to their corresponding Dominical Letter. Several of these days – or Dominical Letters – are linked to drawings of Saint Days that were celebrated on those specific days.

The Dominical Letter of that year is indicated by a red letter (in this case the "A"). Important Christian holidays as well as days on which to abstain from the consumption of animal products (indicated by a fish) are depicted in pictography above or below and are also connected to the letters (i.e. dates). Despite damages, some remnants are still discernible of Mesoamerican day signs including dots, alongside indigenous pictography that must have referred to important days in Mesoamerican collective memory. This horizontal sequence of letters is preceded by, from top to bottom, the Zodiac signs that correspond to any given month in both alphabetic writing and pictography, a crescent moon, and the name of the month in alphabetic writing. There are also drawings that are difficult to interpret because they are incomplete, but they appear to include both drawings in a Western style – e.g. of flowers and animals – and indigenous iconography.

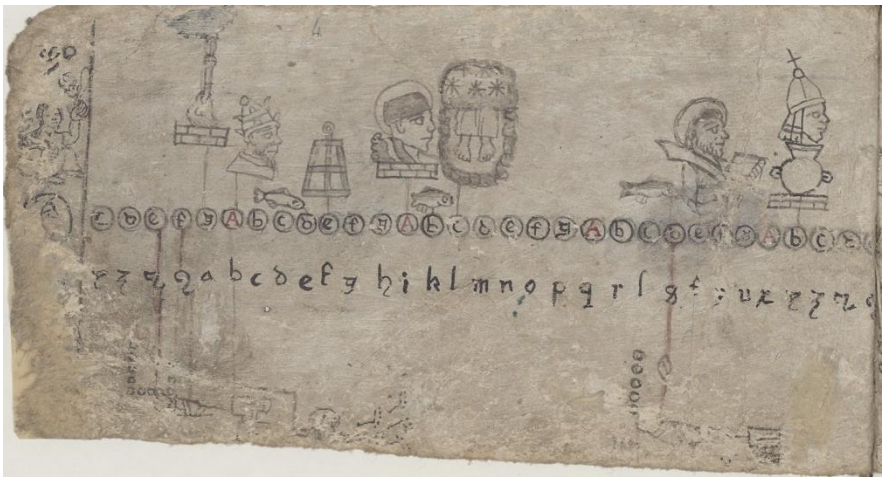

Figure 23. The month of August of Codex Mexicanus
In: Bibliothèque Nationale de France, Paris. Available online: http://gallica.bnf.fr/ark:/12148/btv1b55005834g.

Such a presentation of the Western calendar with these references to Dominical Letters, the phase of the moon, and the ruling Zodiac sign is similar to a *calendario* or Saint's calendar within an astrological almanac.[68] Leaving aside the significance of both the alphabetic and pictographic writing in a single document for just a moment, the dates and Catholic feasts in a table of one of the months that is most complete – August – is the following:

Sequence of days of the month of August [unnumbered in the Codex Mexicanus]	Dominical Letter	Saint Day depicted in codex Mexicanus according to E. Mengin [1952:401]	Saint Day according to reportorio Sancho de Salaya [1542]	Corresponding days in the Aureus Numerus cycle
1	C		Sant Pedro	y
2	D		Sant Esteuan papa & martir	z
3	E		La inuencion de Sant Esteuan	[symbol]
4	F		Sant Justino sacerdote	[symbol]
5	G	Our Lady of the Snow	Sancta Maria dela nieue	a
6	A	13rd Sunday after Trinity Sunday.[69] Pope Sixtus I	La transfiguracion del Señor	b
7	B		Sant Donato obispo	c
8	C		Sant Ciriaco Obispo & confessor	d
9	D		Sant Roman. Uigilia	e

[68] And also present in the Doctrina Cristiana by Pedro de Gante [1553] for example.
[69] The Sunday of the celebration of the Trinity falls on the first Sunday after Pentecost and thus is ta moveable feast.

10	E	Laurentius	Sant Llorente martir	f
11	F		Sant Tiburcio & Susanna	g
12	G		Sancta Clara virgin	h
13	A	13rd Sunday after Trinity Sunday. Hipplytus	Sant Ypolito con sus compañeros	i
14	B		Uigilia. Sol en virgin	j
15	C	Assencion of Holy Virgin Mary	La assumpcion de Nuestra Señora	k
16	D		Sant Roconio Obispo	l
17	E		La octaua de San Llorente	m
18	F		Sant Agapito martir	n
19	G		San Luys Obispo & confessor	o
20	A	14th Sunday after Trinity Sunday	Sant Bernardo abad	p
21	B		Sant Priuado martir	q
22	C		La octaua de Nuestra Señora	r
23	D		Uigilia	s
24	E	Apostle Bartolome	Sant Bartolome apostol	t
25	F		Sant Luys rey de Francia	u
26	G		Sant Seuerino papa	v
27	A	15th Sunday after Trinity Sunday		w
28	B	The choking of Saint John the Baptist[70]	Sant Augustin Obispo	x
29	C		La degollacion de Sant Johan baptista	y
30	D		San Feliz & Audacio martires	[symbol]
31	E			[symbol]

Figure 24. Table that compares the Dominial Letters and Saint Days for the month of August in Codex Mexicanus and Reportorio by De Salaya [1542].

These pages of the codex Mexicanus are copies of a *reportorio's* standard *calendario*. However, the *tlacuilo* selected certain dates from the liturgical calendar and decided to leave out others. The Tropenmuseum manuscript excludes the Saint's calendar altogether, and no attempt is made to relate or compare the Christian and Mesoamerican dates.

On the ninth page of codex Mexicanus, the *tlacuilo* tried to establish a correlation between the Julian calendar and the Nahua system of time reckoning with two calendar wheels. In the center of the left wheel we find Apostle Saint Peter holding the keys to Heaven. Two circles surround him, the inner one contains the seven Dominical Letters and the outer one the 28 letters of what is presumably the lunar

[70] The image of Saint John the Baptist is attached to the letter 'b' and thus the day preceding the day on which E. Mengin decided to locate the celebration. However, I have decided to leave the error in the table.

cycle (Mengin, 1952: 404). The calendar wheel on the right contains the four Year Bearers of the Mesoamerican calendar. The function of the four Year Bearers was to distinguish one solar year from another. The 365-day calendar year was named after one of the twenty day signs of the Mesoamerican calendar. Mathematically, only every fifth day sign could designate a Year Bearer: House, Rabbit, Reed, and Flint or the third, eight, thirteenth, and eighteenth day sign (Anders, Jansen & Reyes Garcia, 1993: 57-59). If we read the calendar wheel and the year bearer signs according to its sequential order within the cycle of 20 day signs, then we would have to read the wheel counter clockwise. This would mean that we would not be able to read the calendar wheel on the right side of the page in the same way as the calendar wheel to its left, because one would have to be read clockwise while not the other. Interlacing the two calendar wheels would thus not be possible, but that would not necessarily have been the intent of the *tlacuilo* who created the Codex Mexicanus.

3.2.1.2 Page 10: an Aureus Numerus table

Also directly copied from a *reportorio* is an extensive table of the Aureus Numerus cycle on page 10 (see Figure 25). On page 11, the author provides a table of six columns and six rows that display, from top to bottom, the Zodiac signs (beginning with Aquarius) and then a variety of symbols, which appear to be phases of the moon and one of the four elements (hot, cold, dry, and humid).

Figure 25. Aureus Numerus table from Codex Mexicanus and a Reportorio [1554, probably edited by De Salaya].

Codex Mexicanus see http://gallica.bnf.fr/ark:/12148/btv1b55005834g and *reportorio* [1554] see http://hdl.handle.net/10366/82575, University of Salamanca, Spain.

3.2.1.3 Page 12: a drawing of Zodiac Man

A Zodiac Man is depicted on page 12 (see Figure 26). Only the male figure and some of his organs and parts of the *figura de la amistad* are visible, but we can infer that all of the planets and Zodiac signs that should have been to its right and left respectively have been warn away. Still visible on the margins of the page are some stylized faces that look to their left, but as they do not seem to fit the theme of the

page, they seem to have no relation to Zodiac Man. There are several pages in the codex that seem to indicate that the pages of the codex were reused or erased to make way for its current content. For example, on page 16, parts of the upper layer of a genealogy of Mexica rulers from the Aztec capital Tenochtitlan are scraped off and show a European style, up-side down drawing of a sun (his friendly face is smiling at the reader) which is in parts hidden underneath the new genealogical scene. So, it appears that the material of the codex was used and re-used, or at least scenes that were erased and pages prepared for a new layer of pictographic writing.

According to Lori Diel however, the poor conditions of several of the pages of the Mexicanus, has nothing to do with whitewashing (2018: 66). Rather, she argues that these pages were used so frequently that this is what we are left with (*idib.*: 58; 66). In addition, Diel suggests that the introduction of Old World diseases and an epidemic right before the codex was made speeded up the necessity to know European ways of curing (*ibid.*: 58).

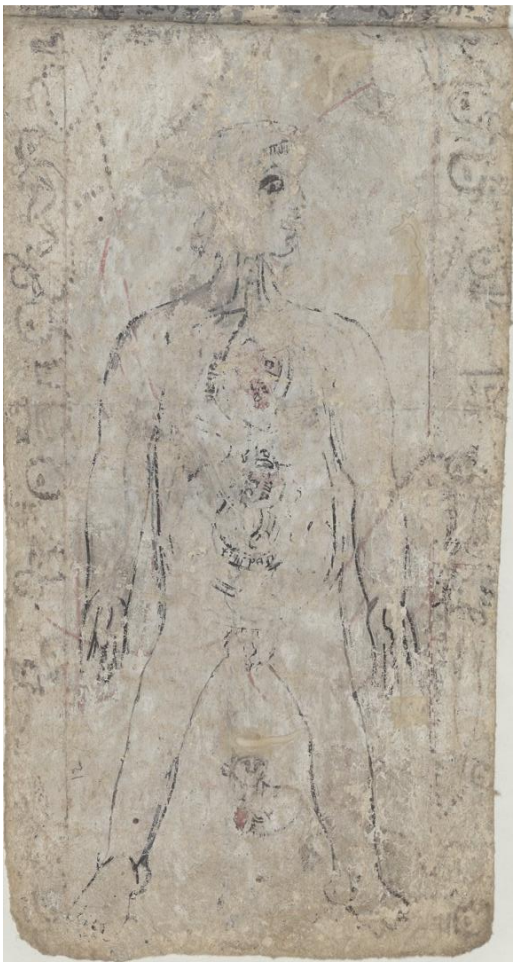

Figure 26. Image of a Zodiac Man in Codex Mexicanus, page 12.

Source: http://gallica.bnf.fr/ark:/12148/btv1b55005834g

Pages 13 to 88 are calendar-related: pages 13 and 14 hold a section of 66 days of the *tonalpohualli* calendar (a 260-day rendition of the calendar), so it would seem likely that the other half of this 260-day calendar is missing in the document (Prem, 1978: 277). Pages 15 to 88 are an account of historical events of the Mexicas. Pages 89 to 102 are an incomplete *tonalpohualli* or 20 periods of 13 day signs. The lay-out of these pages are similar to the early colonial codex Borbonicus and thus according indigenous stylistic conventions (Prem, 1978: 280). The *tlacuilo* however, decided to write the names of the day signs in alphabetic writing in Nahuatl rather than drawing day signs. Also, the numerals are

not drawn according to the traditional bar and dot system, rather, Arabic numerals 1 to 13 appear alongside the left and lower margins of the page. The drawings of indigenous deities and mantic symbols, which would make a *tonalpohualli* useful for someone who would be able to read and interpret this ritual calendar, are faded to the extent that one wonders if the pages were ever truly finished.

