

Narrative and Ritual in the Codex Borgia

A structural analysis of pages 29 to 46 of this
Postclassic Mexican manuscript

By Samantha Gerritse

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I. 1. Introduction

1.1 *General research problem*

Archaeologists often have to interpret imagery, as images are found almost everywhere in the archaeological record; for example on murals, ceramics and sculptures. Such imagery is of major importance for understanding past ways of life as it often shows human behaviour that is not directly visible in the material record. In that sense, the imagery can be used as a sort of frame of reference from which analogies can be drawn to interpret the archaeological material record. Furthermore, images often contain specific information on the worldview that the past people under study had, and studying them is therefore invaluable for the understanding of how and why people in the past acted the way they did, thereby forming a link between thought and behaviour. In archaeology of Mesoamerica the study and interpretation of such imagery seems to be an almost separate discipline. Throughout the years scholars have come to understand many aspects of Mesoamerican worldviews through these studies. However, many problems still remain, especially concerning the interpretation of images that have a highly religious content.

Generally, interpretations of imagery are made following the steps of iconography and iconology. These theories concern the following questions: what is the imagery about and what is the intended meaning given by the artist? (Van Straten 1994, 92). The iconological method was introduced by Erwin Panofsky in 1939, and included mainly three steps of analysis. These steps are (1) the description of the scene; (2) the identification of elements within the scene, and thereby placing it in a historical context; and (3) the analysis of cultural values and norms inherent in the scene (see Van Straten 1994). To be able to identify elements within the scene and to give them their appropriate meaning, Panofsky (1939, 11-12) argued that one should be or become familiar with the worldview of the culture under study. This is because the images are made from a specific view on the world (an ontology). However, this is problematic as archaeologists cannot ask the people under study anything. Therefore the interpretation of the imagery remains very difficult and subject to a lot of discussion. Various sources are needed in

order to be able to say something about the content of the imagery, because archaeologists only have scattered pieces of information.

For the interpretation of religious Mesoamerican pictography this is most problematic, as from the Spanish Conquest (A.D. 1521) onwards the Spanish have tried to dispose of the native religion and imposed their own religion, Christianity, on the native population. Practitioners of native rituals were punished and religious monuments and idols were destroyed. Furthermore, ritual manuscripts inherent to Mesoamerican life were burned in immense amounts. Only a handful of manuscripts has survived (Anders 1998, 1-4). This all has led to the disappearance of a tremendous amount of religious information in the archaeological record. Because of this, scholars gather most information about pre-colonial Mesoamerican religion from the chronicles that were written by Spanish friars and the documentation on 'heathen practices' written by priests. Works that are often cited are for example those from Sahagún, Durán, and Ruiz de Alarcón. Thus, in their attempt to reconstruct past religious life in Mesoamerica scholars rely mostly on such biased works of various Spanish monks and priests, who wanted to understand the ritual practices in order to efficiently dispose of them. This is then often compared with what is found archaeologically.

Because there is so little information left, interpretations of pictography are thus being made on the basis of scattered sources from different areas of Mesoamerica, and often this leads to great discussions amongst scholars. This thesis will focus on one of such cases: the interpretation process of pages 29 to 46 of the Codex Borgia, a religious manuscript used in Central Mexico in the Postclassic period (A.D. 1250-1521) (Boone 2007, 1-4; Hernández Sánchez 2005, 17).

1.2 *The Codex Borgia*

The Codex Borgia, also called Codex Yoalli Ehecatl (Jansen and Pérez Jiménez 2004, 270), is a codex (a folded pictorial manuscript) which was probably used as a divinatory guide. It is part of the so called Borgia Group, which consists of a number of religious codices, composed of the codices Borgia, Vaticanus B, Cospi, Fejérvàry-Mayer, Laud, Porfirio Díaz, and the manuscript Fonds Mexicain 20. These codices form a group because their contents all concern time cycles in relation to their spiritual meanings. At the base of this lies the ritual calendar of 260 days that provided information about life and death. Because of this content, these codices are also called books of fate. They describe among others what rituals should be carried out, where, and when, in order for people to

live a good life (Boone 2007, 2). Most of the Borgia Group codices are made of deerskin and are screen folded documents; however some exist only of one page and are made of *amate* paper (Byland 1993, xiv). The information in the manuscripts is provided through pictographic script. The Codex Borgia itself counts 39 folios, which, except for two of them, are painted on both sides. This results in 76 painted pages, each with a height and width of 27 cm (Figure 1). The two that are not painted form the outer pages, on which a cover was attached, probably of wood. It is assumed that to make the pages paintable it was covered with lime-plaster. In turn, the pictographs on it were painted with mineral and vegetable pigments (Byland 1993, xiii, vxi).



Figure 1. Facsimile of the Codex Borgia (www.facsimilefinder.com, accessed 26 April 2013)

The Borgia Group codices are named after their collector: Cardinal Stefano Borgia (1731-1804). For years his whole collection has been stored in the Apostolic Library of the Vatican in Rome, Italy (Byland 1993, xiv), where it still remains now. Where the codices initially came from, however, remains a mystery. The general consensus today about the Codex Borgia seems to be that it originates somewhere in the Puebla-Tlaxcala area, although some scholars even extend this to the Mixteca Alta in Oaxaca (Byland 1993, xiv) (Figure 2). This is mostly based on style analysis. The Codex Borgia is part of the Mixteca-Puebla style, which was an iconographic style that was widespread over Mexico, but which was used especially in Central Mexico (Hernández Sánchez 2005, 17). It can be argued that since the style and contents of the Codex Borgia are relatable to many of

the regions where they were encountered, the people of Central Mexico probably shared a religious and iconographic scheme and thus a variety of people would probably have valued the content of the Codex Borgia (Gerritse 2011, B.A. thesis).

Apart from where it was made, it is also unknown when it was made. The general consensus is that it was made before the Spaniards arrived (A.D. 1521), since no Spanish influence can be recognized in the manuscript. More specifically it is thought that it dates from the late fifteenth century (Byland 1993, xiv).



Figure 2. Indication of region of origin of the Codex Borgia (after www.mexconnect.com, accessed 26 April 2013)

Many studies have been done on the contents of the Codex Borgia. They all seem to agree that the Codex Borgia generally concerns the 260-day ritual calendar and the meanings of the specific days within this calendar round. These meanings were interpreted by diviners in order to make prognostications, or rather, to keep humans in harmony with the cosmos. For example, the codex contains an almanac that was used for the prognostication of a marriage, but it also contains almanacs for hunting, birth, influences of Venus, traveling, and so on (Anders, Jansen, and Reyes García 1993a). In

short, they are almanacs that deal with various things of everyday life. People would thus consult a diviner in various instances, for example when something bad happened, in order to know what to do to keep a balanced life (Boone 2007, 238).

1.3 Problems with pages 29 to 46 of the Codex Borgia

Although generally the codex contains the elements described above, in the middle of the manuscript there is an abrupt change. Here a sequence of 18 pages appears that stands out; these are the pages 29 to 46 (see Appendix 1). These pages differ from the rest of the codex because (1) they are rotated 90 degrees counter clockwise; (2) they have a different layout without red lines which would indicate how to 'read' it; (3) they contain much more elements and thus complex imagery; (4) they seem to be related to one another at first sight due to actors who seem to come from one page and move towards the next. This sequence of pages is considered to be unique in the limited corpus of pictorial manuscripts that have been preserved. The imagery on these pages is so different in form and layout when compared to the rest of the manuscript, but also in comparison to all the other writing styles known from codices, that it has been hard to understand how to read and interpret it. This has led scholars to interpret them in various ways, and thus far no consensus has been reached. This discussion and the interpretation process of pages 29 to 46 of the Codex Borgia are central to this thesis.

The pages 29 to 46 of the Codex Borgia have been the focus of interpretation efforts for already over a century, starting with the interpretation of Fábrega in 1899. Researchers have neither come to any consensus concerning the reading order nor the interpretation of the imagery. Some scholars argue that the pages in question show a narrative sequence in which actual historical events are told of, such as rituals to become king (Byland 1993). Others argue that the events presented form a (creation) myth (Boone 2007). Also, interpretations exist in which the importance of astronomy is emphasized (Fábrega 1899; Milbrath 1989; Seler 1906). Still others do not agree with the idea that the pages form a narrative and argue for prescriptions of separate rituals (Anders, Jansen, and Reyes García 1993a, Nowotny 1961). All in all, therefore, it is not clear what these pages are exactly about, what they were used for, and how they should be read.

A consensus is needed, however, as gaining further insights into the specific meanings and uses of the various almanacs, and making it also useful for interpreting the archaeological record, can only be accomplished when a clear interpretation about

their contents is agreed upon. A clear understanding of these pages is integral to a broad understanding of Postclassic Mesoamerican ritual life and conceptualizations. Pictorial manuscripts like the Codex Borgia are considered to have been of major importance during the Postclassic as they were used as guides for diviners in everyday life and in ritual life (Boone 2007, 238).

1.2 *Research aims and questions*

The debate about pages 29 to 46 of the Codex Borgia is chaotic. New interpretations keep being made, without any consensus being reached. Furthermore, many scholars provide almost no evaluation of previous interpretations. Therefore, it remains uncertain why certain interpretations are specifically considered invalid. This makes it impossible to discuss the practice of interpreting the Borgia pages. In that way a consensus will never be reached. So in general, there is no overview and it remains unclear what is actually known about the imagery and where the biggest issues of interpretation lie. One of the principal aims of this thesis, then, is to clear this up and to provide some new starting points to work from for future research. Secondly, a structural analysis will be made that is inherent to narratology, in order to aid in this evaluation process and to give some new insight for further interpretation efforts in the future. To make it all more concrete, the aims can be subdivided more specifically in the following three points:

1. To give an overview of the interpretations that have been made thus far.
2. To identify and discuss the specific problems in the interpretation process of pages 29 to 46; thereby providing suggestions for future lines of research.
3. To test if new insights in the structure (and thereby function) of the pages can be gained through the use of narratology in order to aid the process of interpretation.

The first two points thus aim at facilitating the interpretation process of these pages for future research, while following the last point the pages will be approached with a different perspective in order to gain some additional insights in the imagery. A narratological analysis will result in insights that may give extra support for certain interpretations that have been made earlier, or by which these interpretations can be evaluated further. In that sense it is expected that the narratological analysis will contribute to the iconographical analysis.

Regarding the aims presented above, the research questions of this thesis are thus the following:

1. What is known thus far of pages 29 to 46 of the Codex Borgia? What is the state of the art of the knowledge about the content of these pages? And, how have they been interpreted?
2. How did scholars come to the interpretations they made? Where do the problems of interpretation lie, and which lines should future research follow in order to deal with these problems?
3. To what extent can narratology aid in the interpretation process?

To answer these questions the thesis will be presented following multiple steps. First a little more background information will be given about Mesoamerican Religion in Chapter 2 in order to give some context to the discussion. Then the specific theories and methodology for this thesis will be presented in Chapters 3 and 4. Subsequently, an overview will be given of the interpretations that have been made of pages 29 to 46 of the Codex Borgia thus far, after which they can be thoroughly evaluated and discussed. This will be the subject of Chapter 5. In Chapter 6 the pages will be analysed using a narratological approach to gain some further insights into the pages and to provide a further discussion of the interpretations of the various scholars. The thesis will end with Chapter 7 in which the research questions will be answered with the gathered results. On the whole, this paper should be considered to be mainly preparatory work for future research on the religious symbolism inherent in pages 29 to 46 of the Codex Borgia.

2. Mesoamerican religion

Before I start with the analysis of pages 29 to 46 it is necessary to generally outline what is currently understood about Mesoamerican religion and ritual practices (more specifically of the Highlands of Central Mexico, where the codex was probably made).

2.1 Worldview

To understand the general Mesoamerican worldview one has to change one's minds significantly. In the Western world people are familiar with the religions that refer to one God, who created and controls everything according to his set rules. In Mesoamerica people did not conceptualize the workings of the world in that way. Everything the people encountered in their life was interconnected and no clear difference was made between, what in the Western world would be seen as, the natural and the supernatural (Trigger 2003, 411). Here, with something supernatural the following is meant: “[...] *some force beyond scientific understanding or the laws of nature*” (Oxford Dictionaries, oxforddictionaries.com).

Because the Codex Borgia probably comes from the Puebla-Tlaxcala area, and since this area had been inhabited mainly by Nahuatl speaking people in the Postclassic period, the ontology presented here will concern that of the Nahuas¹. It should be noted, however, that many concepts were shared among the people of Central Mexico, and their ontologies often overlapped to a great extent.

To be able to understand Nahua ontology two concepts need to be explained here: *teotl* and *teixiptla*, as they are considered to be the basic concepts from which their ontology is formed (Townsend 1979, 28). *Teotl* has often been interpreted by the Spaniards as “god”, “saint” or “demon”. However, although it is still a highly discussed concept, it may be explained better as some kind of impersonal force or power that is present everywhere; a numinous power (Townsend 1979, 28). It is part of the world itself and not a separate entity like God in Christianity, for example. Like Durán and Sahagún (two Spanish chroniclers) have described it, *teotl* configures and vivifies everything in the

¹ Among the Postclassic Nahua speaking people were for example the Aztecs, the Tlaxcalteca, and the Toltecs.

whole cosmos (Maffie 2010, 13). Considering this, everything in the cosmos is part of teotl. Therefore, it can be argued that teotl is more of a concept, rather than a specific entity or god. Maffie (2010, 13) argues that it is a concept of becoming.

A *teixiptla* is the physical representation or incarnation of teotl. Like Boone (1989, 4) argues:

"It describes the living humans who impersonate or personify the teotl during cult performances and rituals, the effigies of stone, wood, or dough, and the assemblages of ritual attire that might be arrayed on a frame (usually of wood)."

The *teixiptlas* thus make aspects of the teotl definable due to the attributes that these *teixiptlas* are given (Boone 1989, 4). Furthermore, there is no rank among these *teixiptlas*, because everything in the cosmos is part of the same force, the teotl (Townsend 1979, 28). The *teixiptlas* were often representations of natural forces (like rain and wind) who interacted with each other. They are, however, not gods, as they are often wrongly called, because they are not intermediaries between humans and the natural forces. They are rather representations and incarnations of the actual forces themselves, and these forces may merge (Townsend 1979, 28).

Often the attributes given to the natural forces are metaphorical; probably in order to make it depictable. For example, from Nahuatl poetry it is known that "the lake's water" is often described as "she of the jade skirt" or "Chalchiuhtlicue" in Nahuatl (Townsend 1979, 28), and this is directly depicted in the codices as a women with a jade skirt (Figure 3). Such metaphorical representations of the teotl make the interpretation process of religious pictography much more complex, and, of course, it makes understanding the ontology on itself really complex. A *teixiptla* may easily refer to various concepts, as everything in the cosmos is interwoven according to the Nahua ontology.

Nonetheless, even though these



Figure 3. Chalchiuhtlicue in the Codex Borbonicus (www.mexicolore.co.uk, accessed 13 June 2013)

natural forces can be merged, and thus actually no specific fixed representations existed, often specific attributes do happen to be depicted together. This has probably led scholars to argue that these combinations of attributes represent specific gods. I will use the word "god" or "deity" throughout the rest of this thesis as well, in order to prevent confusion, but also because there is no specific word that can be considered as fit which I can use here. Thus, I will use the word "god" or "deity" to refer to the a personified aspect of teotl that is described in a metaphoric sense, and which has certain attributes that often form a specific combination.

As teotl consisted of many aspects, a great variety of gods existed which related to natural phenomena such as rain, fire, the sun, and wind. Nicholson (1971) has assigned the majority of these deities to three thematic groups: those of celestial creativity and divine paternalism; those of rain, moisture, and agricultural fertility; and those of war, sacrifice, blood, and death. These deities were not always shown separately with their specific attributes; often they were mixed to show the various important forces in various contexts. Various attributes were thus shared (Trigger 2003, 430).

The major gods in Central Mexico played great roles in narratives about the cosmos and how they functioned in it. There was often told about the relationships between them, and between them and humans. These sacred narratives gave the gods their personalities and made it possible to identify them with human leaders, who had played a major role in history. Such a leader was, for example, the ruler of Tollan, a Toltec city. He was called Topiltzin Quetzalcoatl, like the major deity associated with creation, fertility, and the planet Venus (Trigger 2003, 420).

A lot of the deities had a connection with agriculture and with celestial bodies. This means that most of Mesoamerican ritual and belief was related to practical issues. A lot of the rituals focused on daily life with issues like fertility, health, and prosperity, while the overarching issue in Nahua religious activities was balance and harmony (Miller and Taube 1993, 28-30). The whole existence consisted of a cyclical motion of life, death, and rebirth. Everything in the cosmos was related to each other and should be kept in balance. To do so the people observed nature and acted according to how they interpreted it. As an example, for Nahuas sacrifice was of key importance to keep the cosmos in balance. Death was therefore also related to creation. This was not only on the behalf of humans, but also of the gods. These groups were dependent on each other to keep the cosmos as it was. In a distant past the gods had sacrificed themselves to make (human) life possible on earth. In turn, they needed the people to make sacrifices to

them, by means of ritual bloodletting or killing, so these gods could regain their powers that keep life possible. So this whole idea is based on the concept of retribution (Miller and Taube 1993, 28-30).

It is thought that the Nahuas considered the cosmos to consist of a multiplicity of layers. The earth was the one on which the people lived. Above the earth there were thirteen sky-layers in which the gods dwelled. The one directly above the earth was called Tlalocan, the realm of the rain deity Tlaloc. The second layer was the layer of the Sun and other celestial beings; and the uppermost layer was that of the creator couple Tonacatecuhtli and Tonacacihuatl (Miller and Taube 1993, 154). The nine layers of the underworld were situated directly below the earth. The last of them was called Mictlan, which was the home of the death deities Mictlantecuhtli and Mictlancihuatl. Most of the dead went to this place after having travelled through the dangerous eight layers above (Miller and Taube 1993, 178). Not all the dead went here however, as, for example, the people who drowned would go to Tlalocan.

Next to a vertical subdivision of the cosmos there was also a horizontal way of ordering the world. The cosmos was generally divided in five directions: the east, the west, the north, the south, and the centre. The centre also functioned as the vertical axis, or the *axis mundi*. Each direction had its own colour: yellow, red, blue, white, and black (although these colours could be different throughout Mesoamerica). Also each direction had its own specific gods (Trigger 2003, 447). Furthermore, world trees were of importance in these directions; they were embodiments of them. The tree in the centre, the *axis mundi*, had its roots in the underworld and its branches in the sky, through which it connected every layer in the cosmos (Miller and Taube 1993, 186).

It is thought that in Mesoamerica geographical features like caves and mountains often served as places of crossing between the layers of the cosmos, and therefore they were sacred places (Trigger 2003, 447-448). Furthermore, the ceremonial centres of Mesoamerican sites were often copies of the geography of the cosmos. For example, pyramids were seen as replications of mountains, and on these buildings rituals were carried out for the gods (Miller and Taube 1993, 28-30; 154). But not only on the pyramids rituals were performed. Other geographical features like the ones mentioned above were also places where various rituals were carried out. Thus, each location had its own significance.

2.2 Calendars

The various rituals that were carried out throughout the years had to be guided, and also largely performed, by priests and/or diviners, who had great knowledge of the workings of the cosmos. To a certain extent, this knowledge was also painted down in the religious codices like the Borgia group, of which it is thought that they were used by these priests as a guide. In these codices the calendar was of major importance. Boone (2007, 13) indicates:

“In Mesoamerica everything that happened and everything that mattered was bound together and controlled by time. Time, as it was organized and codified in the pan-Mesoamerican calendrical system, characterized and qualified all actions and happenings, just as it ordered and linked the present to the past and future”.

The people in Mesoamerica used a variety of calendric systems in very complex ways to keep time and follow the cycles of, for example, the sun, the moon, Venus, and rain. It should be mentioned, however, that there is not so much known about the practice of astronomy in the Central Mexican area. Most of the things that are known of the astronomy of pre-colonial Mexico comes from the Maya area. The Maya made calculations of astronomical cycles in their codices, but if the people in Central Mexico did the same is not known. We do know that two calendars were of importance in Central Mexico: the 260-day ritual count and the 365-day count. As interlocked cycles they controlled the ways of life, as will be explained in more depth later in this chapter. The 260-day count specifically was related to divination, as well as to the celebration of religious feasts pertaining to specific days (Miller and Taube 1993, 48, 606-607). This calendar associated days with particular qualities and attributes.

The 260-day count is also called the *tonalpohualli* in Nahuatl. The *tonalamatl* was the book in which the *tonalpohualli* was recorded (Miller and Taube 1993, 49). In this calendar the



Figure 4. Day signs (after Díaz and Rodgers 1993, 76-77)

basic counting system consisted of 20 day signs and 13 numbers. Each day carried a name of a number ranging from 1 to 13, and one of the 20 day signs (see Figure 4 for the day signs in sequence). These signs showed animals, plants, natural phenomena, and a house. The counting thus resulted in 1 Crocodile, 2 Wind, 3 House, 4 Lizard, and so on. After 260 days the names repeated and a new ritual year began (Boone 2007, 14-15). The 260-day period could be divided into *trecenas* (a Spanish word), which are periods of 13 days. Each *trecena* began with the number 1, and the first day and its characteristics controlled the whole *trecena*, together with one or two gods. So, each of the 20 day signs was related to a certain god (who served as the patron of that day) and/or with natural phenomena, depending on the qualities and attributes it carried. Also, each of the 20 day names was related to a particular direction (Miller and Taube 1993, 33, 49-50). It can thus be said that everything in the cosmos was interwoven into the calendar.

Because each day of the *tonalpohualli* had its own qualities and attributes, the *tonalamatl* was of major importance for diviners. They used the 260-day calendar as a guide to daily life, by searching for the characteristics of specific day signs and numbers, and by interpreting the meaning of them in relation to the context in which it was of importance (Miller and Taube 1993, 49). This knowledge helped the diviner in making his auguries, and to tell what kinds of offerings had to be made for which cause (Boone 2007, 2). Furthermore, specific days had an effect on the life of people, and among the Nahuas (as among many other people of Mesoamerica) it was common to name a person after his or her date of birth (which was a combination of a number and a day sign) (Miller and Taube 1993, 606-607).

As mentioned before, together with the *tonalpohualli* a 365-day calendar was used, which was called *xihuitl* (which means "year"). This calendar corresponds more or less to the solar year, but there are no leap years involved. The 365 days were divided in 18 periods of 20 days, and an extra 5 days at the end of the year. These days were seen as dangerous and therefore no rituals were carried out during this period (Boone 2007, 17). A period of twenty days is called a *veintena* (also a Spanish word) and each *veintena* had its own name and was linked to a number ranging from 1 to 20. Each year in the 365-day cycle had one of the *tonalpohualli* day signs as its name. The sign used for the year name was called a



Figure 5. Year-bearer signs (after Díaz and Rodgers 1993, 76-77)

year-bearer. Due to the conjunction of the two calendars, there were only four signs that could serve as a year-bearer. These were House, Rabbit, Reed, and Flint (Boone 2007, 17) (Figure 5).

The 260-day calendar and the 365-day calendar worked as interlocking cycles. This way, it took 52 years of 365 days to repeat an exact same date. Such a period of 52 days is called a calendar round. Period endings like these were of major importance in Mesoamerican ritual life. They were seen as markers of the ending of the present world and the creation of a new one (Miller and Taube 1993, 33). Creation and destruction, therefore, were seen as cyclical happenings. Such a happening, of course, required grand rituals. The Aztecs, for example, initiated a new calendar round by lighting the New Fire (Miller and Taube 1993, 50).

2.3 Priests and public rituals

Here I will refer to the public feasts of the Aztecs more specifically, as a lot has been recorded of them. It is known that most Aztec cities had a ceremonial centre; an area for religious activities filled with pyramids and various kinds of monuments which were centred around a big plaza, where crowds could gather for the ceremonies (Smith 2012, 225). In some places these sacred centres were walled off, like, for example, in Tenochtitlan. This gives the impression that the space was relatively restricted, although commoners could still be invited for ceremonies (Smith 2012, 225).

Various temples were erected for specific gods, and at these places sacred objects were kept and taken care of. Each of these gods had their own group of dedicated priests. Such priests were called *tlamacazqui* in Nahuatl (Smith 2012, 217). They had various types of duties, among which the performance of rituals (including making offerings), administration and caretaking of the temples and their sacred objects, and education and learning. The priests had to be trained in a specific school, a *calmecac*, which was in turn also led by priests. There they gained knowledge concerning the gods, the calendar, and various rituals, and they learned to use the sacred books (Smith 2012, 218-219). The students learned the sacred speech "*nahuallatlli*", through which priests spoke about the gods and forces. This way of speaking was very metaphoric in nature, and because of that the speech appeared to be very mysterious (Boone 2007, 4). This also relates well to the metaphoric way in which the natural forces were depicted in the codices, as explained above.

Priests wore their hair long, and there wore short tunics (Boone 2000, 46; Smith 2012, 219). Furthermore, Boone (2000, 46) tells that the priests dyed their faces and bodies black with some kind of ash application. Anders, Jansen, and Reyes García (1993a, 187) also indicate that priests made a hallucinatory ointment with which they smeared themselves in order to be able to communicate with the gods. This ointment was made of hallucinatory products like the seeds of *ololiuhqui*, which was mixed with various other products. At various occasions priests would use this ointment in their rituals. However, if this is the same kind of application that Boone implied is not sure.

Of the rituals that were performed a distinction can be made between those that were public and those that were performed more privately. Among the rituals of a private sphere are the divination practices, which will be the topic of the next subchapter. The rituals that were more public, and which were often performed in the ceremonial centre, were especially those of the 365-day calendar. During each of the 18 months a festival took place in which various gods were honoured. The whole population would then gather for worship (Trigger 2003, 510). Nine *venteinās* in the summer period were associated with agriculture, while the other nine *venteinās* of the winter period were generally associated with war (Trigger 2003, 509). For example, during the month *Toxcatl* (approximately between May 4 and 23), which was at the height of the dry season, various fertility rituals were performed for *Tezcatlipoca* in order to ask for rain. Sometimes human sacrifices were needed, and when this happened the victim-to-be was dressed as a deity impersonator, a *teixiptla*. This happened, for example, in *Tenochtitlan*, where the month *Toxcatl* ended with a ritual in which an impersonator of the deity *Tezcatlipoca* needed to be sacrificed. He was chosen by priests already year before the sacrifice. During his last month he was given four wives, who were symbolized fertility goddesses, and together they visited various part of the city. The *teixiptla* was eventually sacrificed on the top of the great pyramid, the *Templo Mayor*. This symbolically marked the end of the dry period (Smith 2012, 235-236).

Other specific public rituals were those that were related to period endings. Rituals were then performed to renew the cosmos. Often a New Fire Ceremony would take place during which the years were symbolically bound and a new fire was lit in order to start the new period. This was especially a great ceremony at the end of a 52-year cycle (Anders, Jansen, and Pérez Jiménez 1992, 33).

2.4 Divination

Rituals of the private sphere were mostly those based on divination. The practice of divination was important in order to keep people in a balanced life, and therefore it played a major role in daily life. Even Oxomoco and Cipactonal, the primordial ancestral couple, were often described as being diviners (see Figure 6) (Miller and Taube 1993, 79). They created the calendar and the various divinatory systems that were used in Central Mexico (Boone 2007, 24).

There were thus various divinatory techniques. Among them were the practices of casting maize kernels, reading a person's reflection in the water,

tying knots along a cord and then pulling them, measuring parts of the body with one's hand, interpreting dreams, and interpreting the appearance and actions of animals. The one that was used most, however, was the reading and interpretation of the *tonalpohualli* (Boone 2007, 27).

Most divinatory practices were thus based on the sacred calendar. As mentioned before, each day had its own symbolism, and each day had its own patrons. This was structured according to the ways divine forces governed nature and society. The structure of this symbolism permitted to make auguries, to interpret dreams and events, and to interpret which days were suited for certain rites (Anders and Jansen 1993, 31-32).

The eventual interpretation depended on the diviner's knowledge of the symbolic meaning of the depicted scenes (Byland 1993, xvi), as they were highly metaphoric. Using metaphors was essential in describing abstract concepts, and diviners learned to use them during their education at the *calmecac*. Through the metaphoric nature of the iconography in the codices various levels of meaning could be expressed, so a scene could hold various meanings (Boone 2007, 31-32). The specialists who could interpret this were called *tonalpouhqueh* (counters of the days).



Figure 6. Oxomoco and Cipactonal as diviners in the Codex Borbonicus (www.mexicolore.co.uk, accessed 14 June 2013)

Divination was often used for making auguries and diagnoses on an individual level as well as on a community level. For example, diviners were often asked to make prognostications of marriages, to tell the fate of a child, to diagnose an illness, or to find the cause of a death (Anders and Jansen 1993, 32). Various almanacs in the Codex Borgia (and the rest of the Borgia Group for that matter) are argued to be related to these practices, and they were used as guides for these divination practices. These almanacs are thus of a prescriptive nature (Anders and Jansen 1993, 34).

To give an idea of what is known of such almanacs, and in turn what the Codex Borgia mostly consists of, I will give an example here. Figure 7 shows a part of what is considered to be a marriage almanac (Anders, Jansen, and Reyes García 1993a, 309). In order to be able to make a prognostication of a marriage the numbers of the names of both individuals were added together. This could then result in any number from 2 to 26. Subsequently, each of these numbers has its own scene and this



Figure 7. A part of the marriage almanac on page 58 of the Codex Borgia (after Jansen, Anders, and Reyes García 1993a)

scene could be interpreted in multiple ways (Anders, Jansen, and Reyes García 1993a, 309). As an example, Anders, Jansen, and Reyes García identified a lot of symbolism in the first scene of Figure 7. The quetzal heads of the individuals, the strings of jewel which they eat, and the precious bowl indicate wealth. Furthermore, the child in the arm of the woman on the left shows they will have children. On the other hand, however, half of the sun at the top of the scene is filled with darkness, which would indicate doubt, insecurity, and danger (Anders, Jansen, and Reyes García 1993a, 320). Each of scenes in the almanac is filled with such symbolism, and subsequently it was up to the diviner to make the right prognostications.

Because the Codex Borgia is filled with almanacs like this one, with a great variety of themes pertaining to everyday life, it is considered to be mainly a divinatory

manuscript. What pages 29 to 46 were used for, however, is not that well understood. The contents do not seem to be of a mantic nature², as Nowotny argued (1976, 20), but what they present exactly is still under a lot of discussion. Therefore, still a lot more research needs to be done. In the following chapters these pages will form the centre of analysis.

² It is of divinatory nature.

3. Theoretical Framework

3.1 *Interpretation by analogy*

As Asselbergs (2004, 34) indicates, in the society we live in we share a context which lets us more easily understand the meaning of each other's words. As most of the general context of the period in which the Codex Borgia was made does not exist anymore we can only recover the meaning of the contents of the manuscript to a certain extent. Religious and ritualistic imagery, like in the Codex Borgia, may even be the hardest genre of imagery to interpret, as it is based on specific conceptualizations that cannot be recovered that easily from the archaeological record; a worldview remains largely in the head. In turn, the meaning of the imagery is not directly explained for archaeologists to understand. To be able to interpret these images then one must gain sufficient knowledge of the worldview of its makers, and in order to get to this knowledge we (have to) make use of a lot of different sources that may give some insights in this. Interpretations, therefore, are based almost completely on analogical reasoning. These analogies can come from everywhere; especially since Mesoamerican pictography has not only been a point of interest for archaeologists, but also for linguists, art historians, historians, and anthropologists. To understand the imagery each discipline uses its own theories, and every scholar uses various kinds of sources. Sources that are often used to draw analogies from are for example:

- Ethnography
- Historical/colonial sources
- Better understood iconography
- Archaeological materials
- Language

Certainly the use of analogies has its problems. One problem with interpreting past imagery is that analogies can often be drawn from a great variety of sources (as pointed out above) which may each provide different information. It is then up to the scholar to select which analogs are the best solutions (Ascher 1961, 322). In the best scenario the various approaches and sources would complement each other and form one strong

interpretation. However, for pages 29 to 46 of the Codex Borgia, this obviously did not happen. According to the link a scholar sees between the subject and a source, and the line of reasoning that goes along with it, the eventual interpretation can go in totally different directions. Unfortunately the correctness of these analogies cannot be tested as past behaviour is long gone (Johnson 2010, 62). However, that does not mean that there are no ways in which one can evaluate the *strength* of the analogy, or, in other words, its credibility. It does mean, on the other hand, that every analogy is based on subjective use of the materials and information at hand. That said it is very likely that scholars will find similarities more quickly with the subject he or she is familiar with and he or she will look for complementary sources to provide more background or links for the specific ideas that come up during interpretations. In most cases then, interpretations of pictography are, almost unavoidably, highly subjective to personal knowledge and ways of reasoning.

The Codex Borgia has its specific problems as well when it comes to creating analogies. For one there is a relative scarcity of information in the archaeological record, because many ritual items were destroyed. Secondly, as nothing has been found that can be directly correlated with these pages, interpretations will often be based on small similarities with various sources. This will even be more the case when considering that it is still not known where the Codex Borgia was made. All in all this scarcity of information has resulted in scholars making use of sources ranging from all over Mexico to interpret the Codex Borgia pages. This, in turn, has led them to create a great variety of interpretations.

In order to be able to reach a consensus about the content of the pages it is necessary to evaluate the arguments and analogies which have been made in the interpretations. This way it becomes more clear which points in the analysis give problems in the interpretation process and which interpretations are more credible or speculative. It should be noted, however, that the interpretations do not have to be mutually exclusive. It may be the case that the different approaches contain elements that complement each other. Whatever it may be, the evaluation of the analogies and arguments will give a clearer starting point for later research on the imagery. So, the questions then become the following: how can analogies be evaluated on the basis of strength (as they cannot be tested on correctness)? Which kinds of analogies are stronger than others, and why?

Scholars have made a distinction between various forms of analogies. The first is between the *formal analogy* and the *relational analogy*. A formal analogy is made when it is implied that two objects or situations have common properties and therefore may have other similarities as well (Johnson 2010, 63). A relational analogy is composed of

more additional arguments which show causal relations between what is being studied of the past with the ethnographic present. Thus, a relational analogy is often based on well-established theoretical knowledge about relations between the source and subject (Johnson 2010, 63). Because of this, these analogies are generally considered to be the strongest (Raemaekers 1999, 15).

Single formal analogies, which concern a similarity between things mostly on one aspect, are considered to be less strong as the similarities could be just a coincidence (Raemaekers 1999, 15). However, when more analogies seem to point in the same direction this might strengthen the analogical reasoning, especially when the relationship between these analogies is understood (Johnson 2010, 63). At that point, then, a relational analogy is created. With that it is also important to look at the extent to which the differences between the source and the subject are explained and understood (Wylie 2002, 150). So, the number of the analogies that point in the same direction, and the degree to which the relationship between them is understood, is indicative for the degree of validity of the interpretation. An addition to that is the extent to which the subject is similar to the source that it is related to. Also, the more similarities exist with what is known from a *range* of sources, the more credible the interpretation becomes (Shelley 2003, 67; Wylie 2002, 150). Nonetheless, the biggest informant of credibility is the line of reasoning through which these analogies are turned into arguments for a specific interpretation.

Apart from the formal and relational analogies, another distinction between kinds of analogies has been made: the direct historical approach and the general comparative approach (Raemaekers 1999, 15). Generally scholars consider the direct historical approach to be the stronger one of the two, as with this line of reasoning it is assumed that there exists a direct relation between the people of the past and people of the present (Raemaekers 1999, 15). In other words, it is assumed that there is cultural continuity. However, these analogies should be made with caution as well, as circumstances and ways of life might have changed drastically throughout the years even though some similarities might be found. With the general comparative approach it is not assumed that there is cultural continuity, but scholars who use this approach often look for similarities in certain contexts in the present in order to create analogies for past situations (Raemaekers 1999, 15).