3.2.1.4 Page 24-34: textual descriptions of the twelve Zodiac signs

In addition to the Saint's calendar, the Aureus Numerus table, and Zodiac Man, the *tlacuilo* or *tlacuiloque* of Codex Mexicanus included other sections of a *reportorio* as well. Codex Mexicanus' historical account is depicted in Central Mexican pictographic style from page 16 onwards. The pages 24 to 34 (accounts of the years 1201-1266 AD) include alphabetic writing below the drawings and contain astrological information in Nahuatl. Prem's work on the Codex Mexicanus (1988; 2008) does not refer to these texts; and Mengin provides only a transcription and preliminary translation of each fragment. These texts are difficult to read for two reasons. First, the margins are damaged, and words have faded after more than 400 years. Second, the *tlacuilo* uses the difficult paleography and orthography. The latter used the letter 'n' as if it were a 'u.' and the 'v' as a 'u'. Moreover, the letters are not rounded off as well as they could have been, so it seems that the *tlacuilo* had an unsteady hand.[71]

Mengin himself mentions that his translation approximates the text in Nahuatl, subject to revision (1952: 423). Lori Diel (2018) published her transcription of the Zodiac signs in codex Mexicanus. She admits that a transcription and translation is difficult due to the poor conditions of the pages (Diel 2018: 70-72, 171-174). Mengin's study did not relate this content of the codex to the genre of the *reportorio*, and as such, does not contain any comparisons with fragments of a Spanish almanac. Diel tries to translate the sentences for each Zodiac sign (ibid.: 70-71), however does not succeed to go beyond "And the [number of sign], its name [name of sign], and someone who is born during that time, he…". I will try to go a bit beyond that for Aquarius, below:

On Aquarius:	
[p.24]	
/Δ yn/ aqui ypa tlacati yn itoca Aqualliyos yevuatli	the one who was born in the one called Aquarius, he
yn amo vel mitçi/minaz/	is the who can't stab fish
ye yca Aquariyos ytla ypa mitçiminaz ye miquiz	because if he stabs fish in Aquarius, he will die
Auh /…/y nemiz (?)	and […] he is the one who will live
ynic motlayecoltiz yni quitemoz yn itechimona /…/	so as to provide for himself, this one will seek his [mother-in-law?]
Auh ytla cana ypa moqueçaz yn eetli y	and will somehow stand […] blood
ceca temama /ni?/	he is one who very much is a carrier of others
Auh /…/e ni mochivaz	and […] it will happen
ye yca ca ypa tlacat yn Aquari[yos]	therefore he was born in Aquarius
Auh in icha mochiv yez yni tlacat	and that which happened in his home, it will happen, this one was born
Auh quinemiltiz y [p.25] naço totolme,	and he will raise turkeys,
Anoço ychicame Anoço quaqnave que Anoço me	or sheep, or cattle, or […]
mochiti vel nemizque yn icha	many can be living in his home

The fragment is difficult to translate. In fact, the Zodiac sign of Aquarius is the only fragment that is decipherable with a fair amount of reliability. The transcription and translation made here are different

[71] I thank Raul Macuil Martínez and Søren Wichmann for their observations.

from Mengin's (see Appendix E). Nonetheless, we can compare both the transcription and translation above and those from Mengin to similar fragments from several *reportorios* that the *tlacuiloque* could have consulted. See also Appendix E for full transcriptions of the sign of Aquarius from the editions by Jeronimo de Chávez [1584] and Sancho de Salaya [1542] and Izcatqui. For this analysis, I have also included the corresponding fragment from the Tropenmuseum manuscript. As is evidenced in Appendix E, the *tlacuilo* of Codex Mexicanus did not copy the descriptions of the Zodiac signs from any of the *reportorios* that I compared it to. This is supported by Diel (2018: 71-72)However, to the extent that the text is translatable, it does read as if it was inspired by a European almanac – not only in the descriptions of the ways in which individuals born under the Zodiac signs are affected by them, but also in manners of formulation.

The text of the twelve Zodiac signs seems to have been added where there happened to be left-over space on the pages. The *tlacuilo* begins his discussion with Aquarius and not with Aries as is the case for the Spanish almanacs (see also Diel 2018: 72). Instead of following what is considered the first House of the Sun on the day of Spring equinox or March 21st – also symbolically the beginning of a new cycle of life – the *tlacuilo* decided to start with the sign that is the House of the Sun in January – Aquarius – and thus the beginning of a year cycle of the Julian calendar. Lori Diel argues convincingly that the combination of a genealogy and a text that is derived from a *reportorio* mimics the royal lineage of Spain (2015: 124). These lineages are included in some of the Spanish almanacs that were well-known in colonial Mexico in the sixteenth century. The Spanish lineage in the almanacs from the Old World is related to a Roman decent – a pagan past but glorified nonetheless. For a literate indigenous scribe and reader, Diel argues that the indigenous past was a pagan parallel to the Roman past and therefore also "a legitimate foundation for the Christian present" (*ibid*.: 124). The *tlacuiloque* of codex Mexicanus conveyed both local history and ventured into a new genre that had a certain appeal to them.

3.3 Fonds Mexicain 381

Fonds Mexicain 381 is part of the collection of Mexican manuscripts in the Bibliothèque Nationale in Paris.[72] This manuscript of 60 folios was once owned by Italian scholar Lorenzo Boturini in the eighteenth century as part of his collection. It was probably shipped to Paris in 1840 after it was bought in Mexico by French collector Joseph-Marie Aubin. Similar to Codex Mexicanus, Fonds Mexicain 381 is the result of miscellaneous efforts, presumably written by three individuals according to the different styles of handwriting (Tavárez, 2000: 8 & 2002: 70). One of these three individuals wrote the first and final part of the document and this seems to suggest that its current composition was intended; no additions were added after it was owned by Boturini (Tavárez, 2000: 8).

Manuscript Fonds Mexicain 381 is a collection of different subjects of text and languages. For a short overview of the content of the complete manuscript, I refer to the work by Susan Spitler (2007: 192) and David Tavárez (2000: 10; 2011: 133). The contents of both do not fully coincide and, interestingly, the authors do not refer to each other's work. As I focus on particular pages within Fonds Mexicain 381, I will use the summary of the content of the manuscript by Tavárez as my main reference. In my analysis of the folios that are of main concern to my study, I combine my own observations with both Spitler's and Tavárez' work as they complement each other. The manuscript begins with a set of Nahuatl meditation prayers, a devotional listing of the thorns in the crown of Christ, a *per signum crucis*

[72] There are several scholars who have examined the manuscript. Alfonso Caso (1967) and Robert Barlow (1994) have studied the correlation between the Matlatzinca calendar and the several months of the Gregorian calendar in Fonds Mexicain 381. Charles Gibson & John Glass (1975) have commented on the material aspect of the manuscript. Susan Spitler (2007) and David Tavárez (2000; 2003; 2011) both briefly analyze the overall content of the manuscript and provide a more detailed discussion of the content that the *tlacuiloque* derived from a *reportorio.*

in both Nahuatl and Otomí (Hñahñu), a translation in Nahuatl of a Latin text dealing with the life of Saint Nicolas Tolentino, and several prayers in Latin, Spanish, and Nahuatl. These folios are then followed by calendrical information. The *tlacuilo* correlates the months of March or April (according to Spitler and Tavárez respectively) through December of the Gregorian calendar to the twenty Matlatzinca day signs; while also noting the Holy days that occur in each month. The folios I am mostly interested in are folios 47 to 54. Here, the *tlacuilo* briefly recounts the Zodiac signs related to the days and month of the Gregorian calendar. The final folios are dedicated to the Christ's last supper or Eucharist (Tavárez, 2011: 133).

The combination of Nahuatl, Otomí, and Tarascan (P'urhépecha) references to the calendar might suggest that the manuscript was produced by Nahua speakers who lived near Otomí and Tarascan areas to the west and northwest of the Toluca Valley (possibly the jurisdictions of Metepec, Temazcaltepec, and Queretaro) (Tavárez, 2000: 8). As for dating the manuscript, the list of Holy Days on folio 24 is presumably provided for the year 1633. The *tlacuilo* mentions another year on page 45, in a note on the feast of the Assumption in 1639. There is third indication of when the manuscript might have been in use in a note that a particular girl named Catarina ran away from home in 1654 (*ibid.*).

3.3.1 The Winds and the Zodiac Signs

Page 47 contains a drawing of a double-lined circle within a decorated frame of tree stems with cut off branches. Within the circle there are faded words written in red that together form a cross. On the left, we can read *septe[nt]rion*, or the northern wind direction. The word on top reads *orie[n]tal* or the east. Taking into account the four wind directions with the north to the left, the other two words that are more difficult to read, would then be *meridian* (South) and *occidenta*l (West). My translation below contains the description of the *tlacuilo* of not four, but of two Winds. Susan Spitler's work contains a transcription and translation of pages 47 to 54. The fragments that I have translated are quite similar to hers, therefore I do not include a full transcription of translation up to page 54 of Fonds Mexicain 381.

[f.47]

Nica[n] pohualo ynahuitin eecame[73] *ynhuitze*	Here it is counted, the four winds come
cequi totoqui[74] *cequi yztic*	some [are] warm, some [are] cold
cequi concolliztli[75] *yn quihualhuica centlamatli*[76]	some illness they bring
onpa huallauh oriete[77]	one, there the East approaches[86]
ynic otlamatli[78] *onpa huallauh metiotia*[79] *yn*	second, there the South approaches
iniquetlamatli[80] *onhuallauh occitente*[81]	third, there the West approaches
ynic nauhtlamatli[82] *onpahuallauh septe[n]triom*	fourth, there the North approaches
ynehecame mochi	all winds
cencetlamatli[83] *yn quihuica*	it brings all things

[73] Read 'ehecame.'
[74] Read 'totonqui.'
[75] Read 'cocoliztli.'
[76] Read 'tlamantli.'
[77] Read 'oriente.'
[78] Read 'inic ontlamantli.'
[79] Read 'medio dia', midday or South.
[80] Read 'inic yeitlamantli.'
[81] Read 'occidente.'
[82] Read 'nauhtlamantli.'
[83] Read 'tlamantli.'
[86] I.e. the Wind from the East approaches.

yn orie/n/te hualauh yehecatl yn cenca totoqui[84] *yn*	the East, it brings the wind, it is very warm
ce[n]ca hueca	it is very far away
mochi quitotonillia yn tlalticpactli cenca	it warms all [on] earth a lot
yehuacauh	some time ago
yn occe[n]tetl yehecatl ce[n]ca qualli	the next wind is very good
huel totechmonequi qualli	we want something good for ourselves
yn occe[n]tetl yehecatl	the next wind
onpa hualauh yn tocayoca metiotia[85]	there it brings [what] is called the South
yztic	[something] cold
amo totechmonequi hual itechtica cocoliztli	we do not want for ourselves, here it is with us, illness

For reasons that are unknown, the *tlacuilo* abruptly ends his description of the Winds after a description of the Eastern and Southern winds. He describes how there are four Winds – some cold, some warm – and how some can carry illnesses. The sequence with which he lists the four winds is the same as in a *reportorio de los tiempos* (East, South, West, and North). The wind from the East is said to be beneficial. The second wind from the South is said to be a cold wind and presumably brings forth illnesses. A positive association with the Eastern wind and a negative one with a Southern wind is precisely the characteristics these winds are said to have in a *reportorio*.[87] The *tlacuilo* describes in general terms the beneficial or negative associations of the wind, and leaves out all specific recommendations and further information about the body parts most affected by it.

The top half of page 48 has some unclear writing in three lines. The first line is a part of the alphabet from B to N; the significance of the second and third line is unclear to me. It seems that the writing on this half of the page was added after the text on the lower half had already been there for some time. Pages 48 to 54 are an enumeration of the 12 Zodiac signs and description of how they each relate to the seven weekdays, the seven planets, and the months. The *tlacuiloque* were clearly inspired by one or more *reportorios*. However, they adapted such a text or set of texts to a Nahua cultural context, and so turned the original into a new and reconstructed one. There are several indications of this methodology. First, each Zodiac sign is termed according to its Spanish terminology while at the same time translated and interpreted into Nahuatl. Thus, the twin brothers of Gemini became *tlamatinime* or Wise Men; Libra became *pochtecatl* or a Merchant (the iconography of a scale is thus associated with the careful weighing of merchandise); and Sagittarius was described as a *tlacamaçatl* or Deer Man. Figure 27 compares the terminology of the Zodiac signs in three Nahuatl *reportorios*. Apparently, the translator of what is presumably the oldest Nahuatl *reportorio* out of the three – the appendix of the Doctrina Cristiana – chose to minimize his amount of translations of the Zodiac signs in Nahuatl or a closest equivalent in Nahuatl. He only did so for Leo, which became *ocelotl* (jaguar); Virgo, which became *ychpochtli* (a young woman); Scorpio, which is explained as *gollotl* or *colotl*; and Sagittarius, which became *tlaminqui* or someone who pierces. Fonds Mexicain 381 (mid seventeenth century) and Izcatqui (mid eighteenth century) share the most similarities: each Zodiac sign is translated into Nahuatl or the closest equivalent from the perspective of the *tlacuilo*. The Zodiac signs of Gemini, Cancer, and

[84] Read 'totonqui.'
[85] Read 'medio dia', midday or South.
[87] According to Susan Spitler (2007: "In comparison with a typical Spanish text (such as that of Sancho de Salaya 1542), the Nahua author has conflated the natures of the eastern and southers winds (as a result of miscounting the number of winds he has described." I do not follow her argumentation that the author conflated the two winds. De Salaya's text on the first and second wind reads as follows: "El primero viento viene de oriente de donde sale el sol: su naturaleza es caliente y produze muy claro tiempo: […] estos vie[n]tos son buenos y sanos […]. El segu[n]do viento viene de medio dia: y es frio y humido […]. Estos vie[n]tos son frios y humedos […]. Estos vientos son muy dañosos a n[uest]ros cuerpos […]".