So, in short, it is argued here that the credibility of the analogies is mostly based on the degree of similarity between two entities (in various aspects), the number of similarities

(from a range of sources), the relation between various analogies, and the line of reasoning that accompanies it. These are the points that will stand central in the analysis.

With the evaluation of the interpretations that have been made of pages 29 to 46 of the Codex Borgia the problems in the interpretation process will become more concrete and discussable. This will result in a critical overview of what is actually known about the contents thus far, and thereby an indication can be given of which points deserve more attention in future research. Adding to this, I will use the theory of narratology as a way to gain additional information from the pages which, in turn, may help in the further evaluation of the interpretations and to get a more concrete conclusion about what the pages 29 to 46 are likely to represent.

3.2 Interpretation by narratology

Interpretation by analogy is based on recognition of similarity between the subject and a source. These similarities eventually make up what is recognized in the imagery and how it is interpreted. With these analogies scholars try to interpret the *meaning* of the imagery. There are, however, also other ways in which one can approach the imagery; for example, one could question the *function* of the pages by looking at the way in which the imagery on the pages is structured. The way something is depicted has an effect on the perceiver(s) and to reach that effect and to make the pictographs understandable for others the painter had to have followed some conventions. The structure is thus informative for the eventual use of the imagery. Therefore, I believe that by asking questions about this structure, one can get new insights about the imagery. A theory that analyses such a structure is narratology, defined by Bal (2009, 3) as

"[...] the ensemble of theories of narratives, narrative texts, images, spectacles, events; cultural artifacts that 'tell a story'. Such a theory helps to understand, analyze, and evaluate narratives."

Although this theory is mostly used for alphabetic texts of which it is known that they contain stories (which could be present in the Codex Borgia as well, but could also not be) I believe it has various useful tools that can also be used in other kinds of texts and texts written in different media, as Bal indicates as well (2009, 3). Furthermore, I believe it might be especially useful for the pages of the Codex Borgia in order to determine if a narrative is present or not. In that way I will use the theory somewhat differently than what it is

mostly used for. But before I discuss how the theory may be useful for the Codex Borgia specifically it is first necessary to explain what the theory entails and what it is generally used for.

The theory of narratology holds that a text (a finite, structured whole composed of signs) is never created or perceived in isolation. It is always made in a certain context, for a certain purpose, and with a desired effect (Asselbergs 2004, 32; Bal 2009, 5). With narratology one tries to find these underlying messages and rhetoric of a narrative text. Questions that one tries to answer with this set of theories are for example (Asselbergs 2004, 17):

- Who made the document?
- In which context is it made?
- Who is the intended reader?
- With what purpose is it made?

To answer these questions narratologists use a variety of concepts. The most important ones will be explained here shortly and are the following: text, story, fabula, and focalization. According to Bal (2009, 5) a *narrative text* is any text in which a story is told, and this can be done through the use of various media like imagery, sound, or language. The text is thus the visible aspect of the narrative. The *story*, however, can only be perceived when one reads the text. Thus, the story is the content of the text. The *fabula* then, is a series of logically and chronologically related events; they follow certain logic: one event cannot happen without the other (Bal 2009, 7). In the story the fabula can be arranged in various ways, and does not have to be chronologically organized (Bal 2009, 8). The fabula, furthermore, consists of various elements: events, actors, time, and place. The selection of what is being told of and the way in which they are told about gives information about the way a message is transmitted to the reader (Bal 2009, 8-9).

Focalization is a term which refers to “*the placing of a point of view in a specific agent*” (Bal 2009, 77). The subject of focalization is called the focalizer. This is the agent from which the elements of a story are seen (Bal 2009, 149). Focalization is an important aspect in the study of narratives because it determines what information the reader gets, and this, in turn, may determine which meaning the reader will assign to the series of events (Bal 2009, 76-77). Focalization does not have to remain with the same agent throughout the story (Bal 2009, 28). Furthermore, it can be character-bound or external.

Character-bound focalization can also shift from one character to another. Because of all of this, it is important to know who focalizes what (Bal 2009, 153).

Considering what has been outlined above there are a few things that need to be pointed out here when we want to apply the theory to the Codex Borgia pages. The first thing is that the Codex Borgia contains text that is made up of pictographs. Surely this creates a whole different level of analysis than when an alphabetic text is studied. An alphabetic text is easier for us to understand and to interpret further than pictographs, as we are more used to this. Like Asselbergs (2004, 33) argues, the images that are used in Mesoamerican pictographic script have different characteristics than those of alphabetic words:

"[...] images can represent whole stories and have a magnetic power to attract other ideas to their sphere, whereas alphabetic words are often [...] more fixed in the message they communicate."

Furthermore, with a text written in depictions it must often first be established what is being displayed, before one can proceed to analyse the structure of it. After the interpretations of pages 29 to 46 of the Codex Borgia are discussed then, it depends on how much is identified in the pages to what extent narratology can be applied. On the other hand, one does not need to have an extensive deeper knowledge of the *meaning* of the imagery in order to be able to say something about the function, as narratological analysis focuses more on how aspects are depicted and arranged.

Secondly, although there are some books and articles about the use of narratology in films, there is almost no theory on how narratology can be used for static pictography that does not make use of any form of text or sound. Because of that the analysis of narratology in the Codex Borgia is relatively limited in scope, and therefore my aim here is to examine *to what extent* narratology can be applied on its religious pictography. Asselbergs (2004) is one of the few who has used narratology for an interpretation of a pictographic narrative, and it is her work that seems to be most useful as a point of reference for the analysis of the Borgia pages. However, it should be noted that her work contained a narratological analysis of a historical narrative, of which she had already interpreted the contents. Nonetheless, her methodology seems to be useful in case of pages 29 to 46 of the Codex Borgia as well.

Asselbergs mainly examined the elements of a fabula and their arrangement, the choice of elements to be depicted, the emphasis put on certain elements, and the traits that are given to the characters, as they are informative for the narrative structure (Asselbergs 2004, 32). For example, the size, position, and repetition of each scene is important in recognizing the emphasis put on the scenes. The depiction of roads or ground lines, or even the direction most faces point, may help to recognize the reading order. The identification of relationships among the scenes, their internal hierarchy, and the graphic links, thus, makes it possible to understand the narrative structure (Asselbergs 2004, 32). I believe that, of course to a certain extent, this focus can be applied to the Codex Borgia pages 29 to 46 as well. However, instead of using it specifically to analyse how a narrative is structured I will use it to indicate *if* a narrative is presented on the pages. As the theory concerns how elements like actors, events, time, and space are all linked in one narrative, it also gives a starting point for indicating if a narrative is actually present or not. For example, within a narrative a form of sequentiality is expected, in which events are connected to one another (Bal 2009, 10). Another example of an indicator for a narrative is that actors are turned into characters through to specific attributes given to them. In that sense they become individuals (Bal 2009, 112). Thus by focusing on these aspects, a narratological analysis may give insights into what is presented and what that indicates for the function of the pages.

So, to make it all more concrete, I will analyse the structure of pages 29 to 46 of the Codex Borgia by examining the structure of the imagery on the basis of the arrangement of actors, events, time, and space and their relationship as well within scenes as between scenes. Furthermore, focalization may give insight in what the codex was used for as it indicates who focalizes and what is focalized, giving a certain emphasis on specific aspects. I have chosen these elements because Asselbergs (2004) has already examined their usefulness in analysing pictography (although for a historical narrative), and she has shown their value in the whole interpretation process.

Of course, the approach of narratology is subjective as it is a layer of analysis put over that of the analogies. This is what makes the narratological analysis of pictographic script much more complex: for a large part it needs to be understood what the images show before they can be evaluated further. Nonetheless, for the narratological analysis not everything has to be understood in that much depth in order to say something new. Some aspects can still be analysed to some extent because they do not necessarily require an understanding of the deeper meaning of the imagery. By using a theory that

approaches the matter from another perspective new questions can be raised which can be analysed and which in turn may provide new food for thought.

4. Methodology

4.1 *Analysis of the interpretations*

The Codex Borgia pages 29 to 46 have been subject to a big interpretational discussion for already more than a century. Many interpretations have been made, of which some concern the whole sequence of pages, while others only point at various elements. As not all these interpretations can be analysed here a choice had to be made between them. This choice is made on the basis of differing perspectives and all-over interpretation, and some on the basis of their infamous status. This does not mean, however, that other interpretations are not worth analysing. However, to analyse everything that has been said about the pages would require more time and space for research. Here then, eight interpretations will be analysed to show how interpretations have advanced throughout the years, and to see how there is being argued by a variety of scholars. The theories in question are from Fábrega (1899), Seler (1906; 1963), Nowotny (1961; 1976), Milbrath (1989), Anders, Jansen, and Reyes García (1993a), Byland (1993), Boone (2007), and Batalla Rosado (2008). Among them are archaeologists, anthropologists, art historians, ethno-linguists, and historians. It is expected that each of them worked from a somewhat different perspective and has a different way of arguing.

The interpretations mentioned above will first be summarized to give an overview of what has been said about the pages 29 to 46 of the Codex Borgia thus far. Each sub-chapter on an interpretation will start with some background information of each scholar in order to reach a better understanding of their line of reasoning. After that a summary will be presented of the general all-over interpretation given of the pages together with the general lines of argument for the interpretation in question. Subsequently more detailed interpretations per page will be provided, in order to be able to compare the interpretations with one another more specifically afterwards.

When this overview has been created the interpretations can be evaluated in more detail. The arguments and analogies for the interpretations will be analysed on the basis of strength and credibility in order to give an idea of what is actually known about these pages, and to point out specific issues that need more attention in future research. This analysis will be based on the following points:

1. Whether the interpretation is based on formal and/or relational analogies.
2. Whether the analogies are based on a direct historical approach or general comparative approach.
3. The amount and range of sources that have been pointed out to show similarities with the imagery.
4. The coherency of the various analogies in relation to the interpretations.
5. The extent of similarity between the subject and source.
6. The line of reasoning that accompanies the analogies.
7. The explanation of the differences that one sees between the source of information and the imagery on pages 29 to 46.

Especially the last two points are important as they determine in which way the analogies are fit into a certain interpretation and how a coherent interpretation is being made.

After this evaluation the interpretations will be compared to see where they overlap or contradict each other. In this way it will become clear where the major differences in interpretations lie, and thus what the problems of interpretation are. Subsequently, some recommendations will be given regarding in what way future research should continue in order to overcome these problems; of course to the extent in which this is possible. The results of this analysis will also provide some starting points to work from with the theory of narratology.

4.2 *Analysis through narratology*

The aim of narratological analysis is to gain some insights into the function of the pages. To do this various foci of narrative theory will be taken out for the analysis of pages 29 to 46 of the Codex Borgia. However, to a certain extent it will depend on the results of the evaluation of the interpretations what can be said through the lens of narratology. Still, it is expected that enough can be said to at least draw some new conclusions or to ask some new questions on which future research can be built. This is because some elements can be analysed without a specific deeper knowledge of the meaning of the imagery. For example, the time indicators, the places and actors, and the sequentiality between scenes can be analysed on the basis of how the images are arranged. It is expected then that the use of narrative theory will help to evaluate the narrative/ritual debate, to give insights in the function of the pages, and to aid in the discussion of interpretation.

Narratology works by asking relevant questions which will be answered by looking at the text; a text which in this case is built up out of images. Answering these questions, then, relies on what is being recognized in the imagery, and therefore it must be noted that narratology is also a subjective enterprise. Aspects that will be of importance in the narratological analysis of the pages are space, time, events, and actors. It should be noted that even though these elements will be separated to some extent in the analysis, these elements are interrelated in the whole structure of the pages. They will be analysed separately mainly to provide for a structural analysis, but I will also look at their interrelationship in order to come to new insights in the function of the pages.

The events and actors will be taken together in the analysis to some extent as I will look at the relationship between certain actions and the actors that perform them in order to recognize the function that each figure has in the scenes; the actions of the actor may give the actor some qualifications (Bal 2009, 131). Furthermore, I will look at who the main actors are and what the roles of various figures in the scenes seem to be. Main characters may be recognized on the basis of their repetitiveness or size in the scenes, as this indicates emphasis and thus importance (Bal 2009, 132). If it is possible to determine the relationship between actors this may also give an indication as to what the relationship towards the reader is.

Specifically about the events the following questions will be asked: what kinds of events are presented and do the events follow a certain line or theme? Are they linked to one another, and if so, how? The relation between events can be based on various things; for example on the basis of time (or logic of events), the locations in which they occur, and the re-occurrence of certain actors (Bal 2009, 200-202). This is indicative of the structure of the series of events (Bal 2009, 194).

For the element of space I will look into the emphasis that is given to each environment or building, which can become apparent through frequent appearance or large representation in the scenes, but also through the function that places have within the events. This might indicate which kind of environment is important for which act and how the scenes may be related to one another.

On the subject of time the analysis will focus on how time is structured across the pages and how this is related to one another. So, is there a time span presented? Are there specific dates mentioned and, if so, how are the dates related to one another? This might indicate whether the scenes are ordered chronologically or if there is something else going on. It is therefore also an indicator for the presence of a more strict sequence

of events or separate rituals; or better said it shows the extent to which the sequence of pages can be considered a narrative.

Furthermore, the aspect of focalization is relevant for the pages. Questions of interest that will be discussed are: What is focalized? What is depicted, and (if possible to answer) what is not? And what does that mean? Does the reader know what the characters are thinking or can he or she perceive only their external actions? Thus, is the focalization character-bound or external? This will be answered by looking at how the actors are depicted.

Based on the results of these questions together I will eventually look at the overall structure of the scenes and this will be discussed in relation to the problems and disagreements in the interpretations that have been pointed out earlier, in order to provide new conclusions about the pages.

II. 5. Iconographical interpretations of pages 29 to 46

5.1 An overview

In the first part of this chapter an overview will be created of the interpretations of Fábrega (1899), Seler (1906; 1963), Milbrath (1989), Nowotny (1961; 1976), Anders, Jansen, and Reyes García (1993a), Byland (1993), Boone (2007), and Batalla Rosado (2008). Although this will generally follow a chronological order, this is not the point of departure for this overview. The idea is to put the interpretations together that seem to follow a similar line of reasoning. I have chosen to present it in this order to make the paradigms more clear, as they are the ones that will be discussed in the second part of this chapter.



Figure 8. The strip goddess (after Batalla Rosado 2008, 436)

During the explanation of the interpretations I will refer to the long figure at the border of a few pages as the strip goddess (Figure 8), as it is clear that it is a woman (due to the skirt, and the band of cotton in her hair), but it is not necessarily clear whom she must be identified as. Furthermore, various names of gods will be given during the interpretations. For more specific information about these gods, as background information, Appendix 2 may be consulted.

Some symbols needs to be explained beforehand, as to make clear what is meant. The interpretation of these symbols has already been agreed upon earlier. One such symbol is the star, which is often painted in two ways. Both can be seen in Figure 4 (the red and white circles and the more complex sign). When it is combined with a dark band (like in Figure 9) it

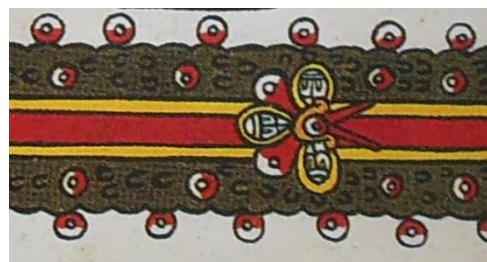


Figure 9. A part of the band of darkness and stars of page 31 of the Codex Borgia (after Díaz and Rodgers 1993, 47)

often represents darkness. Another symbol that is often mentioned is the *chalchihuitl* (Figure 10). This is generally explained as a big jewel. Furthermore, Figure 11 shows what is considered to be a heart, and Figure 12 shows the convention of a flint knife.



Figure 10. A *chalchihuitl* (after Díaz and Rodgers 1993, 43)



Figure 11. A heart (after Díaz and Rodgers 1993, 49)



Figure 12. A flint knife (after Díaz and Rodgers 1993, 46)



Figure 13. Stripe Eye (after Díaz and Rodgers 1993, 42)

Apart from this, there is also one figure which needs to be pointed out beforehand, as he is not necessarily interpreted as a god. This figure is often called Stripe Eye in the interpretations. Who he is is still a point of discussion. This actor is seen in Figure 13.

5.1.1 Fábrega (1899)

Biography

José Lino Fábrega, born in 1746 in Tegucigalpa, Honduras, was one of the first researchers who was interested in the meaning of the imagery in the Codex Borgia. He was a Jesuit who entered his novitiate in 1766, and the college of Tepotzotlan in 1767. However, like many other Jesuits he eventually got suppressed and exiled. Nine years later he was ordained priest in Italy, where he got the shelter and protection of Cardinal Borgia. It is by his collection that Fábrega got connected with the antiquities of Mesoamerica, among which the Borgia Group codices. Since then, Fábrega dedicated himself to the study of these antiquities. At the 20th of May 1797 Fábrega passed away in Italy (Anders, Jansen, and Reyes García 1993a, 18).

Because Fábrega was the one who had access to the Borgia Group codices he was the first to make an interpretation of them. During Fábrega's time, however, there was not so much known about Mesoamerican religion. He and Francisco Xavier Clavigero were two people who really got into this material at that time. Clavigero gave an overview of Mexican culture, and Fábrega focused on the interpretation of the codices. During his work Fábrega had figured out that the manuscripts of the Borgia Group mainly have a religious content (Anders 1998, 13-14).

As for his interpretation of the Codex Borgia he mainly used the Codex Vaticanus A which was accompanied by an Italian text that explained the images. By way of comparison he got some insights in the Codex Borgia, but also in Mesoamerican religion in general (Anders, Jansen, and Reyes García 1993a, 43). For the pages 29 to 46, however, he had nothing similar to compare with.

Fábrega seemed to have had a linguistic interest in Nahuatl as he gives various Nahuatl names to the figures presented (León-Portilla 1988, 127). Furthermore, he also had an interest in astronomy, and he thought that the Borgia pages 29 to 46 contained astronomical meaning (Anders, Jansen, and Reyes García 1993, 34). However, as he claimed not to be an expert in Mesoamerican astronomy (Fábrega 1899, 140) his interpretation remained largely descriptive.

Interpretation of the Borgia pages

Fábrega's general idea about the pages 29 to 46 is that they show 18 zodiac signs, as he thinks that the pages are linked to the sun's path (*tonalotli*) which is divided in 18 parts

(months), of which each part is related to a celestial sign (Fábrega 1899, 140). He comes up with this idea because there are exactly 18 pages in the Borgia sequence. The zodiac signs themselves hold specific meanings which Fábrega, as he argued, could not decipher (1899, 140). Once in a while he identifies a character in the scenes, but he remains very superficial in every case. The characters which he identifies (which are mostly the central figures in the scene) also lead him to the name-giving of the zodiac signs. An overview of Fábrega's interpretation can be seen in Table 1, in which the names of the zodiac signs, and thus the main figure, are underlined. However, these names are in some cases given by himself on the basis of what the figures look like, and these cases are therefore not included in Appendix 2. In these instances a translation is provided between brackets. Next to the interpretation the periods are indicated in which Fábrega thought these zodiac signs were important. The dotted underlining implies that these parts lack interpretation. The descriptions of the pages are left out.

Table 1. Interpretation of Fábrega (1899, 140-194)

Page	Interpretation	Period
29	The 1st zodiac sign : <u>Tezauhteuh-oquiyocoxqui</u> , the creator of all things. He is accompanied by Mictlanteuctli.	20 March – 8 April
30	The 2nd zodiac sign : <u>Ollintonatiuh</u> (movement of the sun). In the company of Mictlanteuhcihua (woman of Mictlan, the underworld). The Sun with the four directions and seasons stands central. Lower right: autumn; upper right: winter; upper left: spring; lower left: summer.	2 April – 29 April
31	The 3rd zodiac sign : The right: <u>Tlacolteuhcihua</u> or Lady of Impurity, in company of Mictlanteuctli. The left: <u>Mixcohuatl</u> (Cloud Serpent) accompanied by Mictlanteuhcihua. They represent the same zodiac sign.	30 April – 19 May
32	The 4th zodiac sign : <u>Teuhtecpatl</u> or Lord of Flint	20 May – 8 June
33	The 5th zodiac sign : <u>Quetzalcoatl</u> A heart sacrifice is performed and the heart is received by Quetzalcoatl in the temple.	9 June – 29 June
34	The 6th zodiac sign : <u>Tlacaocelotl</u> (Jaguar Man) or <u>Huehuecoyotl</u> (Old Coyote) A heart sacrifice is performed and the heart is received by two women dressed as Mictlanteuhcihua. A fire is drilled, of which a virgule moves towards Tlacaocelotl in the temple.	30 June – 19 July

35	The 7th zodiac sign: <u>Tezcatlipoca</u> or <u>Teuhcipactli</u> (Divine Crocodile) Self-sacrifice by Quetzalcoatl to the god in the four corners. The rest represents a journey in which Quetzalcoatl obtains an (unidentified) object.	20 July – 8 August
36	The 8th zodiac sign: <u>Citlalicue</u> From the obtained object virgules arise. One person journeys through the Milky Way (at the border of the page), which is shown with 18 symbols of the zodiac sign.	9 August – 28 August
37	The 9th zodiac sign: <u>Piltzinteuctli</u> (Young Prince), accompanied by Tlacaocelotl or Tlatocaxolotli.	29 August – 17 September
38	The 10th zodiac sign: ??	18 September – 7 October
39	The 11th zodiac sign: <u>Tonatiuh</u> During this period the Mexicans commemorated the creation of the sun and the moon.	8 October – 27 October
40	The 12th zodiac sign: <u>Cipactli and Cihuacoatl</u> During this period the Mexicans commemorated the animation of the first man: a sort of Adam. Below his female companion gives birth in a ball court.	28 October – 16 November
41	The 13th zodiac sign: <u>Tlacanexquimilli</u> (Ghost; related to Tezcatlipoca), accompanied by Tlacolteucihua	17 November – 6 December
42	The 14th zodiac sign: <u>Tlacanexquimilli</u>	7 December – 26 December
43	The 15th zodiac sign: <u>Tlacaocelotl</u>	27 December - 15 January
44	The 16th zodiac sign: <u>Xochitl</u> (Flower), the first woman	16 January – 4 February
45	The 17th zodiac sign: <u>Mictlanteuctli</u> , Lord of the underworld and the dead.	5 February – 24 February
46	The 18th zodiac sign: <u>Tlefl</u> or <u>Xiuhteuctli</u> , the fire and lord of the fire and the year.	25 February – 15 March

5.1.2 Seler (1906; 1963)

Biography

Eduard Georg Seler (1849-1922), born in Crossen an der Oder, East Prussia, is considered the founder of Mexican and Amerindian studies in Germany, being mostly renowned for his interpretations of pre-colonial Mesoamerican manuscripts (Nicholson 1973, 348). He did not start as an Americanist as he began with a study in natural sciences at the University of Breslau with a special interest in botany. His study was interrupted in 1870-1871 by the Franco-Prussian War during which he had to take up military service. After his service he continued his studies at the University of Berlin. When he finished in 1875 he became a teacher at the Berlin Dorotheenstädtischen Real-gymnasium until 1877, at which time he had to quit out of poor health (Nicholson 1973, 348-349).

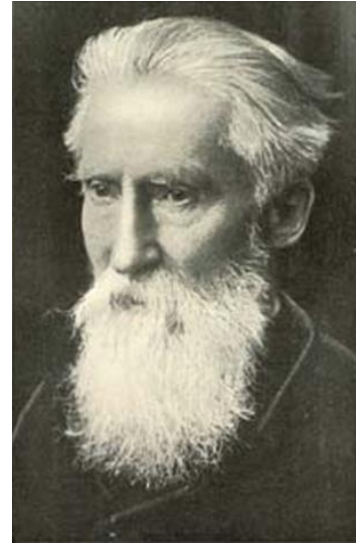


Figure 14. Eduard Seler (1849-1922), (www.germananthropology.com, accessed 12 January

Seler eventually started studying again in Trieste and Berlin in the field of Indo-Germanic languages, comparative linguistics, ethnography, and archaeology, through which his interest in Middle and South America grew. In 1884 he joined Adolf Bastian and others in the creation of a new Ethnology Museum: the *Königliche Museum für Völkerkunde*. He started working there as an assistant and eventually became the head of the American Division (Nicholson 1973, 349).

During this time he married Caecilie Sachs, who would accompany and assist him during all his later travels and researches. Before he started his travels he had published several papers on languages and religion of the Americas, with a special focus on Maya writing systems. He entered Mayanist research and worked together with two other German scholars and well-known Mayanists Ernst Förstemann and Paul Schellhas (Nicholson 1973, 349-350). In 1887 he also published his seminal work on the Borgia Group codices and he undertook his first travel to Mexico where he studied sites and extensive collections of artefacts (Nicholson 1973, 350-351).

During his presence at the Seventh International Congress of Americanists in Berlin in 1888 Seler presented his interpretation of the *Tonalamatl Aubin*, a calendric-divinatory manuscript, which was his first extensive and successful interpretation of a pictorial

divinatory manuscript from Central Mexico. One of his subsequent achievements concerned his translations of and commentaries on Nahuatl texts collected by the Spanish friar Sahagún. Seler had worked on this until his death, after which his wife continued publishing some texts that he wasn't able to finish (Nicholson 1973, 351, 354).

In the 1890s Seler became close friends with Joseph Florimond, Duc de Loubat, who financed Seler's travels to Mexico and Guatemala in 1895-1897. Furthermore he provided him a position as professor in American studies at the University of Berlin in 1899, and financed the publication of Seler's thorough commentaries on the Tonalamatl Aubin, the codices Fejérvàry-Mayer, Vaticanus B, and Borgia. He also financed the production of facsimiles of these manuscripts and the English translations of Seler's commentaries on the first three manuscripts. These works are considered Seler's most influential contribution to the field of Mesoamerican studies, and his work is still used by many scholars up to this day (Nicholson 1973, 353).

Between 1887 and 1910 Seler went to Mexico six times, during which he often attended scientific conferences. During his expeditions he studied archaeological sites and museum collections together with his wife. He has written many commentaries on these studies. Together they also assembled botanical and archaeological collections for the museum in Berlin. His collections also included numerous photographs, illustrations, newspaper clippings, drawings, sketches, copies of codices, and large-size rubbings, which he assembled with his wife. He also kept a collection of his papers containing around a thousand cards with words from thirty-eight indigenous languages (of which the most were Nahuatl) (Ibero-Amerikanisches Institut, www.iai.spk-berlin.de). He wrote many papers on this, and thereby he was the first to translate Native American texts into European languages (Nicholson 1973, 351).

In 1911 various scholars who had participated in the Seventeenth International Congress of Americanists in Mexico City together established the International School of American Archaeology and Ethnology, of which Seler was appointed its first director. In 1912 the Selers attended the Congress of Americanists for the last time before the First World War started. Throughout and after the First World War Seler continued his studies. Eventually he died of his health problems in 1922 (Nicholson 1973, 355).

Throughout his Mesoamerican studies one of Seler's focuses had thus been the pre-colonial Mesoamerican codices. Due to his immense research in Mexico and his research methods he was able to say a great deal more about the contents of the Codex Borgia than Fábrega could before him. He identified many figures and these

identifications are often still used today. Furthermore, he had knowledge of many Mesoamerican languages, and studied religious texts, archaeological sites, and museum collections. So, for his work he had done extensive research and this was a major contribution for Mesoamerican studies.

Nevertheless, many of his interpretations were influenced by a particular interest in his time: astronomical mythology. During Seler's time various clay tablets were found in the Mesopotamian area with an astronomical mythological content, which increased the interest of scholars in astronomical mythology. Anders, Jansen, and Reyes García (1993a, 46) mention that Seler made various analogies from such Babylonian texts for his interpretation of pages 29 to 46 of the Codex Borgia. One text specifically tells of a journey through the underworld which was undertaken by the goddess Ishtar (see Figure 10), which is very similar to how Seler interpreted pages 29 to 46 of the Codex Borgia: as the travel of Venus through the underworld. Seler does not mention that he used this specifically in his texts, but these tablets did increase the interest in astronomical mythology for various scholars, which was already a hot topic, and it is clear in Seler's interpretation that his interest goes towards this astronomical mythology as well.

Also closer to his area of research, in 1880 Ernst Förstemann published his identifications of the Venus tables of the Maya Codex Dresden which contained calculations of the movement of Venus. Next to that, in 1904 Paul Schellhas identified the glyphs associated with the deities in the Codex Dresden (McKillop 2004, 296). So, it is actually not that surprising that Seler focused on astronomical indicators as well, as it was a great interest of his time. Probably Seler was influenced by all these discoveries. In any case, it is clear that Seler believed that the Mexican codices were full of myths that were related to astronomy, and he started searching for astronomical indicators in the iconography in order to support his hypothesis. This approach has been refuted in later years, and constituted the failure of a part of his career, especially since he used it to interpret the Mixtec codices which have otherwise always been interpreted as historical (Nicholson 1973, 353-354).



Figure 15. Mesopotamian clay tablet telling of the descend of Ishtar into the underworld (www.britishmuseum.org, accessed 26 March 2013)

As for the Codex Borgia pages, however, his general identifications of the iconography are still conceived to be correct by many scholars. It is mostly his astralistic interpretations of the pages that have been declared obsolete over time. Eventually Nowotny corrected various parts of Seler's interpretations of the Codex Borgia in 1961.

Interpretation of the Borgia pages

Seler's commentary on the Codex Borgia, written between 1904 and 1909, was so extensive that he eclipsed the work of Fábrega before him. Fábrega's (1899) work, therefore, did not receive any attention anymore and became almost forgotten. Seler himself only mentioned Fábrega's work shortly, but he did not refer to his work anywhere during his interpretation or gave any opinion about it. Due to Seler's extensive and in-depth commentary on the Codex Borgia, his work has eventually been referred to the most throughout the years; even up until now, although his interpretations were declared obsolete by Nowotny (1961) and others already in the 1960's. In 1963 a Spanish translation was published which resulted in the re-use of Seler's interpretations in various researches. This was two years after Nowotny published his corrections of Seler's interpretations in his book *Tlacuilolli*. However, Nowotny's commentary was written in German, like Seler's first publication. Therefore, Seler's ideas were picked up faster and many scholars who could not read German missed out on Nowotny's corrections.

Seler (1906, 1-75) interpreted pages 29 to 46 of the Codex Borgia as the travel of Venus through the Underworld. He based this mainly on: (1) the frequent appearance of a figure (or figures) which he interpreted as Quetzalcoatl; (2) the continuity between the pages through the personages that seemingly move through the body of the strip goddess to the next scene; (3) and especially the myth of the Toltec leader Quetzalcoatl, who sacrificed himself to become the Morning Star: the planet Venus. This sacrifice is what Seler believes the sequence of pages starts with. Overall, Seler believes that the imagery concerns the 584-day cycle of Venus.

According to Seler (1906, 16) the Quetzalcoatl in the Codex Borgia represents Venus as he often has fire hair, or the hair of stars (yellow with two protruding tufts), which makes him a



Figure 16. Quetzalcoatl with stellar hair (after www.famsi.org, accessed 2 April 2013)



Figure 17. Venus in Codex Borgia page 33 (after, www.famsi.org, accessed 2 April 2013)

stellar being (Figure 16). Furthermore, his headdress contains a star and he often has quincunx face paint (see for example Figure 17) which is related to Venus. Therefore, Seler argues that the main figure in the sequence is indeed Venus. Subsequently, he interprets the pages as follows: the first page (29) of the sequence depicts the death of the Morning star, as told in the Toltec myth, which is followed by the travel of Venus through the underworld towards the west. At the end of page 32 he appears again as the Evening Star in the west. The following six pages (33-38) represent the travel of Venus through the Evening Sky. Pages 39 and 40 show his entrance in the earth in the west. This is then followed by four pages (41-44) that show the disappearance of Venus in the underworld and its journey to the east. The last two pages show the re-appearance of Venus in the east in combination with the rise of the Sun (Seler 1906, 2).

Seler is very specific in his work, trying to explain all of the iconography and binding his arguments into an all-encompassing interpretation. However, his interpretations are forced as he works with a predetermined mind-set on what the pages should present. Some interpretations are therefore farfetched and often do not seem to be very coherent. For example, Venus appears in many forms, and a figure is even interpreted as being Venus even though he has the appearance and characteristics of the Moon or Sun god. Figure 18 shows the various personages that Seler has named Venus. Table 2 shows more specific interpretations that Seler gave of the pages. The phases he ascribes to Venus are shown, indicated by ES or MS (Evening Star or Morning Star-phase).