Libra are translated differently. Gemini in Fonds Mexicain 381 is perceived as Wise Men, whereas in Izcatqui, it is described for its iconography: two children. Leo in Fonds Mexicain 381 is described as *tecuani* "wild beast" and in Izcatqui as *ocelotl;* both are names in Nahuatl for the jaguar. Cancer is either a crayfish or a crab. Even though Cancer is in fact a crab, its iconography would lead one to think it is a small lobster. Finally, Libra in Izcatqui is a scale in Nahuatl terminology; apparently the *tlacuilo* of Fonds Mexicain 381 related the scale to those who would use such an item.

Zodiac sign	Fonds Mexicain 381 (after original)	ms 3523-2 (after original)	Reportorio Doctrina Christiana (after López Austin 1976)
Aries	aries *ychcatl* "sheep"	Aries *oquichichcatl* "male sheep" *carnero* "ram"	aries
Taurus	taurus *quaquahe* "ox, cow, bull"	Taurus *quāquahê* "ox, cow, bull"	tauros
Gemini	geminis *tlamatinime* "Wise Men"	Geminis *omentin pipiltzitzintin* "two children" (REV)	geminis
Cancer	cancer *acocilin* "crayfish"	Cancer *tecuictli* "crab"	gancer
Leo	lleon *tequani* "wild beast"[88]	Leo *ōcēlōtl* "jaguar"	reonis *yn ocellotl* [ocelotl] "jaguar"
Virgo	Virgo *ychipochtli* "young woman"	Virgo *ychpochtli* "young woman"	virgo *ychpocthli* "young woman"
Libra	libra *pochtecatl* "Merchant"	Libra *tlatamachihualōni* "scale" (composed form)	llibraxo
Scorpius	Scorpio *collotl* "scorpion"	Scorpio *cōlōtl* "scorpion"	Esgor pros *gollotl* [colotl] "scorpion"
Sagittarius	sangitarius *tlacamaçatl* "Deer Man"	Sagittarius *maçātl* "deer" *cahuallo, centauro* "horse", "centaur"	*yntlamiqui* [yn tlaminqui] "archer"[89]
Capricornius	capricornos *tentzone*	capricornius *quāquauh tēntzon*	gaprigornos

[88] *tequani* literally means "someone [i.e. an animal] who eats people".

[89] *mini,* the verb "to prick, pierce something" (Karttunen, 1983: 148).

	"someone with a beard"	"horned animal with beard" *cabra* "goat"	
Aquarius	aquarius *ateteca* "by the water"	Aquarius *cetlacatl atetecac* "one person by the water"	aquirios
Piscis	Piscis *michi* "fish"	Pisces *Michintin* "fish"	pisçes

Figure 27. Table with the names for the twelve Zodiac signs in Fonds Mexicain 381, ms 3523-2 and the short reportorio from the Doctrina Cristiana.

On page 49, we read the following:

Domigo Raphael leon totoqui	Sunday; Raphael; Leo; warm
Lunes grabiel cacex atl yztic yeecatl totoqui	Monday; Gabriel; Cancer; water; cold; wind; warm
martes lamael scorbius aries atl totoqui yeecatl yztic	Tuesday; Ismael; Scorpio; Aries; water; warm; wind; cold
miercoles migael virgo geminis tlalli yztic yeecatl totoqui	Wednesday; Michael; Virgo; Geminis; earth; cold; wind; warm
Jueves san guial sangitarius piscis tetl[90] *totoqui ynatl yztic*	Thursday; Sachiel; Sagittarius; Pisces; fire; warm; water; cold
viernes amael libra Taurus yeecatl totoqui tlalli yztic	Friday; Amael; Libra; Taurus; wind; warm; earth; cold
sabado Gabriel gabricornus aquarius yeecatl yztic tlalli totoqui mochi totoqui tlaticpactli	Saturday; Gabriel[91]; Capricorn; Aquarius; wind; cold; earth; warm; very warm on earth

In 2002, Victoria Bricker and Helga-Maria Miram published their transcription, translation, and commentary on a Yucatec Mayan manuscript which is, to a large extent, inspired by a *reportorio* (see more on this later in the chapter). They argue that a correlation between the seven planets, the days of the week, and the seven archangels is one that has been established since the medieval period (Bricker & Miram, 2002: 31). According to Bricker & Miram, Raphael was associated with Sunday; Gabriel with Monday; Sammael with Tuesday; Michael with Wednesday; Sachiel with Thursday; Anael with Friday; and Cassiel with Saturday. The medieval association between one of the seven archangels and the seven planets (and weekdays) is also present in *reportorios*, see for example Andrés de Li (1529: 79-80) and Sancho de Salaya (1542) (*ibid*.: 150 and Spitler, 2005: 223). Page 38 of the Chilam Balam of Kaua lists the seven planets in relation to the seven angels (Bricker & Miram, 2002: 150).

The *tlacuilo* of Fonds Mexicain 381 left out the association of the planets with the angels and added other associations to the weekdays: Zodiac sign, element, and an either hot or cold state. In the Spanish *reportorios* that I have consulted, there is, as Susan Spitler (2005: 223-4) also argues, a correlation between the planets and the Zodiac sign. However, on folio 84r, Izcatqui not only relates the planets to the Zodiac signs, but also to the days of the week, an element, and a hot or cold state of being.

[90] Read *tletl* 'fire' and not *tetl* 'stone.'
[91] The archangel associated with Saturday should have been Cassiel.

Izcatqui omits the seven archangels and mentions the seven planets not according to the order of the seven days, but according to the first seven spheres of Ptolemy, starting with the seventh sphere Saturn, followed by Jupiter, Mars, the Sun, Venus, Mercury, and the Moon. The associated Zodiac signs, elements and state coincide to a large degree with Fonds Mexicain 381:

folio 84r	
/Satur/nos Sabato caprico[r]nius tlalli yztic	Saturn; Saturday; Capricorn; earth; cold
aquarius hehecatl totoq[ui]	Aquarius; wind; warm
/Ju/piter Juebes Sagittarius tletl totoq[ui]	Jupiter; Thursday; Sagittarius; fire; warm
piscis atl ytztic	Pisces; water; cold
/Mar/s martes Scorpius atl ytztic	Mars; Tuesday; Scorpio; water; cold
Aries tletl toto[qui]	Aries; fire; warm
Sol domigo leo tletl totoqui	Sun; Sunday; Leo; fire; warm
Venus viernes libra hehecatl /t/otoqui	Venus; Friday; Libra; wind; warm
Taurus tlalli /y/tztic	Taurus; earth; cold
mercorius miercoles virgo tlalli ytztic	Mercury; Wednesday; Virgo; earth; cold
geminis heh/e/catl ttq[ui]	Gemini; wind; warm
luna lunes cacer atl ytztic	Moon; Monday; Cancer; water; cold

3.3.2 Cultural translation and the presence of Mesoamerican cultural memory

Both Tavárez (2000; 2011) and Spitler (2005) acknowledge that the *tlacuiloque* were clearly familiar with a European almanac. However, they both also argue that the *tlacuiloque* adjusted the text to a Nahua cultural background and readership. The emphasis on the seven weekdays instead of the planets as the prime element for correlations is continued to page 54. On page 49, the *tlacuilo* continues to record the seven days; and each day except for Sunday, is linked to a planet. What then follows is a list of characteristics of individuals; this can either be characteristics related to a profession (astrologer, doctor), a personal trait (gentlemen, hard worker), or a biological feature (sterile). It is not clear whether these characteristics are linked to the planets in terms of the presumption that such characteristics are influenced by their state or if the planets are seen as the guardians of the people with these characteristics who were born on one of the seven weekdays previously given.

There is no doubt, however, about how we should interpret pages 50 to 54: the day of the week on which one is born is taken as unambiguously defining one's faith in life. The seven days are called the first to the seventh birth, and, except for Leo,[92] all of the Zodiac signs are left out of the text. So, whereas in a Spanish *reportorio* one's personality is defined by the Zodiac sign under which one is born, the Nahuatl text of Fonds Mexicain 381 completely redefines the function of the text itself. Thus, the *tlacuilo* deliberately reshaped the text so that it was not formulations of space (constellations) which were of influence on human affairs, but of time (the seven symbols for the cycle of the rise and setting of the Sun within a larger Moon cycle from an Old World tradition).

Why did the *tlacuiloque* decontextualize a Spanish *reportorio* and recontextualize part of its content in this Nahuatl *reportorio* in this way? According to Spitler:

[92] Tavárez describes how there are seven paragraphs for the days of the week and each paragraph shortly analyzes the planet and Zodiac sign 'born' on that day. That is indeed what the Nahuatl text claims in the first sentence of the paragraph on Sunday on page 50: *Ynica micuiliuhtica ynizqui tlamatli yplanetas ytlacatiliztli ynquenica Leportorion ypa tlacaliztli nican*. Tavárez also provides a transcription and translation of the first day, Sunday. Therefore, he does not recognize that even though Zodiac sign Leo is explicitly mentioned in one paragraph, the other Zodiac signs are not part of the text and thus do not seem to have an influence of the course of life of an individual.

> "[…] [T]he Nahua author's selection of these particular texts, as well as his explanation of the context in which he would consult them, indicate he considered these new concepts and divinatory practices congruent with traditional practices, and thus useful substitutes or complements. The author's translations of these texts bring them closer in line with traditional Central Mexican calendrical and divinatory practices. Although the concepts contained within these texts are cultural borrowings from the Spanish, this Nahua author modified these concepts so that they were more congruent with traditionally accepted notions of the calendar and its divinatory potential."
> (2005: 229-230)

Spitler argues that by changing the correlation from Zodiac signs to "day signs" (i.e. to the seven days of the week of the Gregorian calendar), the author was better able to practice the divinatory capacities of the text. I would argue that by making this change the new text was indeed able to remind those that would have consulted it of a pre-colonial practice and ideology. This would suggest that an indigenous divinatory system was still very much part of the cultural memory of not only the *tlacuiloque* but also of their readership.

3.4 Appropriation of a *reportorio* in Codex Huichapan in Otomí

Codex Huichapan is a manuscript with traditional pictorial elements and alphabetic writing in Otomí, spoken mainly in the states of Hidalgo and Puebla. This seventeenth century document has been studied by few. Alfonso Caso was the first scholar to encounter the codex in 1928 and he presented the rare writing in Otomí at the 23rd Americanist Congress in New York that same year. His commentaries of 1928, 1955, and 1967 were bundled together and published in 1992 along with a facsimile and introduction by Óscar Reyes Retana.

There are other publications that make reference to Codex Huichapan. For example, the works of Jacques Soustelle (1937), Pedro Carrasco Pizana (1950), and Manuel Alvarado (1976) all include reference to and consideration of the codex. In his commentaries, Caso compared his ideas with the ones proposed earlier by Soustelle and Carrasco (Ecker, 2001: 10). A complete transcription and translation have been made by Lawrence Ecker, and although he himself never got to publish his work, the editors Yolanda Lastra and Doris Bartholomew did eventually transform his text into a post mortem publication in 2001. In 2008, Hanns Prem included the codex in a discussion on colonial calendars that, according to him, are artificial creations produced to either salvage or (and these reasons are overall what Prem believes to have been the main objectives) to eliminate and change indigenous cultural practices and ideologies (2008: 196). I will come back to his argumentation later, but for now I should mention one final set of relevant publications dealing with codes Huichpan: the investigations of David Charles Wright Carr (2011; 2012), who, as an affiliated scholar of the University of Guanajuato in Mexico, undertook an in-depth study of Otomí language and culture.

According to Caso, Codex Huichapan was authored by Franciscan priest Felipe de Santiago, who was probably also Otomí himself (Caso, 1992: 35). The document is partly damaged, and some pages appear to be missing or, perhaps, the author did not finish particular sections. In general, the manuscript has a historic character and is divided into four sections. The first section is written in alphabetic writing in Otomí and informs the reader about the convent of San Mateo in Huichapan in the state of Hidalgo during the periods 1539-1618 and 1629-1632. The second section is a two-page collection of twelve toponymic glyphs of communities in the province of Xilotepec. The third section is of particular interest for my investigation here, because it is a reference to the *reportorio.* The final and largest section of the manuscript contains historical information in pictographic style for the years 1403 to 1528. These pages narrate historic events of Xilotepec according to year signs and to pictographic descriptions of events alongside glosses in Otomí and, to a lesser extent, Nahuatl. The arrival of the

Spanish in 1519 is depicted, followed by the construction of a Catholic church in Xilotepec almost ten years later (Ecker, 2001: 9 and Wright Carr, 2012: 54). As said before, two out of the 68 pages contain references to a Spanish almanac. Page 11 of the codex is introduced as a *reportorio* ("Repoltorio") (see Figure 28). This reference is immediately followed by the words "Enero" and "Aquarios 31" to indicate (without an explicit explanation) that the month of January is associated with the Zodiac sign Aquarius and a length of 31 days. What follows in Otomí is translated as *aguador jilote perro que muerde*, however this sentence does not make much sense in the context of the calendar. The numbers 1 through 31 are listed from top to bottom and correlated to a day name of one of the 20 day signs of the Mesoamerican calendar system in Otomí.

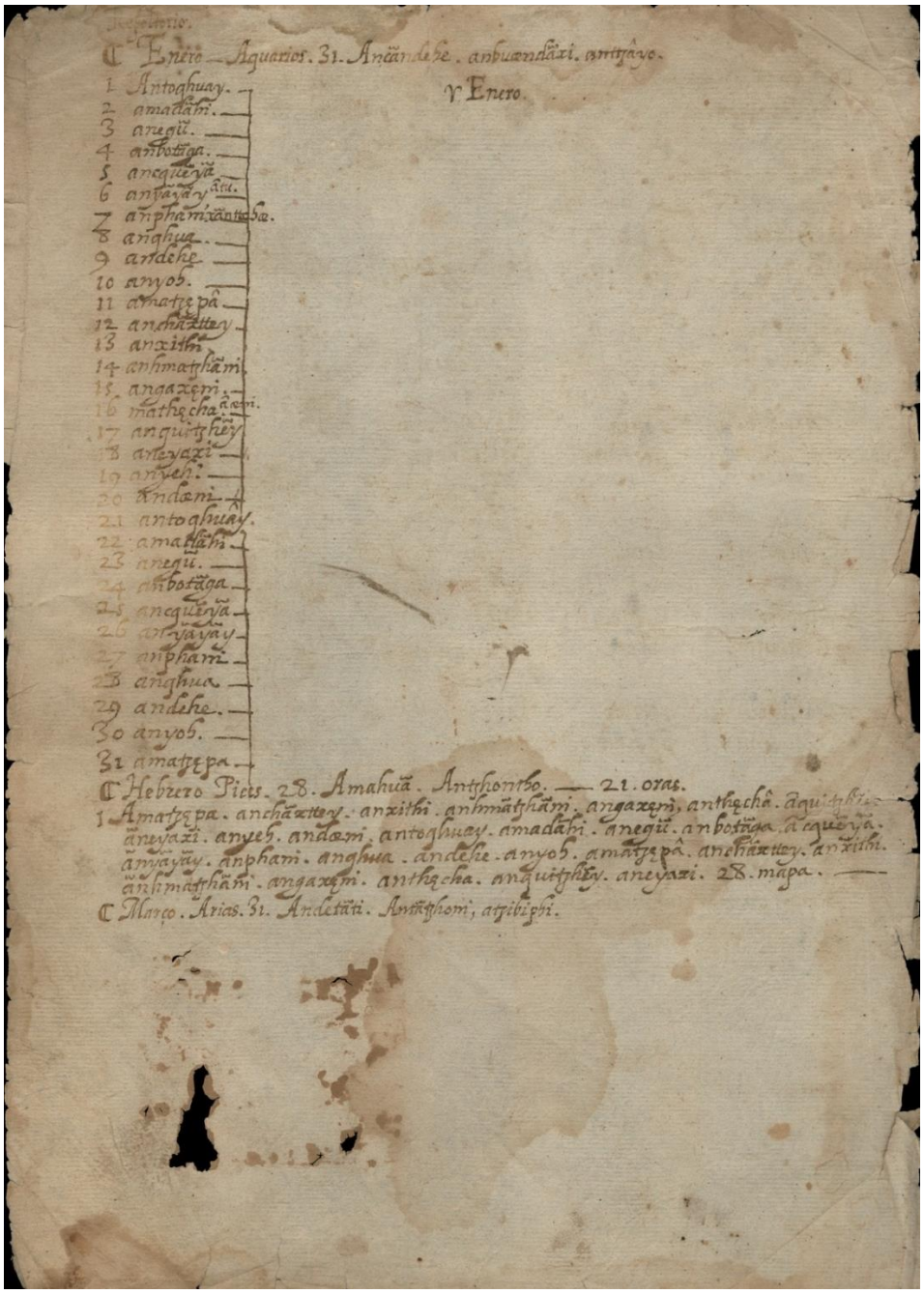

Figure 28. Page 11 from the Codex Huichapan with a reference to a reportorio ("Repoltorio").

Image from the facsimile published by Óscar Reyes Retana (1992).

January 1st, in this case, is the day sign Flint and the 31st day is Monkey (Ecker, 2001). The table below presents the names of the 31 days of January according to Codex Huichapan in Otomi, Spanish/English and their corresponding sequence in the sequence of the 20 day signs.

Day	Day name in Otomí	Day name in Spanish[93] [English]	Sequence in 20-day cycle
1	Antoqhuay	pedernal [Flint]	[1][94]
2	Amadãhi	viento [Wind]	2
3	Anegū	casa [House]	3
4	Anbotãga	lagartija [Lizard]	4
5	ancquẽyã	culebra [Serpiente]	5
6	anyãyãy a[n] tu	calavera[95] [Skull]	6
7	Anphanixãnttöhö	venado [Deer]	7
8	Anqhua	conejo [Rabbit]	8
9	Andehe	agua [Water][96]	9
10	Anyoh	perro [Dog]	10
11	Amatzūpâ	mono [Monkey]	11
12	Anchaxttey	[brush of natural fibre]	12
13	Anxithi	caña [Reed]	13
14	Anhmatzhãni	ocelote [Jaguar]	14
15	Angaxüni	águila [Eagle]	15
16	mathücha a[n]öni	zopilote [Vulture]	16
17	anquitzhẽ	sanguijuela[97]	17
18	Aneyaxi	navaja de obsidiana [Obsidian Knife]	18
19	anyeh? [sic]	lluvia [Rain]	19
20	Andöni	flor [Flower]	20
21	Antoqhuây	chuchillo de piedra [Stone Knife]	[1]
22	Amadãhi	viento [Wind]	2
23	Anegū	casa [House]	3
24	Anbotãga	lagartija [Lizard]	4
25	ancquẽyã	culebra [Serpent]	5
26	anyãyãy a[n]tu	calavera [Skull]	6
27	Anphani	venado [Deer]	7
28	Anqhua	conejo [Rabbit]	8
29	Andehe	agua [Water]	9
30	Anyoh	perro [Dog]	10

[93] According to the translation by Ecker (2001: 38-41). The English translation is mine.
[94] In the Central Mexican calendar this is 'lagarto' or Alligator.
[95] In Otomí, this sign is termed literally after what it portrays: a skull (calavera). In most cases, however, this sign is termed 'death' (Muerte).
[96] This is in the Central American calendar Rain.
[97] This is Spanish for leech. In the Central American sequence, this would be Movement (Ecker, 1998: 40).

31	Amatzüpa	mono [Monkey]	11

Figure 29. The names of the days for the month of January in Otomi, Spanish/English and their order in the sequence of the 20 day signs, from the reportorio in Otomi.

Thereafter follows the month of February ("Hebrero"). The scribe decided not to list the 28 days (or 29, if the codex considered a leap year) of the month in a table, but instead he wrote them down in a single paragraph. According to the scribe, the first day of February is *amatzüp*e or Monkey, the eleventh day sign in a sequence of twenty. As Monkey is also the final day of the month of January, it would seem reasonable that February would have started with *anchaxttey* ("brush of natural fiber"), or the twelfth day sign. According to Prem, it is unclear whether this is an error or if this belongs to a specific calendrical pattern (2008: 202). The month of March is incomplete and, moreover, the information presented does not seem to point to any standard day signs in Otomí; e.g. *Março. Arias. 31. Andetãti. Antãtzhoni. atzibiphi*. and translated as Março Aries. 31. borrego [?] el comer humo, fumar (Ecker, 2001: 41).

Page 12 is blank and page 13, as is explained in Otomí, shows a table that correlates the twelve months of the Western calendar, the Zodiac signs, and the names of "months" represented according to their Nahuatl and Otomí designations. The final column is reserved for two combinations of Roman numbers: xx and xx xxi *oras*. According to Ecker, the word *oras* is a mistake that should read *días*, although it is unclear how this would coincide with the numbers 20 and 41 as these clearly cannot be interpreted as the amount of days in a month. The left column of the table explains the Zodiac signs in Otomí. Some of these signs are easily translated; such as Pisces, Leo[98], Virgo, Libra, and Scorpio. Others, however, are translated according to the scribe's interpretation: Taurus is given as the "great deer-bull," Sagittarius as a hunter, a person, and also as the Nahuatl *tlacamaçatl* or "man-deer." The author probably also spoke some Nahuatl considering the amount of Nahuatl present in the codex. Aries is a *topador* or someone who bumps into things and Gemini are two of the same children.

The table includes and starts off with elements from the Western tradition (Zodiac signs and the names of the twelve months). However, it seems that the purpose of the inclusion of information derived from a *reportorio* in an otherwise historical document, is to emphasize the existence of indigenous terminology. In addition, the scribe tries to correlate days and months of the Western calendar to the Mesoamerican calendar in Otomí and Nahuatl. By doing so, Prem (2008) is in parts right in arguing that there is artificiality in the construction of the correlation itself. It tries to create a beginning of a year at the first of January and at the first day sign of a Mesoamerican calendar (Antoqhuay in Otomí or Cipactli in Nahuatl). This, in itself, is artificial as not every 1st of January coincides with the first day sign of the Mesoamerican calendar. The actual presence of such a correlation, however, is a validation of indigenous time reckoning in the middle of the seventeenth century. This section, even though called a "reportorio," has in fact little to do with the astrological, medicinal, and agricultural content of the traditional Spanish almanac. It appears as if the scribe only needed the amount of days in a month (named *planetas* on folio 13) from the Western calendar for purposes of correlating different calendar systems. The scribe furthermore copies names of Zodiac signs, but appears to have no interest in any form of astrological significance. In fact, if we read what the author himself writes prior to the correlation it becomes clear that he is commemorating Mesoamerican feasts throughout the solar year by establishing correlations with the Western calendar:

[98] Translated as *amamihni* or lion, so the Otomí language had already created a word for the animal which is not present in the continent.