Figure 18. Various figures interpreted as Quetzalcoatl by Seler (after Díaz and Rodgers 1993, 33-49)

Table 2. Interpretation of Seler (1906, 1-75)

Page	Interpretation	Phase
29	Death of the Morning Star on the mythical day 1 Reed. The ashes of the dead god Quetzalcoatl (the Morning Star) disperse from a vase in the middle of the underworld. His soul leaves the place as intertwined wind serpents.	MS
30	The big jewel (<i>chalchihuitl</i>) in the middle is the heart of Quetzalcoatl, which contains his soul (the intertwined serpents). This soul moves through the east, which is indicated by the Tlaloc-figures with plants on their backs. The soul then again leaves the place.	MS
31	<u>Right:</u> It appears again in the west, where it is released from a skeletal figure that comes from the heart of a death goddess. The soul then moves to the north. On the left are <i>pulque</i> goddesses related to sin. On the right side sins are shown that relate to <i>pulque</i> (an alcoholic beverage made from the maguey plant). <u>Left:</u> The soul of Quetzalcoatl appears as a skeleton from the heart of a death goddess in the north. On the left the maize drink <i>chicha</i> is made. The right side shows sins that relate to this drink.	MS
32	In the south, in the house of knives, an earth- or death goddess sits in the middle, headless, but with two knives where the head should have been. From the knives of the limbs five Tezcatlipocas move to the five directions and in the middle a Quetzalcoatl. The figures in the borders show the decapitation of the Moon- and Star gods. Then from the body of the earth goddess comes Venus, who appears in the Evening Sky (in the west).	MS-ES
33	The House of the West in which it is announced that Venus appears again in the sky. Star gods lie in the roof. Two priests of the death gods (Quetzalcoatl and Tlahuizcalpantecuhtli) take out the heart of a Light creature. A Quetzalcoatl priest receives Tlahuizcalpantecuhtli (Venus) in the temple. Behind the temple Xolotl is waiting for the sun so he can lead him to the underworld.	ES
34	The House of the West, of the Moon- and Earth goddess Teteo-innan. A priest drills fire from this goddess. In the temple Tepeyollotli (Venus) receives a little figure coming from the fire. Cihuateteo lie in the roof (ancestors of the Evening Sky). A priest of the death gods (Tepeyollotli) takes out the heart of a Light creature and gives it to two death goddesses.	ES
35	It is dark on earth. Yoaltecuhtli (Lord of the Night) sits in a temple. He is the sun in the underworld or the moon. Tezcatlipoca (the Moon) and Black Quetzalcoatl (Venus) pay reverence to him. Blood sacrifice of the penis is also given to four night gods. Black Quetzalcoatl takes the blanket bundle from the temple. Tonacatecuhtli (a light creature) represents an offering bowl. Yoaltecuhtli and Quetzalcoatl play ball in the ball court.	ES
36	This place represents the Evening Sky in the Region of Great (sharp) Winds. In the middle is the blanket bundle with a box and a fire-worm. The winds coming from it represent the ashes of the predecessors of Quetzalcoatl (God of the Evening Star), who appear in the big whirl. Quetzalcoatl (Stripe Eye) pays reverence to his predecessors. Tezcatlipoca as the new moon and Xolotl as the dying sun appear.	ES

37	The celestial temples reappear. The right temple is a House of Lightning. The left temple is a House of Flowers. Xolotl stands on a terrace and holds lightning. He is surrounded by lightning figures. After that he follows a road to a resting place.	ES
38	In the region of water and birth <i>pulque</i> gods are led forward. Xolotl lies in the water, from which trees grow. Next to it Tlaloc pours water on a light creature, which produces a storm that goes high up. In the red square Tonacatecuhtli and Chalchiuhtlicue (water gods) are in copulation. They bring forth a figure with maize cobs and rain.	ES
39	The Sun enters the earth in the West. The Evening Star becomes invisible. Twelve Cihuateteo surround the Black and Red Quetzalcoatl in a red disk. The Quetzalcoatl represents the moon and the sun disappearing in the earth. They are furthermore surrounded by various gods, including Tlahuizcalpantecuhtli (Venus).	ES
40	This scene shows the birth of the dead sun in the eastern underworld. In the middle of the earth the Sun god is shown. Nine Quetzalcoatl figures stab his sun disks and take out the hearts. Two temples appear again and in between them a ball court is visible. In the ball court the sun is symbolically born in the eastern sea. Tlazolteotl and Red Tezcatlipoca are his parents. They capture Red Quetzalcoatl and Black Quetzalcoatl in the temples.	ES
41	Quetzalcoatl (Venus) is led through the underworld (here the north) by Tezcatlipoca and two earth- and moon goddesses. A big <i>chalchihuitl</i> is the heart of the room. In the centre are Chalchiuhtlicue and Chalchiuhtlatonac (water gods), drinking blood from the legs of the Quetzalcoatl figures. Two Cihuateteo are the guide of the victim-to-be. The day signs are the names of the Cihuateteo.	ES
42	The actions are linked to the northern temple on the right. Quetzalcoatl (Venus) lies on the ground of the ball court. Black Quetzalcoatl has conquered him. This symbolizes that life conquers death. Then Quetzalcoatl is sacrificed. His heart is taken out and Tezcatlipoca drinks the blood. Then the body is thrown down the stairs and Quetzalcoatl enters a deep pit where Miclantecuhtli greets him. Xolotl comes fourth from the water: he is born from a water cloud. Xolotl is then cooked to become Venus. He transforms into Xolotl-Nanahuatzin in the middle of a crossroads.	ES
43	In the west of the underworld a Solar House or Maize House stands. It is the place of birth, life, and maize. The new moon (Xolotl-Nanahuatzin), a young warrior, appears. The earth goddess with maize represents a starry sky. Maize- and water goddesses grind precious maize. Tezcatlipoca and Quetzalcoatl, as young warriors, as well as some other gods, eat the maize. Quetzalcoatl then leaves with a bundle of maize cobs.	ES
44	In the south of the underworld a Flower House stands. The cut-off body parts represent the phases of celestial bodies (the Moon and Venus). The jaguar, quetzal, and eagle rip the light creatures (the serpents) apart. The bat brings a heart (life) to Xochiquetzal (the young moon goddess). A tree grows from the heart of Xochiquetzal, and Quetzalcoatl sits in it as a hummingbird. He is the renewed Morning Star.	MS
45	Re-appearance of the Morning Star in the East where the souls of sacrificed warriors live in the House of the Sun. They are seated in four eagle-warrior houses. Venus appears as a wind god serpent with a sacrificial banner on his back. Between the houses on the right the life of warriors is represented by a	MS

	<p>drunken God of Lust who holds up a vessel of <i>pulque</i>. Red and Black Tezcatlipoca perform a warrior dance. On the left between the houses the death of warriors is shown by an offering bowl in which a dead warrior (the Morning Star) lies. The god in eagle costume eats the heart. On a podium Tlahuizcalpantecuhtli (the Morning Star) kneels: he appears again in the eastern sky. Below on a podium sits Quetzalcoatl (Venus). Blood runs from him, which symbolizes the red sky following him in the morning. A net surrounds him with Morning Star-faces of all directions. Four warrior soul gods surround it.</p>	
46	<p>Rise of the Sun in the East, in the Realm of Fire. Two fire gods sit on a kings seat below (left is Tezcatlipoca). Two fire gods sit in temples above. The right holds a small Quetzalcoatl figure; the left holds a small Tezcatlipoca figure. They are all representatives of the 4 directions and of <i>atl-tlachinolli</i>, the warrior god. A fire is drilled on the fire goddess on a precious podium, by Quetzalcoatl. The sun god (Xolotl-Nanahuatzin) as Quetzalcoatl is burned in a pot. Then through the earth goddess Quetzalcoatl rises in the sky as the sun god.</p>	MS

5.1.3 Milbrath (1989)

Biography

Susan Milbrath is mostly known for her studies in archaeoastronomy, a field of study that focuses on how people in the past conceptualized the sky, and how they acted towards it. Milbrath did her whole study of Art History and Archaeology of the Americas at Columbia University, New York (Curriculum Vitae Milbrath). She was a student of Esther Pasztory, a well-known art historian, and probably also a student of Victoria Bricker, a well-known scholar in archaeoastronomy of the Mayan area. Milbrath began as an art historian and



Figure 19. Susan Milbrath (after www.flmnh.ufl.edu, accessed 12 April 2013)

quickly became interested in art and archaeology of Mesoamerica. After finishing her PhD in 1975, which was about Olmec sculptures, she became an Affiliate Graduate at the Center for American Studies at the University of Florida. Later on she was also appointed Affiliate Professor of Anthropology at this university, and she became curator in the Florida Museum of Latin American Art and Archaeology, where she remained working since (Curriculum Vitae Milbrath). She is the writer of *Star Gods of the Maya: Astronomy in Art, Folklore, and Calendars* (1999).

During her postdoctoral research she worked closely with Anthony Aveni (Colgate University), who is seen as the founder of the field of archaeoastronomy in Mesoamerica. Most of their research has focused on the site Mayapán, the last Maya capital in Mexico. With Anthony Aveni and Carlos Peraza Lope (INAH, Mexico) Milbrath studied the role of astronomy in a few buildings of the site. Furthermore she has studied effigy incense burners from Mayapán as well (personal homepage, flmnh.ufl.edu). Aveni and Bricker influenced Milbrath's work a lot as Milbrath started working in the field of archaeoastronomy during her study and especially during this fieldwork and she has worked within this field of study ever since.

One of her research interests is the astronomical almanacs in the Maya codices (Codices Dresden and Madrid) and the Borgia Group codices (personal homepage,

flmnh.ufl.edu). In the Codex Borgia she interpreted various pages as relating to astronomical events or calculations of astronomical cycles. In that sense she follows the work of Mr and Mrs Bricker, who have focused on astronomical calculations in the Maya codices, as well as in the Codex Borgia. For her research on the Codex Borgia, Milbrath is mostly interested in the links between astronomy and seasonal ceremonies, and with that especially pages 29 to 46 of this manuscript. She believes that astronomy was an essential part of ancient Mesoamerican life and therefore it is apparent in many parts of Mesoamerican archaeology (Milbrath 1989, 103-104). With this mindset she comes close to Seler's initial ideas, which she also elaborates upon for the Codex Borgia pages. She, however, does not say much about the critique of Nowotny (1961, 1976), and others, on Seler's view. On the other hand, the English translation of Nowotny's work was published only in 2005 so it could have been the case that the work was not accessible for her. In any case it is interesting that the 'Astraldeutung' as an approach of the German Altamerikanistik has been declared obsolete over time, but has had a resurgence as well. This can be seen in the ideas brought forth by the field of archaeoastronomy, which is actually not so different from the 'Astraldeutung' theories at the beginning of the 20th century. Maybe the biggest difference is that Seler focused on mythology and Milbrath focuses on historical events. Nonetheless, in both cases there is a specific focus on the recognition and interpretation of what is considered astronomical imagery.

The same happened with the Codex Borgia pages 29 to 46, in which representations of, or references to, celestial bodies seem to appear. However, little is known about Central Mexican astronomy, and therefore most references come from the Maya area. To say something about her interpretation of the movement of Venus Milbrath (1989) often uses the Dresden Codex as a comparison. An example is the Venus phases that play a central role in her interpretation of page 29 to 46 of the Codex Borgia. Her methods of study for these pages contain various calculations of the movements of celestial bodies and their connection to the iconography, which is something that Victoria Bricker (2001) also did for various pages in this codex. Like her, Milbrath (1989) also tried to date pages of the Codex Borgia, in this case pages 29 to 46. Furthermore, Milbrath (1989) searches for historical evidence of the festival calendar and tries to fit this with the iconography as well. However, she does not take Nowotny's ideas into account, who argued that not all 18 main festivals are represented in the pages, as, according to him, the pages are linked to the role of a specific temple in certain rituals.

All in all, Milbrath's way of working is not so much different from Seler's, as she begins with a pre-set focus on astronomy and she tries to support her ideas with evidence that she finds in various sources (especially myths and festivals). In doing so she stays close to Seler's initial interpretations. The correction that she made is that she appointed a historical period to the pages as Nowotny did, instead of seeing the pages as a myth. However, no new information is gathered for her interpretation; rather the information that was already at hand is used to create a new theory. Unlike Nowotny, Milbrath focused mostly on the representation of art, and did not complement it with ethnographic fieldwork or language studies. In that sense the interpretation can be considered to be more of an evaluation of Seler's idea and a little bit of synthesizing with Nowotny's idea of the festival calendar.

Interpretations of the Borgia pages

For her interpretation of the pages 29 to 46 of the Codex Borgia, thus, Susan Milbrath relied to a great extent on the interpretations of Seler (1906, 1963). She mentions Nowotny in passing, but she only copies his reference to festivals in the pages. Milbrath suggests that the 18 pages depict Venus events in relation to the festival cycle of the 365-day solar calendar. Nonetheless, according to her, it is not the festivals that are central in this sequence but celestial events during these festival months. The central topic, in which she follows Seler, is the passage of Venus through the underworld, and in conjunction with the sun (Milbrath 1989, 105).

Before explaining Milbrath's critique on Seler's interpretation, the movement of Venus around the sun as seen from the earth must be explained. Seen from the earth, Venus takes 584 days to return to the same place in the night sky. According to the Maya Dresden Codex, which Milbrath uses as source of reference, at the beginning of the Venus cycle Venus is visible in the sky for about 236 days (as the Morning Star) (see Figure 20). After that, Venus moves behind the sun, making itself invisible. This is the period of *superior conjunction* which lasts about 90 days. When Venus appears again, it stays visible in the sky for about 250 days as the Evening Star. After that it moves in front of the sun, by which it again makes itself invisible. This period is the *inferior conjunction* phase, which lasts for about 8 days (Milbrath 1989, 113).

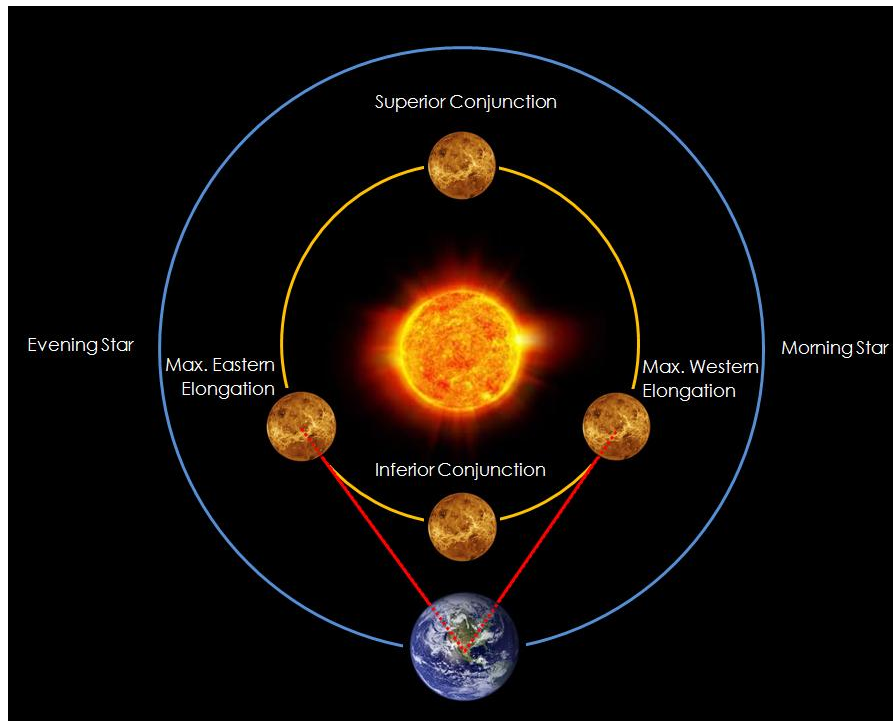


Figure 20. The movement of Venus around the Sun (own image)

Milbrath's critique (Milbrath 1989, 104) on Seler's interpretation is that he failed to link the dates on the pages with actual Venus phases. One of the problems, for example, is that Seler mentions that page 29 shows the end of the Morning Star phase, while he interprets it as the burning of Quetzalcoatl, which is, in the myth, linked to the beginning of the Morning Star phase (Milbrath 1989, 113). According to Milbrath (1989, 108-109) the pages do not refer to the whole Venus cycle of 584 days, but to the annual calendar of 365 days, because there are exactly 18 pages, which could relate to the 18 months in the 365-day calendar. Furthermore, the arrangement of day signs would indicate solar periods. Within this depicted solar year she defines various Venus phases: pages 29 to 38 represent Venus in its Morning Star phase. Page 39 shows his transition to superior conjunction. Pages 40 to 43 represent Venus in superior conjunction (and thus being invisible in the underworld), and pages 44 to 46 represent Venus as the Evening Star. With that, Quetzalcoatl and Tlahuizcalpantecuhtli alternately represent Venus as the Morning Star and Evening Star, while Xolotl represents Venus in superior conjunction (Milbrath 1989, 109-116).

Milbrath argues that four of the eighteen pages (33, 37, 40, and 44) show deities that are related to specific months in which they were honoured, according to Sahagún, which provided extra evidence for her to link the pages to the festival months of the solar year. Subsequently, Milbrath argues that most of the other pages were not directly related to the specific feasts but to the astronomical events associated with Venus and the sun (Milbrath 1989, 108).

One of the new or alternative interpretations Milbrath makes, that is decisive for her interpretation of these pages, is the conjunction of celestial bodies. She argues that when a celestial god seems to be depicted with a disk of another celestial body on his or her torso this may show conjunction between the two astronomical bodies. This way she identifies, for example, the central imagery on page 43 as the conjunction between Venus and the sun (Milbrath 1989, 115) (see Figure 21). Furthermore, the strip goddess is interpreted by Milbrath as the Milky Way. When Quetzalcoatl moves through it it represents Venus passing through the Milky Way (Milbrath 1989, 117).



Figure 21. Xolotl with the sun disk on his body (after Loubat 1899, www.famsi.org, accessed 2 April 2013)

As for the whole sequence Milbrath argues that the day signs indicate a reference to a double Calendar Round of 104 years, in which the ritual of the last year (maybe a 1-Reed year) could be depicted in the sequence, as a sort of narrative. 1-Reed was the year in which, according to sacred narratives, Quetzalcoatl died and was transformed into the Morning Star (Milbrath 1989, 117). This is what, according to her, can be seen on the first page (29) as well, and with that she agrees with Seler's (1904-1909) interpretation. Milbrath argues that this 1-Reed year could have been the year 1298, as during that year the sun and Venus remained in superior conjunction from mid-June to mid-September, which, according to Milbrath, is also shown in these pages (40-43) (1989, 117). For further specifics of her interpretations of the pages see Table 3.

Table 3. Interpretation of Milbrath (1989, 103-127)

Page	Interpretation	Phase
29	Time of the winter solstice. Quetzalcoatl becomes the Morning Star, who rises out of the solar fire after a period of invisibility when he was in conjunction with the sun.	The 16 th month Atemoztli
30	Venus rapidly ascends in the eastern sky.	The 17 th month <i>(unnamed)</i>
31	<i>Not interpreted.</i>	The 18 th month <i>(unnamed)</i>
32	<i>Not interpreted.</i>	The 1 st month + 5 extra days <i>(unnamed)</i>
33	During a spring equinox ceremony captives called the <i>xipe tototeci</i> were sacrificed. The souls of these dead warriors then ascend to the temple roof, symbolically rising into the sky to join the sun at zenith. Tlahuizcalpantecuhtli (the morning star in the east) faces Quetzalcoatl in the temple.	The 2 nd month, Tlacaxipehualiztli
34	Venus's lateral movement after western elongation (highest position in the eastern sky), or the beginning of Venus's descent as the Morning Star. Dead women descend from the zenith.	The 3 rd month <i>(unnamed)</i>
35	<i>Not interpreted.</i>	The 4 th month <i>(unnamed)</i>
36	The yellow Quetzalcoatl (who is dead) follows a starry ash trail, from the burning bundle, into the underworld.	The 5 th month <i>(unnamed)</i>
37	Xolotl enters the underworld: Venus moves in superior conjunction. It is the time of the summer solstice, when Tlaloc is worshipped.	The 6 th month, Etzalcualiztli
38	Xolotl lies dead in a pool of water. His death marks the beginning of renewed life and transformation into the visible Evening Star.	The 7 th month <i>(unnamed)</i>
39	Venus's descent into the jaws of the earth monster: the Morning Star disappears in superior conjunction.	The 8 th month <i>(unnamed)</i>
40	Honoring the rainy season Quetzalcoatl. Venus is in conjunction with the sun, invisible within the Earth Monster.	The 9 th month, Miccailhuitontli
41	<i>Not interpreted.</i>	The 10 th month <i>(unnamed)</i>
42	Xolotl burning in an olla on a hearth fire prior to his rebirth: the planet Venus is being transformed into the Evening Star.	The 11 th month <i>(unnamed)</i>
43	The sun moves in conjunction with Venus (Xolotl)	The 12 th month <i>(unnamed)</i>
44	Xochiquetzal and the Tlaloque were worshipped. Evening Star re-emerges as Quetzalcoatl in a hummingbird costume who flies up towards a bat goddess symbolizing the evening sky.	The 13 th month, Hueypachtli
45	Dead Morning Star god, Tlahuizcalpantecuhtli. <i>Not interpreted further</i>	The 14 th month <i>(unnamed)</i>
46	New Fire Ceremony. Quetzalcoatl burning in a hearth fire framed by fire serpents: the proximity of the Evening Star to the sun and Scorpius at the time of the New Fire Ceremony.	The 15 th month, Panquetzaliztli

5.1.4 Nowotny (1961; 1976; 2005)

Biography

Karl Anton Nowotny (1904-1978), born in Hollabrunn, Austria, studied Ethnology and Art History at the University of Vienna, specializing in Mesoamerican cultures (Durant-Forest 1979, 291). He was a student of Friedrich R6ock, who was very impressed by the astronomical interpretations made by Seler and his contemporaries. R6ock wanted to expand on Seler's work and made Nowotny do so as well. Within this line of research Nowotny finished his PhD thesis in 1939, containing his interpretation of the Codex Laud, one of the Borgia Group codices. With this he elaborated upon the commentaries of Seler. However, Nowotny did not like the approach of Seler and R6ock and tried to escape from their influence as much as he could (Anders 2005, xii).

Nowotny critiqued the astral interpretations for not making use of archaeological materials and ethnographic records of still living descendants, but instead only some knowledge about astronomical periods (Anders 2005, xii-xiii). For the rest of his work he would use ethnographic records of Schultze Jena and even Seler in order to correct these astralistic interpretations (Everett and Sisson 2005, xx). This critique which Nowotny had on the Astraldeutung has also led him to create only minimalistic interpretations in his later work, as he did not want to speculate too much. He was one of the few scholars who interpreted what he thought was evident. That which he wasn't sure of did not result in any interpretation.

In 1947, after World War II, Nowotny became Assistant Professor and then a specialist in the Departments of the Far East and America in the Ethnographic Museum in Vienna. After he finished his Habilitation thesis in 1954 he also became lecturer at the University of Vienna. Later on he also became professor in Anthropology and African Studies in Mainz, and professor in Social and Cultural Anthropology in Cologne. In 1978 he passed away in Vienna (Durand-Forest 1979, 291).

Although he has never set foot in Mexico himself Nowotny eventually became a leading figure in applying comparative ethnography to the study of pre-



Figure 22. Karl Anton Nowotny (1904-1978) (www.germananthropology.com, accessed 26 March 2013)

Columbian and conquest-era texts and codices. He considered the Borgia codices to contain historical and ritual information. His interpretation-technique consisted of analysing the meaning and symbolism of the texts and comparing it with the cultural practices and beliefs of contemporary Native American peoples who have kept parts of their traditions. As Nowotny was not able to go to Mexico himself he used ethnographic studies of others, like Schultze Jena and Seler, as mentioned before (Everett and Sisson 2005, xx). He saw his work eventually being confirmed by Caso's work on the decipherment of Mixtec codices. Before Caso's work, the Mixtec codices had been considered to contain astronomical information, following the Astraldeutung theories. Caso, however, had shown that none of this was correct and that the Mixtec codices mostly narrated historical dynasties (Nowotny 1976, 18). Thus, instead of interpreting the codices from the point of astral mythology he focused more on historical and ritual elements, and from this perspective Nowotny could get various new insights into the Borgia pages, which resulted in a very different interpretation of them. This has eventually resulted in Nowotny's book *Tlacuilolli* (1961) in which he gives his own interpretation of the Codex Borgia. This was later followed by a more extensive interpretation which would accompany the facsimile edition published by the Akademische Druck- u. Verlagsanstalt Graz in 1976.

Nowotny's way of working gained considerable appreciation later on as he argued not to let himself pose comments that were speculative, because that would confuse people even more. His interpretations are therefore very short. In that sense his methods greatly resemble the work of Erwin Panofsky (1939), who is considered a pioneer in iconography and iconology, and who also argues that iconography can only be interpreted when one is familiar enough with the culture that made it (1939, 11-12). Nowotny's work has been of great influence in later work of Ferdinand Anders, Maarten Jansen, Luis Reyes García, Aurora Pérez Jiménez, Peter van der Loo, and others. They have taken up Nowotny's work and elaborated upon it with new insights (Everett and Sisson 2005, xxi). In that aspect Nowotny had set up a new line of working, which was taken up by these scholars, and in which special attention goes to ethnographic fieldwork.

Interpretations of the Borgia pages

Nowotny did not agree with Seler's astronomical interpretations, nor with Seler's idea that the 18 pages of the Codex Borgia display a narrative. Instead, Nowotny offered a whole

new way of reading of the pages. He called the pages "Temple Cult Rituals" and interpreted the scenes as fourteen independent festivals or rituals which could have occurred in a specific ceremonial centre (Nowotny 1976, 20). The pages thus do not have a mantic content; the focus is rather on specific rituals carried out in relation to a specific temple. These rituals were, according to Nowotny, closely linked to a Sacred Bundle (1976, 29).

According to Nowotny (1976, 26), the buildings on the pages show the ceremonial centre in which the codex was actually used, which probably existed in the area of Cholula. It was composed of a large temple area enclosed by a wall in which two main pyramids (the red and black temple), a pyramid of the sacred bundle, a large ball

court, and many other secondary buildings and pools stood. Nowotny (1976, 44) argues that because the rituals are bound to a specific temple (the Black Temple), not all the general annual festivals that are known from Sahagún's ethnographic work are shown.

As the pages show rituals that were performed historically, Nowotny identified the characters as priests wearing the costumes of deities, instead of actual gods, as Seler (1906; 1963) had interpreted them. Subsequently, Nowotny (2005, 4) argues that the priesthood in the respective city must have existed of more than one hundred men and women.

Nowotny's recognition of the content of page 44 formed extra evidence for him that the imagery was about rituals that actually took place historically. According to him page 44 represents the initiation rite of a prince, during which his nose is pierced. This is very similar to what he found in the *Historia Tolteca-Chichimeca* where princes are shown fasting in trees, being nourished by eagles and jaguars, and in the meantime waiting for



Figure 23. Princes being nourished by jaguars and eagles in trees, in *Historia Tolteca-Chichimeca* page 35 (Leibsohn 2009, 127)

their noses to be pierced (see Figure 23) (2005, 32-33). Furthermore, Nowotny argues that the dates in the pages refer to a division of the 260-day calendar by four. This is a format that was useful for calculating days in the 365 day calendar (Nowotny 1976, 26).

In Nowotny's interpretation some rituals span multiple pages while others consist of only one page. Furthermore, where Seler saw the strip goddess as a continuation between scenes of a narrative, Nowotny gives her more of a concluding function. All of this considered, according to Nowotny (1976, 27), the first pages (29-32) show cults performed in "retreats", in places or one place surrounded by the body of a goddess. They may show the preparation of the rites that follow. Pages 33 and 34 present the two opposing temples that are of central importance in the following rituals. Pages 35 to 38 show a ritual concerning the opening of a Sacred Bundle; pages 39 and 40 show the sacrifice of the Sun; and pages 41 and 42 show sacrifices that are performed for the Cihuapiltin and Tonaleque. After that, page 43 shows a cult related to corn; page 44 the consecration of a prince; page 45 the cult of the Morningstar; and page 46 the drilling of fire (Nowotny 1976, 45). The table below shows his interpretations per page. These interpretations are mostly a correction of Seler's interpretation. Therefore it does not concern the interpretation of every element on the pages.

Table 4. Interpretation of Nowotny (1976, 17-45; 2005, 26-33)

Page	Interpretation	Section
29	It is night. Incense is being burned to the four directions. It is a cult of the wind gods . Two Quetzalcoatl figures leave the section through a hole in the body of a goddess.	1
30	It is night. A cult of the rain gods : a rain ceremony is performed by four priests of the rain god, each of one of the four directions. Two Quetzalcoatl figures leave the section through a hole in the body of a goddess.	2
31	<u>Right</u> : Cult of the maguey . It is night. Little black figures with death heads spring from the heart of a blue-painted goddess with smoke serpents. Similar figures are bathed on the right, and wrapped in cloths on the left. On the left are also two goddesses: one carries an agave, the other carries grass. Two death-head figures leave the section through a black body.	3
	<u>Left</u> : Cult of the corn plant . It becomes daytime. A small black figure with a death head springs from the heart of a red-painted goddess. This figure is bathed on the right. On the left anthropomorphic cornstalks are nurtured. A goddess with eagle claws lies in the perforation of a body.	4
32	Cult of Tezcatlipoca . It is night. The beheaded body of a sacrifice is found in a vessel within an enclosure of stone knives, from which Tezcatlipoca	5

	figures emerge. The Tezcatlipoca figures in the borders carry skulls, while the Tlaloc figures carry decapitated heads. Through the body of a goddess a Quetzalcoatl figure exits between two knives.	
33	A heart sacrifice is performed in front of the Black Temple (a place of magic and terror), which is placed on top of the Earth Monster. The Black Xolotl behind the temple is the cult figure. On the body of a sacrificial victim a ceremonial fire-boring takes place.	6
34	A heart sacrifice is performed in front of the Red Temple (with Cihuapipiltin in the roof), which is placed on top of the Earth Monster. A cord hangs down from the roof, holding spiders. There is also a fire being bored on the body of a sacrificed person from which a little red Xolotl comes forth. Red Xolotl (bearer of the sun) in the temple is the cult figure.	7
35	The opening of the Sacred Bundle. At night, the priest Black Xolotl pierces himself on a cult site in front of the lord of the Temple of the Sacred Bundle. Then the priests Quetzalcoatl and Black Xolotl bring the sacred bundle from the Temple of the Sacred Bundle and carry it on a blue path while passing Tonacatecuhtli and a ball court on Tonacatecuhtli.	8
36	The two priests open the bundle (now Black Xolotl has an animal mask). In the bundle is a box with a neck of a creature. From the bundle wind serpents move outwards, carrying the content which consists of various beings and objects. Quetzalcoatl with the stripe face-painting is swimming in the largest wind serpent, among a variety of cult animals and objects.	8
37	Sacred water is presented to Black Xolotl in the Black Temple. Black Xolotl follows a road to the Earth Monster, where he is surrounded by priests and rain gods (with lightning in their hands) of the four directions. He throws the Fire serpent weapon.	8
38	Black Xolotl goes to a temple or subterranean area where priests and captives indicate a ritual. Quetzalcoatl climbs out of the smoke serpent. Xolotl (as a skeleton) lies in a hidden spring (the subterranean area). From his earplug grows a tree with a drum. Tlaloc pours water in the spring. The keeper of the sacred bundle pours this water from a rain pot over Quetzalcoatl with the stripe facial paint. Part of the water splashes high on the page as an offering before the Black Temple. Tonacatecuhtli and Tonacacihuatl embrace in an enclosure of <i>chalchihuitl</i> . They are surrounded by four serpents. A child and ears of corn come from between them.	8
39	A Quetzalcoatl figure exits through the body of the goddess. Sacrifice of the Sun. Twelve Cihuapipiltin dance around two Quetzalcoatl priests. Singing and beating drums, the priests hurry toward the entrance of the temple area, formed (as a wall) by the head of the Earth Monster. Six priests attired as various gods watch with weapons in their hands.	8 9
40	Nine (Quetzalcoatl) priests perform a sacrifice. With one of the Cihuapipiltin and Tezcatlipoca assisting, a child is born from a skeleton on a ball court between the black and red temples. Then the assistants catch the Black Quetzalcoatl and Red Quetzalcoatl by the hair.	9
41	A skeletal figure comes from the previous section through a night cloud and the body of the goddess. Sacrifice for the Cihuapipiltin. In the weeks of the Cihuapipiltin, the Black Tezcatlipoca with weapons and two of the Cihuapipiltin with bowls hurry	9 10

42	<p>through a four-sided enclosure of night clouds. Four priests (one dressed as Quetzalcoatl, one as the sacrificial victim, and two as the Black and the Red Tezcatlipocas) travel toward the cult site. Quetzalcoatl and the priest dressed as a sacrificial victim let blood before Tonacatecuhtli and Tonacacihuatl. Two Cihuapipiltin or priestesses look after the sacrificial victim. Four priests and four Tzitzimime watch over.</p> <p>Four priests play ball. The sacrificial victim lays on the ball court. He is then sacrificed on a pyramid between the black and the red temples, and after that he is thrown into a dark pit full of funerary cult objects and sacrificial remains. Human flesh is cooked and eaten. The five Tonaleque and little animals jump from the skeleton of the sacrifice, which lies on a crossroads. Tonacatecuhtli and Tonacacihuatl with corn sit in a pond. The black Tonaleque springs from a shell trumpet.</p>	10
43	<p>Quetzalcoatl comes through the goddess's body.</p> <p>A corn festivity. It is day. The body of Xolotl lies outstretched on a plaza and is covered with a sun disk (the night sun). Beneath is a blue maize goddess. Two women carry children on their backs and grind corn. The four priests or gods of page 41 and Tezcatlipoca and Quetzalcoatl seated on thrones eat this maize meal from four bowls. It may concern the feast <i>Atamalqualiztli</i>, which, in Tenochtitlan, was celebrated every eight years. A Quetzalcoatl figure with a basket full of maize leaves through the opening of the cult site.</p>	10 11
44	<p>A Quetzalcoatl figure comes through the body of the goddess.</p> <p>The enthronement of a prince. Human sacrifices have sanctified the depicted cult site. A tree grows out of Xochiquetzal. The candidate (with a hummingbird mask), waiting for his nose to be pierced, sits in the tree: fasting. The bat, accompanied by four hummingbirds, nourishes him. Other candidates for the nose piercing are hidden in fire serpents. The eagle, jaguar, and quetzal bird pierce the nostrils of the candidates with their beaks and teeth.</p>	12
45	<p>A smoke serpent with the beaked mask of Quetzalcoatl and a sacrificial banner leave the previous section through the body of the goddess.</p> <p>The cult of the Morning Star. Four buildings with priests stand in the corners. The armed Tlahuizcalpantecuhtli stands central and a tree adorned with prayer flags rises behind him. A black anthropomorphic figure (a star) sits beneath him and he is covered by a cloth adorned with nine heads of Tlahuizcalpantecuhtli. He releases a stream of blood. This may refer to the morning red. Four Tezcatlipoca priests surround him. An eagle, which removes the heart of the sacrificial victim who is lying in a pool, and a large <i>pulque</i> vessel, are ritual attributes.</p>	12 13
46	<p>A Quetzalcoatl figure leaves the previous section through the goddess.</p> <p>The fire-drilling. Xochiquetzal or Xiuhtecuhli lies on a large throne. A fire serpent lies on her/him, and a <i>chalchihuitl</i> lies on the serpent. A priest bores fire on the multi-layered base. Four fire gods spring from the fire. Above this a Quetzalcoatl figure is boiled in a cooking vessel. Four priestesses, two of whom are singing, stand nearby. Two priests, Tlahuizcalpantecuhtli and Xiuhtecuhli, are sitting in two temples and they are holding little figures. Tezcatlipoca and Xiuhtecuhli kneel on two thrones.</p> <p>A Quetzalcoatl figure leaves the section through the body of the goddess.</p>	13 14

5.1.5 Anders, Jansen, and Reyes García (1993a)

Biographies

Ferdinand Anders had experienced the difference in approaches and theories between Röck and Nowotny at the University of Vienna, where he studied in the 1950's (Anders 2005, xi). He was probably a student of Nowotny since Nowotny was a lecturer at that university by then. Anders has followed the footsteps of Nowotny and focused on ethnographic, ethnohistoric, and ethnolinguistic research in his own studies. Eventually he became lecturer in Mesoamerican studies at the University of Vienna himself. Anders wrote a great amount of books, among which *Schrift und Buch im alten Mexiko* (1988), and *Von Schönbrunn und Miramar nach Mexiko* (2009). With his research interest and methodology Anders influenced his student Maarten Jansen, and they have worked together in various instances.

Maarten E.R.G.N. Jansen, born in Zeist (Netherlands) in 1952, started his study with a B.A. in Classical Languages and Archaeology at the University of Leiden. After that he did his M.A. in the Archaeology of Pre-Columbian America with minors in Nahuatl and Quechua at the University of Vienna, where Anders became his teacher. During his study Jansen became familiar with ethnographic and ethnohistoric research of Mexico. He continued his studies with a PhD which focused on the Codex Vindobonensis Mexicanus 1, a Mixtec pictorial manuscript.



Figure 24. Prof. dr. M.E.R.G.N. Jansen (www.leidenuniv.nl, accessed 4 April 2013)

Eventually Jansen was appointed professor at the University of Leiden where he still gives lectures on iconographical, historical, and ethno-archaeological research of Mexico, with a special interest for the Mixtec people. His investigations are often carried out together with his wife, Gabina Aurora Pérez Jiménez (lecturer on Mixtec language and culture, Leiden University). For example, together they worked on the interpretation of various Mixtec codices (personal homepage, archaeology.leiden.edu), and they published many books on this subject like *Codex Bodley* (2005), *Encounter with the Plumed Serpent* (2007), and *La lengua señorial de Ñuu Dzau* (2009).

Currently, Jansen is working on an ERC project at Leiden University with a focus on the perception of time in which various Native American researchers are involved. They carry out ethnographic and ethnohistoric research in combination with their knowledge

of native languages of Mexico (Leiden University News 2011, news.leiden.edu). In that sense, this line of research in which ethnohistory, ethnolinguistics, and ethno-archaeology are invaluable is continued.

Luis Reyes García (1935-2004), born in Amatlán de los Reyes (Mexico) (Caballero 2005, 172), was a scholar who was committed to teaching indigenous Mexicans their languages and history on an academic level. To reach this goal he had set up a program in Michoacan and Tlaxcala, two states of Mexico. This program was called “*Programa de Formacion Profesional de Etnolingüistas*”, and it was set up for indigenous Mexicans from all over Mexico, including Maya, Mixtec, Nahuatl, Purepecha, Totonac, Zapotec, Mixe, and many others (Caballero 2005, 173-174). During that time Reyes García was a Nahuatl historian and investigator of CIEAS (Centro de Investigaciones y Estudios



Figure 25. Dr. Luis Reyes García (Caballero 2005, 176)

Superiores en Antropología Social) and university lecturer in Tlaxcala (Caballero 2005, 171). He has made various translations of ancient texts, codices, and documents from Nahuatl to Spanish. On various occasions he has made tours throughout Cuauhtinchan and Tlaxcalan villages to raise awareness among people about the value of their original documents. This led him to transcribe and translate various manuscripts, of which many had to do with land ownership (Castillo Palma and Gonzalez-Hermosillo Adams 2004, 154). He wrote various books during his work, among which *Cuauhtinchan del siglo XI al XVI* (1977), and *El anillo de Tlalocan* (1990). All in all his work has contributed a lot to ethnohistoric research.