> "[He] aquí la memoria [de] la cuenta de las fiestas [de] la cuenta
> de años [de] los lejanos ancianos [=antepasados]
> veinte días aquí [en] mexicanos otomíes, mazahuas todos los pueblos
> aquí [en] nuestra casa tierra [que] se llama Nueva España, que se
> equipara [a] la cuenta [de] luna, de los españoles cada año asimismo
> la cuenta de fiestas [=el calendario] [de] los meses
> lejanos ancianos [antepasados]"
> (translated from Otomí by Ecker, 2001: 42)

If we consider the document as a whole, therefore, we have a text that begins with the annals of the convent of San Matteo through a historical account in a number of years of the Western calendar. The author then (incompletely) correlates the Western calendar with the Mesoamerican calendar in two languages. The final part of the codex is a historical account of the community of Huichapan between the years 1403 and 1528. In contrast to the purely alphabetic text of the annals of the convent and years denoted according to the Gregorian calendar, this section is a combination of text and Central Mexican pictography. Each folio contains two of the four Mesoamerican year signs (House, Rabbit, Reed, and Flint) and their corresponding number in dots. The correlated year in the Gregorian calendar has been written in both Roman and Arabic numerals. Important historical events are depicted in pictorial codex style above the year signs.

In summary, the codex begins with a history that was initiated by Spanish and Catholic influence: the construction of the San Mateo convent by Priest Alonso Rengel. Thereafter, the author combines references of time of the indigenous calendar (day signs; feasts) and the Western one (months and their amount of days; Zodiac signs) in an effort to have them run side by side. Finally, the historical account turns to Mesoamerican history of the early fifteenth century through to the third decade of the sixteenth century. Being an alphabetic document in Otomí, it was meant to be read by an Otomí speaking (literate) audience. The presence of the codex style kept alive indigenous forms of writing, but its iconography also enabled a larger audience to read and commemorate Mesoamerican history.

The author of the Codex Huichapan was familiar with the genre of the *reportorio.* However, the author did not intend to explain the astrological, liturgical, medicinal, or agricultural content of the *reportorio.* Rather, he selected solely the names of the months and their amount of days. By doing so, he established a starting point (i.e. the first day of the year) in the Gregorian calendar. This starting point could then be related to an artificial beginning of the Mesoamerican calendar in Otomí. The inclusion of the Zodiac signs and the effort to translate their names into Otomí, appears to be relevant to the extent that each of these belong to one the months of the Western calendar. Their astrological influence, however, has been omitted from the codex.

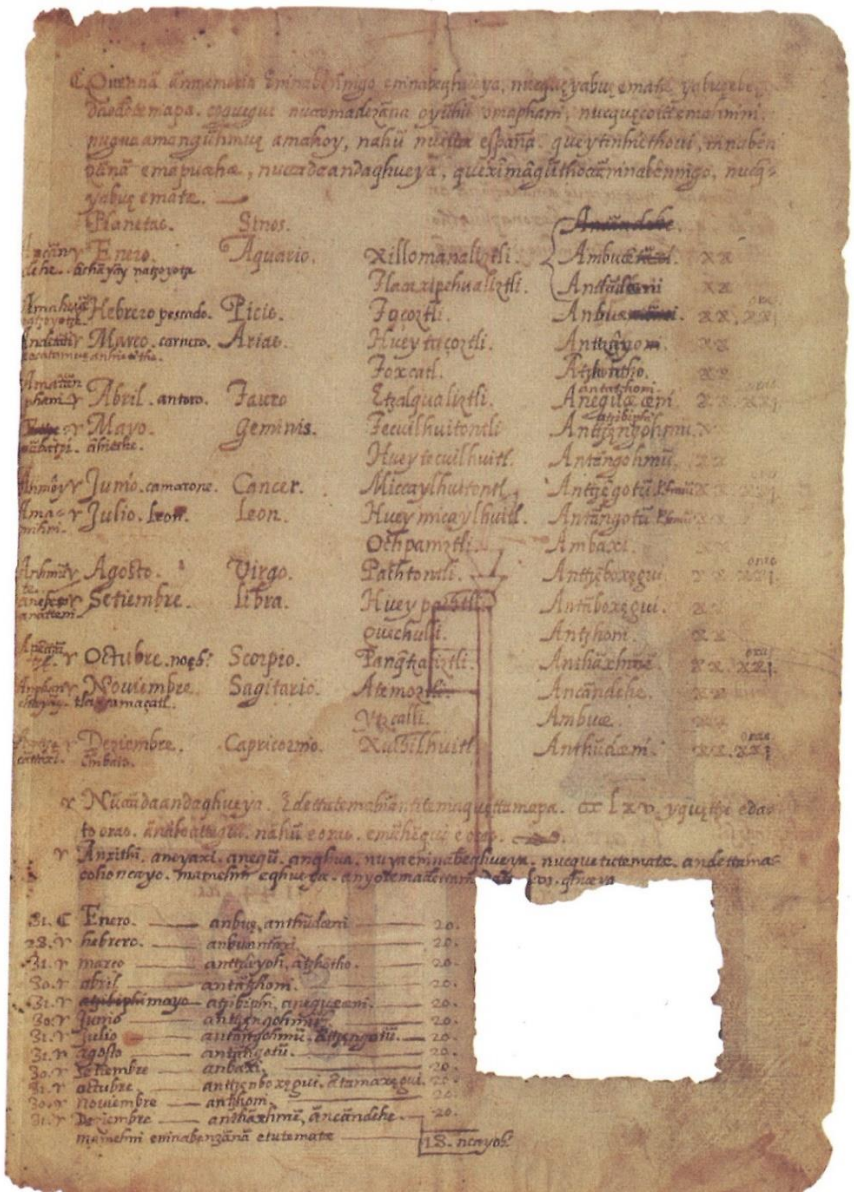

Figure 30. Page 13 from the Codex Huichapan. Image from the facsimile published by Óscar Reyes Retana (1992).

3.5 Corpus of Yucatec Maya translations: Books of Chilam Balam

The genre of the astrological almanac was not only present in the more central parts of Mexico, but also in the Yucatán Peninsula, a Maya speaking area. In this area, the famous surviving Books of Chilam Balam originated. This corpus of books was named after a Mayan prophet or *chilam;* his name Balam referred to the highly esteemed animal jaguar. These books, similar to Izcatqui, are a collection of texts that were translated in the sixteenth century and were then copied into the existing books well into the eighteenth and early nineteenth century (see Roys, 1967 [1933]; Craine & Reindorp, 1979; Edmonson, 1982, 1986 and the PhD thesis of Gunsenheimer, 2002). The corpus of books can be divided into a variety of themes:

1) History and prophecy: Books of Chilam Balam of Chumayel, Tizimin and Tusik

2) Astronomy, astrology, and medicine: Books of Chilam Balam of Kaua, Chan Kan[99], Nah, Tekax, and Ixil (Bricker & Miram, 2002: 1).

These themes also include religious texts, literary texts (Spanish novels for example), and explanations of the Mayan calendar in relation to the Christian calendar. It is, then, a compilation of both indigenous oral knowledge and hieroglyphic texts, as well as of European printed texts (Barrera Vásquez & Rendón, 1948: 9) – an encyclopedia of what was part of an intellectual valorization of two worlds that came together in a Mesoamerican context:

> "[S]everal Books in the second group [that is, astronomy, astrology and medicine] consist of compilations of texts of both Old and New World origin and present fascinating possibilities for investigating the intellectual encounter between the two civilizations: which European texts were deemed worthy of inclusion and why, and how they were reconciled philosophically with texts of obvious New World origin. […] [A] virtual treasure trove of information reflecting the intellectual concerns of the colonial Maya scribe."
> (Bricker & Miram, 2002: 1, 3)

Several studies on the specific Books of Chilam Balam of Kaua and Ixil have been published in the last decade. The Book of Chilam Balam of Kaua is translated and annotated in a publication by Victoria Bricker and Helga-Maria Miram in 2002. The Book of Ixil is translated and commented upon by Laura Caso Barrera and was published in 2011. An English translation of her book will be published by Brill in early 2019 in the Series The Early Americas: History and Culture, Volume 7.

3.5.1 Chilam Balam of Kaua

This book is the most extensive of all the Books of Chilam Balam in terms of number of folios (141) and encyclopedic content. It not only covers astrology, astronomy, and medicine, but also includes similar texts on history and prophecy that are present in some of the other Books (Bricker & Miram, 2002: 1-3). The work by Bricker & Miram is the first complete transcription and translation of the Kaua. Their work was preceded by several other studies between the second half of the nineteenth century and the early 1980s, however the latter were limited to thematic fragments of the text. The transcription by Bricker & Miram is based on photocopies of the (probably) complete original manuscript from the late nineteenth century by Teobert Maler. These were the final photos taken before the manuscript went missing from the Library in Mérida in the Yucatecan Peninsula where it was kept. Copies of the photocopies taken by Maler are located at the Ibero-Amerikanisches Institut Preußischer Kulturbesitz in Berlin, the University of Hamburg, and the Libraries at the Brigham Young University in Provo (Utah). Furthermore, a copy made by William E. Gates (1915) resides in the Tozzer Library of Harvard University.

3.5.1.1 Content and source texts

The Kaua is composed of two parts (called "Volumes" by Bricker & Miram) that certainly belong together: the first part of 87 folios is entitled "Tratado de la[s] 7 Planetas y otr[o] de medecinarum sygno de sangrar [sic]"; the second part of 55 folios is untitled. Bricker & Miram identified one very specific source text by comparing images in the Kaua with images in other manuscripts. The first image

[99] The name of Chan Kan is given to the book by the University of Pennsylvania, and Bricker & Miram also use this name. However, the name of the town in which it was found is Chan Cah, a name that Alfredo Barrera Vázquez corrected. The name of Chan Cah is used by the study from the Grupo Dzibil *Manuscrito de Chan Cah* (1982: v). I will use the name of Chan Cah in the subsequent paragraph on the manuscript.

compared was a geocentric, spherical model of the universe and the second was a drawing of a comet. Bricker & Miram argued that both of these images would have been copied from a *reportorio* by Rodrigo Zamorano, published in Sevilla in 1585 (*ibid.*8, 92, 248, 249). What is so specific about the spherical model of the universe is that it exceeds the nine heavens of Ptolemy and it also exceeds the tenth heaven added by Alfonso the Great, ruler of Castile and León in the thirteenth century. In this way, it is a perfect representation of the 11 heavens as theologians envisioned the cosmos in the relevant period (*ibid.*: 13). This conceptualization of cosmos is not represented in, for example, the 1554 edition by Sancho de Salaya, nor in the 1529 edition by de Li. This leads one to the conclusion that it most likely is a copy of a feature of the *reportorio* by Zamorano.

Both Zamorano's publications of 1585 and 1621 illustrate the cosmos as composed of 11 spheres. Other images in the Kaua – such as the constellations and planets – have been compared to other *reportorios* such as the edition by Salaya from 1542. Although it is possible that such *reportorios* provided a basis upon which the authors were able to interpret their iconography, it has not been proven that these *reportorios* served as source texts (*ibid.:* 8). As for dating the manuscript, Bricker & Miram pinpointed 1746 as the publication date of the latest source text consulted: a colonial grammar of Maya by Pedro Beltrán de Santa Rosa. Thus, Bricker & Miram argue that the manuscript was composed somewhere in the final two decades of the eighteenth century as it contains tables of calendar dates ranging from 1796 to 1826, and the year 1789 on the title page of the first part of the Kaua (2002: 11). Kaua, then, was not produced long after Izcatqui [1754].

3.5.1.2 Interpretation of Mayan tz'ib [scribe]

Bricker & Miram endorse the term "syncretism", which they explain as "the integration (and consequent secondary elaboration) of selected aspects of two or more historically distinct traditions" (*ibid*.: 85, after Edmonson, 1960: 192). In order to explain where syncretism is present they identify the fragments where it is evident that the authors changed the European text into something more fitting to a Mayan cultural framework, similarly to what I have done for Izcatqui. There are four "cultural domains" in which syncretism is clearly present according to the two authors:

1) Calendrics: the Mayan calendar system is explained in Western calendar terms. One such example is how the *uinal* or a period of 20 *kin* ('days') is either divided into four times a five-day 'week' – named after newly coined 'week bearers' – or is divided into three seven-day weeks. A visual example is a calendar wheel after a European model, which tries to fit in two cycles of the Mayan calendar within a wind compass.

2) The identification of the four horsemen of the Apocalypse as rain gods – which remain as part of present-day religion in Yucatán Bricker & Miram (*ibid.*: 85; 88) – could have been precedented by the representations of the wind gods as angels in books such as the Chilam Balam of Kaua. In addition, the Mayan wind gods are also represented as Christian saints. Therefore, the wind compass – such as the one we find in the Book of Kaua – is used to link Christian angels and saints to the Mayan wind and rain gods (*ibid.*: 88).

3) Astronomy: since the number eleven held no great significance in Mayan culture, the number of heavens in the European model was increased by two more to exploit the importance of the number thirteen.

4) Medicine: medicinal plants from the Mayan area were implemented in treatments of illnesses that originated according to European beliefs (*ibid.*: 88).

The authors distinguish between syncretism of "form" and "meaning" in the Chilam Balam of Kaua according to the list above. The first form of syncretism was the adaptation of the Mayan calendar to the European model via the incorporated division of months and weeks. This process of syncretism required a change in the structure and meaning of the preexisting calendar. The equating of saints to Mayan rain and wind gods was less troublesome as the structures of both religions allowed for a substitution of the one into the other largely without changing its system or meaning. There are fewer examples of syncretism that clearly affected the structure or meaning in the medicinal texts. However, some aspects as syncretism are present, including the account of cures which depend in part on astrology as well as the description of herbal treatments. Bricker & Miram argue that, ultimately, the European structure prevailed, because the Mayan substitutions found were those related to the processes of curing with native plants. This was likely due to the great difference between European and Mayan ways of curing (*ibid*.: 88).

3.5.2 Chilam Balam of Ixil

It was not until 2011 that the first complete transcription and translation of the Book of Chilam Balam of Ixil appeared, edited by Laura Caso Barrera with a contribution by Mario M. Aliphat Fernández. Prior to Caso Barrerara's publication, only fragments of the Ixil had been translated, the earliest by Juan Pío Pérez in the beginning of the nineteenth century. In addition, parts of the medical recipes that appear in the Chilam Balam of Ixil were published in 1976 by Ralph L. Roys in his work, *The Ethno-Botany of the Maya*. Instrumental to our understanding of the Books altogether, are the translations and historical and comparative research by Alfredo Barrera Vásquez in the mid-twentieth century (Caso Barrera, 2011: 12-13). Caso Barraras' work has brought together the missing pieces that were left from those earlier studies. As such, it is one in a range of invaluable contributions to the study of products of interaction and interpretation between Mayan (Mesoamerican) and European cultures. She hits the nail right on the head by arguing that:

> "[…] [S]e puede afirmar que los libros de *Chilam Balam* son fuentes de gran riqueza para el studio de la cultura y lengua mayas desde el Posclásico hasta el siglo XIX, pues su contenido fue variando al irse integrando nuevos conceptos y elementos culturales en las poblaciones mayas de Yucatán. Lo que se debe destacar es la oportunidad que brindan documentos como el *Chilam Balam de Ixil* para entender los conceptos, temas y textos de la cultura europea que los mayas consideraron interesantes y relevantes para retomarlos, adaptarlos y compararlos con su propio Sistema simbólico y cultural. Muchas veces se cree que los textos "más hispanizados", como el *Ixil*, resultan menos interesantes, sin tomar en cuenta que son precisamente este tipo de fuentes las que nos permiten analizar y entender la aculturación dessde el punto de vista indígena. […] Los mayas no solo copiaron los textos europeos, sino que escogieron cuidadosamente pasajes de especial importancia que tradujeron utilizando palabras con alto significado cultural."
>
> (Caso Barrera, 2011: 11-12)

Much like Izcatqui, it is believed that the Ixil book has been composed in the eighteenth century and that it is a copy from an earlier version. On folio 21r, the year 1743 appears in a section that explains the Mayan calendar. This however, is not necessarily a reference to the year in which Ixil was made. The Biblical texts that pertain to the Ixil book are thought to derive from a *Biblia vulgate Latina* which was translated into Spanish by Father Felipe Scio de San Miguel in 1791. This, then, would be the latest possible date for the composition of the manuscript (*ibid*.: 16).

Ixil's content is a combination of religious narratives from the Old Testament; recipes to cure illnesses; the Mayan calendar explained through calendar wheels; an explanation of the eclipse;

drawings of the twelve Zodiacs signs[100] (including which parts of the body and humor each rules or effects, prognostications for those born under a given sign, and agricultural advice); a Saints calendar; an image of the eleven spheres with Earth as the center; a table relating the twelve months to the twelve Zodiac signs; an incomplete table of the twelve months of the year – January to September used for medicinal purposes[101]; religious narratives from the Old Testament[102]; a table in which each day of the twelve months of the Gregorian calendar is related to the lunar cycle indicated by letters of the alphabet; a table that indicates which organ or body part is effected by one of the twelve Zodiac signs (the table substitutes a drawing of Zodiac Man); and, finally, an Aureus Numerus table (Caso Barrera, 2011).

The drawings in the Chilam Balam of Ixil leads to a rather easy search for the original sources used (either as primary or secondary source): the *reportorios* by Rodrigo Zamorano[103] (1585), Jerónimo de Chávez (1580), and Andrés de Li (the year of publication is not mentioned) (Caso Barrera, 2011: 16, 46). The image of a lunar eclipse on folio 22 is similar to a drawing from Zamorano's edition of a *reportorio* from 1585. Bricker & Miram (2002) were able to provide many corresponding passages and images between the Chilam Balam of Kaua and Zamorano's work. The eclipses of the Moon and Sun in Ixil are also very similar to Zamorano's edition. The image of the solar eclipse of the Kaua, however, is different from both Ixil and Zamorano. Here we see the first four Heavens (Moon, Mercury, Venus, and Sun) with the Moon clearly in front of the Sun. The image of the solar eclipse in Ixil has one addition to the image from Zamorano and that is what appears to be a letter 'V', which might refer to the sphere of Venus.

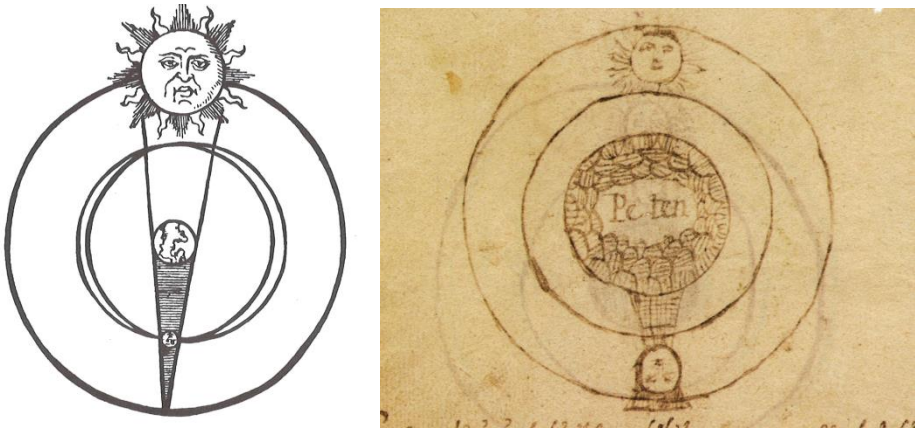

Figure 31. Lunar eclipse from Zamorano's reportorio (1585:219) in comparison with lunar eclipse from Chilam Balam of Ixil (folio 22v). (from Caso Barrera 2011:160).

[100] Note how the *tz'ib* decided to start with the sign that correlates to the beginning of the calendar, thus Aquarius for January. Spanish *reportorios* depart not from the first month of the calendar but with the first sign: Aries for the month of March. We find the same restructuring of the text in Chilam Balam of Kaua and Chan Kah.

[101] A doctor had to be aware of the ruling Zodiac sign for each day of the year to carry out the correct curing practices. In this case, the *tz'ib* related the days of the months and the Dominical Letter of the Gregorian and liturgical calendar to the twenty names of *kin* or day signs and a numeral coeffient ranging from 1 to 13 – each day is either defined as 'good' or 'bad.'

[102] Caso Barrera argues that the folios containing this narrative should have been placed after the religious narratives on previous folios. Together these narrate chapters 8, 22, 49 and 50 from Genenesis (2011: note 1 on page 259 and note 576 on page 272).

[103] Zamorano had a well-established career as cosmographer and was the first to edit a *reportorio* after the Gregorian calendar reform in 1582 (Bricker & Miram, 2002: note 1398 on page 278 and Caso Barrera 2011: 16).

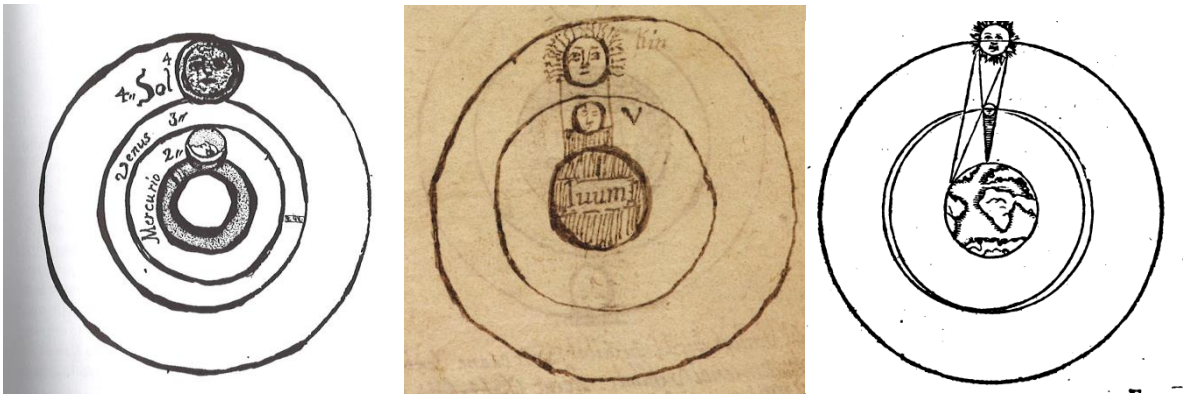

Figure 32. Solar eclipse from Chilam Balam of Kaua (folio 138) in comparison to eclipse from Chilam Balam of Ixil (folio 22r) . (from Caso Barrera, 2011: 162 and Zamorano, 1585: 221).

The Chilam Balam of Ixil and Kaua illustrate that the edition by Zamorano was familiar amongst indigenous scholars who read, translated, and incorporated the Spanish almanac into new texts in Yucatec Maya. Drawings of the Zodiac signs are very similar in style to the same images in Jerónimo de Chávez' almanac. Note how the *tz'ib* correlated each sign to a single month. The texts on the twelve Zodiac signs in Ixil are a mix of the aforementioned three *reportorios* as well as indigenous elements. They showcase how its composer mixed images and fragments of text of different sources. The images, for instance, are derived from Chávez or Zamorano, but the text is short like de Li's and aims to instruct the reader on a number of details. First of all, it provides information about the number of stars that make up each sign. Furthermore, it discloses the date of the month in which it rules and the length of the days and nights of that month. Although the Chilam Balam of Ixil does not include an image of Zodiac Man, it does provide this type of information in the form of a table on folio 44v and in the descriptive text of the Zodiac signs. It describes the effect on the four humors, as well as the characteristics of persons born under the sign, and, finally, agricultural advice is dispensed.

3.5.3 Chilam Balam of Chan Cah

Two studies have been published on the Chan Cah: one is a Spanish and the other an English transcription and translation. Marla Korlin Hires dedicated her PhD dissertation to the Chan Cah in 1981 (Tulane University), which was the first full English transcription and translation of the manuscript. Korlin Hires' dissertation also includes a brief comparison with several other Books of Chilam Balam, and was also written in English. The Spanish translation and transcription was made by the Grupo Dzibil under the direction of Héctor M. Calderón in 1982. This translation is preceded by a short 2,5 page commentary.