The methodology of Reyes García consisted of an interdisciplinary approach incorporating linguistics, ethnolinguistics, anthropology, economics, history, and literature (Gomez García 2010, 2). In that regard his interests overlapped to a great extent with those of Ferdinand Anders and Maarten Jansen. Through his research he gathered a lot of information on Nahuatl language and history, documented through photographs, audio-tapes (in case of interviews for example) and writing. After Reyes García passed away in 2004 this collection was catalogued in order to preserve it and to facilitate future research (Gomez García 2010).

Working together, Anders, Jansen, and Reyes García wanted to extend the interpretational work of Nowotny and Seler on the Borgias group codices by including new

information gathered especially from ethnographic, ethnohistorical and linguistic data. Their methodology led them to gain new insights about the contents of these manuscripts.

Interpretation of the Borgia pages

Based on information gathered from archival research, comparisons with other codices, ethnographic fieldwork, and archaeology, Anders, Jansen, and Reyes García (1993a) came up with new and complementary ideas (Anders, Jansen, and Reyes García 1993a, 7-8). They argued that Seler's (1906, 1963) identifications of various elements (objects, animals, deities, etc.) were often very good, but just like Nowotny they argued that he was influenced too much by the astronomical paradigm (Anders, Jansen, and Reyes García 1993a, 45). Anders, Jansen, and Reyes García (1993a) took over most of Nowotny's (1961, 1976) ideas of the temple cult rituals and elaborated upon them. They argue that the pages were turned one step counter clockwise in order to better represent the geographical space on the pages (Anders, Jansen, and Reyes García 1993a, 175). Their idea of what the ceremonial centre might have looked like can be seen in Figure 26.

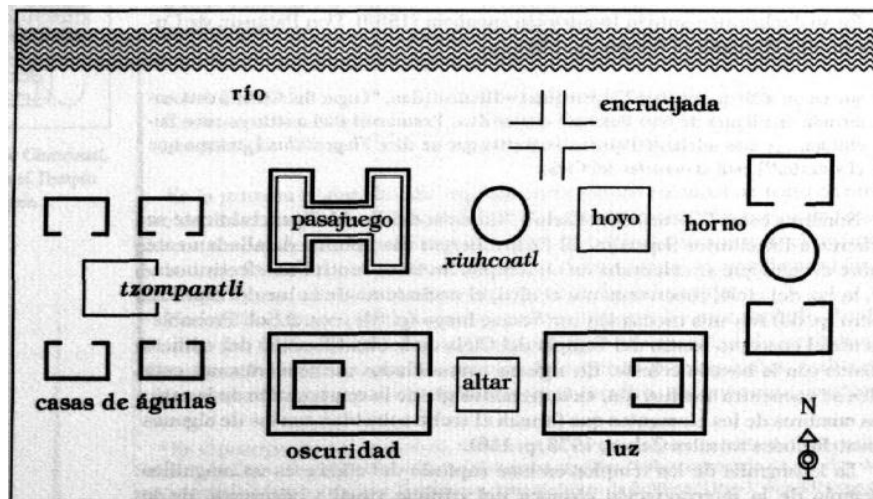


Figure 26. Possible map of the ceremonial center painted on pages 29-46 of the Codex Borgia (Anders, Jansen, and Reyes García 1993, 182)

Another argument for the idea that the pages represent a specific ceremonial centre that could actually have existed, is provided by a comparison with the Mixtec Codex Nuttall. Here similar temples are shown by which a Sacred Bundle ceremony is indicated (see Figures 27 and 28) (Anders, Jansen, and Reyes García 1993a, 175), and these Mixtec codices are historical codices that represent events that actually happened,



Figure 27. Temple of Heaven in the Codex Nuttall (after *ignorantisimo.free.fr*, accessed 13 April 2013)



Figure 28. Temple of Heaven in the Codex Nuttall (*ignorantisimo.free.fr*, accessed 13 April 2013)

in existing places. Anders, Jansen, and Reyes García (1993a, 180) argue that what makes the Borgia pages difficult to read is the double meaning given on the pages. This double meaning may be indicative of a trance state. Various priests in the scenes are in trance and therefore in another reality. According to Anders, Jansen, and Reyes García (1993a, 187) they come to this state by applying a black hallucinatory ointment to their bodies. This trance state is often shown on the pages as black winds with the beak of the wind god (for example on page 29 and page 36).

One of the most important elements in the interpretation of Anders, Jansen, and Reyes García (1993a) was the link with the Codex Borbonicus. A great part of this codex is dedicated to temple cult rituals. In this sequence Cihuacoatl plays a very important role. This figure appears many times on the pages, and is interpreted as being the one who initiates the rite. Added glosses in Spanish indicate that this Cihuacoatl figure was not the deity that the figure was named after, but the Aztec name of the High



Figure 29. Cihuacoatl as *papa mayor* in the Codex Borbonicus (www.famsi.org, accessed 13 April 2013)

Priest (*papa mayor*) (Figure 29) (Anders, Jansen, and Reyes García 1993a, 178). As Cihuacoatl is also often shown at the beginning of scenes in the Codex Borgia pages 29 to 46 (the strip goddess), Anders, Jansen, and Reyes García argue that this figure might have the same function: it is a representation of the High Priest who initiates the rites by commanding priests to perform certain duties (1993a, 178). In this aspect they differ from Nowotny's (1961) interpretation, who gave the Cihuacoatl figure more of a concluding function.

Another significant new interpretation is the link to a part of page 47 (Figure 30), which is argued to belong to the previous 18 pages even though the reading direction is different and the scenes are significantly smaller (Anders, Jansen, and Reyes García 1993a). The relation of a part of this page to the previous 18 pages is probably argued for due to the Cihuacoatl who appears at the end of page 46. Throughout the whole sequence this figure is interpreted as the initiator of each rite. Furthermore, the two squares of the page that is being referred to look different from the rest of the page (see Appendix 1) and may therefore represent something different.

According to Anders, Jansen, and Reyes García (1993a, 175) pages 29 to 47 of the Codex Borgia represent nine rituals that are related to the emergence and birth of light and maize from darkness and death. The first rite (page 29 to 32) takes place in the temple and patio of Cihuacoatl, where darkness is turned into light, and death into

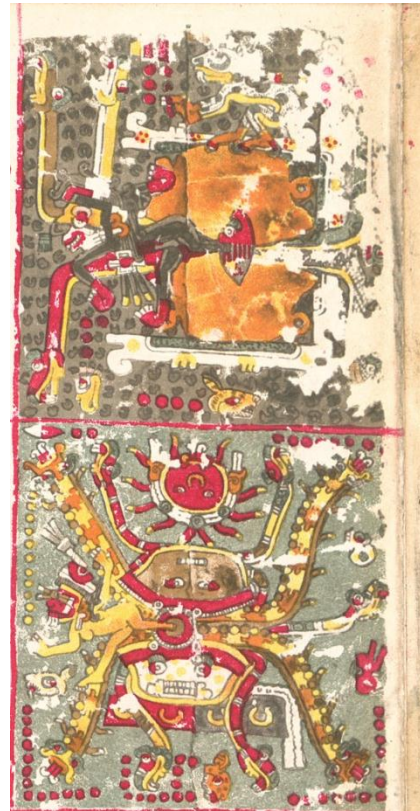


Figure 30. A part of page 47 of the Codex Borgia (after www.famsi.org, accessed 28 April 203)

birth. Rite 2 (pages 33-38) concerns the Temples of Heaven and the opening of a Sacred Bundle. Rite 3 (pages 39 and 40) shows the sacrifice and rebirth of the Sun. The following rite, Rite 4 (pages 41 and 42), shows the sacrifice of a man consecrated to Itztlacoliuhqui. Rite 5 (page 43), in turn, concerns the growth of maize. Rite 6 (page 44) shows the perforation of the nose; an interpretation taken over from Nowotny. Rite 7 (page 45) is about Venus; Rite 8 (page 46) shows the drilling of New Fire; and Rite 9 starts on page 47

with the birth of the Tonallehqueh and Cihuateteo (Anders, Jansen, and Reyes García 1993a, 191). The more specific interpretations of the pages can be read in Table 5.

Table 5. Interpretation of Anders, Jansen, and Reyes García (1993a, 175-246)

Page	Interpretation	Rite
29	At the point when Venus dies (during sunset or invisibility), a time threatening the end of the world, an incantation is started in the Temple of Cihuacoatl, to save life. The principle priest undergoes fasting and self-sacrifice by piercing his penis and pulling a rope through it. The rope is placed on a brazier which is full of hallucinatory vapours. All the present priests enter in trance. The Double Spirit, the main priest in trance, goes out of the temple.	1
30	The darkness (black circle) turns into light (red bright circle), and thereby death turns into life. The Double Spirit is fasting, celebrating the cult of Quetzalcoatl. During the 20 days of penance, spirited priests of the four directions evoke all the vegetal powers and make offerings of copal and auto-sacrifice. At the end of the 20 days the Double Spirit leaves the temple in trance.	
31	<u>Right:</u> In the middle of the Temple of Cihuacoatl, the incarnation of Cihuacoatl is reclined, in the position of the Great Parturient, and dead. She brings black spirits to life, beings of the Beyond, which are received as children by the priestesses of Cihuacoatl. They bathe them in tubs with the dark liquid (hallucinatory ointment) of priesthood. In turn, other priestesses of Cihuacoatl receive them, dry them, and cover them with sacred cloths, like bundles of power. <u>Left:</u> Another woman consecrated to Cihuacoatl sits in the middle. From her emanate great visions in the form of precious snakes, in which the deceased are manifested. From her chest a black spirit, a being of the Beyond, is born. The spirited priests, horrific mothers, bathe him as a child, with the dark liquid. Attended by priestesses, the women consecrated to Cihuacoatl are tucked in big spirited containers. From their bodies maize cobs sprout.	
32	It is dark in the patio in front of the temple. In the centre the spirited brazier stands, from which the Black and Red Tezcatlipocas are shown as great vision serpents. The god Flint Knife sits in the brazier. From his claws decapitated men leave. From the knives on his body manifestations of Tezcatlipoca are created. From one knife Quetzalcoatl leaves. Priests consecrated to the Divine Knife and the Divine Eagle dance around them, holding decapitated heads. Four Tezcatlipocas are also dancing in the corners, carrying skulls with odorous herbs. Afterwards, the High Priest Cihuacoatl commands the priest Quetzalcoatl to initiate the next rite.	
33	A Temple of Heaven stands above a sacred cave. It is the Temple of the Black Serpent. It is the building of the supreme god. A jaguar spider rests on the roof, who weaved the strong thread that ties the deer that carries the sun, and the rabbit that carries the moon. It also connects the signs of sacrifice. In front of the temple a black priest dances above a great round stone. On the other side of the temple the black priest is drilling a fire on a Palm God. In the three levels of the roof the spiritual power of Fire is situated. Behind the temple Xolotl is waiting. In front of the pyramid, the spirit priest of Quetzalcoatl and of the god Venus sacrifice the spirit of a fruit tree, and take out his double heart. On the top platform of the temple a victim is prepared for sacrifice. On the altar the	2

	force of Xipe Totec is made into a bundle. Inside the temple the Venus priest puts a maguery spine in the tongue of the Quetzalcoatl priest for auto-sacrifice.	
34	There stands the Temple of the Red Serpent, another Temple of Heaven. It is the building of the supreme god. From its roof a thread descends a with spiders which look like Cihuateteo. In the roof the forces of Cihuacoatl (also the Milky Way) are situated. In front of the pyramid, the priest of Black Xolotl sacrifices the spirit of <i>pochote</i> (a tree species). He takes out his heart and passes it to the priestesses of Cihuacoatl. In the entrance a black priest drills Fire on the chest of the Palm God. From the smoke a spirit leaves that flies to the Red Xolotl God in the temple, who carries the Solar Disk.	
35	The black spirit priest of Quetzalcoatl perforates his penis in the night. His blood is received by Yoaltecuhtli, the Night Sun, in the four directions. The priest is then led forth by Quetzalcoatl-Tezcatlipoca, and he prays before the Temple of the Nocturnal Wind, where the Sacred Bundle is. The guardian, Yoaltecuhtli, hands over the Bundle. Quetzalcoatl-Tezcatlipoca leads the Quetzalcoatl priest with the Sacred Bundle on his back through the ceremonial centre. On one side the dark place of Ancient Cipactonal is depicted where the priests make offerings of copal and auto sacrifice. On the other side the ball court of Ancient Cipactonal is visible. There the priest Xolotl and Yoaltecuhtli play ball, like a preparation ritual.	
36	Arriving at the right site the Sacred Bundle is placed in the centre and then all is wrapped in darkness. Quetzalcoatl-Tezcatlipoca holds supervision. Xolotl is on the other side. The Sacred Bundle contains a box, from where a sound leaves like a flute with amazing power. Great dark winds bring forward the power of the sacred knives that come from all the cult elements. The Bundle also releases a hallucinogenic force, like an enormous dark wind, which swallows the priest of Xolotl who was praying in front of it. He flies along precious objects and birds.	
37/38	The Xolotl priest awakens from his flight and leaves the dark serpent. He then enters the ceremonial centre. He has to fight against the incarnation of the Rain God, who pushes him to the water. Xolotl beats his opponent in the mouth, but he also falls backward in the river, where he dies. He transforms in various plants. A spirit of Water then washes the Xolotl priest, who was in trance, taking away the hallucinogenic ointment. This produces a hissing vapour that ascends to the two temples. On the left is the Temple of Heaven, of Jade and Precious Flowers. Inside a priest of the Sun is playing his flute and a precious drum. A priestess of Xochiquetzal offers pulque to four Quetzalcoatl priests. On the right is the Temple of Flames and Rays. In this temple Xolotl reigns. From here he goes to an altar, where he throws a magic fire serpent to the Ray spirits in the four corners. Then a spirited Mirror lines up his captives before Tonacatecuhtli and Tonacacihuatl, who deliver wealth and sustenance. Next to the river, in a red enclosure, Tepeyollotl and Chalchiuhtlicue reign. From here the Young Maize is born, surrounded by vision serpents.	
39	From the High Priest the priest Quetzalcoatl comes to initiate the rite. Twelve women dedicated to Tlazolteotl dance around the priest Xolotl, who is singing to the sound of his drum, and the priest of the Sun, who is playing a precious flute. Great priests of the ceremonial centre stand by. All go to the ceremonial centre, as if entering the earth. The priests enter with priestesses of Cihuacoatl, all with knives in their hands for sacrifice.	3
40	Nine priests of Quetzalcoatl and Xolotl surround the Night Sun and they take out his nine hearts. The two priests that enter the court are sitting in the two temples. Cihuacoatl and Red Tezcatlipoca take them out by the hair. In the middle of	

	the ball court the spirit of death delivers a child. This is attended by Tlazolteotl and Red Tezcatlipoca. This child symbolizes the sun that rises again and the maize that grows of the earth.	
41	Through the command of the High Priest Cihuacoatl the priest of Black Tezcatlipoca comes, flanked by Cihuateteo. The rite is initiated on the days of the Cihuateteo. From two roads figures come to the centre. On the right is Red Tezcatlipoca, guiding a man consecrated to Itztlacoliuhqui, who is prepared for being sacrificed. On the left Black Tezcatlipoca guides the priest of Xolotl. Four priestesses of Cihuacoatl pass to the cult place. There a black spirited priest and the man consecrated to Itztlacoliuhqui offer the blood of their penis sacrifice to Tepeyollotl and Chalchiuhtlicue, owners of the community. Then the man consecrated to Itztlacoliuhqui has a good time with naked young girls, while the Xolotl priest gives penance in the Temple of Dark Wind. The priest of the Sun God gives penance in the Temple of Precious Flowers. This takes a whole trecena.	4
42	On the day 1 Rabbit they leave from the temple of Dark Wind and go to the ball court, where four black spirits throw stone balls and horrendous sticks to the man consecrated to Itztlacoliuhqui, after which he loses and falls. Then they carry him to the Precious Altar where priest Xolotl takes out his heart. Black Tezcatlipoca drinks the blood. The dead body is thrown into a dark pit where he arrives before the God of Death. Then a drink is prepared with a vital force, which is taken by the black spirit priest and the Xolotl priest. The heart of the victim is buried in a crossroads, where Cihuacoatl lies. An offering of ocote sticks, paper, and cotton, is placed there for Tlazolteotl. From the dead victim five Tonallehqueh (deified warriors) are born who move to the cardinal directions. The Tonallehqueh are born like black spirits from the big snail in the water (a symbol of the Moon) in the realm of Tepeyollotl and Chalchiuhtlicue. There are also Tonallehqueh born from the spirited olla above the fire.	
43	The High Priest commands the priest Xolotl to initiate the rite. In the chamber of jade, light and precious cobs, Black Xolotl (the carrier of the Dark Sun) is lying down. This force gives bravery in battle. The Dark Dead and Fertile Earth below receives and transforms everything in maize flowers and maize cobs. There is abundant sustenance for the black spirit Quetzalcoatl and the black spirit Tezcatlipoca on the thrones, and for the great priests. The women with children on their backs grind precious dough. The black spirit priest leaves the temple with cult objects and a net filled with maize cobs.	5
44	The High Priest commands priest Xolotl to initiate the rite. The court of the Temple of Precious Flowers contains parts of people who died in sacrifice. A <i>nahual</i> ³ bat descends with a heart in his hand. As hummingbirds, the spirits of fallen warriors surround him. The stream of blood bathes the goddess Xochiquetzal, and she sprouts a tree of jade, in which the spirit priest seats as the black hummingbird. Through the other three entrances the Lords consecrated to Tlahuizcalpantecuhtli, the Fire God, and Quetzalcoatl enter as <i>nahuales</i> , to receive the sign of royal dignity: the perforation of the nose. This is done by the eagle, the jaguar, and the quetzal.	6
45	From the chest of Cihuacoatl leaves the Dark Wind that surrounds the spirited banner of sacrifice. Four houses of the eagles and down are in the corners. They are houses of the brave warriors and of the consecration to sacrifice. The Black and Red Tezcatlipocas prepare a large olla of <i>pulque</i> for the devoted	7

³ An alter-ego or alternative form of a person or deity (Léon-Portilla 1980, 141)

	<p>Lords. The Lords give the sacred elements for the Bundles. In the middle of the plaza is the Altar of Skulls, where the god Dead Venus reveals himself in the sacred dance of the warriors. A captive consecrated to Tlahuizcalpantecuhtli is sacrificed in the river nearby, where an eagle warrior tears out his heart and eats it. He is then transformed into an untouchable spirit, identified with Quetzalcoatl and converted into a Star. The priests of Tlahuizcalpantecuhtli cover his spirited body and make a Sacred Bundle.</p>	
46	<p>The High Priest commands the Quetzalcoatl priest to initiate the rite. He enters a court of fire and heat. The force of Quetzalcoatl arises from a boiling olla. The ones consecrated to Chantico (the goddess of the Hearth) surround it. In the palaces Fire deities reign and they raise two Lords (Quetzalcoatl and Tezcatlipoca) towards the hearth to consecrate them. They then sit on the jaguar thrones and have command. On an altar the spirit priest of Quetzalcoatl drills the New Fire in the heart of the Fire Serpent Xiuhtecuthli-Chantico, and the spirits of Fire disperse themselves towards the four directions.</p> <p>The High Priest lets the priest of Quetzalcoatl proceed.</p>	8
47-49	<p>From the dark night of death, of the court of bones, the spirited souls of the Tonallehqueh come out. They are liberated by the sacrifice. This happens in the days 34, 95, 147, 199, and 251 of the tonalpohualli. From the preciousness of the braziers the spirited souls of the Cihuateteo were born, in the earth of Tlazolteotl, in the middle of spiders, centipedes and coral snakes. This happened on the days 26, 78, 130, 182, and 234 of the tonalpohualli.</p>	9

5.1.6 Byland (1993)

Biography

Bruce E. Byland (1950-2008) was an archaeologist throughout. He had his education at Rice University and Penn State University where he studied Archaeology as a sub-discipline of Anthropology (personal remarks 2007). In 1984 he became a teacher at Lehman College, New York, teaching Introduction to Archaeology as well as courses on the archaeology of the Americas. Next to that he also worked as a volunteer at public schools as a teacher in evolution and archaeology, as well as a volunteer at middle schools and high schools where he taught about African-American history from colonial times to the Civil War. Furthermore, Byland also gave courses at Jay Heritage Centre, New York, where he taught groups of teachers about archaeological methods and interpretations and gave excavation class to his students, where they learned to work with archaeological materials (Lehman E-News 2007, *lehman.edu*).



Figure 31. Bruce Byland (after www.flickr.com, accessed 27 March 2013)

Next to his work as a teacher Byland has led various excavations on the subject of all of his classes. In 1999, for example, he led an excavation in Manhattan where an African cemetery was encountered (Lehman E-News 2008, *lehman.edu*). Nonetheless, he was mostly a specialist in Mixtec archaeology and ethnohistory. In 1985 and 1989 he surveyed the valley of Tilantongo in the Mixtec area together with John Pohl (1994, xiii). Furthermore, they conducted test excavations at a site in the town of Tilantongo. During their fieldwork Byland and Pohl discovered what they call the Mixtec Temple of Heaven and 8 Deer's palace (1994, xiii). These places were well-known from the Mixtec historical codices. For their interpretations of the political and social changes from the Classic to the Postclassic period and the identification of important sites as displayed in the Mixtec codices, Byland and Pohl relied mostly on the combination of their archaeological data and interpretations from Mixtec codices. Furthermore they mention that local people at Tilantongo and Jaltepec knew stories about ancient kings and saints, and they tried to

incorporate this in their research as well (1994, 29-30). This joint research effort has been decisive for Byland's comments on the Codex Borgia, which would serve as an introduction to the reconstruction of the codex made by Díaz and Rodgers in 1993. Many elements which he interprets there relate directly to what he wrote with Pohl in their book *In the Realm of 8 Deer*, published in 1994. Bruce Byland passed away recently (2008) at the age of 58 (Lehman E-News 2008, *lehman.edu*).

For his interpretations of the Codex Borgia pages 29 to 46, as presented in the Introduction to Díaz and Rodgers's (1993) restoration of the Codex Borgia, Byland probably relied for a great deal on the knowledge that John Pohl had of the Mixtec codices. Pohl is a scholar from the University of California, Los Angeles (UCLA) who worked with Mixtec codices and who interpreted them with an interest in historical political and social issues (personal web page, *linkedin.com*). John Pohl, in turn, was a student of Henry B. Nicholson, a scholar who had a great interest in iconography, but also style analysis. Nicholson is probably most famous because of his analysis of the Mixteca-Puebla style and Aztec iconography (Quiñones Keber 2007, 4).

The focus on political and social issues in Mixtec history, which Byland and Pohl both had, is what brought them together in the first place. Because they recognized some aspects from the Mixtec codices in the Codex Borgia they linked the Borgia pages to the activities of Lord 8 Deer and thus saw pages 29 to 46 as a series of initiation rites for someone to become king. In the Codex Borgia the person to become king was Stripe Eye (Byland 1993, xxiii-xxiv). Byland was not a scholar who worked intensively with the Mixtec codices, and it may be that that is the reason why he explains so little of his interpretations in the introductory part of Díaz and Rogers' (1993) reconstruction; his interpretations are relatively short. All in all, the interpretations are directly related to their work which was at that time still in progress (*In the Realm of 8 Deer* was published a year later).

Interpretations of the Borgia pages

In the introductory chapter of Díaz & Rodgers' (1993) reconstruction of the Codex Borgia, Byland explains his interpretation of pages 29 to 46 briefly. He does not seem to follow any of the earlier interpretations made by other scholars, although he is not very explicit. Overall he sees a mix of narratives and rituals in the pages. The biggest part of the sequence (pages 35 to 44), according to Byland (1993, xxiii), shows a ritual journey undertaken by Stripe Eye in order to become king or ruler of a community. This is preceded by 5 supernatural statements (pages 29 to 32), which may be read as a sort of

invocation that is being undertaken as preparation for the rituals performed in the subsequent journey. But before the journey is depicted pages 33 and 34 introduce two "Temples of Heaven". The last two pages (45 and 46) represent a New Fire Ceremony. With this all, the whole sequence consists of prescriptions of ceremonies, thus forming a guide (Byland 1993, xxiii-xxvi). The strip goddess on various pages functions, according to Byland (1993, xxiv-xxv), as an entrance for big scenes, through which a figure continues the narrative.

Byland's whole interpretation is based on those made during his work with John Pohl. They saw many relations between the activities of Lord 8 Deer in the Mixtec historical codices, and what is depicted in the Borgia pages. In both codices then, the idea is that a person becomes king through a series of pre-set rituals. The Sacred Bundle plays an important part in this and Byland and Pohl argued that the bundle is often related to kingship or a form of hierarchy. The bundle was taken care of by the high priests, just like in the Borgia pages, and the king did not touch it. The priests were thus its guardians (Byland and Pohl 1994, 131). Like Anders, Jansen, and Reyes García (1993) Pohl and Byland made the link between the Temples of Heaven in the Mixtec codices and in the Codex Borgia. They add to it that the flint-helmeted deity on the roof of the temples in the Codex Borgia refer to kingship like in the Mixtec codex Zouche-Nuttall (1994, 156-157).

Other links they made are the following:

1. Yoaltecuhtli (Figure 32), who Byland and Pohl consider to be the guardian of the sacred bundle in the Codex Borgia, has the same attributes as the father of Lord 8 Deer in the Mixtec codices (Figure 33). This father was also a caretaker of the sacred bundle (1994, 157).
2. The king-to-be has to play ball before being confronted with the Sacred Bundle. In the Codex Borgia the king-to-be is Stripe Eye, and in the Mixtec codices this is Lord 8 Deer (Byland and Pohl 1994, 157-158) (Figure 34 and 35).
3. To take over authority the king-to-be had to conquer the sun. Stripe Eye does this by sacrificing the sun on page 40 of the Codex Borgia, while Lord 8 Deer burns the sun's temple in the Codex Becker I (Byland and Pohl 1994, 158).
4. Both journeys continue across a big pool of water, in the Codex

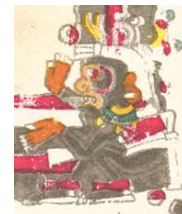


Figure 32. Yoaltecuhtli (after www.famsi.org, accessed 27 March 2013)



Figure 33. Lord 5 Alligator (after www.famsi.org, accessed 27 March 2013)

Borgia depicted on page 41, the other on page 75 of the Codex Zouche-Nuttall (Byland and Pohl 1994, 158).

5. Both drill a new fire to start a new beginning; in Codex Borgia on page 46, and in Codex Zouche Nuttall on page 78 (Byland and Pohl 1994, 160)

As a conclusion to this comparison, Byland and Pohl argue that there must have been a specific set of rituals which a king-to-be had to undertake before getting full authority (1994, 159). Table 6 shows Byland's specific interpretations as given in his Introduction on the reconstruction by Díaz and Rodgers (1993).



Figure 34. Stripe Eye in ball court (after www.famsi.org, accessed 27 March 2013)



Figure 35. Lord 8 Deer in ball court (after www.famsi.org, accessed 27 March 2013)

Table 6. Interpretation of Byland (1993, xxiii-xxvi)

Page	Interpretation
29	A pot is being prepared that liberates winds.
30	The winds and rains of the East are propitiated.
31	Death and sacrifice of the West (right) and North (left) are observed.
32	The blood sacrifice of Tezcatlipocas who influence the South is being honoured, so that the Quetzalcoatl character can emerge ready for what is to come.
33	Introduction of the "Temple of Heaven" with conical roof. Quetzalcoatl and Tlahuizcalpantecuhtli perform a heart sacrifice in front of the temple. Quetzalcoatl is also in the temple, where he is being addressed by Tlahuizcalpantecuhtli.
34	Introduction of the "Temple of Heaven" with eared roof. Inside the temple is Tepeyollotl. In front of him a fire is started on a representation of Tlazolteotl. A

	heart sacrifice is performed in front of the temple by Tepeyollotl.
35	A priest passes a sacred bundle to the priests Quetzalcoatl-Tezcatlipoca and Black Quetzalcoatl, who transport it to the next page. In the ball court Stripe Eye, the idealized king, is playing ball.
36	The bundle is opened under the supervision of priest Quetzalcoatl-Tezcatlipoca, and priest Xolotl. This releases a heavenly mist through which Stripe Eye is transported to the next pages.
37	Priest Xolotl enacts a series of rituals in front of the Temple of Heaven with the eared roof, while Stripe Eye is still in the heavenly mist.
38	Stripe Eye emerges from the mouth of Ehecatl-Quetzalcoatl. Meanwhile priest Xolotl continues rituals in front of the Temple of Heaven with the eared roof.
39	Stripe Eye is in the centre with Red Quetzalcoatl, while 12 Cihuateteo dance around them and 6 deities stand by.
40	Stripe Eye and Red Quetzalcoatl enter the jaws of the earth monster Tonacatecuhtli. Stripe Eye (the central figure) is assisted by 8 priests in a heart sacrifice of the solar deity Tonatiuh, which symbolically represents that he visits the solar deity.
41	Two Tlazolteotls and a Black Tezcatlipoca descend. Black Quetzalcoatl (probably Stripe Eye) and white Quetzalcoatl with red dots perform auto-sacrifice of the sexual organs for Chalchiuhtlicue and her male counterpart in the South.
42	Between the two temples Stripe Eye extracts the heart of white Quetzalcoatl, and is assisted by Black Tezcatlipoca. The white Quetzalcoatl is taken to the underworld and the ball court. After that he appears on a cruciform device with five little Nahuatzin. Here Quetzalcoatl transforms into Xolotl-Nahuatzin. Stripe Eye participates in cooking him.
43	The Night Sun or Moon supports the growth of corn from the earth. Eight figures sustain the growth of maize birth through fluids that emanate from their mouths.
44	Human headed serpents are tormented by rapacious animals. Smoke Eye in hummingbird costume sits in a tree, which grows from the body of Xochiquetzal (young goddess of the moon). She is nourished by blood from a heart that a bat brings.
45	Smoke Eye takes over the role of Stripe Eye. The life and death of warriors is represented: life by a pot of <i>pulque</i> on the right with Black and Red Tezcatlipocas; death by a red-and-white striped figure in a stream whose heart is torn out by Smoke Eye dressed as an eagle. Tlahuizcalpantecuhtli stands in the middle on a skull-rack. Below him Smoke Eye has a Venus-headdress and he bleeds from his rear end.
46	Smoke Eye is starting a fire in the chest of an image of the Fire Serpent and Xiuh-tecuhtli. Above Smoke Eye is being cooked symbolically in preparation for the lighting of fire. These acts mark the end of the ceremony and the beginning of a new era.

5.1.7 Boone (2007)

Biography

Elizabeth Hill Boone, born in 1948, started her study in Art History at the College of William and Mary in Virginia. After obtaining her B.A. degree there she studied at California State College. Subsequently she continued her study in art history with an M.A. at the University of Texas at Austin. This is where she specialized in Pre-Columbian art. In 1977 she finished her PhD dissertation on Pre-Columbian Art and History at the same university. Then from 1977 until 1980 Boone was Research Associate at the Research Center for the Arts at University of Texas, San Antonio. After that she started working at Dumbarton Oaks: first as



Figure 36. Elizabeth Hill Boone (tulane.edu, accessed 29 March 2013)

Associate Curator for the Pre-Columbian Collection (1980-1983) and later as curator of that collection and as director of Pre-Columbian Studies. Subsequently Boone held a chair at the Art Department of Tulane University, after which she got her current position as professor in Latin American Art at the same university. At Tulane she teaches various courses in Mesoamerican Art and codices. She is also a Research Associate of the Middle American Research Institute there (Curriculum Vitae Boone).

Boone's work is mostly influenced by George Kubler, an art historian. Kubler was a prominent scholar of Pre-Columbian and colonial art and brought the area to art history as a field of study (Willey 1998, 673). Furthermore, he was one of the first to treat the Mesoamerican hieroglyphs and pictographs not only as a form of written language but also as a visual form (Los Angeles Times 1996, articles.latimes.com). Boone continued working upon this idea, as her main research interest lies in the way knowledge is expressed through images, and in what way the use of imagery is more effective in conveying information than logo-syllabic script is. Her work consists of analysing this symbolism and interpreting Mixtec and Aztec codices (personal homepage, tulane.edu). Boone has written various books in which she takes up a synthesizing analysis of the pictorial manuscripts, and in which she focuses on the workings of pictographic writing. *Stories in Red and Black* (2000) and *Cycles of Time and Meaning in the Mexican Books of Fate* (2007), are the best-known of them.

Boone has focused mostly on ethnohistoric information and interpretations of codices by others in order to interpret the pages 29 to 46 of the Codex Borgia. She seems not to be familiar with ethnographic fieldwork and has elementary knowledge of Nahuatl (Curriculum Vitae Boone). Therefore ethnographic sources are probably not used by her that much to interpret the iconography. Influenced by the school of art history her analysis mostly relies on the analysis of the structural arrangement of the imagery and thus how the imagery is formed into a narrative. So, the overall layout of pages 29 to 46 of the Codex Borgia let her to interpret the sequence of pages as a narrative (Boone 2007, 173).

Interpretations of the Borgia pages

Boone generally follows the interpretations of Anders, Jansen, and Reyes García (1993a) when it comes to the specific images of pages 29 to 46 of the Codex Borgia. Nonetheless, she argues (Boone 2007, 173) that their overall interpretations are not satisfying enough as they do not account for all the imagery and its organization. According to Boone many interpretations do not incorporate why certain scenes are included and how they are related. To gain some insights in this Boone analysed the overall graphic structure of the pages to see how the scenes are organized and if they show similarities in arrangement of the imagery. She sees the sequence as a whole since it starts with four pages with separate scenes and ends with four pages with separate scenes, and in between scenes are depicted that span multiple pages. Because of this coherency, and also because of the figures that seemingly move from one page to the next, Boone concluded that the pages represent a narrative (2007, 173).

In general Boone (2007, 209) sees the pages 29 to 46 as a series of eight individual episodes that are linked together as a loose sequence of events, because the scenes are not inherently related to one another. The episodes are defined by the appearance of the strip goddess at the top of the page at the beginning scene of each episode. The first 3 pages contain a quadrilateral god or goddess which, according to Boone, binds the scenes together. The episodes are, furthermore, linked to each other by figures that exit one episode and enter a new one through the strip goddess. These figures initiate or enable the actions of the scenes they enter. All together the eight episodes form a narrative of creation (Boone 2007, 171).

The structure of the narrative is then as follows: Episode 1 (pages 29 to 32) functions as a genesis, representing the first acts of creation in which fundamental essences, concepts and tools emerge. Episode 2 (pages 33 to 38) shows the Black and

Red celestial temples, and then narrates the story of the obtaining and opening of the sacred bundle with Quetzalcoatl, Tezcatlipoca, Stripe Eye, and Xolotl. In the last pages of the episode humankind and maize emerge. Episode 3 (pages 39 and 40) shows Stripe Eye and his associates entering the earth where they perform a heart sacrifice of the Night Sun, after which Episode 4 (pages 41 and 42) represents the sacrifice of a human being, detailed in stages of preparation, enactment, and results. Episode 5 (page 43) concerns the obtaining of maize; Episode 6 (page 44) the need of blood sacrifice for the growth of plants; Episode 7 (page 45) the Morning Star in relation to warriors; and Episode 8 (page 46) the drilling of New Fire (Boone 2007, 178-179). The interpretations of each page can be read in more detail in the table below.