The Book of Chilam Balam of Chan Cah contains 128 folios and probably dates to somewhere between 1823 and 1845 (Calderón, 1982: vii). The date of Friday August 24, 1832, appears on folio 124. On this day, it is said, people from abroad (*extranjeros*) arrived in Hō or Mérida (Yucatán) (Calderón, 1982: vi). In addition, the scribes also refer to the year of 1513, the year in which *extranjeros* set foot on the Peninsula for the first time. It is noteworthy that they denoted the year 1513 as *"He aquí el año mil quinientos trece años* […]," a Spanish way of counting the year in the Gregorian calendar (ibid.: vi). However, when referring to years in the nineteenth century, the scribes in this instance combine both the Spanish *Agosto 24. Viernes de 1832* with a calculation in multitudes of 20 that very much reflects Mesoamerican numerology: *Cuatro veces cuatrocientos, diez veintenas, una veintena y tres unidades es la cuenta del año*, or four times 400, ten times a *veintena* (20), one veintena (20), and

three *unidades* = 1823 (and not 1832). Moreover, both Chan Cah's structure and parts of its content shows similarities with Tekax and Nah (Calderón, 1982: v).

Two of the sources of the Books of Chilam Balam of Chan Cah – and also of Mani and Kaua and Codex Pérez – are *el Cuento del Mercader* and *La Doncella Teodora* (see more on this story below as it refers to the importance of knowledge from a *reportorio*). The incorporation of the story of Teodora is a good marker of the period in which it was produced. The legend of Teodora apparently came from an astrological almanac that was designed for the year of 1834 and published in 1833. More so, it seems likely that there was a single copy of an almanac that circulated between certain groups of *h-menoob* (Mayan highly esteemed teachers/ priests) in the year 1833; this single copy was translated in different ways amongst them. (*ibid.*: vii). See Appendix F for an overview of the content of the complete Chilam Balam of Chan Cah. Here, I am mostly interested to the reference of the genre of the *reportorio* through the account of *La Doncella Teodora*. This account not only refers to the content of the *reportorio*, but to the epistemology of the genre itself.

3.5.3.1 History of Doncella Teodora: a story about knowledge

From the eleventh century onwards, Western Europe's development of the sciences and literature was highly influenced by contact with the Arabic world (Rivera & Rogers, 2000: vi-vii). Knowledge brought by scholars and texts entered via Southern Europe. Under the influence of King Alfonso X – known as *el Sabio* for his active propagation of Arabic texts translated in vernacular language – the story of the slave girl Tawaddud (renamed Teodora in Spanish) entered Europe as well. Her narrative originated in the Orient in the ninth or tenth century and was incorporated into the famous collection of tales Arabic Nights (Thousand and One Nights) in the fifteenth century (Rivera, 1998: 416). It was first translated into Castilian in the second half of the thirteenth century and was first printed in Toledo around 1500 at the printing house of Pedro Hagenbach (*ibid*.: 416-417).

The story of the slave girl Tawaddud gives an account of a young woman who is about to be sold by a merchant to King Almanzor. In Chan Cah, this king is named *ahau* – ruler in Yucatec Maya – *Almasor*[104] or Al-Mansur. As the result of his demand of a price so high as ten thousand golden pieces, the king asks the merchant if he is "out of his mind" and if he is "exaggerating the maiden's value" (Bricker & Miram, 2002: 224). The following events in the story reveal to the reader what is considered to be relevant to the maiden's "value." For example, the maiden is judged on what can be interpreted as her wisdom, because the King is concerned that she "maybe […] does not know anything" (*ibid*). The merchant is quick to respond that she knows many of the things that knowledgeable individuals know (*los sabios*); she knows, that is, what is "in the spirit" (*están en el espíritu*). In fact, the merchant claims that there is no one quite like her amongst the male *sabios* as she has been taught all. The merchant continues to explain that she is able to write, she "knows of the letters," and "might possibly also know of all things on earth." The King asks Teodora if the miracle of her knowledge is the greatest in the world, upon which she replies that the principle of knowledge lies in the first seven things that people are taught. These are matters of the earth and sky; herbs; animals and birds – all created by God. What's more, Teodora exhibits her knowledge of how to play the flute and how to sing in organum.[105]

In the second Chapter of the story of Doncella Teodora, the King calls for a conference of all *sabios* in which he selects the three best to interrogate Teodora to estimate if the ten thousand golden pieces are worth spending on her or not. The three wise men that are about to question the maiden are the ones that know of the Commandments of God; the second is very informed on writing, medicine,

[104] In the Chilam Balam of Kaua, his name is spelled *almanzor* (folio 99, page 222 in Bricker & Miram, 2002)
[105] Bricker & Miram (2002 : 225, note 881) refer to the work by McKechnie (1974: 1261) who defines singing in 'organum' as "an early type of two-part harmony in which the voices are separated by an interval of a fourth or fifth."

how the stars travel, and how people are born on earth; the final and third one knows all there is to know about the ways of the Sun and Moon, the movements of the spheres, and of the seven things (*cosas*) too. The selection of the three wise men is followed by Doncella Teodora being subjected to a series of questions which she was able to either outsmart or to respond so complete that the second *sabio* even states that the maiden is much brighter than he is, that she knows of all things on earth as well as of the sky.

After the interrogation of the three wise men who were outsmarted by Teodora, the wisest of all came to the fore: Abraham the Prophet.[106] A debate amongst the two of them ensues in the form of riddles proposed to Teodora by Abraham. The structure of the transcribed conversation between Abraham and Teodora is thus in a Q&A form and includes a number of riddles. From the Middle Ages through the sixteenth century, Rivera (1998) explains, the questionnaire (*quaestiones*) was a popular didactic technique to teach a variety of disciplines in a playful manner while at the same time "[offering] concrete advice concerning human knowledge and experience by means of a series of concise exchanges" (*ibid*.: 416). As for the Spanish edition of the story of Doncella, Rivera states that the reader is being instructed on "physical sciences, folk traditions, medicine, and social practices" (*ibid*.: 416-7). This is no difference in the Mayan text and again I would argue that this story was included for other reasons than just an interest and curiosity towards foreign literary traditions. By adding the account of a young slave whose only way out of being sold and helping her master was to be the most knowledgeable of all, the text insinuates that virtue was in one's intelligence. This then, was not necessarily conditional upon one's social status (recall that the girl was a mere slave at the time). According to Rivera, the format of the story – and, I think, the underlying reference to virtue despite social class – only further intensifies the excitement a reader would have felt in finding out the outcome and to find out her triumph over the King's trail (1998: 417). It is the underdog position that everyone is rooting for and, by creating sympathy for Teodora, the reader automatically connects to the urge to want to know more than the masters who are questioning her and to the idea that such a thing was even possible.

What is present very clearly in the Chumayel is the so-called language of Zuyua or *Suyuaa than* in Maya[107]. Zuyua referred to the city of Tula in Central Mexico, "to draw the mantle of the Toltecs over the ritual language of the Mayan examination system" (Edmonson, 1986: 168, note 3501). Whoever is posed several riddles that each, if understood correctly, reveals a secret word or action that the royal child has to carry out. Brotherston (1982: 135) and Bricker & Miram (2002: 232, note 936) recognize phonetic resemblances between the Mayan translation for doncella or maid *suhuy* to the word in the language of *suyua*. *Suhuy than* "the language of the wise maiden" could be related to *suyua than* "the language of Zuyua" other than just a reference to "virgin, pure, maiden" (Bricker & Miram, 2002: 232, note 936). The use of riddles posed by Abraham in the story of Teodora could very well have reminded the Mayan authors of the Books of Chilam Balam of the language of Zuyua. As rightly pointed out by Brotherston, however, the difference between the two is that the riddles posed to Teodora by Abraham have a hierarchical character. "What is stronger than steel?", "What is sweeter than honey?", "What is the swiftest of all things?" (Brotherston, 1982: 137). This hierarchy is not only present in the questions themselves, but also in the reasons as to why they are asked in the first place. It is Abraham's aim to prove that Teodora's intelligence can never reach the level of his – but, of course, Abraham fails. Still, the riddles in the Mayan texts are designed in such a way as to identify a "shared consciousness" in the knowledge of the interviewee (*ibid*.: 137).

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[106] This is Chapter Four, however, it is not until after this segment of the story that the manuscript says *C.P.4 El cuarto título quiere hablar del final* (Calderón, 1982: 87). In the fourth title, the interrogation was finished (Bricker & Miram, 2002: 235)

[107] Maarten Jansen and Gabina Aurora Pérez Jiménez discuss this type of esoteric languages (characterised by metaphors and riddles) and compare the language of Zuyua with the Mixtex lordly language (*Iya*) (2009: 104-120).

By incorporating these riddles or having selected a text that included them, the authors of the three Books of Chilam Balam were aiming to mirror – and hence keep alive – a tradition of the Zuyua language (Brotherston, 1982: 139). According to Brotherston, the inclusion of the story of Teodora meant more than is straightforwardly apparent when one first encounters the story, because:

> "The Maya translators of her [Teodora] story neglected the mere circumstances of her narrative in favor of intellectual exchange; and by this they meant not just the supplying of facts that are correct according to the scientific orthodoxies of the day, or of answers that are right in terms of pre-defined authority. Rather it involved the process of thought itself, the capacity to hear a question in more than one way."
> (Brotherston, 1982: 139)

Furthermore, in the story, Teodora was also able to reply to Abraham in such a way that he was no longer able to continue the debate with Teodora. Therefore, he took off his clothes until he was wearing nothing more than his white shorts. (Calderón, 1982: 85). He asked for mercy from the maiden Teodora, that she would not take away his shorts and that he should give the money to her.[108] Teodora in turn, plead to the King that she should remain with her master (Calderón 1982: 86-7).

In the pages of the questionnaire, one of the wise men asks her kindly to answer any of the questions that they are about to propose to her[109]. Teodora is asked who is above all skies, created God, and has all the characteristics of January up until December. Doncella Teodora knows everything and very aptly characterizes the ruling Zodiac signs and planets, and the characteristics of someone being born under them; additionally, she lists the advice on medicinal treatments related to the signs, as well as agricultural practices (all according to a *reportorio*). This is how the story of Teodora ends in the Chilam Balam of Chan Cah, after which the text changes into a medicinal treatise (Bricker & Miram, 2002: 229-235).

Why does this manuscript – as well as the Chilam Balam of Kaua, Mani, and the Codex Pérez – include the story of Doncella Teodora? This story is not part of any *reportorio* and its inclusion was thus decided upon very deliberately by the authors of the aforementioned Books of Chilam Balam and codex. The merchant is asked to showcase the value of the maiden and, as we have seen, this value lies solely in the repertoire of her mind. She is only worth those ten thousand golden pieces if her brightness equals those of the wise men that are selected to interrogate her. By adding the story these manuscripts not only include the authorities of "the King" and "the Wise Men," but also have these authorities refer to which type of knowledge was seen as highest in a certain kind of hierarchy of knowledge.

3.5.3.2 Reportorio de los tiempos as cited by Teodora

The first publisher of the printed Spanish book known as *Historia de la donzella Teodor* turned the medieval manuscript into something that would fit the demands of the reading market in the early sixteenth century. Hagenbach not only changed its size and font to have it conform to other books that were printed for a non-specialist audience, but also transformed its content to synchronize it to scientific

[108] In the Spanish translation of the Chan Cah the translators refer to 8,000 golden pieces (1982: 86) to be paid for the maiden, the English translation by Bricker & Miram refers to 10,000 pieces (2002: 235).
[109] There seem to be some differences between the Mayan texts of the Chan Cah and the Kaua. The latter, according to the transcription in Bricker & Miram, states in Maya (2002: 239): *be caina mac u lepl av ol* (Let no one make you angry!) *y oklal uayanon t u tan ahaue* (Because we are here in the presence of the king). The Mayan transcription and the Spanish translation from the Grupo Dzibil (1982: 87): *cayna maac u lepel a uol yoklal uayon tan ta tan, Ha eubal a nah maix ca c* (ojalá nadie te cause enojo sobre lo que vamos a hablar. Será necesario averiguar […]) In English that would be: let's hope no one makes you angry for what we are about to talk. It will be necessary to find out […]. So here there is no reference to any king.

writing popular at the time (Rivera, 1998: 419). Hagenbach used fragments from an edition of the *reportorio* by de Li, which were probably available given his prior relationship with the author: it was his printing house that printed one of de Li's editions of the *reportorio* in 1510. Rivera illustrates how identical the texts from the Spanish *Historia de la donzella Teodor* and de Li's *reportorio* are by posing them side by side. Other than some orthographical differences, the fragments are perfect copies (*ibid*.: 421).