Boone's work on pages 29 to 46 of the Codex Borgia can be considered to be a synthesis of previous findings, although she gives a slightly different interpretation about the deeper meaning of the images and she uses a different approach. The part that differs most from previous interpretations is thus the meaning that Boone gives to the whole sequence, namely a narrative of creation instead of temple rituals, although the rituals in the narrative are taken over from other interpretations. The reason why she considers the pages to be something other than historic temple cult rituals is that there is the possibility that it is all metaphoric (Boone 2007, 178). Furthermore, as indicated above, she wants to give an explanation for why certain scenes are included in the sequence (Boone 2007, 173). A cosmogony would make each scene important as it shows the creation of various aspects of the ritual life of the makers of the Codex Borgia. Table 7 shows her general interpretations per page.

Table 7. Interpretation of Boone (2007, 171-210)

Page	Interpretation	Episode
29	An explosion of power and energy through which wind essences bring forth materials (obsidian and copal) and concepts of human sacrifice. The skeletal figure might enact the event.	1
30	The creation of time and the calendar (by piercing the day signs) in a time of darkness. The four directions are symbolized by the trees on the back of the spirits.	1
31	The birth of death-related goddesses, female personifications of maguey and <i>malinalli</i> (a kind of grass), and maize spirits. The central figure relates to Tlazolteotl.	1
32	The birth of the five Tezcatlipocas and Quetzalcoatl in the underworld, and the beginning of warfare and "human trophy hunting".	1

33	The Temple contains the deified souls of dead warriors, who accompanied the sun from dawn to noon. A primordial sacrifice is performed by Venus and Quetzalcoatl in front of the temple. Four essences of rubber are born from a rubber ball. A fire is drilled on the chest of Tonacatecuhtli to release essences of fire to the four directions.	2
34	The Red Temple has Cihuateteo, who accompanied the sun from noon to sunset. The sun (Red Xolotl) is born in the Temple. A sacrifice is performed by ancient beings in front of the temple. Above the sacrifice stellar beings descend.	2
35	Quetzalcoatl performs auto-sacrifice to Yoaltecuhtli as a request for the sacred bundle. They carry it to the next page, passing a subterranean place of Cipactonal and the ball court of Cipactonal.	2
36	Quetzalcoatl and Tezcatlipoca open the bundle, which releases tremendous power. This carries Stripe Eye and Xolotl into a day-lit ritual space on the next two pages. The elements from the explosion, brought forth by wind serpents, are essential to life and ritual, and they give birth to obsidian spirits.	2
37	Xochipilli plays his flute and drum in the Red Temple. Four Quetzalcoatl costumed figures, Xochiquetzal, and Tlalocque bring offerings to Xolotl in the Black Temple. Xolotl then descends and starts to dance. After that Xolotl brings down lightning and rain to the four directions.	2
38	In the water, a skeletal personification of water-tolerant trees and plants has taken the staff of Quetzalcoatl and he cuts the Tlaloc who stands above him. Blood gushes from Tlaloc's mouth, to nourish the river. Next to this scene a human is born. His progenitors are creator gods represented above in a sexual union. The newly born is bathed by a Tlaloc and the steam coming of him is later presented to Xolotl (on the previous page).	2
39	Descent of Stripe Eye and Xochipilli with a host of women dedicated to Tlazolteotl. They sing as if to gladden the sun on its descent into the underworld.	3
40	Trials of the sun once it sets into the underworld: Quetzalcoatl-related males cut into a black sun god (the night sun). Stripe Eye is in the middle. The descending pair is occupying the temples but is then taken captive. A stillborn birth where the mother also died occurs in the dark ball court.	3
41	The descent of Tezcatlipoca, with two of the women dedicated to Tlazolteotl who carry offerings. On the right is the future sacrificial victim, preceded by red Tezcatlipoca. On the left is Stripe Eye led by Black Tezcatlipoca. Tonacatecuhtli/Tepeyollotl and Chalchiuhtlicue are fed by the penis blood that is being drawn by the victim and a black Quetzalcoatl. At the bottom the victim is dancing with two nude women (the sexual license granted to those intended for sacrifice).	4
42	The victim is taken to the ball court by Stripe Eye, where he is defeated. This can be a metaphor for a warrior's defeat on the battlefield. Then Stripe Eye cuts out the heart of the victim. The blood feeds Tezcatlipoca. After the heart sacrifice the victim goes down into the earth, where he is greeted by Mictlantecuhtli. As a skeleton, the victim gives birth to the Tonaleque, while other Tonaleque emerge or figure in a sacrificial context. This episode stands as a prototype for heart sacrifice in general.	4

43	In the House of Sun and Maize is a great, black anthropomorphic sun. Below is a nude corn goddess. On either side are goddesses with infants that tip over their grinding bowls of ground corn. Above them, four male gods are fed by bowls of corn. At the top wider bowls of foaming corn feed the warriors Tezcatlipoca and the black Quetzalcoatl.	5
44	This episode represents the full corpus of flowering plants. It shows how blood brought by a bat nourishes Xochiquetzal, from whom the flowering tree of Tamoanchan sprouts. The eagle, jaguar, and quetzal are aggressively attacking the serpents or defending the quadrant from the serpents' entrance.	6
45	Venus, as the Morning Star, dances on a skull rack. He brings a general threat. On either side of him offerings are being made. On the right are Tezcatlipocas with pulque. On the left a heart sacrifice is performed by Quetzalcoatl disguised as an eagle. Below, Quetzalcoatl, as Venus, defecates precious blood, which symbolizes the redding dawn light followed by Venus in the morning.	7
46	In the centre is the cosmic hearth, in which Quetzalcoatl simmers. In the temples, two fire gods hold out and present small images of Quetzalcoatl (right) and Tezcatlipoca (left). These gods then occupy the two thrones below, where they rule over the final act of the narrative: the fire drilling. Quetzalcoatl drills a new fire from a disk on the torso of the fire god Xiuhtecuhtli. This functions to close the narrative. Then Quetzalcoatl moves through the strip goddess at the end of the scene as if leaving the narrative.	8

5.1.8 Batalla Rosado (2008)

Biography

Juan José Batalla Rosado is currently a Senior Lecturer in History of the Americas at the Universidad Complutense de Madrid, Spain, where he teaches courses in Aztec culture and History of America in the Modern Age (personal homepage, portal.ucm.es). In 2000 he obtained his doctoral degree with a thesis called “*El Códice Tudela y el grupo magliabechiano*”, supervised by Dr. José Luis de Rojas y Gutiérrez de Gandarilla. Like Batalla Rosado became later, Rojas is a specialist in the Aztec Culture of before and after the Spanish Conquest and the History of America in the Modern Age, and he also has a research interest in the Nahuatl language (personal homepage, portal.ucm.es), having worked in Mexico various times.



Figure 37. Juan Jose Batalla Rosado (vma.uoregon.edu, accessed 5 April 2013)

Batalla Rosado has eventually followed his footsteps at the University of Madrid. However, his work focuses more specifically on Aztec art and writing, with a special interest in the study of Mesoamerican codices. Most of this work deals with colonial codices, especially the ones in Spain (personal homepage, portal.ucm.es). In 2008, however, Batalla Rosado also published a thick book with commentaries on the Codex Borgia. He also has some knowledge of the Nahuatl. Batalla Rosado is the author of *Códice Tributos de Coyoacán* (2002), and *La religión azteca* (2008).

Interpretation of the Borgia pages

The work of Batalla Rosado on the Codex Borgia (2008) is, like the work of Boone, a sort of synthesis. The same holds for his explanation of the contents of pages 29 to 46. He takes over the ideas of Anders, Jansen, and Reyes García (1993a), as for the specific actions and figures involved. What he sees different is where this all takes place and what the pages were used for. Instead of interpreting the buildings as belonging to a specific ceremonial centre, Batalla Rosado argues that the scenes relate to the nine layers of the underworld (2008, 408-409). He argues that this is shown by the vertical division in which the scenes appear on top of one another. The nine rites that Anders, Jansen, and Reyes García (1993a) mentioned then take place in nine different layers of the underworld

(Batalla Rosado 2008, 409). The biggest determinants for this interpretation are the darkness and reference to death that appear frequently, and most of all the appearance of the figure that Anders, Jansen, and Reyes García (1993a) interpreted as the “*papa mayor*” or the High Priest Cihuacoatl; Batalla Rosado (2008, 410) interprets this



Figure 38. The Night Sun is sacrificed nine times (after www.famsi.org, accessed 5 April 2013)

figure rather as Mictlantecuhtli or a Mictlantecuhtli priest. According to him (Batalla Rosado 2008, 441) it could also be Cihuacoatl, but in either case the main reference is to death. This figure represents a different layer of the underworld each time it appears and it provides an entrance to the layer of the underworld that it represents. Therefore, Batalla Rosado agrees with Anders, Jansen, and Reyes García (1993a) that a part of page 47 also belongs to the sequence as the figure at the end of this page should indicate a new underworld layer. Furthermore, almost every figure with a skull as a head is interpreted as Mictlantecuhtli.

Batalla Rosado's overall interpretation is that the rites are connected to the sun's path through the underworld at night (2008, 409). That it shows the path of the sun is deduced from the appearance of the two temples on pages 33 and 34, which Batalla Rosado interprets as the paradise of the sun in which his companions are shown in the roof (the sacrificed warriors and the women who died in childbirth) (2008, 421). Furthermore, the sun is sacrificed 9 times on page 40 (Figure 38), which would refer to the nine layers of the underworld. As to the function of the pages, Batalla Rosado argues that the pages form a guide for a hallucinatory journey of a group of priests or of one priest (Batalla Rosado 2008, 411). Thus, all in all the pages represent a vision of the passage of the sun through the underworld as perceived by a priest (Batalla Rosado 2008, 421). With this Batalla Rosado (2008, 412) assumes that:

"[...] this is a pictorial reflection of hallucinations that the author(s) had to reach to exercise his priestly office."

In that sense he slightly differs from the interpretation of Anders, Jansen, and Reyes García (1993a), who argue that the pages form a guide for a sort of festival rites. However, they do not deny the hallucinatory element in it. Batalla Rosado (2008, 413) argues that the priests would know what to do during festivities without needing explanation and therefore he does not believe that the pages show such rites. This is also why he does not believe that there is a direct relation with the Codex Borbonicus, in which the monthly festivities are shown for what he calls the "*ratification of the process of the New Fire Ceremony among the Mexica*" (Batalla Rosado 2008, 412). According to Batalla Rosado the day signs that are depicted on pages 29 to 46 of the Codex Borgia refer to the days on which rituals were held in honour of the dead (Batalla Rosado 2008, 441). Thus again, the whole sequence of pages is related to rituals that relate to the realm of the dead.

All in all, Batalla Rosado used previous interpretations mostly to pick out the parts that support his idea of the hallucinatory journey in the underworld. However, he does not explain what actually happens on the pages as he argues he does not have enough information to do so. Therefore he generally follows the ideas of Anders, Jansen, and Reyes García (1993a), but with a main emphasis on the reference to death in the pages. According to Batalla Rosado the first four pages (29-32) then show the ninth layer of the underworld represented in horizontal divisions of the five directions of the cosmos, indicated by the rectangular body of Mictlantecuhtli. The other rites that start with the Mictlantecuhtli body in strip-form each indicate another layer of the underworld. The last rite (on page 47) shows the Cihuateteo and Tonaleque (as Tzitzimime), who are thought to be the companions of the sun through the underworld. Subsequently, in the next sections (page 47 to 49) they appear as the companions of the sun during daytime (Batalla Rosado 2008, 441).

5.2 Discussion of interpretation problems

5.2.1 Summary

Looking at the various interpretations and their specific argumentation it becomes clear that there are four main paradigms at play. One paradigm concerns the astral focus, initiated by Seler, but partially revived by Milbrath and various other scholars who work within the field of archaeoastronomy. Their line of reasoning departs from the pre-set idea that astronomy plays a great role in Mesoamerican life and therefore also in the pages of the Codex Borgia. Seler and Milbrath interpreted the pages with an emphasis on astronomical cycles and events, and they have come to the conclusion that these events are central in the imagery of pages 29 to 46. Fábrega also slightly belonged to this paradigm, as he considered the pages to have astronomical content, based on the number of pages.

The second paradigm has been initiated by Nowotny, and is continued by Anders, Jansen, and Reyes García. Although the other scholars (Byland, Boone, and Batalla Rosado) also partially follow Nowotny's interpretations, they do not follow his line of research and his use of sources. Therefore they fall under another line of reasoning. Within Nowotny's paradigm ethnography and ethnohistory (paired with ethno linguistics) are considered the primary tools for interpretation. This has resulted in the idea that pages 29 to 46 of the Codex Borgia represent temple rituals which may or may not be related to monthly festivities (Anders, Jansen, and Reyes García 1993a, Nowotny 1961, 1976).

The third paradigm is that of Pohl and Byland, in turn influenced and informed by the knowledge of Nicholson. They believe that there is a strong relationship in cosmology between the Mixtecs and the Central Mexican Nahuatl people (as both the Mixtec codices and the Codex Borgia belong to the Mixteca-Puebla style). Therefore, Byland and Pohl look at parallels between Mixtec codices, Mixtec archaeology, and in this case the Codex Borgia, to interpret the pages. Pohl and Byland came to the conclusion that the Borgia pages show the process of a ceremony in which someone is elevated to the rank of king (Byland 1993, Byland and Pohl 1994).

Boone and Batalla Rosado both work from a different, fourth, paradigm to interpret the pages further. Both argue mainly on the basis of structural logic and layout of the imagery, questioning how the scenes form a coherent whole and why each scene is part of the whole. They answer this mainly through their own logic, combined with information that they gathered from previous works to aid their interpretation.

Nonetheless, Boone and Batalla Rosado came to different conclusions. Boone sees the whole as a narrative of creation, and Batalla Rosado interprets pages 29 to 46 as representing death rituals related to the nine layers of the underworld.

5.2.2 Evaluation

To be able to discuss the problems that appear in the interpretation process the interpretations will first be evaluated on strength and credibility by examining the analogies they used in combination with line of reasoning. Subsequently the interpretations will be compared with one another in order to gain insights in the problems of the interpretation process and to make these problems more concrete. After that I will also try to find out why these problems occur in order to suggest future lines of research.

Fábrega's (1899) research is mostly descriptive and he does not really tell where he got his information from. His interpretations have also not been elaborated upon by subsequent scholars. Therefore the evaluation will start with the extensive interpretation of Seler (1906). With his research in Mexico Seler has contributed greatly to the current knowledge of Mesoamerican religion. It is striking then that although he has gathered a lot of information through ethnohistory, ethno linguistics and so forth, he does not use it a lot for his interpretation of the Codex Borgia pages. It seems that he has used this information only to identify the figures in the scenes (which of course is already a great contribution). Primarily, Seler's ideas are based on an assumption: that the Mesoamerican codices contain myths that concern the cosmology and especially astronomy of the ancient Mexican peoples. The main argument with his interpretation is the link of the first page (29) with the Toltec narrative of Quetzalcoatl who was turned into Venus. This is a single formal analogy from which he reasons, and he looked for additional arguments to aid his interpretation. But all in all Seler does not use that many sources for his main line of argumentation.

Furthermore, the extent of similarity between the Quetzalcoatl narrative and the Codex Borgia pages is not great. Seler links the Quetzalcoatl narrative to the first page (29) and the rest of the pages are subject to a forced interpretation in order to continue the story; namely, that this is the journey of Venus through the Underworld. As Milbrath indicated, the interpretation of page 29 is contradictory. In the sacred narrative, Quetzalcoatl's death is related to the emergence of Venus. Seler, however, interprets page 29 as the end of the Morning Star phase. Milbrath also indicates that the periods presented on the pages by the day signs do not coincide with Venus phases. As for the

characters, Seler does not only see Quetzalcoatl as Venus, but also many other figures in the scenes, which does not make it a coherent interpretation. When comparing the various figures that he considers to be Quetzalcoatl there seems to be no coherence as to the characteristics that Venus should have; at least he does not explain them. Furthermore, Quetzalcoatl, who is seen as being Venus the whole time, is interpreted as the sun as well on page 46. Therefore, we can again conclude that the interpretation is forced and therefore does not fit the imagery very well.

Apart from this, Seler's identification of some of the figures is strong, like one of the Quetzalcoatl figures in the pages (Figure 39). This figure seems to be very similar to the Mixtec Quetzalcoatl (Figure 40). Especially when considering that they both are born from a flint knife. Subsequent scholars have also adopted Seler's identification of many other figures. Still, all his arguments considered, Seler's overall interpretation seems to be a coherent one on its own, but it does not seem to fit the imagery, and it is based on too little information. I therefore conclude that his interpretation is weak.



Figure 39. Birth of Quetzalcoatl from a flint in the Codex Borgia (after www.famsi.org, accessed 14 April 2013)

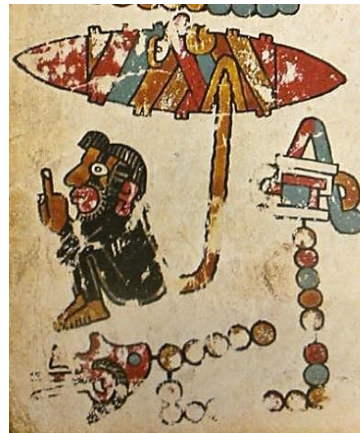


Figure 40. Birth of Quetzalcoatl from a flint in the Codex Vindobonensis (after Anders, Jansen, and Pérez Jiménez 1992, 49)

Milbrath in turn, continues with Seler's formal analogy with the Toltec myth, but at the same time she argues for the presence of a festival calendar in the 18 pages in which astronomical events play an important role. The presence of monthly festivities is based on the appearance of 18 pages, which is the same number as the months in one solar year. However, this number (or formal analogy) may be just a coincidence, and Milbrath seems to ignore the fact that some scenes span multiple pages.

To aid in her interpretation, Milbrath uses Sahagún's account for the further identification of specific festivals. The extent to which Sahagún's accounts are similar to the Borgia pages, however, is very small, as Milbrath was able to recognize the principle deities of each feast only in four of the 18 cases. So there is some similarity in only four cases, and this is based on the appearance of related gods only. Milbrath does not explain to what extent the actions involved are also similar to the ones described by Sahagún. Overall, the relation to specific festivals of the year is very weak. This does not mean that there are no festivities depicted; rather the ones depicted are not very similar to what Sahagún wrote down and she has indicated no relation with any other source. Furthermore, the time periods don't indicate a specific relation with these festivals either.

The most important elements in the pages, according to Milbrath, are the astronomical events. These, however, are mostly interpreted following her own ideas as to what the imagery could represent, without using a source of reference to draw analogies from. Milbrath sees most of the events as related to Venus, even though the iconography does not show the presence of Venus very well in some cases (for example on page 40 where only the sun seems to be shown and no relation to Venus is apparent). Actually, nothing is really known about Central Mexican astronomy so it is difficult to interpret anything that has to do with this. Therefore, it is not known to what extent the makers of the Codex Borgia were involved in the kind of astronomy that we know the Maya were involved in, and what role it played in their ritual life. What seems to have happened here, and also with Seler's interpretation, is that the knowledge of the Maya is projected upon the people of Central Mexico. Thus, Milbrath's interpretation of the conjunction between various celestial bodies could be right, but it cannot be linked to any source available. Therefore, according to the evaluation of the strength of analogies, the whole interpretation is weak.

Furthermore, Milbrath's interpretation is not complete as she only interprets the astronomical events and not the actions that occur along with them. Some pages are not even considered at all. One last thing is that Milbrath argues that the pages refer to a 104 year period of which only the last year is shown, but this argument is not elaborated upon. Why would a 104 year period be indicated if only the last year seems to be shown? And why then are some time-indicators of the 104 year period put into various scenes while they, according to the interpretation, are not direct dates for the specific scenes? In general, because of this the interpretation is very speculative and not very coherent. It

would be better if Milbrath could strengthen her interpretation by comparing it with ethnographic data.

Nowotny, in turn, did not consider the events on the pages to be inherently astronomy-focused. He mentions that there is no Venus calendar involved, as that does not fit the imagery, but that the whole seems to refer to a 260-day calendar divided in segments of 4x65 days. Subsequently, he argued mainly through relational analogies since he used various sources (also ethnographic) to build up a theory: that the pages represent rituals in a ceremonial precinct that were actually performed historically. His interpretation also seems very coherent. Although Nowotny does not mention his sources it is known from other historical codices (like the Codex Nuttall) and from archaeology that ceremonial centres like the one in the Codex Borgia existed. More specifically the link of page 44 with the nose piercing ritual in the *Historia Tolteca-Chichimeca*, the similarities between page 43 and the ritual of *Atamalqualiztli*, and the historical appearance of the New Fire Ceremony as shown in the Codex Borbonicus serve as more evidence for this interpretation. Also, bundle rituals are known to have actually existed, as seen in Mixtec codices, but it is also known from various works of Spanish priests, for example, the work of Ruiz de Alarcón. All in all, Nowotny showed that many rituals that are shown in the pages have a relation with rituals that were actually performed by priests in Central Mexico, among the Nahuatl as well as among the Mixtecs. Thus, although the specifics of the rituals present in the Codex Borgia have not been explained or are not known from any source, there were some similarities in ritual acts among various cultures in Central Mexico. This makes Nowotny's interpretation very credible.

The extent of similarity and the amount of sources that relate to Nowotny's overall interpretation seem to be relatively large, when we consider that there are no sources that are identical to what can be seen in pages 29 to 46 of the Codex Borgia. Furthermore, Nowotny strengthens his interpretation by explaining the differences that exist between the imagery in the Borgia pages and the sources that he uses. After all, the rituals are important for a specific ceremonial centre, often with a specific focus on the Temple of Dark Winds, and are therefore different from the rituals as described by Sahagún. It is also known from historical sources that rituals or specific stories and beliefs could differ between each community (Tavárez 2011, 271). All in all, Nowotny's interpretation has been strengthened by various analogies that point in the same direction. However, he does not discuss in real depth the meaning of the actions and that is why he is able to keep his interpretations relatively safe from critique. Nonetheless, in

some cases where he did assume more, the interpretation becomes more speculative. For example, he argues that Tonacatecuhtli on page 39 and 40 represents the wall of the ceremonial centre, while no specific characteristics of a built wall are visible. The same holds true for Nowotny's interpretation of the "retreats" on pages 29 to 32, which are indicated by the body of Cihuacoatl. These bodies, which then form walls, are not interpreted as such with a lot of complementary data. Rather these interpretations seem to be based more on the idea that the whole sequence depicts a ceremonial centre and the bodies thus have to represent walls. These interpretations are relatively weak, which again does not have to mean that they cannot be true. They may concern a metaphorical reading, and it is known that the ritual codices are full of metaphors, but thus far it has not been backed up with sufficient data yet.

Anders, Jansen, and Reyes García then built on Nowotny's ideas of rituals in a ceremonial centre, adapting most of his interpretations of the pages. Therefore, the basis of their interpretation is generally strong. Here I will look at the additional interpretations they bring. One of the main new interpretations Anders, Jansen, and Reyes Garcia make is that the strip goddess represents the high priest of a community, who is named after the earth goddess Cihuacoatl. In the Codex Borbonicus this figure plays a very important role

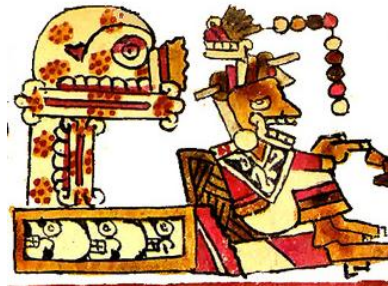


Figure 41. Lady 9 Grass as an oracle priestess (Codex Selden, www.famsi.org, accessed 14 April 2013)

in the festivities presented. As the Borgia pages may also indicate such festivities (as interpreted by Nowotny before), the idea that the large figure at the beginning of each scene represents this high priest is relatively well-founded. It is also known from various other historical sources (e.g. Sahagún and Duran) and from the Mixtec codices that such a figure existed (see Figure 41), although in these cases it may not necessarily concern the highest priest of the community. The Cihuacoatl-priest then could have been represented in various communities in Central Mexico, and this makes the interpretation credible (not to say that the imagery does not contain any other metaphorical readings as well, which could be perfectly possible).

A second new interpretation is that of the use of a hallucinogenic ointment, with which the priests were painted black. It is known from various historical sources that such hallucinogens were used in Central Mexico; like from Ruiz de Alarcón. On the other hand not every priest in the scenes is painted black even though they sometimes seem to

perform the same act (for example the central figures on page 39). Because it is not explained why, the interpretation remains hypothetical. Nonetheless, the wind serpents could indeed be indicators for a hallucinatory state, especially if it can be considered correct that page 29 represents the making of a hallucinatory ointment. Like Durán explained, a hallucinatory ointment was made of spiders, centipedes, and other kinds of poisonous animals, as well as various herbs and the hallucinogenic seeds of *ololiuhqui* (Durán as cited in Anders, Jansen, and Reyes García 1993a, 187). On page 29 it is indicated that spiders go in the turquoise pot, and the whole scene is surrounded by a god with the body of a herb (*malinalli*) (the twisted cords). Furthermore, the wind serpents could be vision serpents. All of this could therefore indicate a trance state. Future research may hopefully give a more decisive answer.

Anders, Jansen, and Reyes García also provide new evidence for the actual existence of the ceremonial precinct as depicted in the Codex Borgia. They compare the Temples of Heaven mainly with the temples in the Codex Nuttall, but also with temples that have been painted and described in many sources from different areas of Central Mexico. For example, they appear in the wall-paintings of Mitla (Figure 42), a Zapotec settlement. In Sahagún's accounts there is also a description of a Temple of Heaven for the Aztec capital Tenochtitlan (Anders, Jansen, and Reyes García 1993a, 181). All in all then, for this part they provide extra evidence to make the interpretation of actions in a real historical ceremonial centre very credible.



Figure 42. Mural painting at Mitla with the Temple of Dark Wind (Pohl, www.famsi.org, accessed 29 April 2013)

Where it becomes more hypothetical is when a more specific meaning is given to the imagery. Although a reoccurring theme seems to be sacrifice, the idea that the scenes represent life and light coming from death and darkness does not seem to hold

up for every page. For example, page 44 is still interpreted as an initiation rite for princes. On the other hand the depiction of the growth of maize and figures being born is apparent in most of the scenes. Nonetheless, not much information is given in support of these interpretations, again because not that much specific information is available. Therefore, unavoidably, the specific meaning given to the actions on the pages remains hypothetical, although not implausible. So in short, the additional evidence they give for the presence of various rituals, led by the priest Cihuacoatl, is relatively strong, but the specific meaning given to each action remains hypothetical, like we will see in the interpretations of Byland, Boone, and Batalla Rosado.

Byland, in turn, interprets the purpose and meaning of the actions very differently. Seeing parallels with the Mixtec codices, and especially with the story of Lord 8 Deer, Byland argues that the Borgia pages show a series of ceremonies to be undertaken by the king-to-be, in order to become king. However, the arguments he gives, together with Pohl, are very limited. Only three pages (35, 40, 46) contain elements or actions that have some similarity with the story of Lord 8 Deer. The idea that the pages show the whole process of becoming king, which was according to Pohl and Byland a shared thing in Central Mexico, is therefore not based on very strong argumentation.

The extent of similarity between the subject and the source in the analogies is not so great either. They are based on formal analogies. For example, Yoaltecuhtli shares some characteristics with the father of Lord 8 Deer, and both are keepers of a Sacred Bundle, but that does not necessarily indicate that the actions related to them are the same. Byland and Pohl argue that the king-to-be had to play ball before coming into contact with the sacred bundle, which in both cases is seen, but again this is a formal analogy and may be just a coincidence. Furthermore, Byland and Pohl argue that the king-to-be had to conquer the sun, but in the Codex Borgia the Stripe Eye figure (the supposed king-to-be) does not sacrifice the sun on its own, but there are also many other Quetzalcoatl figures involved. Another argument for the presence of ceremonial rites for a king is the presence of a big pool of water which people had to cross. However, again the action related to it is very different, as it is not the crossing of water that is being shown in the Codex Borgia, but an auto-sacrifice for the watergods. So the extent of similarity that is required to argue for a shared series of ceremonies to be undertaken by a king-to-be is very small and not very credible. Adding to this, pages 43 and 44 do not show a Stripe Eye figure. The rest of the interpretation of Byland is also very descriptive and non-

explanatory. Therefore, overall, the strength of analogies made by Byland and Pohl is not very large.

Adding to this they also do not make use of many sources as they only refer to the story of Lord 8 deer in a few Mixtec codices, so there is no indication if the series of rituals for kingship was actually shared amongst various groups in Central Mexico. The analogies are thus, again, not relational ones; only formal. Overall then, even though their interpretation seems to be coherent in itself, it is not that credible as it does not fit the pages very well and it consists of only a few comparisons. Therefore the interpretation is weak.

Boone gives still another interpretation of the meaning of the actions, although she generally agrees with Anders, Jansen, and Reyes García on the actions on the pages. For her interpretation of a creation story she uses various creation stories from all over Mesoamerica (Maya, Aztec, and Mixtec) to support her argumentation. The meaning given to the actions, however, is mostly based on her own ideas, as there are no specific sources that mention creation in a sense that it strongly relates to what seems to happen in the Borgia pages. This makes the interpretation just as hypothetical as that of Anders, Jansen, and Reyes García, and Byland. However, in some cases Boone contradicts herself, like when she argues that on page 33 sacrificial items are brought down for humans to make sacrifices, while humans only come into existence later in the narrative; and even though she argues that a narrative does not have to be presented in a chronological order, she does indicate that it does follow a logical sequence (Boone 2007, 210).

Other than Anders, Jansen, and Reyes García, Boone interprets the strip goddess as a structural element showing the beginning of each scene. As some beings have claws, she interprets them as essences instead of real active figures. However, in as far as becomes apparent from her argumentation, this is not based on any structural analysis of the characters. Therefore it remains an assumption. To support this interpretation it would be better if she made an analysis of the relation between each clawed figure and the actions performed in the scenes, to see what their real functions are. As for the rest Boone generally summarizes the interpretation of Anders, Jansen, and Reyes García, although her own focus on the meaning of the imagery lies on creation and primordial times.

The analogies that Boone makes from the various Mesoamerican creation stories do not, however, always coincide very well. For example, she argues that the obsidian and copal shown on page 29 may have had a similar function to the prayer and offering

in the Mixtec Codex Vienna, namely, that they are the first elements of creation. These elements, though, are not the same things, and the similarity is therefore not great. Boone also does not give any indication for why these would be different. Another example is that Boone argues that page 30 represents the birth of the calendar, because all the day signs are shown and the Tlaloc figures pierce day-signs as if opening the eyes of a newborn child. This analogy comes from the birth almanac in the Codex Borgia itself (see for example Figure 43), but whether the same act is implied is hard to prove. The formal analogy may thus be purely coincidental.



Figure 43. The eyes of a new born child are opened with a bone awl (after www.famsi.org, accessed 14 April 2013)

Lastly, Boone's idea that the whole sequence represents a narrative of creation does not correspond to the time periods indicated. Boone argues that they are often *trecenas*, but they do not necessarily follow a chronological order, while Boone does argue that the scenes seem to follow a logical order. Furthermore, it would be expected that with a narrative of important events, the time indicators would mention the specific time at which something occurred, like in the historical and religious codices of the Mixtec in which this is always indicated (e.g. Figure 44). In various Aztec codices too, such as the Codex Telleriano-Remensis (Figure 45), dates are given for certain events. In the Borgia pages however no specific dates are given, and the time pattern seems to point at something different. This does not mean that the actions involved have no relation to primordial times or to a story of creation, as the scenes might have a double layer of meaning. However, telling a creation story does not seem to be the main function of the Borgia pages when regarded in this way.

All in all, Boone's interpretation is mostly based on her perception of the contents and is therefore just as hypothetical as the interpretations before. Next to that, the analogies that she makes do not show extensive similarities and are almost all formal analogies. Nonetheless Boone does argue that there are no extensive similarities because the codex has a different origin than the stories she uses as sources. This is a valid argument, just as Nowotny argued that the rites do not resemble the ones described by Sahagún. All in all, however, the conclusion is still that the interpretation of the possible meaning(s) is not very strong, as there is not enough data available, relational or not, to back it up.



Figure 44. Indication of dates of a specific event in the Codex Vindobonensis (after www.famsi.org, accessed 18 April 2013)

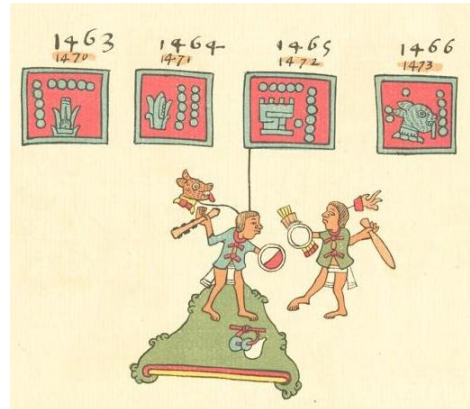


Figure 45. Indication of dates of a specific event in the Codex Telleriano-Remensis (after www.famsi.org, accessed 18 April 2013)

The same holds true for the interpretation of Batalla Rosado. He also agrees with how the rituals on pages 29 to 46 are described by Anders, Jansen, and Reyes García. However, he relates all the rituals to the underworld, which is again an interpretation focusing specifically on the deeper meaning of the imagery. This interpretation is not based on many analogies and many sources at all. Three things lay at the basis of this interpretation: the vertical layout in which scenes are represented on top of each other, the division into 9 rites by Mictlantecuhtli or Cihuacoatl (the strip goddess), and the frequent appearance of figures related to death. According to Batalla Rosado the 9 layers of the underworld are indicated by the appearance of Mictlantecuhtli (or maybe Cihuacoatl) in strip form. It is known from various sources that Mictlantecuhtli is indeed a god of the underworld and a god of death (e.g. Sahagún). However, Batalla Rosado seems to ignore the female attire that this figure often wears in the Codex Borgia. This makes the interpretation of Mictlantecuhtli, a male god, less credible. Furthermore, the interpretation is based on a formal analogy, but is not explained much further. What is known from Sahagún's accounts is that Mictlantecuhtli reigned in Mictlan, which is the 9th layer of the underworld (Baquedano 2011, 205). Therefore, his relation with the other layers is not clear. Batalla Rosado also recognized various other figures in the scenes as Mictlantecuhtli and, together with the 9 layers represented by the strip goddess, these are the only analogies he makes to interpret the scenes as taking place in the underworld. He does not refer to any sources that actually relate the depicted scenes to the underworld,

but he also argues that not much is known about these underworld layers. His whole interpretation of meaning therefore is very weak.

But his interpretation does not end here. He also argues that the sun's path through the underworld is shown. The sun seems to be important as Batalla Rosado argues that the sun's paradise is introduced on pages 33 and 34, after which the sun is stabbed 9 times on page 40 which indicates that he is going through the 9 underworld layers. This last interpretation seems well-founded, were it not that the nine sacrifices take place in one layer in the imagery. This does not fit the rest of the interpretation as Batalla Rosado argued that each scene would indicate one underworld layer. For the first interpretation there are also problems, because Batalla Rosado does not explain why the Temples of Heaven, the sun's paradise, reappear in various layers of the underworld. All in all then his interpretation is not very coherent, and it is based on very little information. The analogies he makes are only a few formal analogies, which are not backed up with sufficient data and argumentation in order to form a thoroughly argued interpretation.

In conclusion then, it can be argued that the interpretation of Nowotny, elaborated upon by Anders, Jansen, and Reyes García, is the most credible as they used many different sources that point in the same direction, and the extent of similarity between these sources and the imagery in the Codex Borgia is relatively large. It is notable that most subsequent scholars agree with these interpretations. Researchers start to disagree when a specific deeper meaning is given to the actions in the pages as there are not enough sources to relate to. Furthermore, there is no consensus as to what extent the rituals relate to one another. Thus the layout is badly understood.

5.2.3 Comparison of the interpretations and identification of the problems

When comparing all the interpretations, there seems to be disagreement only on the 'deeper' level of interpretation: the specific meaning of the imagery. As for the consensus, almost all scholars agree about what actions take place in the scenes (as mostly interpreted by Nowotny and Anders, Jansen, and Reyes García), except for the first 4 pages, and especially page 29. What seems to be the problem here is the identification of the substance that disperses from the vessel, which has heads of the windgod Ehecatl. Does it represent a hallucinatory vapour, ashes of Quetzalcoatl, or energy winds? Of page 30 it is not known what the red circle in the middle represents, and the accompanying actions are not really identified other than being related to vegetation or rain. The interpretation of page 31 is even less certain, but there is a general agreement

on page 32: here the Tezcatlipocas and Quetzalcoatl seem to be born. As for pages 33 and 34 there is an agreement that it is specifically about the Temples of Heaven (with sacrificed warriors and Cihuateteo in the roofs) where heart sacrifices and fire drillings take place.

All scholars, except perhaps Milbrath, seem to agree that a sort of narrative is represented on pages 35 to 38, in which a bundle is opened that releases a tremendous force. Stripe Eye is taken away by it, and in the meantime a Xolotl figure performs various rituals, among which a lightning ritual. Furthermore aquatic plants grow and a human is being born. Pages 39 and 40 are also considered to belong together and they are generally interpreted as the descent of two priests, surrounded by Cihuateteo, into the earth where the Sun is sacrificed 9 times by Quetzalcoatl figures, whether read metaphorically or not. The scholars seem to agree that pages 41 and 42 belong together as well, and that an auto-sacrifice is being performed for the watergods on days related to the Cihuateteo. Afterwards a human being is sacrificed and from him Tonaleque spring. Furthermore every scholar seems to agree that page 43 shows a ritual in which maize is eaten (by warriors). It is also agreed, with the exception of Boone, that page 44 shows the initiation rite of princes in which their nose is being pierced in some kind of courtyard. Subsequently scholars also agree that page 45 shows a ritual related to Venus and warriors and that page 46 shows a New Fire ceremony.

Apart from all this, there is agreement on the identification of most figures in the scene, the exception being the strip goddess. She is either interpreted as structural denominator, the earth goddess, Miclantecuhli, or a high priest. Where scholars start to differ the most in their opinions is on the specific meaning of the actions (what is the central theme?) and their context. This is where the interpretation process goes different ways. Subsequently, the spacial context has been interpreted as a specific ceremonial centre, a primordial realm, and the underworld. As for the context of time, the rituals take place either at various occasions during the year or a few years, or they happened in primordial times. Generally then the scholars disagree on what the overall function of the pages was. Milbrath seems to argue that it is a historical record of events, Nowotny and Anders, Jansen, and Reyes García, and Byland argue that the imagery shows a sort of prescription for rituals, Boone argues that it is a narrative of creation, and Batalla Rosado argues that the pages show a reflection of the kind of hallucinations that a priest should reach in order to perform his duties.

What scholars also disagree on is which elements of the scenes define what the scene is about and how it should be interpreted. Clearly Seler and Milbrath focus on astronomy, for example. And clearly Boone focuses on aspects of creation. Choosing different points of departure thus results in different conclusions. Besides that, some interpretations rest on assumptions, which are very hard to proof with the amount of information that is referred to. Therefore it is hard to clearly argue for one interpretation over another.

A final point of disagreement is in what way the pages are related to one another and if they can be considered a sequence of events or separate rituals. All seem to agree, however, that the whole does not show a story with a plot. The narrative element, according to the scholars who interpret the sequence as a sort of narrative, seems to lie in the reoccurrence of characters and the movement through the strip goddess.

Taking all these points in consideration, it can be argued that where it goes wrong is when it comes to the interpretation of symbolism, the focus in the pages, and the relation between the pages. Above all, however, the biggest issue is still the lack of information for a specific interpretation, which in many cases has resulted in scholars arguing from their own ontology. Much more needs to be researched.

5.2.4 *Suggestions for future lines of research*

Understanding the content of imagery that has not been encountered before in other sources seems almost impossible. For the Codex Borgia this is specifically problematic because it is not known who made the imagery, where it was made, and when. Thus to look for specific contextual information is difficult. Furthermore, it is a ritual codex which contains a lot of information about the religion of its makers. The interpretations of the deeper meaning of imagery often rely to some extent on certain assumptions that one makes. Nonetheless, we should keep in mind that the Codex Borgia was not made for us to read (Van der Loo 1989, 32); therefore nothing is explained to us. Furthermore, from our cultural background the imagery does not seem to make sense (Van der Loo 1989, 33). Reasoning from our own ontology, then, does not seem to work.

In order to be able to understand what is depicted it is crucial to understand the values and ontologies as they existed in Central Mexico. We must, somehow, manage to understand this worldview which the people had, which was considerably different from western conceptions. People often tend to forget that the ancient cultures of Mesoamerica still have their descendants living in Mexico today, and these people have

kept many of their traditions, stories, and beliefs throughout the years. As for the Codex Borgia it is clear that many religious elements were shared all over Central Mexico, by various culture groups, through trade or other forms of contact. The Mixteca-Puebla iconographic style is an indicator of this, and the presence of the Borgia group codices which carry highly similar contents shows this as well. Therefore the knowledge that people have in various places within or near the region where the Codex Borgia probably originates (the Puebla-Tlaxcala area) may be very valuable even though the specific place of origin of this codex is not known.

It is often argued that so much has changed throughout the years that we should be careful with using the knowledge that current Mexican people have about the world in order to interpret the past. Some argue that we should not use it at all (Van der Loo 1989, 33). However, ontologies do not change that quickly. Only the way people acted towards them changes through time (Rivière cited in Rival and Whitehead 2001, 18). As shown on multiple occasions the Spaniards imposed their own religion upon the Native American peoples, but what actually seemed to have happened is that the Native American peoples incorporated this belief into their own worldview. While European Catholicism is very restrictive in the sense that it recognized one God and one God only, Mesoamerican religion thus seems to have been more open. As a result when Christianity was introduced the two religions formed, through a process of synergetic confluence, a new type of blooming Mesoamerican Christianity. In its outward appearance it may seem purely Christian (due to European extirpation efforts), but underneath the surface a rich layer of truly Mesoamerican culture and indeed religious experience flourishes (Jansen, personal communication). Therefore, although some things seem to have changed superficially, the ontologies as they existed in Mexico prior to the Spanish Conquest have been preserved in Mexico up to this day still to some extent. An example of this which fits the topic of this thesis is the synergy between Cihuacoatl and the Virgin Mary (or Virgin of Guadalupe) (Figure 46), who are both interpreted as



Figure 46. Virgin de Guadalupe (www.aciprensa.com, accessed 15 April 2013)

“our mother”, and who both have similar functions (Stafford Poole 1995, 78). It is mostly the outer appearance that has changed.

Here it is thus argued that in order to gain understanding of the ontology that is at play in the pages 29 to 46 of the Codex Borgia, we need to work together more with the indigenous peoples in Mexico. Peter van der Loo gives a great example of why such an approach is fruitful. He was able to interpret a mantic scene on page 63 of the Codex Borgia (Figure 47), because it related closely to a story that he had recorded in the Tlapanec area in 1979 (Van der Loo 1989, 38). The myth tells about the Lord of the Mountain (the jaguar in the Figure) and the terrible consequences that a hunter will suffer when he lives in a situation of adultery (which could be his wife or himself): Tlazolteotl (the woman in the Figure), the patroness of adulterers, will capture him and punish him in front of the Lord of the Mountain (Van der Loo 1989, 38-40).



Figure 47. Tlazolteotl and the Lord of the Mountain on page 63 of the Codex Borgia (after www.famsi.org, accessed 16 April 2013)

Van der Loo was not able to interpret these pages without his frame of reference. Before his interpretation, Seler had made a false interpretation, arguing that the whole scene had to do with the moon as the figures are both moon gods. He couldn't argue for anything else because there was no knowledge of why these figures would be depicted together, and therefore he wasn't able to say what the scene would have meant; and looking at what Van der Loo argues, he probably wouldn't have been able to come up with this interpretation himself. Working from one's own ideas then may result in different interpretations. Therefore, one should reason from a Mesoamerican ontology as much as

possible in order to get to the deeper meaning of the imagery that the makers intended and to be able to make sense of it (Van der Loo 1989, 33, 40). Therefore, working together with the living descendants of the makers of the Codex Borgia is crucial. In regard to this matter, Van der Loo is right in arguing that if such a frame of reference is lacking we should be able to say that we just don't know (1989, 40).

All in all, a combination of ethnography, ethnohistory, and ethno linguistics seems to form a valuable approach for getting closer to the deeper meaning inherent in the scenes of pages 29 to 46 of the Codex Borgia. I have shown this through the evaluations presented above. The scholars who worked according to this line of reasoning (Nowotny and Anders, Jansen, and Reyes García) provided the most new information that was backed up by many different sources. This approach thus provides for interpretations based on relational analogies, which generally are considered strong and well-argued for in comparison to others.

Ethnographic research may yield new information in various ways. Like the example above of Van der Loo, many more stories probably still exist and they can give insights into the worldview of the people who made the Codex Borgia. Van der Loo uses such stories in conjunction with ethnohistorical data and the imagery in the Codex Borgia to identify "thematical units": groups of data that seem to appear together frequently. These units may be indicative for cultural continuity, and therefore they are very helpful in the interpretation of the imagery (Van der Loo 1989, 32-33). These thematical units provide for a frame of reference from which one can argue for a certain interpretation of the imagery (Van der Loo 1989, 37). One, then, needs to gather information from the themes that seem to be important in the scenes, by looking into ethnohistoric sources and listening to the Native American people in Mexico. Stories that might be relevant for the pages 29 to 46 of the Codex Borgia may be ones that concern celestial bodies, life and death, and dark wind, as these are recurrent themes in the pages, as far as we can tell from the interpretations thus far.

In conducting such analyses one should also focus more on metaphors, since a lot of imagery is very metaphoric in the Codex Borgia. By focusing on how people have made sense of certain concepts before (in ethnohistoric records), and how they still make sense of them today, one may find links with the imagery and be able to interpret the imagery from a more Mesoamerican point of view or frame of reference. Such metaphors may be inherent in language as well as in traditions that still exist. An example of the first can be given with the work of Reyes García. He noted that in current Nahuatl societies the

Milky Way is described as *sitlalkweiti*, or "skirt of stars", and the sky is seen as a great mirror (*teskatli*) (1990, 19). These expressions are related to the pre-colonial goddess Citlalicue (meaning "star skirt") who was the goddess of the stars and the Milky Way, and Tezcatlipoca ("smoking mirror") who was the god of the nocturnal sky.

One example of the last is provided by Anders, Jansen, and Reyes García, who, while referring to pages 33 and 34, mention that nowadays various people, like the Totonacs, put figurines in the walls of their houses for strength and to protect the building. Such an action is very metaphoric, and this information may indicate that the figures in the roof and pyramid of the temples on the Borgia pages could also be read metaphorically. This also shows that there are not only stories left to tell in present day societies but that in various instances the Native American people in Mexico might practice some rituals (probably in some altered form) that are related to what was practiced in Postclassic times. Again, therefore, for the interpretation of the deeper meaning of the Borgia pages, ethnography, together with ethnohistory and ethnolinguistics can be used in various ways in order to understand Mesoamerican religion better.

Apart from this, for the pages 29 to 46 of the Codex Borgia it has also been argued above that the understanding of layout and structure of the imagery has a great influence on the eventual interpretation of the scenes. Up to this day there is no consensus concerning the way the scenes are related to each other and what their overall function is. Arguments have been made for the way we should read this based on the reoccurrence of certain characters, the space in which it takes place, and the function of the strip goddess, among other things. Still, no thorough structural approach has been applied in order to gain more information about this and thus to critically look into the structure of the pages. Narratology may prove to be valuable in this.

5.2.5 Value of narratology

Various scholars, but most specifically Boone and Batalla Rosado have looked at the overall structure of the 18 page sequence in order to say something more about the relation between the scenes and the function of the sequence. The structural analysis of Boone and Batalla Rosado, however, did not go in very much detail, and they selected only a few parts of the whole. For example, Boone did not perform a structural analysis for her interpretation of the strip goddess as an essence or anonymous agent. She looked

mostly at the overall structure of the pages. Boone and Batalla Rosado also do not say a lot about the aspect of time.

Because layout and structure play such an important part in the interpretation process, as evident from the evaluation above, taking a closer look at this may provide some new questions and insights for future research. Narratology is exactly the kind of theory that is concerned with such structures and their function. The theory may even give insights as to which interpretation thus far seems to be more likely. Thus, instead of focusing on the specific *meaning* of the imagery, which should be researched further according to the lines of research suggested above, in the next chapter I will focus on the structural elements in the pages and their internal relationships. Thus *function* will be the focus of this analysis. In short, the main questions of interest are: What is the choice of elements in the pages and how are they represented? And what does this tell us? What new insights can we gain about the function of the pages when their structure is thoroughly analysed?

III. 6. An analysis of narrative structure

6.1 The analysis

In order to convey a message to the reader of the Codex Borgia the painter had to select what to depict on the pages and what not. Furthermore, he or she had to present it in such a way that the message becomes clear for the intended reader, or at least clear enough to form a continuous thread for a specialized reader to tell the whole story. Subsequently each depicted element is important in the whole and communicates a message (Asselbergs 2004, 17). In turn it can be argued that the selection of information that is presented, and the way in which it is structured, informs about what the function of the imagery was and who the intended reader might have been. This is exactly what I analyse in this chapter: What are we looking at? What were the pages used for? For who was it intended? Or more generally formulated: What can we learn from the layout of the pages?

According to the theory of narratology the basic elements that make up a fabula are the events, time, space, and characters, as well as their arrangement, presentation, and selection (Asselbergs 2004, 38). Focalization is also an important aspect as it indicates from which point of view the images are presented and thus for whom and for what the pages were meant. In this line, Bal (2009, 76-77) argues:

"The point of view from which the elements of the fabula are being presented is often of decisive importance for the meaning the reader will assign to the fabula."

On the basis of these elements then, the structure of pages 29 to 46 of the Codex Borgia will be analysed in order to give insights into the above mentioned questions. The elements will be studied by asking what I think are relevant questions, on the basis of the points of disagreement in the interpretations as discussed before, and by recognizing and discussing patterns. In turn this information will be used for further discussing the interpretation of the pages as presented before in order to come to a full conclusion about what the pages seem to represent and thus which interpretation(s) seems to be more likely.

6.1.1 Time

For the aspect of time, the following questions are important for the analysis: do the pages relate to each other on the basis of time? If so, what is the timeframe of the sequence of pages? Can the events be related chronologically? And can a logic of events be recognized?

What becomes apparent first is that not every scene contains time indicators. The pages that do have day signs are page 30, 31, 32, 39, 40, 41, 42, and 44 (Figure 48). That is only 8 out of 18 pages. Thus, not for every scene time was important, or the reader would have been so familiar with the subject that he or she knew when it happened, or it was not bound to a certain time. We know of page 41 that the days concern the days of the Cihuateteo, which are 1-Monkey, 1-House, 1-Eagle, 1-Deer, and 1-Rain. The circles then seem to indicate that the days concern trecenas or at least the first day of the trecena. That said, in most of the scenes in which time does play a role it seems to concern 4 days that are the first days of the trecenas they indicate. This shows a subdivision of a 260-day ritual year into 4x65 days (see Appendix 3). It should be noted that page 41 is an exception to this as here the division of the 260-day year is 5x52 days instead of 4x65 days. The day 1-Eagle has a central place in the scene, within the main place of action, which may indicate that this date was of special importance for the indicated rite.

In various instances a series of day signs is provided; for example on page 30, page 39-40, and page 41-42. On the border of page 41 and page 42 these seem to be 13 subsequent days. They probably indicate a whole trecena, which begins with the day Eagle, the day which is specifically indicated in the cult site. These 13 days seem to be important as they are specifically indicated in the scene. Once again it looks like the day Eagle, or the trecena of 1-Eagle, is of mayor importance for this rite. Subsequently, the 1-Jaguar (or 1-Rabbit) trecena date is specifically indicated for the sacrifice. On page 30, again a series of day signs is provided. This concerns all the 20 day signs in a solar year month, or the four encircled days may refer to four specific trecenas in a 260-day ritual year. The ring around the day sign could indicate that it is a trecena sign, as was indicated with the Cihuateteo days, but this is not entirely sure. The left series of day-signs on page 39-41 do not follow a clear sequence either. The right side shows the 20 day signs in sequential order, and the left side seems to indicate groups of 4 trecena day-signs but it is not consistent. Maybe something more is indicated, but for now no pattern can be deduced from it. There also seems to be no apparent relation between the day signs

and the figures on a page, for as far as can be deduced with the current knowledge of the calendar; an exception being the Cihuateteo days on page 41.

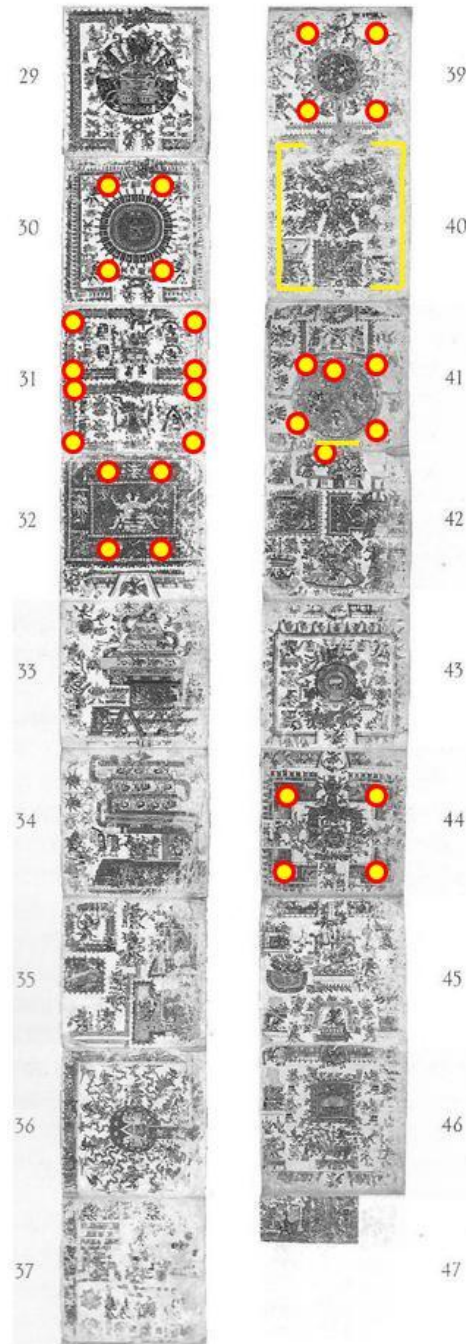


Figure 48. Indication of where the dates are situated (after Batalla Rosado 2008, 408)

For what could be said thus far, the dates indicated in some of the scenes do not show sequential order between the scenes; at least not in the sense that it would indicate a story or record of historical events. No specific linear dates are given, but only the first day of the trecenas. In each case, there seems to be no distinct pattern that binds the scenes together, even though the dates on pages 30 to 32 could have some sort of connection, in which almost all the day signs (or trecena signs) appear divided by 4. There seems to be some kind of pattern if we look at how the sequence of day-signs is distributed across the pages (see Figure 49). However, because page 33 does not follow the pattern seen in pages 30 and 31 it is not sure if there is really an indication of a pattern.

What is notable, however, is that the day-signs Reed, Flint, House, and Rabbit (day-signs 3, 8, 13, and 18 sequentially) are not shown in any of the pages when there is a division of 4x65 days indicated. These signs are the year-bearers. It could be the case that these days had their own cycle of events that was not depicted in these 18 pages. So far, however, nothing more can be said about it. So, as with the aspect of time, it seems that the scenes are generally unrelated and that the whole refers to different rituals instead of one narrative.

6.1.2 Space

Important questions about the aspect of space are: where do the events take place? What kind of setting is it: a geographical landscape, the interior of various buildings, or something else? What attention does each of the places get compared to the others? How do characters move through and between spaces?

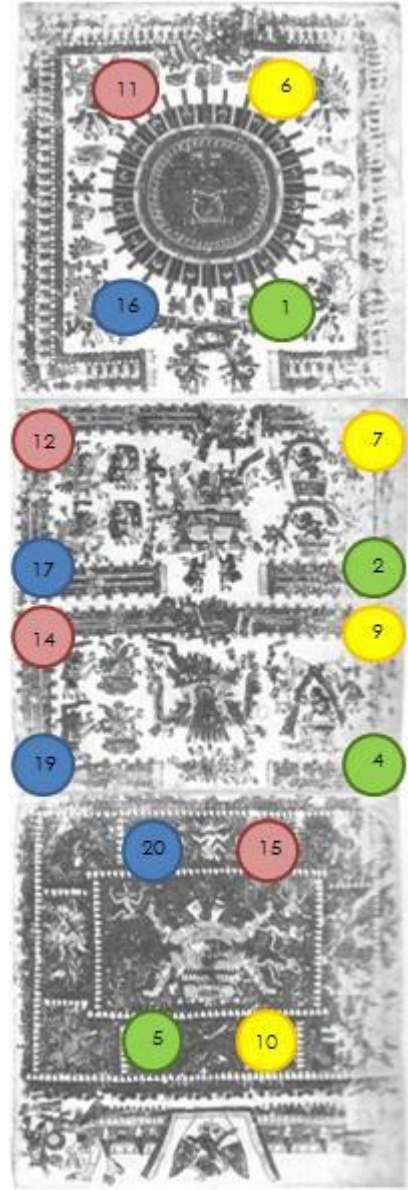


Figure 49. Sequence of day-signs as they occur on pages 30-33. Day-signs 3, 8, 13, and 18 are not included (after Batalla Rosado 2008, 414)

When looking at the places where the events take place, it can be argued that they are all places that were part of a ceremonial centre. The reappearance of the celestial temples and the lack of specific place names indicate that it concerns one ceremonial centre in which it all takes place, and that no movement between villages or cities is implied. Besides this, almost every place in the scenes is known to have existed in some form according to ethnohistorical and archaeological research; though it may not necessarily be the place where this codex was in use. The first place in the 18 page sequence, however, is the most hypothetical one when it comes to this aspect. Pages 29 to 31 show that the whole event takes place inside the body of a god or goddess. It depends on the interpretation of the god where this might be. As the general interpretation seems to be that the god is an earth god and/or goddess it can be considered that the ritual takes place in the earth. Jansen has shown that such an underground place, related to a goddess of death or of the earth, existed at Monte Albán. This is Tomb 7 which was probably used as a cult site instead of an actual tomb, and it was controlled by a figure close to the Aztec goddess Cihuacoatl (Jansen 2012, 32-33). Furthermore, Cihuacoatl seemed to have had her own temple among the Aztecs; a temple called Tlillan, a place of darkness, which was an imitation of cave (Broda 1987, 229-230).

Furthermore, Cihuacoatl is also considered to be Citlalicue, the Star Skirted goddess, or the Milky Way (Anders, Jansen, and Reyes García 1993a, 178). This might be represented on page 31, where the body is covered with stars. Although it remains speculative as what happened in such places, and no real similarities have been found thus far between this ceremonial place and the Borgia pages when it comes to activity, it does seem likely that a similar place like the ones mentioned above is indicated. However, the interpretation remains hypothetical.

The places in which there are flint enclosures, on page 32 and page 44, are related to sacrifice, but nothing more can be said as the actions taking



Figure 50. Flint knife structure on page 32 of the Codex Borgia (after www.famsi.org, accessed 22 April 2013)

place within them seem not to be related to each other; even though the day signs are the same. The first one (page 32, Figure 50) may be the temple of flints as indicated on page 50 (Figure 51), although this is of course speculative.

The celestial temples seem to be the most important places for the rituals after the first four pages. They do not appear in all scenes, but they do appear often, and they are the most elaborate

places in the sequence. On pages 33 and 34 all the aspects of the temples are shown. Not all figures represented play an active role in the various rituals performed at the place, like the figures in the roof. Therefore it may be considered that they are characteristics of the respective temples. Furthermore, in all the other scenes the pages concern one act, or the depiction of multiple acts connected by the indication of roads. This, however, is not the case on pages 33 and 34. Therefore it seems that the acts show that the pages are descriptive in nature, as they combine various elements and events that are related to the temples; and on top of that the temples seem to be full of symbols. Maybe these pages mark the transition between the sanctuary of Cihuacoatl and the Temples of Heaven as a main place for the events.

From the descriptive elements it becomes apparent that the Temple of the Black Serpent is related to sacrifice in the broadest sense. We see a heart sacrifice in front of the temple, an auto-sacrifice in the temple, sacrificed warriors in the roof, and from the rope of the flint on the roof a scorpion comes down that brings various sacrificial items and the staff of Ehecatl. Furthermore it is a Temple of Heaven, identified by the stars, but also because the sacrificed warriors relate to it: they accompanied the Sun during its journey to the zenith. The Tlahuizcalpantecuhtli figure is also related to dawn, as his name translates to “Lord of the Dawn”. As indicated by the characteristics of the temple in later scenes, the temple has a special function as the Temple of Dark Wind, shown by the Ehecatl serpent on the roof (Figures 45 and 46).

The red temple seems to be characterized by Cihuateteo and the Sun, and is therefore also a Temple of Heaven. On page 34 we see Cihuateteo in the roof, and Cihuateteo coming down in the form of spiders in front of it. Two Cihuateteo also receive

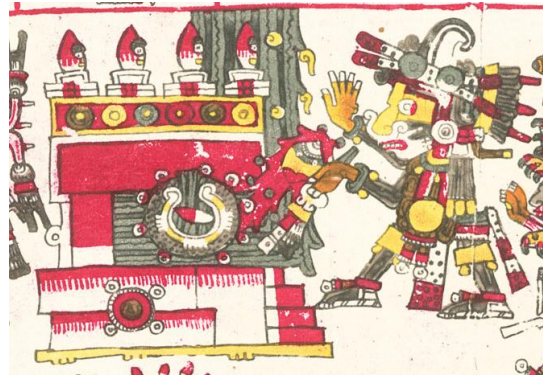


Figure 51. Temple of Flints on page 50 of the Codex Borgia (after www.famsi.org, accessed 22 April 2013)

the heart of the sacrifice performed by a Xolotl figure who is related to the sun. The Cihuateteo are known to have accompanied the Sun from zenith to the underworld. Xolotl has a similar function as a guide to the underworld.



Figure 52. Temple of Dark Wind (after Díaz and Rodgers 1993, 38)



Figure 53. Temple of Dark Wind (after Díaz and Rodgers 1993, 36-37)

In the cases where the celestial temples play a role in the events, other than on pages 33 and 34 where they appear, the event is always initiated from the Temple of Dark Wind; that is the place where roads leave from. The rituals in these pages probably refer to a part of the ceremonial calendar in which this temple has a main function, like Nowotny has stated. This may indicate that the pages show the function of a specific group of priests in the ceremonial precinct. This will be analysed further in the subchapter about actors.

The place of the sacred bundle appears only once (on page 35). It is shown as the starting place of the rituals that follow, but it is not a place where the main event of the scene takes place; the opening of the bundle and its effects seem to be the most important due to the size and centrality given to this whole action. However, the painter has incorporated the temple and thus must have found it important to show what had to be done before the bundle was opened and where the bundle came from. The roads show a specific journey, thus the journey from this place is considered important. It is not entirely sure if the temple also represents the Temple of the Black Serpent. Like in other

cases the temple is characterized by a black serpent and it is a celestial temple because of the star in the roof, so it could be. Considering the fact that the bundle from which dark winds spread on page 36 comes from this temple, it does have a relation with dark winds as well. Therefore, the characteristics make it very likely that the Temple of the Sacred Bundle is the Temple of the Black Serpent or Dark Wind. This means that once again, the place from which rituals are initiated is the Temple of Dark Wind. Furthermore, the ball court on which Cipactonal lies is of importance. What his function is in the ball court is not that clear. Maybe he signifies that it is a ball court of Cipactonal.

For the opening of the Sacred Bundle on page 36 no specific indication of place is given. Probably, the reader would know where the opening would take place. After that, on pages 37 and 38, place seems to be an important factor again. It can be seen that the main actor (Xolotl) comes from the temple with the pointed roof, which in this case is not a Temple of Dark Wind anymore, but a Temple of Fire, as it is smoking. The temple is probably the same temple as the one of Dark Wind, but here the focus seems to lie on another aspect of it. That it is probably the same temple is indicated by the way it is again paired with the eared roof temple, which seems to be a Solar Temple. They appear together most of the time. Apparently it was important to indicate that the event was initiated from the temple with the pointed roof, as a road leaves from there. From the Temple of Fire, Xolotl moves towards an altar which is situated above a cave. After that he moves towards another platform, which is situated somewhere else because that is where the road ends.

A certain symbol which also occurs in the Codex Nuttall (compare Figures 54 and 55) seems to be some kind of place indicator on page 38: a place of the Fire Serpent. Maybe it was an easy way of indicating where the subsequent sacrificial victims, who are aligned in front of it, came from. More than this cannot be said about it however, as it is hard to tell what the symbol stands for. Anders, Jansen, and Pérez Jiménez have interpreted it as an altar (1992, 117).

The square place beneath these sacrificial victims is also one that has not been seen before, and which remains a great



Figure 54. Fire Serpent symbol in the Codex Borgia (after www.famsi.org, accessed 11 June 2013)



Figure 55. Fire Serpent symbol in the Codex Nuttall (after ignorantissimo.free.fr, accessed 11 June 2013)

mystery. It is full of what seem to be *nahual* serpents who bring forth a human being. The place to the left of the square is much easier to recognize: it is a river or a pond from which aquatic plants grow. How this place is related to the others is hard to tell. Maybe it constitutes the result of the event as depicted above. Nonetheless, what can be said is that these last two places, like many others, are ones that do not reappear in the rest of the 18 pages, unlike the temples above, as we will see during the rest of the analysis. Therefore the temples are the ones which receive the greatest emphasis in the whole sequence of pages.

What seems to be of most importance on pages 39 and 40 is the movement of the actors into the earth, where a sacrifice is performed. Once again the two temples reappear as a place indicator. However, the ball court seems to be the place where the main act takes place as it appears relatively large but also central in the event. This is again a ball court in darkness; probably the same one as on page 35. Again the ball court is somehow related to Cipactonal. On page 35 Cipactonal is shown in the middle of the ball court, and on page 40 the ball court appears in Cipactonal.

On page 41, a ritual seems to be taking place in or near a large pond or lake, indicated by the blue circle with the watergods inside it. The shape of the pond, together with the day signs on its the border, forms the symbol *chalchihuitl* (jade), which is also a metaphorical reading for water.

On page 42 the ritual seems to continue, but here the temples reappear again, indicating from where the event starts. From the Temple of Dark Wind a road leads towards a ball court, which is very likely the same ball court as seen before. It is again red, and covered in darkness. Here, however, there is no indication of Cipactonal, so it is uncertain if the ball court should be read as the ball court of Cipactonal. Then the victim in the ritual is led to an altar, which, according to its appearance and place near the temples is probably the same altar on which *Xolotl* performed a ritual on page 37. The victim is then thrown into the earth, which I think might be the cave that was situated below or near the Temple of the Red Serpent, the Solar Temple. This cave or pit was also indicated with the maw of Cipactonal on page 34, also at roughly the same place in relation to the temple. Below the Temple of Dark Wind another cave is indicated, which makes this interpretation more secure. However, the relationship between the victim and the Solar Temple is not well understood.

After these actions the sequentiality of places becomes less clear. A hearth appears in which someone is cooked, and after that a crossroads is shown in the middle.

On the right we again see a watery place with the watergods in it. This serves as a sort of place of origin as a Tonaleque comes from it, and out of a conch shell. Maybe this shows the result of the previous sequence of actions, just like what happens on the crossroads.

Page 43 depicts a place of maize where a maize ritual takes place. It may be a *milpa* where maize grows, as the goddess lying down in it is interpreted as the fertile earth from which maize grows. However, it may also be a solar house (judging by the rays on the frame of the scene).

Page 44 again shows a place of flints, but also of flowers. It appears to be some kind of courtyard, as the circles often indicate that it is a palace. It might be a courtyard of flowers and sacrifice. Fitting this description of the place is the central event that takes place in it. We see Xochiquetzal who is fed with a sacrificial heart and from her heart grows a colourful tree. Furthermore, the place is (probably symbolically) filled with cut-off body parts, making it a place of sacrifice.

On page 45 the place of importance seems to be the area of the Eagle Houses where the *tzompantli* (skull-rack) stands, on which Venus dances. Eagle houses are known to have existed from Tenochtitlan and Teotihuacan. In Tenochtitlan the Eagle House stood near a *tzompantli*. These Eagle houses are considered to be warrior houses (Townsend 1982, 32). In the Codex Borgia the warrior Tlahuizcalpantecuhtli seems to be related to this place as he plays an important role in it. Therefore, the characteristics in the scene show that this is a place of warriors.

On page 46 yet another place is shown. It is a place of Xiuhtecuhtli or the Fire Serpent. The location of the scene is indicated by the temples of fire and a hearth, but also by a large altar on which the fire is drilled.

As could be read above, various parts of a ceremonial centre were part of the rituals displayed in the 18 pages. Most of these places appear only once, and they may indicate a different theme every time; among them are places related to water, maize, flowers, warriors, fire, just to name a few. Places that reoccur multiple times are the temples that were already introduced on pages 33 and 34, and of them a special emphasis is placed on the Temple of Dark Wind. These temples occur in every scene that spans multiple pages. The ball court also appears multiple times. Furthermore, in the first three pages an emphasis is put on the place of Cihuacoatl, and in the last pages the places differ greatly.

As for emphasis, therefore, each event has its own place. In almost all cases then it was important to indicate the location(s) of the rituals. Furthermore, it was also

important to show where certain elements originated, indicating the various steps that were undertaken; for example, by showing where the Sacred Bundle came from.

Apart from this, even though it is the Dark Wind Temple from which actions are often initiated, it is not painted larger than the other temple. Furthermore, compared with other cult sites, for example pages 41 and 42, the temples appear to be relatively small; the water basin is much bigger. Apparently the ritual in that place is more important than the role that the temples play in the sequence of events. The temples are also not specifically the locus of the ritual. Therefore they probably function as indicators for where the ritual should start or who should start the ritual, and where this person came from. The appearance of these places once more gives the whole a descriptive or prescriptive character. However, it does also show that the temples were important in the events that concern various parts of the ceremonial centre, and that they played a role in various kinds of rituals concerning various themes.

Considering sequence, only in some scenes roads are depicted that show journeys to certain places (e.g. Figure 56). The roads only occur in scenes that span multiple pages, but only in these scenes sequential events seem to be indicated. All the other scenes show one major event or ritual. A journey between these various scenes, then, seems not to have been indicated. Important journeys are thus signified by roads within the scenes. They indicate a sequence of actions whenever they appear; they determine who is going where. These roads lead a person, or persons, from one place to another, even before the main events seems to take place, and thereby they create a descriptive or prescriptive situation. More will be said about this sequentiality in the subchapters concerning events and actors.



Figure 56. Page 39 showing a road which leads to the next event (after www.famsi.org, accessed 20 April 2013)

6.1.3 Events

The events are an important aspect in determining sequence and coherency in the pages. The sequence may be coherent based on a recurring theme or on the logic of

events. When a theme for each event is recognized, they can be compared and it becomes possible to search for a logic of events. If this logic is present, this might be indicative of a narrative as the scenes are then related sequentially or chronologically. The events in the imagery are also indicators for what the pages might be used for, but I will analyse this more specifically in the subchapter on focalization. All things considered, important questions for the aspect of events are then the following: what kinds of events take place? What is the theme of the events? Is a logic or sequentiality of events recognizable (by physical sequentiality)?