From the late medieval period onwards, astrology and medicine were no longer an elite's prerogative, but trickled down to a wider audience in the form of almanacs and manuals. Hagenbach's selection of this type of information was directed towards the aim of meeting the need for readings that could be used in everyday life by a wider audience. Hagenbach perfectly played into this trend by including those texts from de Li that dealt with hygienic and agricultural advice throughout the twelve months (*ibid*.: 422). He did so by weaving it into the *quaestio* didactic formula, so it was a perfect combination between what the public wanted and a method by which the incorporation of scientific discourse of the time would have been transmitted to the audience in an easy to grasp format.

The Mayan texts include these fragments from de Li, but what they do not include are texts concerning human sexuality that are mentioned in the article by Rivera (1998: 423). If these texts were included in the Spanish source text for the three Books of Chilam Balam, they were omitted by their authors. Rivera (1998) lists two fragments side by side: one from the Spanish *Historia de la donzella Teodor* and the other from the 1495 Zaragoza edition by de Li. I will copy it below to show how similar they are before comparing them to the Mayan texts:

En el mes de ENERO, siendo vieja la luna, deues alimpiar los arboles que perden la foja, e e s tiempo despuesto para trasplantar, enxerir, cauar las viñas, los rosales e los gezmines, e raer e entrecauar el alfalfa, e boluer los barbechos e plantar qualquier generacion de ligumes. Deues vsar en este mes los baños e sangrias, e los manjares e potages claros e calientes de su natura, e no deues suffrir que se leuante el estomago de la mesa con sed.	Enaqueste mes siendo vieja la luna deues alimpiar los arboles que pierden la foja. y es tiempo dispuesto para trasplantar e enxerir para cauar las viñas los rozales e los gezmines: e para raer e entrecavar el alfalfa: e bouer los barbechos: e para plantar qualquiere generacion de legumes. Deues vsar en aqueste mes los baños y las sangrias e los majares e potajes claros: e calientes de su natura. e no deues suffrir que se leuante el estomago dela mesa con sed.
Historia de la donzella Teodor. Toledo: Hagenbach 1500-1503, folio 5r	Reportorio de los tiempos. Zaragoza: Paulus Hurus, 1495, sig. D1v

(From Rivera, 1998: 421)

The Chilam Balam Books and the story of Doncella Teodora refer to other specific information from a *reportorio* that I will list below:

1) Teodora is questioned by the second *sabio* who asked her what the meaning is of the appearance of the star [stars] of Sagittarius in the month of April, accompanied by Jupiter. She replies: "whoever is born in this period, will be restless [troubles, anxious] and will not be respected. I [also] say its medicine [treatment], if there is also pain in the leg, it is very dangerous to let blood from it, and you should not bathe either. In the muscular part of the foot appears a star, Jupiter is its name" (page 80 Chilam Balam of Chan Cah: translation mine from Spanish translation Grupo Dzibil).

2) Spherical division of the cosmos: on page 88 of the Chan Cah, Teodora is asked by a *sabio* if she knows who rises above all the heavens, who gave birth to our God. Teodora replies that God has created all in seven groups. She recounts the Sun, Moon, Saturn, Jupiter, Mars, Venus, and Mercury; the stars that do not move; the Zodiac signs (the nine spheres); and God in the outer sphere, who created and oversees all.

3) On pages 89, one of the *sabios* asks Teodora during which months the Zodiacs rule and what their characteristics are.[110] In the following pages up to 96, Teodora recollects the twelve months; their ruling Zodiac signs; their associated planets and days of the week; their associated personalities (and on a few occasions physical characteristics) of those born under that particular Zodiac; which bodily malfunctions are prone to appear during these months; and whether or not particular medical treatments have beneficial or negative effects during these months.

Below I compare what Teodora says about the month of January to the *reportorio* by Andrés de Li [Zaragoza 1495]:

> "In this month of January,
> It is when Aquarius rules
> With one great star,
> With Saturn,
> And Saturday.
> Whoever will be born during this sign,
> He will be small;
> And his body must be of medium size.
> He is very melancholy also.
> And he may be crazy about women.
> And I am speaking about medicine also.
> And a strong wind should not distend the pit of the stomach;
> Nor should he suffer from thirst at the table
> When coming from a meal either."
> (from Bricker & Miram, 2002: 242)

Andrés de Li's summary on the twelve Zodiacs signs informs us on the following about Aquarius on f. 122r (DelBrugge, 1999: 68):

> "Aqueste signo llamado Aquarius es assignado al planeta Saturno por detras, porque el sol entra en aqueste signo a .xj. de enero & quando entra el sol enel es el dia de .ix. horas & media. Y dende que entra en aqueste signo fasta que sale creçe el dia vna hora. Es de natura de ayre, & su qualidad es caliente & humida. E el que nasciere en aqueste signo sera hombre pequeño, triste de condicion [&] amara bien las mugeres,"

[110] When comparing what actually is being asked of Teodora by the *sabio*, the translations of the Books of Chilam Balam of Chan Cah and Kaua are different. The Mayam text is, apart from small orthographic differences, the same: *bax ti uil uil licil y ahualilob xane bla tux citan lic y ahualilob* (Bricker & Miram, 2002: 240). The Spanish translation of the Chan Cah reads "[…] cuál es la causa de la Luna? Cómo rigen también,. y cuándo empiezan a regir?" (1982: 89). Bricker and Miram (2002: 240) translated it as "In which months may they [Zodiac signs] rule also? What characteristics do they have when they rule?" Consultation with native speaker of Yucatán Maya, Dr. Manuel May Castillo, has lead me to select the English translation.

The consultation that follows in the Chilam Balam is, in parts, taken from the text that in a *reportorio* accompanies the lists of Saint days for each month of the Julian/Gregorian calendar as I have copied it from another *reportorio* on page 86 (from another *reportorio*, but the Zaragoza 1495 reads the same). One similarity to what Doncella Teodora states is the phrase:

> "[…] no deues suffrir que se leuante el estomago dela mesa con sed."

Let's compare the month of June (Bricker & Miram, 2002: 244):

> "This is when what is called Cancer rules,
> In this sign.
> There appears one star:
> It is the Moon;
> And Monday is its name.
> Whoever will be born then,
> He is handsome.
> He has lust in his body.
> And I say also
> That no one will have sharp pains in his chest.
> And whatever is in his heart;
> Whatever is there in his liver,
> It is favorable for purging.
> He is very lazy too."

Andrés de Li, [Zaragoza 1495, f.119r, DelBrugge, 1999: 65]

> "Aqueste signo llamado Cancer es assignado ala luna. E entra el sol comunmente en aqueste signo a doze de junio, & quando entra elel primer grado son los dias de .xv. horas. & luego comiençan a menguar & mengua el dia dende que entra el sol en aqueste signo fasta que sale media hora. Es de natura de agua, & su qualidad es fria & humeda. E el que nasciere en aqueste signo sera hombre hermoso de cuerpo valiente & muy esforçado."

The month of September (Bricker & Miram, 2002: 245-246):

> "In this month of September,
> It is assigned to when Libra rules.
> And it is associated with its rule,
> Whose name is Venus.
> It is a major star.
> Whoever will be born then,
> He is very honest.
> He is very industrious
> And diligent.
> He is prudent.
> "When he is born,
> He has many friends also.
> And I say that here in this month,

Much is favorable.
It is not dangerous for bleeding.
However, great is the pain in a man's kidney
And his buttocks.
It is favorable for purging.
And this is the time for harvesting grapes."

De Li (Zaragoza 1495 f. 131r, DelBrugge, 1999: 78):

"En aqueste mes se acostumbran de venimiar las viñas & deues coger las huuas que quieres para alçar quando la luna es vieja & enla hora mas caliente del dia. En aqueste mes el sembrar los panes es maravilloso. La leche es muy prouechosa. Puedes te sangrar sin peligro. Mas las dolencias delos riñones & delas nalgas son muy dañosas."

Two conclusions can be drawn from the comparisons of the fragments above: first, that the text in the story of Doncella Teodora does not copy complete fragments from a *reportorio* by de Li; and, secondly, that the author has selected information from elsewhere that would have mattered most and reconstructed it into the knowledge that is Teodora's. For example, whether or not a month – or, better said, a Zodiac sign – was beneficial or negative for the practices of bloodletting and purging, was taken from a table that accompanies an image of Zodiac Man. This table lists the twelve Zodiac signs (each twice or three times) followed by either "good", "bad" or "indifferent" for purging and bloodletting.

The story of Doncella Teodora is one that has been appropriated and, in terms of Peter Burke's cultural translation, decontextualized and recontextualized. Alfonso X's objective meant that Arabic texts translated into Latin and Castilian were transformed in such a way that they confirmed to Christianity rather than to Islam. The earliest translation in Castilian thus omitted content aligned with Islamic religious, medicinal, and cultural traditions (Rivera & Rogers, 2000: x). According to Rivera and Rogers, the longevity of the story of Doncella Teodora was partly a result of its didactic characteristics. The *tz'ib* of the Chilam Balam texts worked in a period and in an intellectual sphere where there was a great interest in literary genres. It seems reasonable that the scribe or scribes of the Chilam Balam texts incorporated the story of Doncella Teodora to deliberately use the didactics of a Q&A, a tactic that would have been appreciated by Mayan speaking readers, to emphasize what was considered knowledge on an intellectual level. This knowledge was what had been united in a *reportorio*: astronomy and astrology.

3.6 Concluding remarks

My initial aim of this chapter was to analyze the differences between the manuscripts that incorporated the genre of the *reportorio* in Central and South Mexico and to try to establish, even if only in a preliminary way, possible scenarios for why they differed. My claim is that the Mayan texts include more references to calendrical and cosmographic indigenous worldview and medicinal and agricultural products. Furthermore, I was searching for evidence that would support the hypothesis that the active adaptation of *reportorios* to a Mayan cultural horizon was part of a stronger resistance to Spanish cultural and religious hegemony in the Yucatec peninsula than in Central Mexico. However, having had the time to let this idea linger, it seems more fruitful for the time being to find the commonality of texts within the small corpus of *reportorios* in indigenous languages. What I can conclude from having made an overview of all sources in indigenous languages, therefore, is that all include – in one way or another

– information from a Spanish almanac; and, thus, that none of them can be characterized as a *reportorio* proper.

The short *reportorio* as a handwritten appendix to a printed Doctrina Cristiana from 1553 is written alongside a *huehuetlatolli* or ritual speech for women who died during childbirth. Seemingly, these texts and the Doctrina Cristiana do not have much in common, especially considering the fact that the handwritten texts were a somewhat later addition to the printed text. There remains, then, the question why the *reportorio* was first translated and the *huehuetlatolli* first transcribed before being added to an already printed text. Pedro de Gante's work was used for missionaries teaching a certain group of indigenous Nahua peoples the pillars of Christian religion. The Doctrina Cristiana would have been read, narrated, and discussed in a context in which Spanish and Nahua speakers would have come together. This mixed readership is also present for the Codex Mexicanus, here we even speak of a hybrid document containing both alphabetic writing and indigenous pictographic writing. The *tlacuiloque* of Codex Mexicanus tried to unify indigenous and European calendar systems. The codex is a tangible reminder of how one version of indigenous history and the European worldview in a new Mesoamerican world were casted and captured at a single moment. Fonds Mexicain 381 illustrates how a translated *reportorio*, as said in the text itself, was taken by someone to be consulted. Therefore, we know that the *reportorios* were not just read and translated into local languages as pure documentation of literary genres from abroad. Alongside the *tlacuilo* of Fonds Mexicain 381, the *tlacuilo* of the *reportorio* of the Doctrina Cristiana altered the text where it would not make sense to a Mesoamerican reader. Codex Huichapan, although not abundant in its references to a Spanish almanac, broadens the range of indigenous languages in which the genre of the *reportorio* was known. This seems to suggest that the current corpus that we know of today was much larger at one point in time. The three books of Chilam Balam of Kaua, Ixil, and Chan Kah contain so much information derived from *reportorios* that they must be considered a focus for future research. It is not difficult for any of the above-mentioned texts to imagine a group of intellectual scribes from both a Spanish and indigenous descent discussing, interpreting, and translating texts and oral knowledge traditional to two parts of the world. These texts are examples of genuine human curiosity and interest in other individuals and other worldviews, while further demonstrating that people were searching for inspiration and attempting to construct a groundwork based upon what they had in common. This communality is what binds us, instead of dividing us.

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