Although it is not exactly clear what happens in each scene, general characteristics may still indicate a certain theme. The events seem to concern priestly duties only, when considered that the people who perform them are priests (or sometimes gods). No other people seem to have been depicted, but there were probably other people present at some of the events as well. They are, for example, shown in the representation of the New Fire ceremony in the Codex Borbonicus (a colonial manuscript), where commoners are depicted sitting in their houses and wearing masks (Figure 57) (Anders, Jansen, and Reyes García 1991, 35-36). On page 46 of the Codex Borgia, however, they are not presented. A specific focus is thus placed on the interplay of priests and natural forces.

Events that occur frequently in the Borgia scenes are actions related to sacrifice, or death. However, there seems to be no general theme for all of the scenes together. Some scenes concern rites related to the Cihuateteo, like pages 31, 34, 39, and 41; others relate specifically to dark wind (pages 29 and 35-38); there are also rites that seemingly relate to plants and fertility (pages 30, 38, and 43); and especially the last few scenes have varying themes: an initiation rite of princes (page 44), Venus and warriors (page 45), and the New Fire Ceremony (page 46). So although some themes overlap or appear more often than others, there is no specific overall theme present as far as can be recognized at this point. The only recurring thing seems to be darkness or dark wind, although this is again not shown on every page.

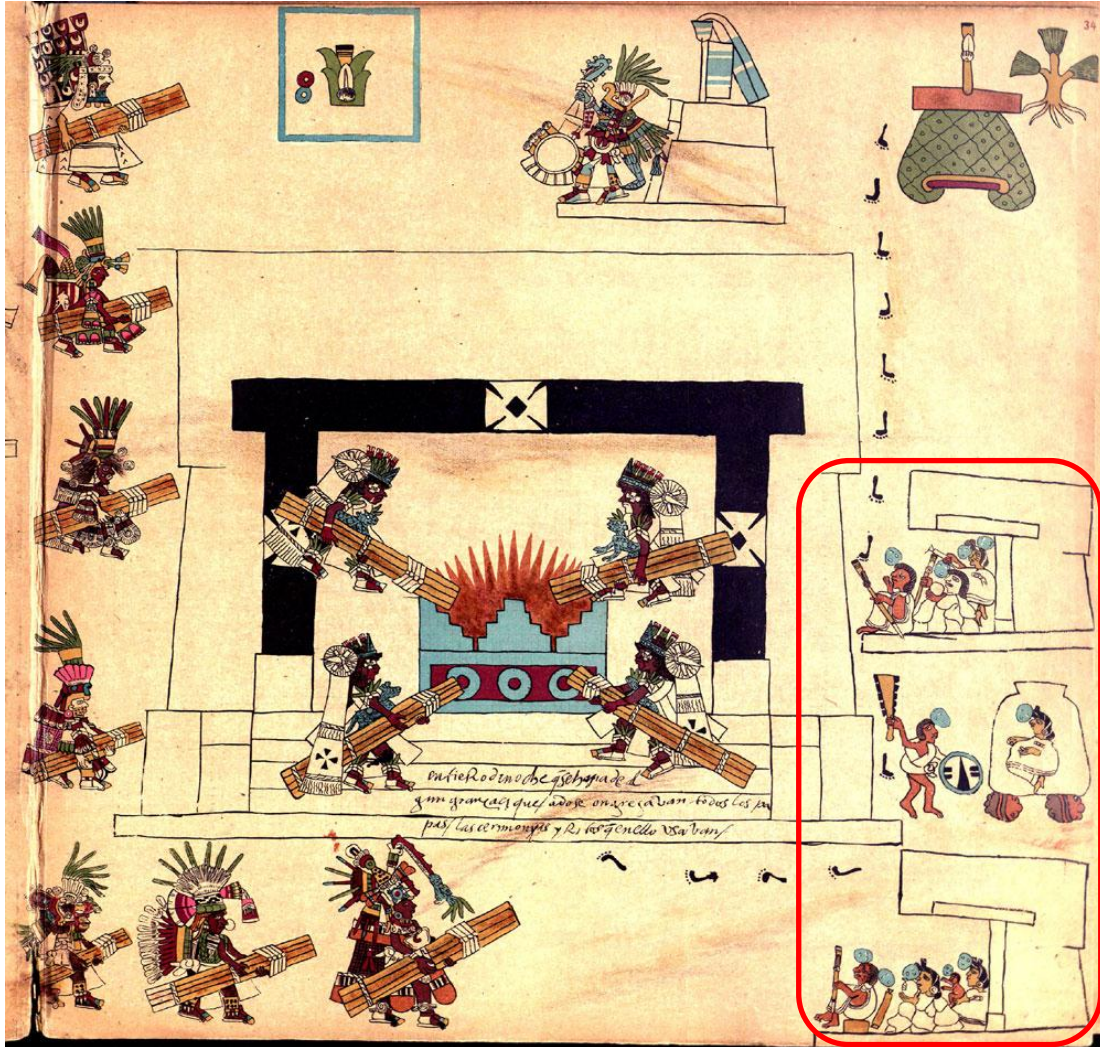


Figure 57. New Fire Ceremony in the Codex Borbonicus with an indication of people who are waiting and wearing masks (after www.famsi.org, accessed 10 June 2013)

As for sequentiality, the clearest sequence of events is indicated by roads within the scenes, as argued before. Most scenes contain one major event, except for the scenes that span multiple pages. In these longer scenes the roads appear to connect the various events. This sequentiality is thus made very clear and important. Considering the logic of events between the scenes, there is no clear indication at all, except for the first four pages on which the figures are depicted as if moving from one scene, and where they also appear on the next. It is not certain, however, if this indicates sequentiality. The actors have no names attached to them, and therefore it is not sure if the same actor is

depicted each time. Besides this, the events in the scenes do not seem to show any clear link between cause and effect-type of actions; or at least not in a sense that is recognizable for us (yet). Thus, the most important sequences are the ones within one scene.

The scenes seem to have been divided by the strip goddess. This strip goddess appears when a change of place and/or a change of time takes place. No roads are depicted between the scenes. There is one instance in which two roads signify actors moving down from the top of the scene (on page 37), from the strip goddess. However, these roads do not seem to originate from the previous page, as no roads start there. Therefore, I consider the strip goddess to have a structural function as a separator of the scenes, apart from what other function she might have.

When we look at this aspect in more detail, we can see that the figures that come from this strip goddess sometimes look like figures that were present in the previous scene. Most of the time, however, this is not the case. Surprisingly, a few figures do not seem to play any role in the previous or the subsequent scene; at least not with the face paint that they have and the clothing they wear. Therefore, these figures may have a distinct role. On the other hand, the link between the figures is still not understood very well. All in all, if there is a sequence present that binds the scenes into a whole, it is far less emphasized than the sequence of events within the scenes. Considering all these observations together, it is unlikely that a continuation of events between the scenes is implied. Nonetheless, it is interesting that no use was made of black or red lines to differentiate between the scenes. This could be a choice of aesthetics or it may be another way of showing that the pages belong together, apart from the vertical layout, but this remains hypothetical.

6.1.4 Actors

Actors definitely play the biggest part in narrative theory. The selection of actors in the scene indicates a certain focus on a specific group of actors. The relation between the main actors and the events especially show what the imagery is about and what it was probably used for. Relevant questions about this aspect are then the following: who are the actors in the scenes? Who are the main actors? Which actors have distinctive traits?



Figure 58. Tezcatlipoca with aspects of Ehecatl (after www.famsi.org, accessed 23 April 2013)

And what are they? What do these characteristics tell about the actors? Which actors play a role in which events? What role do they have in each event? Are there any relationships recognizable among actors?

As a first note, the Tezcatlipoca figure on pages 35 and 36 (Figure 58) shows that the aspects of Tezcatlipoca and Quetzalcoatl-Ehecatl can be combined when it comes to dark wind or night wind. They seem to share a wind aspect, which is also apparent from their names: Ehecatl (Wind) is an aspect of Quetzalcoatl (or another name of Quetzalcoatl), but Tezcatlipoca has a name that is associated with wind as well: Yoalli Ehecatl (Night, Wind) (Anders, Jansen, and Reyes García 1993, 188). Both figures appear in the scenes frequently, and are important actors, but actually this is no surprise because the whole sequence bears a relation to dark wind, as indicated above.



Figure 59. The main actors in the scenes (after Díaz and Rodgers 1993, 32, 41, 43, 45)

The main actors, shown in Figure 59, and recognized by their frequent appearance in the scenes, share many aspects. I refer to the various appearances as actors, but it must be noted that is not known to what extent one appearance is indicative for one person or multiple. They (at least the top three) are mainly priests of the Temple of Dark Wind, indicated by the black body-paint, black paper strips on the legs, a shell pectoral, a curved earpiece, and a Quetzalcoatl headdress (the plumes with the star on the back of the head). These are all aspects of the windgod Quetzalcoatl-Ehecatl

(Figure 60), who is also depicted as a wind serpent on the temple of Dark Wind. Furthermore, these aspects are shared by Xolotl (Figure 61) as well, another main actor in some scenes, and Tezcatlipoca is also often painted black. That the priests are black may therefore just be an indication of their relation to Quetzalcoatl-Ehecatl and Tezcatlipoca, instead of a trance state. Adding to that, if we argue solely from the idea that the body paint is indicative for a trance state, then only the Ehecatl priests would be in trance in the scenes. It remains speculative if this is the case, as sometimes two priests perform a similar act but they are not painted black both (like on page 39). This does not mean that some priests cannot be in a trance state at all. It is still perfectly possible that there is a trance state indicated in various scenes, but this is then shown by means of the dark wind, as Anders, Jansen, and Reyes García argued.



Figure 60. Quetzalcoatl-Ehecatl (after Díaz and Rodgers 1993, 59)



Figure 61. Xolotl (after Díaz and Rodgers 1993, 13)

As indicated above, another issue is that, although these main actors appear frequently, it is not certain if they represent the same individual in each scene. Sometimes figures have the same face paint but carry other headdresses, or they suddenly have a beard. In some cases, the face paint and clothing of the actors are even worn by multiple people on the pages. Therefore, it seems likely that the appearance of the figures is related to function, rather than to the identity of an individual. This is comparable to the Mixtec codices in which there are various actors depicted next to each other who look exactly the same (see for example Figure 52). They share a similar status or role in the story. In these cases we know that they represent different people as they have names indicated next to them. The fact that there are no names depicted near the actors in the

Borgia pages makes implies that the individual was not what was important, but rather his or her function in the event.



Figure 62. Identical figures differentiated by names in the Codex Selden (after www.famsi.org, accessed 23 April 2013)

Their functions become clearer when appearances are compared with the role the figures have in the events. The Black Quetzalcoatl figure (the second in Figure 49), may it represent one person or multiple, always appears as an actor in rituals that involve sacrifice. He is the one who performs the sacrifice. The Black Quetzalcoatl with the smoke scrolls next to his eye is often the one who undergoes auto-sacrifice or fasting. The Black Tezcatlipoca either functions as a guide, or he is the one who is in control of the ritual, or he is the one who receives things like sacrificial blood (page 42) or maize (page 43). Therefore, he is almost always depicted as a figure with a high status. He may also be a god, as he receives the sacrificial blood. Stripe Eye, who is also a Quetzalcoatl-Ehecatl priest, plays a big role in the initiation of rites. Often he is the one who performs large parts of a rite: he is the one who is taken away by dark winds (pages 35-38); he is the one who performs a heart sacrifice (page 42); and he is the one who is making music while entering the earth (page 39). This makes him is a main performer in the rituals. What is also apparent, is that he can be seen changing function in the scenes, or he is replaced by another priest. This happens, for example, on pages 39 and 41. On page 39 the roads indicate that the two figures in the middle enter the earth (may it be read symbolically or not). However, inside the earth the Stripe Eye figure is depicted with the face paint of the Black Quetzalcoatl figure, and he is performing a sacrifice. On page 41 we see the Stripe Eye figure following a road to the place of the auto-sacrifice, where he is again shown with the body paint of the Black Quetzalcoatl figure; and here he performs a sacrifice as well. It is only on page 42 where he does not seem to turn into a Black Quetzalcoatl during a sacrifice. Because Stripe Eye is the one who is performing a sacrifice here,

instead of the Black Quetzalcoatl, it remains not entirely sure what the stripe indicates when it comes to function. The stripe is also not visible on any other figure in the whole codex, so it cannot be compared.

Two other actors which also seem to have a main function in the scenes, but who appear less often, are Xolotl and Quetzalcoatl with three-color face paint. Xolotl is depicted as initiating and performing a ritual in pages 37 and 38, while Quetzalcoatl with three-color face paint is the main performer in pages 45 and 46. At first, Xolotl is shown with the windgod aspects (on page 36), but when he becomes the main performer (on pages 37 and 38) he seems to have a different function, as he wears an elaborate costume. Adding to that, it becomes apparent from the temple that the function has changed, as it is not characterized as the Temple of Dark Wind anymore, but of Fire or Lightning.

All the main actors discussed above only appear *after* the four initial pages. The initial pages again stand out. However, because it is not that well understood what is depicted on these pages I will also not dive into speculative interpretations here. It is clear that the pages do show a relation with dark winds, but as the main act in the scenes cannot be identified with that much certainty, I cannot analyse what functions the actors have in it.

What should be said, however, is that the actors depicted on pages 29 to 31 almost all have clawed hands. Boone interpreted them as anonymous agents, but some of them have a central position in the scene, and may even initiate a certain event (like the skeletal figure on page 29). Therefore, the interpretation that they are anonymous agents does not seem to hold. The clawed hands probably indicate a certain status or function. For example, they appear often with non-priests, like with the earth god Tonacatecuhtli on pages 39 and 40, or with the Cihuateteo or Tzitzimime, but also on animal costumes. This considered, the clawed hands often relate to non-human beings.

Apart from this aspect it is not really clear when an image concerns a representation of a priest or of a god, as priests often dressed as gods. Some figures clearly indicate the function of a god as they represent natural forces, like the growth of maize from the earth (page 43), or water (pages 41-42), or the flowering of a tree (page 44), or the blowing of wind (pages 36-38). These are natural forces that are transformed into persons in the scenes to make them visibly present. In other cases, however, the distinction between gods and priests is not always clear. It was probably also not necessary to make this distinction as the reader(s) would probably know who represents

what. In any case the priests and gods are acting alongside each other within the scenes. This beautifully illustrates the ontology of the maker of this codex, and the role of a priest as a mediator between people and natural forces.

The Cihuacoatl figure at the beginning of each scene does not show a clear function, other than bringing forward a priest and looking over from high up. Seen like this it may indeed be the case that this figure holds overview over the rituals, and that this figure calls upon a priest to lead the ritual. Like Anders, Jansen, and Reyes García argued, this might be a high priest who had a similar function to the Cihuacoatl priest among the Aztecs.

As argued before, there is not always a direct relation between the figure coming down from Cihuacoatl and the figures in the scene (a clear example being page 41). Sometimes the figure resembles one from a previous page and sometimes one from the subsequent page, but a few times it does not represent a figure from a related page at all. If this figure represents the leading figure of the ritual it might be the case that he is not presented in the rest of scene as he does not have a specific role in the act other than leading it in the right directions. However, this is all still very hypothetical, and needs a lot more research in the future.

As could be read, throughout this sub-chapter I have called the main figures actors instead of characters. Within narratology a distinction is made between the two, which I followed here. According to Bal (2009, 6) an actor is defined as an agent that performs an action. Characters, on the other hand, are actors made into individuals through certain characteristics that they are given (Bal 2009, 5-6). As the actors in the Borgia pages are not portrayed as individuals, they are not considered to be characters as such. Their characteristics rather indicate functions, which were shared. Furthermore, no emotions seem to be involved, nor personalities. Therefore, the whole can still be considered to be mainly descriptive or prescriptive in nature, rather than representing a story.

All aspects discussed thus far indicate that the 18 pages form a whole on the basis of actors and space: they show a specific group of actors in a specific ceremonial precinct. On the basis of sequentiality, however, they do not all relate to each other, because the imagery shows various rituals which do not seem to relate chronologically. They also do not show a narrative. The rituals are mainly performed by priests of the Temple of Dark Wind, a temple of Quetzalcoatl-Ehecatl (and maybe Tezcatlipoca), possibly under the guidance of a Cihuacoatl high priest. These actions may, in some

cases, be performed in another state of consciousness. Furthermore, the figures show an interplay between priests and natural forces, creating a reading on multiple levels: it is a mix of literal and metaphorical text.

6.1.5 Focalization

The aspect of focalization has already been touched upon slightly in the previous chapters, as it includes the selection of elements to build up the scenes. Here we will look at this aspect in more detail, because focalization is a good indicator for the function of the pages. Questions that I will try to answer here are: what is the point of view from which the events are told? Who might have been the reader(s)?

There are only a few things that can be said about this aspect as focalization clearly works different in alphabetic texts than in imagery. Only very little has been written about its use in graphic texts, and how it should be approached is still at the centre of discussion. Of all the aspects analysed here, then, this one is elaborated upon the least.

One thing that can be recognized thus far in the way the imagery is presented is that the reader does not seem to follow one person. In a few cases multiple events seem to happen simultaneously and are enacted by different actors (for example on pages 37 and 38). Furthermore, we often begin with one actor and suddenly have to follow another. Therefore, the reader does not follow one individual who carries the role of focalizer. In that case we are thus dealing with an external focalizer that is not bound to one actor.

Adding to this, the actions seem to convey knowledge of the priests, and only the priests and gods were shown; not the commoners that could have been involved in the actual rituals. If actions take place within a temple or underground precinct like in page 29, this would show the perspective of a priest as he or she is the one who operates there and is allowed to enter the place. Subsequently, he or she is the only one who would know what happens in these environments. Knowing what ritual events should happen in which sequence and at what time also looks like something that is expected of a priest or a diviner as it was one of his or her main duties to know when a certain rite had to take place and in what way (Boone 2007, 11). Adding to that, they were the intermediaries between the gods and the people, and the scenes show a clear interplay between priests and these gods. Therefore it seems likely that the external focalizer would be a priest. Aiding this argument is the fact that the rest of the codex was probably used by a diviner, and in that case the reader would of course be a specialist.

The focalizing priest could be, and this is very speculative, the Cihuacoatl priest shown at the top of the pages, who takes overview, or the figure who seems to come through her. In each case, the imagery in the pages shows the knowledge that a priest needed to perform or lead certain rituals. Considering this, the whole codex shows the various roles that a ritual specialist could have, being a diviner in more private rituals, as well as being a priest who performs or leads rituals in the ceremonial precinct.

6.2 Discussion of results

The narratological analysis indicates a coherent interpretation when it comes to the function of the pages 29 to 46 of the Codex Borgia. Here the interpretations of the various scholars will be discussed in comparison with these results in order to form a more specific conclusion about what the pages seem to be used for, and, accordingly, to give a more thorough evaluation of the interpretations.

According to the interpretations discussed in the previous chapters the scholars believed that the pages of the Codex Borgia represent either a Venus year (Seler 1906), a sequence of historical events in one solar year (Milbrath 1989), a story of creation (Boone 2007), a series of ceremonies to be undertaken by a king-to-be (Byland 1993), or various separate rituals carried out in specific places (Anders, Jansen, and Reyes García 1993a; Batalla Rosado 2008; Nowotny 1961). It is expected that if the whole sequence of pages was related to a Venus year, the dates would indicate such a time span consisting of 584 days. If the pages showed specific historical events then it is expected that specific dates are given. If it would be a story of creation it would be likely to see that there is a series of events depicted that relate chronologically, or at least that the time indicators follow a linear timeframe. In the case of a predetermined series of rites for a king-to-be the same holds true, because Byland and Pohl argue that the events are presented as a specific *series* of ceremonies. As for the separate rituals in a ceremonial precinct the timeframe may be relatively unrelated between various rites. As is known from the order of time depicted in other almanacs in the codex, the rituals could alternate each other throughout a year. The rituals could then have taken place at various moments in time, when it was thought that it was necessary. When we compare this to the results of the narratological analysis above it becomes clear that we are not dealing with a sequence of events that follows a linear timeframe. The dates are not fixed to certain years and may thus indicate a cyclical reoccurrence of events. This fits the interpretation of

Nowotny and Anders, Jansen, and Reyes García best as this would be a likely timeframe for various rituals in a ceremonial centre.

As for space the interpretations also differed. The events take place either in the underworld (Batalla Rosado 2008; Seler 1906), in a ceremonial precinct (Anders, Jansen, and Reyes García 1993a; Byland 1993; Milbrath 1989; Nowotny 1961), or in primordial times before and during creation (Boone 2007). For the underworld it is to be expected that the nine layers of the underworld are indicated sequentially, as the sequence would indicate the path of either Venus or the Sun through the underworld. We would see different places each time and a main figure (the Sun or Venus) who would move from one space to the next. As for a ceremonial precinct it is expected that various places of historical or archaeologically found places in a ceremonial centre are shown within which people may or may not move to other places within the precinct. For primordial times the spaces are expected to follow the line of creation. Boone argues that first all was in darkness and then the creator gods started to make things. However this creation part is difficult to analyse as Boone indicates that the creation which she thinks is depicted in the Codex Borgia largely involves concepts like sacrifice instead of the creation of the earth. Therefore, no real specific place can be expected. The results above show that most of the places shown in the pages were present in ceremonial centres in various places in Central Mexico. Furthermore, various places reoccur like the Temples of Heaven. Therefore it seems unlikely that we are dealing with the layers of the underworld here. All of this considered, the results of this aspect compare best with the argumentation of Milbrath, Nowotny, Anders, Jansen, and Reyes García, and Byland. For the interpretation of Boone this part remains inconclusive.

The aspect of events is important for analysing the presence of a narrative or rather separate events. Seler, Byland, Boone, and Batalla Rosado have all argued for the presence of a sequence of events, implying that there is at least some loose narrative present in the whole sequence of pages. Milbrath, Nowotny, and Anders, Jansen, and Reyes García argue for separate events. Milbrath does argue that there is sequentiality involved in time, but she did indicate that the events might stand separate. However, her interpretations cannot be analysed much further on the aspect of events since she did not give a full interpretation of what she thinks is depicted on the pages. As shown above, sequentiality is not that apparent between the scenes, but mostly within the scenes.

Apart from sequentiality, there are various foci of the events indicated by the scholars: a journey of Venus (Seler 1906), historical astronomical events (Milbrath 1989),

various rituals of priests (Anders, Jansen, and Reyes García 1993a; Batalla Rosado; Nowotny 1961), ceremonial rites of a king-to-be (Byland 1993), or acts of creation (Boone 2007). The results of the narratological analysis again seem to support the interpretations of Nowotny, and Anders, Jansen, and Reyes García. The events are led by priests as the acts performed are ones that would be part of priestly duties. They may involve various states of consciousness. The main priests in the rituals are largely related to a specific temple (the Temple of Dark Wind). Again, importance is given to the sequentiality of events in the scenes, but not between the scenes. There the Cihuacoatl figure seems to form an obstacle. Next to that, no roads are shown between the scenes. Furthermore, the figures moving through the body of Cihuacoatl do not always relate to figures that were present in the previous or subsequent scene. Therefore the idea of sequentiality between the scenes does not seem to hold up very often. Overall then, it seems more likely that the scenes involve separate events or rituals that are not necessarily performed in the specific sequence in which they occur in the pages. The sequence of the events within the scenes, however, seems to be very important and it makes the whole descriptive or prescriptive in nature.

Then the actors. Although scholars generally agree on which gods the characters relate to in the events, there is not so much agreement about their roles in the events. Seler sees the main actors as linked to Venus. Milbrath thinks the same while other celestial bodies also play a big role. However, she did not identify the other actors in the scenes. Nowotny, and Anders, Jansen, and Reyes García, and Batalla Rosado saw the main actors as Quetzalcoatl priests; Byland saw the main actor(s) as a king-to-be; and Boone saw the main actors as gods of creation. The analysis of the actors showed that they all wear aspects of Ehecatl which may or may not be combined with the wind aspect of Tezcatlipoca. Although Tlahuizcalpantecuhtli also wears these wind aspects on page 33 the main actors do not seem to relate to him that much or to Venus in general. Furthermore, the actors do not necessarily relate to celestial bodies in all cases. The celestial bodies also do not appear on every page. Therefore the results do not fit the interpretations of Seler and Milbrath on this aspect. The interpretation of Byland that it is about a king, is not really supported by the analysis as well, as Stripe Eye, which he calls the king-to-be, does not appear in every scene. Furthermore, the attire does not really say anything about the status of a king. The idea of Boone that the actors represent creator gods does not seem to be very likely as well, as the duties the actors perform are mostly rituals in a ceremonial centre. Nevertheless, it may very well be the case that these actors

have a relation with creator gods. In that sense there is this double layer of meaning present. However, only further research may give more insights in this.

As for the aspect of focalization, again the results of the narratological analysis show that the events are focalized externally, and not following one actor. This external focalizer is probably a priest; probably the one who would consult these pages. When compared to the interpretations, however, this function could fit any of them as priests took care of rituals, but they were also intermediaries between people and the gods. Therefore, they would have tremendous knowledge of the workings of the cosmos. The movement of Venus, the observation of astronomical events, a creation story, a hallucinatory journey, and rituals for various causes might all have been part of the knowledge and practices of priests. Therefore the scholars would probably all agree that these pages were used by a priest.

All in all then, for what could be analysed using narratology, the results of the analysis seem to fall together best with the interpretation of Nowotny, but also of Anders, Jansen, and Reyes García. However, the idea of Batalla Rosado, building on the interpretation of Anders, Jansen, and Reyes García, that there is a possible presence of a trance state in the pages, may be valid as well as an addition to this, although this should be researched further.

IV. 7. Conclusions

Studying the meaning of religious imagery, as in the Codex Borgia, is a very difficult task. Especially since not much information is left to draw analogies from. The main aim of this thesis was to see how scholars have dealt with this for the pages 29 to 46 of the Codex Borgia and what specific problems caused them to interpret the pages differently. It was needed to evaluate this first as interpretations kept being made without evaluating the ones that were made earlier, and therefore no consensus could be reached. This thesis then has provided such an evaluation and provided some new starting points for future research. To conclude this all more concretely, the research questions will be answered here step by step.

1. *What is known thus far of pages 29 to 46 of the Codex Borgia? How have they been interpreted? What is the state of the art of the knowledge about these pages?*

From the overview I made of the interpretations it became apparent that mainly four paradigms were at play from which the interpretations have been made. Fábrega, Seler, and Milbrath all focused on the importance of astronomy in the pages, although they all saw something different. Fábrega interpreted the pages as each showing a zodiac sign that was important in a certain period of the solar year. Seler eclipsed this interpretation with his own extensive commentary, arguing that the pages show the journey of Venus through the Underworld, following a path of 584 days. Milbrath, agreed with Seler that Venus was important in the pages, but on the other hand she argued that the main point of the author was to show specific astronomical events during specific festivities of the solar year.

The second paradigm was initiated by Nowotny, and elaborated upon by Anders, Jansen, and Reyes García. They argued, mainly through the use of ethnographic, ethnohistoric, and ethnolinguistic sources, that the pages represent specific rituals in a ceremonial centre, in which the Temple of Dark Wind played an important role. These rituals would have been performed historically.

The third paradigm is that of Byland, who worked closely together with Pohl. They saw connections between the Mixtec codices and the Codex Borgia. Subsequently, they argued that pages 29 to 46 of the Codex Borgia show a series of

rituals that a king-to-be had to undertake in order to get to his status of a king. These series of rituals would be shared among the people of Central Mexico.

The fourth paradigm was followed by Boone and Batalla Rosado. They focused on the structure of the pages on a general level, although they both came to different conclusions. Boone argued that the pages represent a loose narrative of creation, while Batalla Rosado argued that they show the reflection of a hallucinatory journey through the underworld, as experienced by a priest.

All in all, there is a consensus as to what kinds of actions are represented in the scenes, but where they take place and when is still a matter of discussion. There is also no agreement on the relationship between the various events and scenes. So in short, not much has been agreed upon yet.

2. *How did scholars come to the interpretations they made? Where do the problems of interpretation lie, and which lines should future research follow in order to deal with these problems?*

The scholars made use of various sources to draw analogies from, coming from the whole of Mexico and ranging from ethnographic to archaeological sources. The interpretations have mainly been evaluated on the basis of the degree of similarity between the subject and the source, the number of similarities (from a range of sources), the relation between various analogies, and the line of reasoning that accompanies it.

As there are no sources that may specifically explain what is depicted on pages 29 to 46 of the Codex Borgia, it was to be expected that a range of analogies would be drawn from a wide range of sources, and this is exactly what happened. Often this resulted in the use of a few formal analogies which were not that strong. However, in some cases relational analogies were used as well. These were used mainly by Nowotny, and Anders, Jansen, and Reyes García. From the evaluation it became apparent that these interpretations were based on the strongest analogies as they came from a range of sources and they all complemented each other.

Eventually the interpretations were compared in order to identify the specific problems inherent in the interpretation process. What became clear is that the scholars all seemed to agree (with some small exceptions) what kind of actions were depicted in the scenes. Where they disagreed was mainly on the deeper meaning of the scenes, and what it would all represent. So, what is the central theme of the pages? And, where and when do the events all take place? The central issue here seemed to be the relative inability to recognize the degree of symbolism and

metaphors in the scenes. For example, Boone had a different interpretation in comparison with previous research, because, as she argued, various elements could also be read metaphorical. Thus, it is not understood to what extent the imagery needs to be read more literally, and where the symbolism starts. Where scholars also seem to disagree upon was which characteristics are the most important in the scenes, and which define what it is all about. This is where one's own specific focus or interest seems to come in, and subsequently there has often been reasoned from one's own ontology to make sense of it all. Often then, further interpretations are largely based on assumptions.

Taking these points together I have argued that further research needs to be done from a Mesoamerican ontology in order to understand what is represented in the scenes. Clearly the symbolism is not really understood and arguing from one's own perspective about what is most important in the scenes does not work. What could be seen from the evaluation is that the interpretations that were based on ethnographic, ethnohistoric, and ethnolinguistic sources provided the strongest analogies. It is also through this methodology that I believe we can continue to understand the ontologies that were inherent as Mesoamerica. I have argued that ontologies do not change that quickly through time, but rather the outer appearance of that ontology and the way people act towards it. Therefore, we can still learn a lot from the indigenous peoples, as they have kept a lot of traditions and stories with them through time. My argumentation is thus that we should continue to collaborate more extensively with the indigenous peoples in Mexico in order to get a better understanding of how their ancestors lived in the past and how they saw the world. I believe that this is the best way in which we can work from a more Mesoamerican ontology.

The last point of disagreement about how the pages should be interpreted concerned how the pages are related to one another and what they might have been used for. This is where I argued that narratology could be of help, as it dives deeper into the analysis of the structure of the imagery.

3. *To what extent can narratology aid in the interpretation process?*

Narratology is inherently a theory that is used for a structural analysis of literary narratives. However, it has also been used by Asselbergs (2004) to analyse a pictographic narrative, although this was a historical one. Despite the fact that it was not clear if the Borgia pages displayed a narrative or not I believed that by using parts of this theory I could gain some insights in this, as in order to be able to analyse a

narrative structure we must be able to recognize it first. With this I mean to say that narratology also indirectly explains what a narrative is composed of, and this can be used to analyse the pages. However, such an analysis has not been done before on a ritual pictographic text, and therefore the question was thus specifically to what *extent* something more can be said through the use of this theory. As turned out, this was quite a bit. I used five elements from the theory of narratology that play a big part in the theory, but which could also be used for the analysis of pictography, as Asselbergs (2004) had shown before. These are time, space, events, actors, and focalization. I looked at their arrangement, emphasis, and relationship in order to come to some new insights as to the function of the pages. Not in every case a deeper knowledge of the meaning of the imagery was needed, as most structural elements could be analysed on the basis of appearance. Here, the results of this analysis are presented shortly.

As for time there is no linear sequentiality recognized. The trecena markers that are painted on the pages may return throughout the years and indicate a cyclical movement of time, and thus a re-occurrence of events. Also, the dates do not form the same structure everywhere, and it may therefore indicate that it shows various time periods. The scenes, then, do not have an apparent relation, except maybe for those on the first four pages.

The places that are shown belongs to one ceremonial centre as no place names are indicated that imply a form of migration or movement from one city or village to the next. It is known that the places that are shown in the Borgia pages were all historically present in various ceremonial centres, and their aspects were widespread throughout central Mesoamerica. This does not have to mean that they have no symbolic relation to mythological places, as a double meaning could be present as well. Apart from this, the places indicated are not always the locus for the main events of the ritual, and therefore they give the scenes some descriptive or prescriptive elements. Of all the places that are depicted, the Temple of Cihuacoatl, the Temple of the Red Serpent, the Temple of Dark Wind, and the ball court re-occur the most, and they are considered to be of most importance. Especially the Temple of Dark Wind has a big role in the scenes, as this is the place from which various rituals are initiated; mostly in the larger scenes.

The events show mainly priestly duties, but they are not necessarily related to one overall theme. The only reoccurring aspect is darkness or dark wind. Apart from that, the importance of sequentiality within scenes is made clear by roads while there is no such importance indicated for the relation between scenes. The Cihuacoatl

priest seems to be an obstacle or separator here. Therefore, it is again argued that the pages probably do not show one narrative.

As for actors there is a clear indication that the main actors relate to Quetzalcoatl-Ehecatl (and Tezcatlipoca) and his Temple of Dark Wind. The actors are mainly identified on the basis of function or role in the scenes, instead of specific individuals, as there are no names indicated, and their characteristics, like face paint and clothing, seem to be shared on specific occasions. The actors that perform the rituals are mainly priests, but gods also appear in the scenes. The Cihuacoatl priest might be the one who initiates the ritual by calling upon a priest to lead it.

When we consider focalization, the imagery indicates that the point of view from which the events are seen implies an external focalizer that is not bound to one actor, because sometimes we can see the actions (or experiences) of various actors at the same time. Furthermore, the imagery seems to show the knowledge that a priest would have and which he would need while performing his rituals. Therefore I argued that the pages are probably used as a prescriptive guide for a priest for various rituals in a ceremonial centre. This would also make sense if we compare it with how the rest of the codex was interpreted: as a divinatory guide. So it is sure that the book was used by a specialist, and that it shows his knowledge.

The Codex Borgia generally contains almanacs with knowledge that was used in more private divinatory rituals (as they concern marriage, birth, death, and various other elements of everyday life), while pages 29 to 46 were probably used for rituals of a non-divinatory nature, which could be feasts, as well as other rituals that had to be performed (of which some at specific times of the ritual-year). These rituals took place in various parts of a ceremonial centre, and each of them probably had different aims, as the themes in the pages are very diverse. Some pages show rituals that apparently took place within a restricted environment, like within a temple (as pages 29 to 32 show), or courtyard (like on page 44). Other pages show rituals that may have been performed for a larger public (like those on pages 41-42 and 46). So overall, the book thus shows the various duties of a priest, and it formed a guide during his or her practices.

The priest in question might have been a priest of a high rank, one who leads various other priests, because pages 29 to 46 show the roles of various priests during rituals. This may thus function to give a sort of overview of the rituals, but this remains hypothetical. The priest may be the Cihuacoatl priest indicated at the beginning of the scenes, although this should also be researched further.

To answer the research question, then, it became apparent that through the use of narratology the interpretations could be evaluated further, and that new

insights could be gained by looking at the imagery from another perspective. However, probably more can be said when more is known about the specific meaning of the imagery. Unfortunately, but unavoidably, this is a step that always needs to be taken in order to be able to analyze the structure of the imagery in more depth, and this makes the research even more complex. Nonetheless, by looking at the structure of the imagery in more depth, for as far as the imagery was understood until now, it was still possible to find patterns and to give an interpretation as to the function of the imagery. Comparing the results with the interpretations that have been made on the meaning of the scenes it became clear that they fit closest with the interpretation of Nowotny, which was elaborated upon by Anders, Jansen, and Reyes García. Nonetheless, the idea of Batalla Rosado, build forth on the interpretation of Anders, Jansen, and Reyes García, that the whole may be related to trance states may also be valid. However, like many other elements in the scenes this still remains unclear. Only through further research of the symbolism inherent in the scenes this may all become more clear eventually.

8. Abstract

Pages 29 to 46 of the Codex Borgia form a sequence of pages that is unique in the corpus of Mexican manuscripts. They stand out from the rest of the codex, and from any other known codex, due to the different layout that they have and their complex imagery. These pages have been the centre of many interpretation efforts for already more than a decade. Thus far, almost every scholar who has interpreted the pages got different results. Therefore, to this day no consensus has been reached about the meaning of the pages.

In this thesis I had three aims: (1) to give an overview of the interpretations made thus far, (2) to identify the specific problems in the interpretation process in order to recommend future lines of research, and (3) to expand upon the knowledge of the imagery through a structural analysis of them from the perspective of narratology.

Eight interpretations have been included in the overview. These are from Fábrega (1899), Seler (1904-1906), Milbrath (1989), Nowotny (1961; 1976), Anders, Jansen, and Reyes García (1993), Byland (1993), Boone (2007), and Batalla Rosado (2008). Fábrega saw the pages as representing 18 zodiac signs; Seler interpreted the imagery as showing a journey of Venus through the underworld; Milbrath argued that the pages show a series of astronomical events during festival months; Nowotny and Anders, Jansen, and Reyes García argued that the images represent rituals in a specific ceremonial centre; Byland came to the conclusion that the pages concern a series of ritual performed by a king-to-be; Boone argued that the pages show a narrative of creation; and Batalla Rosado argued that it concerned a hallucinatory journey through the underworld, as experienced by a priest.

These interpretations have been evaluated on the basis of the analogies that have been drawn. The result was that the interpretations of Nowotny (1961; 1976) and Anders, Jansen, and Reyes García (1993) can be considered the strongest. Their reliance on a combination of ethnographic, ethnohistoric, and ethnohistoric sources has provided a good basis to draw analogies from.

The biggest problems in the interpretation process were the understanding of the symbolism in the pages, the difference in emphasis that scholars gave to various characteristics in the pages, and the understanding of the relation between the scenes. For the first two problems I have argued that we need to work more from a

Mesoamerican ontology, as working from one's own ontology does not work, and to be able to do this we need to collaborate more with the descendants of the makers of the Codex Borgia: the indigenous peoples in Mexico.

For the last issue on layout I believed narratology could be of help. This turned out to be the case indeed. Of this theory the aspects time, space, events, actors, and focalization have been picked out to analyse the structure, and thus the function, of the pages. Through the analysis of the arrangement of these elements, the emphasis given to certain elements, and the relationship between them I came to the conclusion that the pages represent various separate rituals in a ceremonial centre, and that the pages are of a descriptive or prescriptive nature. These results made me conclude that the pages were used as a sort of guide for a variety rituals performed by a group of priests that was closely related to a Temple of Dark Wind. This conclusion falls together nicely with the interpretations created by Nowotny and Anders, Jansen, and Reyes García.

Bibliography

Websites:

Curriculum Vitae E.H. Boone:

tulane.edu/liberal-arts/art/upload/resume-8-15-11.pdf, accessed 14 April 2013.

Curriculum Vitae S. Milbrath:

www.flmnh.ufl.edu/files/1013/4646/2533/milbrath_fullcv.pdf, accessed 27 April 2013.

Ibero-Amerikanischer Institut webpage:

www.iai.spk-berlin.de/bibliothek/nachlaesse/einzelnachlaesse/seler-eduard-1849-1922.html, accessed 27 April 2013.

Lehman E-News 2007:

www.lehman.edu/lehman/enews/2007_09_24/feat_byland.html, accessed 20 April 2013.

Lehman E-News 2008:

www.lehman.edu/lehman/enews/2008_05_19/feat_byland.html, accessed 20 April 2013.

Leiden University News 2011:

news.leiden.edu/news-2011/erc-grant-maarten-jansen-time-in-intercultural-context.html, accessed 28 April 2013.

Los Angeles Times 1996:

articles.latimes.com/1996-10-08/news/mn-51620_1_george-kubler, accessed 9 June 2013.

Oxford Dictionaries:

oxforddictionaries.com/definition/english/supernatural, accessed 9 June 2013.

Personal homepage E.H. Boone:

tulane.edu/liberal-arts/art/boone.cfm, accessed 14 April 2013.

Personal homepage J.J. Batalla Rosado:

portal.ucm.es/web/america2/juan-jose-batalla, accessed 18 April 2013.

Personal homepage J.L. de Rojas y Gutiérrez de Gandarilla:

portal.ucm.es/web/america2/jose-luis-de-rojas, accessed 18 April 2013.

Personal homepage J.M.D. Pohl:

www.linkedin.com/pub/john-martin-deland-pohl-ph-d/2a/89b/76, accessed 20 April 2013.

Personal homepage M.E.R.G.N. Jansen:

www.archaeology.leiden.edu/organisation/staff/jansen.html, accessed 28 April 2013.

Personal homepage S. Milbrath:

www.flmnh.ufl.edu/about-us/people/spotlight/milbrath/, accessed 27 April 2013.

Personal Remarks Byland 2007:

www.lehman.edu/lehman/enews/2007_09_24/pdf/byland.pdf, accessed 20 April 2013.

Books and articles:

Anders, F., 1998. *Die Mexikanische Codexliteratur*. Wien: Im Eigenverlag, Klosterneuburg.

Anders, F., 2005. Foreword, in *Tlacuilolli. Style and Contents of the Mexican Pictorial Manuscripts with a Catalog of the Borgia Group*. Translated and edited by G.A. Everett, Jr., and E.B. Sisson. Norman: University of Oklahoma Press, xi-xiii.

Anders, F., 2009. *Von Schönbrunn und Miramar nach Mexiko*. Graz: Akademische Druck Und Verlagsanstalt.

Anders, F., and M.E.R.G.N. Jansen, 1988. *Schrift und Buch im alten Mexiko*. Graz: Akademische Druck Und Verlagsanstalt.

Anders, F., and M.E.R.G.N. Jansen, 1993. *Manual del Adivino. Libro explicativo del llamado Códice Vaticano B*. Mexico: Fondo de Cultura Económica.

Anders, F., M.E.R.G.N. Jansen, A.G. Pérez Jiménez, 1992. *Crónica Mixteca: El rey 8 Venado, Garra de Jaguar, y la dinastía de Teozacualco-Zaachila. Libro explicativo del llamado Códice Zouche-Nuttall*. Mexico: Fondo de Cultura Económica.

Anders, F., M.E.R.G.N. Jansen, and L. Reyes García, 1991. *El libro del Ciuacoatl. Homenaje para el año del Fuego Nuevo. Libro explicativo del llamado Códice Borbónico*. Mexico: Fondo de Cultura Económica.

Anders, F., M.E.R.G.N. Jansen, and L. Reyes García, 1993a. *Los Templos del Cielo y de la Oscuridad: Oráculos y Liturgia. Libro explicativo del llamado Códice Borgia*. Mexico: Fondo de Cultura Económica.

Anders, F., M.E.R.G.N. Jansen, and L. Reyes García, 1993b. *Códice Borgia (facsimile)*. Graz: Akademische Druck- und Verlagsanstalt.

Ascher, R., 1961. Analogy in Archaeological Interpretation. *Southwestern Journal of Anthropology* 17(4), 317-325.

Asselbergs, F., 2004. *Conquered Conquistadors. The Lienzo De Quauhquechollan. A Nahua Vision of the Conquest of Guatemala*. Leiden: CNWS Publications.

Bal, M., 2009. *Narratology. Introduction to the Theory of Narrative*. Toronto: University of Toronto Press.

Baquedano, E., 2011. Concepts of Death and the Afterlife in Central Mexico, in J.L. Fitzsimmons and I. Shimada (eds), *Living with the Dead. Mortuary Ritual in Mesoamerica*. Arizona: University of Arizona Press, 203-230.

Batalla Rosado, J.J., 2002. *Códice Tributos de Coyoacán*. Madrid: Brokarte.

Batalla Rosado, J.J., 2008. *El Códice Borgia. Una guía para un viaje alucinante por el Inframundo*. Madrid: Biblioteca Apostólica Vaticana / Testimonio Compañía Editorial.

Batalla Rosado, J.J., and J.L. de Rojas, 2008. *La religión azteca*. Madrid: Trotta.

Boone, E.H., 1989. *Incarnations of the Aztec Supernatural: The Image of Huitzilopochtli in Mexico and Europe* (Transactions of the American Philosophical Society Held at Philadelphia for Promoting Useful Knowledge, Volume 79, part 2). Philadelphia: The American Philosophical Society.

Boone, E.H., 2000. *Stories in Red and Black. Pictorial Histories of the Aztec and Mixtecs*. Texas: University of Texas Press.

Boone, E.H., 2007. *Cycles of Time and Meaning in the Mexican Books of Fate*. Austin: University of Texas Press.

Bricker, V.R., 2001. A Method for Dating Venus Almanacs in the Codex Borgia. *Archaeoastronomy* 26: S21-S44.

Broda, J., 1987. The Provenience of Offerings: Tribute and Cosmovisión, in E.H. Boone (ed), *The Aztec Templo Mayor. A Symposium at Dumbarton Oaks, 8th and 9th October 1983*. Washington D.C.: Dumbarton Oaks.

Byland, B.E., 1993. Introduction and Commentary, in G. Díaz and A. Rodgers (eds), *The Codex Borgia. A Full-Color Restoration of the Ancient Mexican Manuscript*. Mineola: Dover Publications, Inc., xiii-xxxii.

Byland, B.E., and J.M.D. Pohl, 1994. *In the Realm of 8 Deer. The Archaeology of the Mixtec Codices*. Oklahoma: University of Oklahoma Press.

Caballero, J.J., 2005. Recordando al maestro Luis Reyes García. *Desacatos* 17: 171-176.

Castillo Palma, N.A., and F. González-Hermosillo Adams, 2004. Luis Reyes García, 1935-2004. *Signos Históricos* 11: 152-157.

Díaz, G. and A. Rodgers, 1993. *The Codex Borgia. A Full-Color Restoration of the Ancient Mexican Manuscript*. Mineola: Dover Publications, Inc.

Durand-Forest, de, J., 1979. Karl Anton Nowotny (1904-1979). *Journal de la Société des Américanistes* 66(66), 291-293.

Everett, G.A., and E.B. Sisson, 2005. Karl Anton Nowotny, in *Tlacuilolli. Style and Contents of the Mexican Pictorial Manuscripts with a Catalog of the Borgia Group*. Translated and edited by G.A. Everett, Jr., and E.B. Sisson. Norman: University of Oklahoma Press, xix-xxi.

Fábrega, J.J., 1899. *Interpretación del códice Borgiano*. Anales del Museo Nacional de México, tomo V.

Gerritse, S., 2011. *Herkomstbepaling aan de hand van stijl. Het debat over de precieze herkomst van de Postklassieke Codex Borgia, Mexico*. B.A. thesis.

Gómez García, L.E., 2010. *EAP383: Preserving and cataloguing the Luis Reyes García collection of native language audios and copies of Nahuatl documents*. The Endangered Archives Programme. Pilot Project.

Hernández Sánchez, G., 2005. *Vasijas para ceremonia: iconografía de la cerámica tipo códice del estilo Mixteca-Puebla*. Leiden: CNWS Publications.

Holmer, R., 2005. *The Aztec Book of Destiny*. North Charleston: BookSurge, LLC.

Jansen, M.E.R.G.N., 2012. *Monte Albán y la Memoria Mixteca. Informe Preliminar*. Leiden: Universidad de Leiden.

Jansen, M.E.R.G.N., and G.A. Pérez Jiménez, 2004. Renaming the Mexican Codices. *Ancient Mesoamerica* 15, 267-271.

Jansen, M.E.R.G.N., and G.A. Pérez Jiménez, 2005. *Codex Bodley. A Painted Chronicle from the Mixtec Highlands, Mexico*. Oxford: The Bodleian Library.

Jansen, M.E.R.G.N., and G.A. Pérez Jiménez, 2007. *Encounter with the plumed serpent. drama and power in the heart of Mesoamerica*. Colorado: University Press of Colorado.

Jansen, M.E.R.G.N., and G.A. Pérez Jiménez, 2009. *La Lengua Señorial de Ñuu Dzauí. Cultura literaria de los antiguos reinos y transformación colonial*. Oaxaca: Colegio Superior para la Educación Integral Intercultural de Oaxaca.

Johnson, M., 2010. *Archaeological Theory. An Introduction*. Malden: Wiley-Blackwell.

Leibsohn, D., 2009. *Script and Glyph. Pre-Hispanic History, Colonial Bookmaking and the Historia Tolteca-Chichimeca*. Washington D.C.: Dumbarton Oaks Research Library and Collection.

León-Portilla, M., 1980. *Native Mesoamerican Spirituality. Ancient Myths, Discourses, Stories, Doctrines, Hymns, Poems From the Aztec, Yucatec, Quiche-Maya and other Sacred Traditions*. New Jersey: Paulist Press, Inc.

León-Portilla, M., 1988. *Time and Reality in the Thought of the Maya*. Norman: University of Oklahoma Press.

Maffie, J., 2010. Pre-Columbian Philosophies. In: S. Nuccetelli, O. Schutte, and O. Bueno (eds), *A Companion to Latin American Philosophy*. Malden: Wiley-Blackwell, 9-22.

McKillop, H., 2004. *The Ancient Maya: New Perspectives*. California: ABC-CLIO, Inc.

Milbrath, S., 1989. A Seasonal Calendar with Venus Periods in Borgia 29-46, in D. Carrasco (ed), *The Imagination of Matter: Religion and Ecology in Mesoamerican Traditions*. Oxford: British Archaeological Reports, 103-127.

Milbrath, S., 1999. *Star Gods of the Maya: Astronomy in Art, Folklore, and Calendars*. Texas: University of Texas Press.

Miller, M., and K. Taube, 1993. *The Gods and Symbols of Ancient Mexico and the Maya. An Illustrated Dictionary of Mesoamerican Religion*. London: Thames and Hudson Ltd.

Nicholson, H.B., 1971. Religion in Pre-Hispanic Central Mexico. In: G. Ekholm and I. Bernal (eds), *Handbook of Middle American Indians, Volume 10*. Austin: University of Texas Press, 395–446.

Nicholson, H.B., 1973. Eduard Georg Seler, 1849-1922. In: R. Wauchope and H.F. Cline (eds) *Handbook of Middle American Indians, vol. 13*. Austin: University of Texas Press, 348-369.

Nowotny, K.A., 1961. *Tlacuilolli. Die Mexikanischen Bilderhandschriften Stil und Inhalt mit einem Katalog Der Codex-Borgia-Gruppe*. Berlin: Verlag Gebr. Mann.

Nowotny, K.A., 1976. *Codex Borgia*. Graz: Akademische Druck Und Verlagsanstalt.

Nowotny, K.A., 2005. *Tlacuilolli. Style and Contents of the Mexican Pictorial Manuscripts with a Catalog of the Borgia Group*. Translated and edited by G.A. Everett, Jr., and E.B. Sisson. Norman: University of Oklahoma Press.

Panofsky, E., 1939. *Studies in Iconology. Humanistic Themes in the Art of Renaissance*. New York: Oxford University Press.

Quiñones Keber, E., 2007. Gifts of the Feathered Serpent: The Life and Career of H. B. Nicholson (1925–2007). *Ancient Mesoamerica* 18 (1), 3–10.

Raemaekers, D.C.M., 1999. *The Articulation of a "New Neolithic". The Meaning of the Swifterbant Culture for the Process of Neolithisation in the Western Part of the North European Plain (4900-300 BC)*. Leiden: Leiden University.

Reyes García, L., 1977. *Cuauhtinchan del siglo XI al XVI. Formación y desarrollo histórico de un señorío prehispánico*. Mexico: Fondo de Cultura Económica.

Reyes García, L., 1990. *El anillo de Tlalocan. Mitos, oraciones, cantos y cuentos de los Nawas actuales de los Estados de Veracruz y Puebla*. Mexico: Fondo de Cultura Económica.

Rival, L.M., and N.L. Whitehead, 2001. *Beyond the Visible and the Material. The Amerindianization of Society in the Work of Peter Rivière*. Oxford: Oxford University Press.

Seler, E., 1906. *Codex Borgia. Eine altmexikanische Bilderschrift der Bibliothek der Congregatio de Propaganda Fide, Band II*. Berlin: Druck von Gebr. Unger.

Seler, E., 1963. *Comentarios al Códice Borgia*. Translated by M. Frenk. Mexico: Fondo de Cultura Económica.

Shelley, C., 2003. *Multiple Analogies in Science and Philosophy*. Amsterdam: John Benjamins B.V.

Smith, M.E., 2012. *The Aztecs*. Malden: Wiley-Blackwell.

Stafford Poole, C.M., 1995. *Our Lady of Guadalupe. The Origins and Sources of a Mexican National Symbol, 1531-1797*. Arizona: University of Arizona Press.

Tavárez, D., 2011. *The Invisible War. Indigenous Devotions, Discipline, and Dissent in Colonial Mexico*. Stanford: Stanford University Press.

Townsend, R.F., 1979. *State and Cosmos in the Art of Tenochtitlan*. Washington D.C.: Dumbarton Oaks.

Townsend, R.F., 1982. Malinalco and the Lords of Tenochtitlan. In: E.H. Boone (ed), *The Art and Iconography of Late Post-Classic Central Mexico*. Washington D.C.: Dumbarton Oaks, 111-140.

Trigger, B.G., 2003. *Understanding Early Civilizations*. Cambridge: Cambridge University Press.

Van der Loo, P.L., 1989. Thematical Units in Mesoamerican Religion. Why Deer Hunting and Adultery are a Dangerous Combination. In: D. Carrasco (ed), *The Imagination of Matter: Religion and Ecology in Mesoamerican Traditions*. Oxford: British Archaeological Reports, 31-49.

Van Straten, R., 1994. *An Introduction to Iconography*. Oxon: Taylor & Francis.

Willey, G.R., 1998. George Alexander Kubler (26 July 1912 – 3 October 1996). *Proceedings of the American Philosophical Society* 142(4): 672-675.

Wylie, A., 2002. *Thinking from Things. Essays in the Philosophy of Archaeology*. California: University of California Press.

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Appendix 1: Codex Borgia pages 29 to 47

Folios: after Anders, Jansen, and Reyes García 1993b, 29-47.

Cover: after www.famsi.org, accessed 10 June 2013.





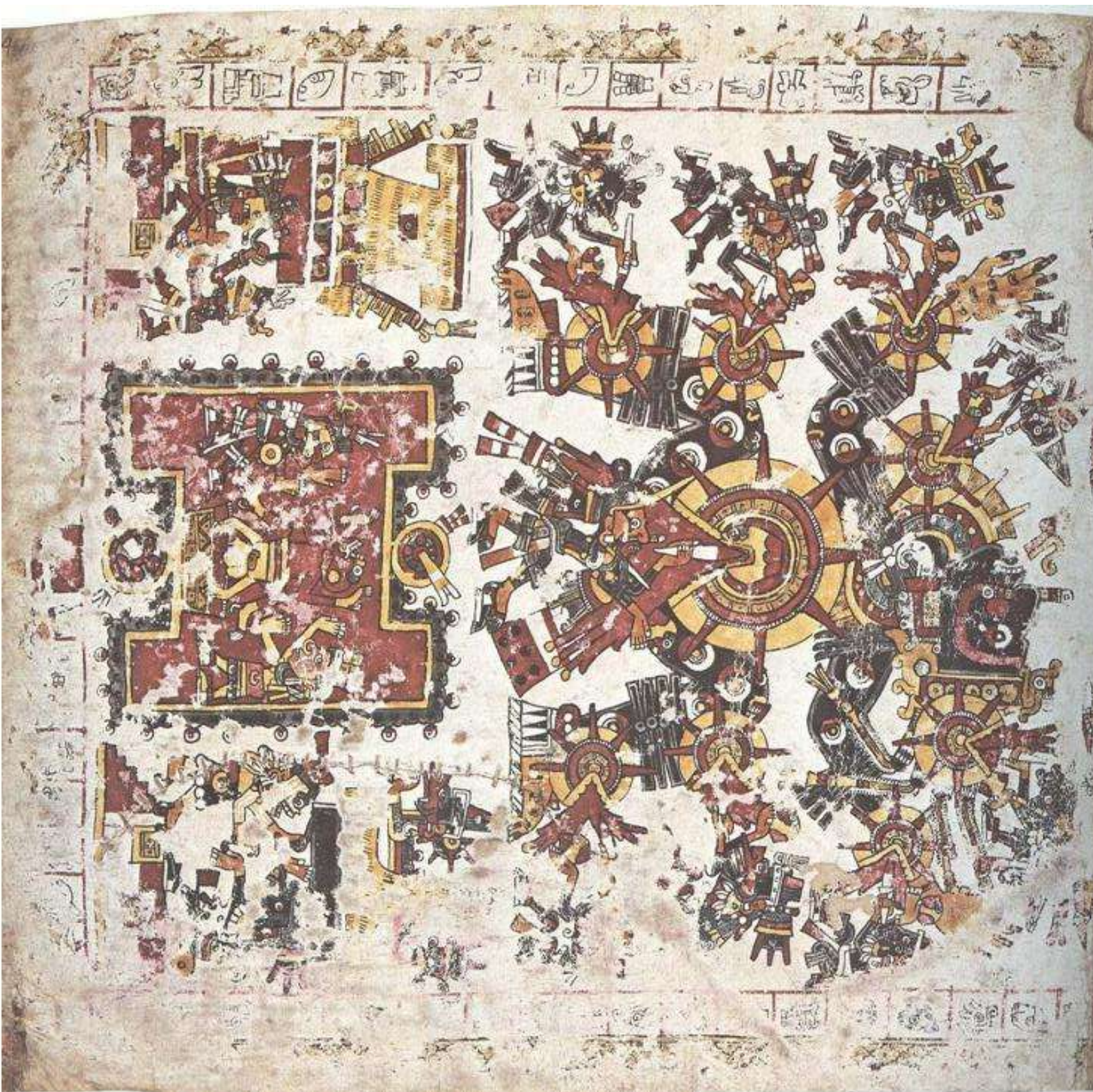












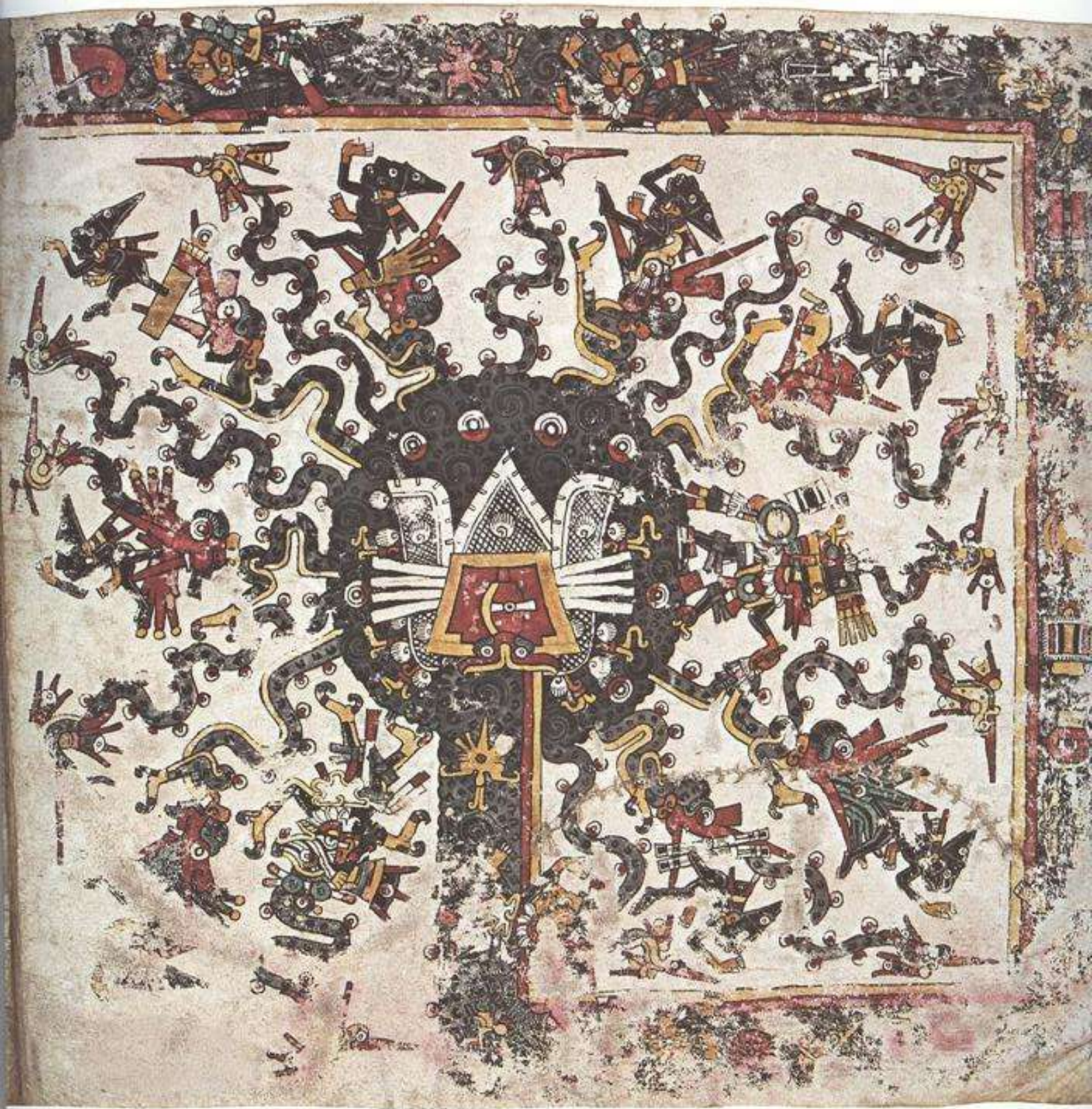


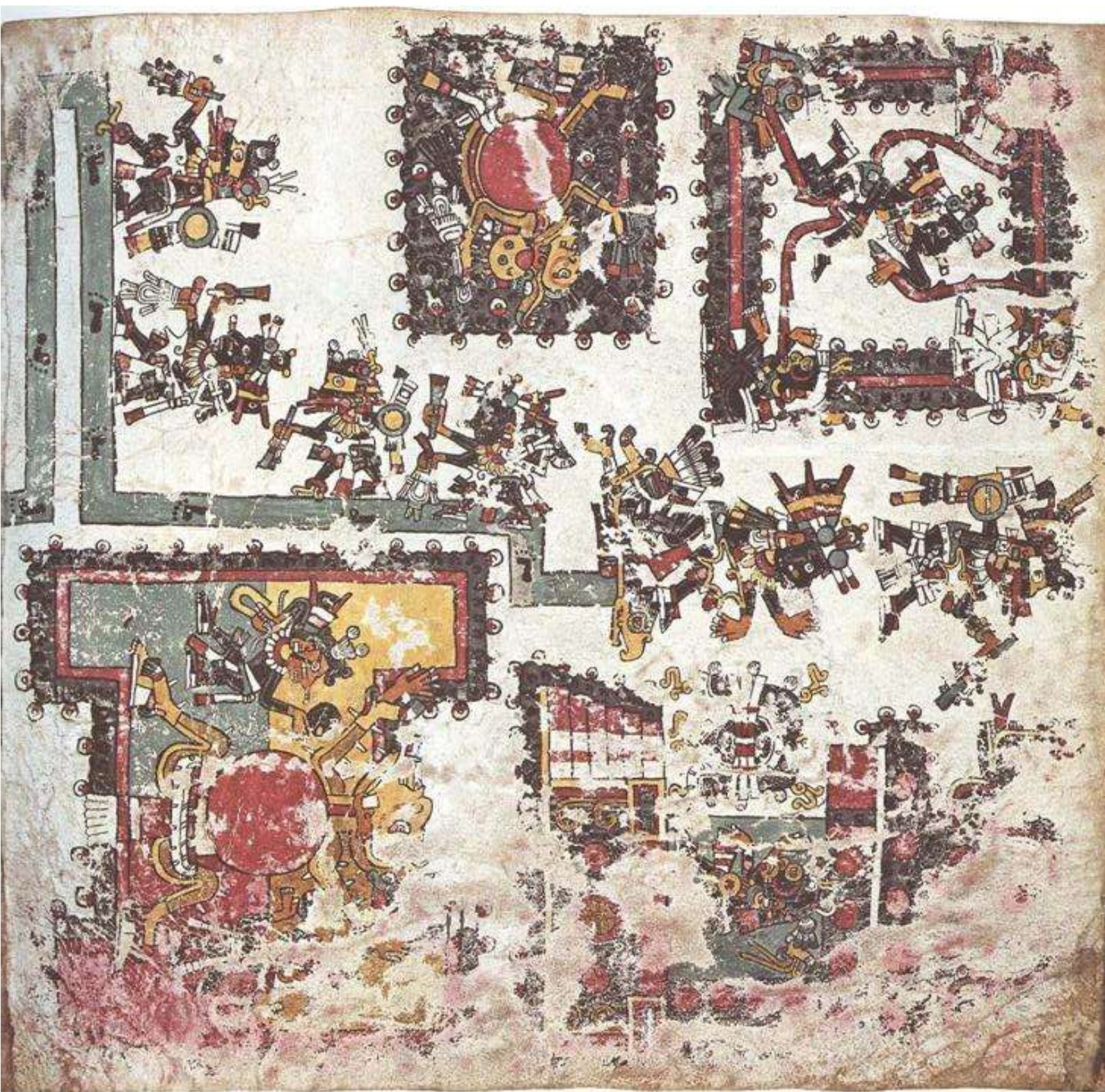


Cover















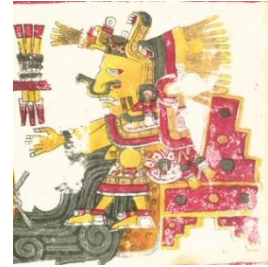






Appendix 2: List of Mesoamerican gods

Chalchiuhtlicue: "She of the Jade Skirt" is the goddess of lakes and streams. Furthermore, she is also related to birth. In the codices she often wears a jade ornamented skirt and she has two short black lines on her lower cheeks (Miller and Taube 1993, 60).



Chalchiuhtlicue (after www.famsi.org, accessed 30 April 2013)



Chantico (www.azteccalendar.com, accessed 30 April 2013)

Chantico: the Lady of the Hearth. She is the patroness of lapidaries, but mostly the goddess of the firehearth in the home and activities of the household (Holmer 2005, 81).

Cihuacoatl: "Woman-snake" is considered to be the mother- and earthgoddess. Furthermore, she is one of the goddesses of midwifery, but also of the sweatbath. Often she has warlike aspects (Miller and Taube 1993, 60-61).



Cihuacoatl (mexiclore.co.uk, accessed 30 April 2013)



Cihuateteo (after www.famsi.org, accessed 1 May 2013)

Cihuateteo: "Women gods". They are women who died in childbirth, and are also female warriors. They would haunt crossroads at night and steal children. The Cihuateteo could also cause seizures and insanity, and they would seduce men and cause them to commit adultery. Furthermore, they accompanied the sun in the western sky (Miller and Taube 1993, 61).

Cipactonal: the woman of the first human couple. Together with Oxomoco she possessed powers of divination and curing. They created the calendar. Sometimes they are considered to be creator gods. Both are depicted as very ages (Miller and Taube 1993, 40-41).



Cipactonal (after mexicolore.co.uk, accessed 1 May 2013)

Citlalicue: personification of the Milky Way. Often wears a skirt of stars and has white clothing (Miller and Taube 1993, 114).



Ehecatl-Quetzalcoatl (after Díaz and Rodgers 1993, 59)

Ehecatl-Quetzalcoatl: the wind god. He is considered to sweep the way for the gods of lighting and rain. Furthermore, in creation stories he is considered to be a creator god and cult hero. He is often painted black, wearing a red buccal mask and shell jewelry (Miller and Taube 1993, 84).

Itztlacoliuhqui: the deity of castigation, stone, and coldness. He is often mixed with the Black Tezcatlipoca. In codices he is often depicted as having a face and curving forehead of banded stone, and he is often shown blindfolded or sightless (Miller and Taube 1993, 100).



Itztlacoliuhqui (www.azteccalendar.com, accessed 1 May 2013)



Mictlantecuhtli (www.azteccalendar.com, accessed 1 May 2013)

Mictlantecuhtli: the god of death. With his wife he ruled over Mictlan, the place of the dead. He is often depicted as a skeleton, wearing paper ornaments, banners, and owl feathers (Miller and Taube 1993, 113).

Nanahuatzin: a diseased deity who threw himself in the solar fire to become the sun (Holmer 2005, 91).

Tepeyollotl: "Heart of the Mountain". He is the jaguar aspect of Tezcatlipoca (Miller and Taube 1993, 164).



Tepeyollotl
(www.azteccalendar.com,
accessed 1 May
2013)



Teteo-Innan (mexicolore.co.uk, accessed 1 May 2013)

Teteo-Innan (or Toci): Mother of the Gods. She was a patroness of midwives and curers, and identified with the sweatbath. Furthermore, she was also a goddess of war (Miller and Taube 1993, 169-170).

Tezcatlipoca: "Smoking Mirror". He is the god of rulers, sorcerers, and warriors. He is considered to be omnipresent, and causes conflict where he goes. He is as well a creator as a destroyer, and a bringer of fortune as well as disaster. Furthermore, he has many names: *titlacuahan* [he whose slaves we are], *yaotl* [the enemy], *youalli ehecatl* [night wind], and *ilhuicahua tlalticpaque* [possessor of the sky and earth]. In codices he is often depicted with face paint consisting of alternating yellow and black bands, and having smoking mirrors on his head and foot (Miller and Taube 1993, 164).



Tezcatlipoca (mexicolore.co.uk, accessed 1 May 2013)



Tlahuizcalpantecuhtli (after www.famsi.org, accessed 1 May 2013)

Tlahuizcalpantecuhtli: "Lord of the Dawn". He is the god of the morning star, and as such he is the dangerous aspect of Venus. He is often depicted with five spots on his face (Miller and Taube 1993, 166).

Tlaloc: the god of rain and lightning. It is believed that he resides in mountain caves. Together with Chalchiuhtlicue he ruled the **Tlaloque**, who were spirits of the mountains and weather phenomena. Tlaloc is often depicted with goggled eyes and jaguar teeth (Miller and Taube 1993, 166-167).



Tlaloc (www.azteccalendar.com, accessed 1 May 2013)



Tlazolteotl (after www.famsi.org, accessed 1 May 2013)

Tlazolteotl: the goddess of filth, purification, and curing. She is often depicted with a grass broom. Furthermore, she often has a black zone around her mouth and spools of cotton in her headdress (Miller and Taube 1993, 168).

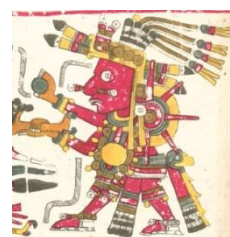
Tonacatecuhtli: "Lord of Our Sustenance". An aged creator god. He resided in the 13th layer of heaven together with Tonacacihuatl. They would send the souls down of infants to be born (Miller and Taube 1993, 172).



Tonacatecuhtli (www.azteccalendar.com, accessed 1 May 2013)

Tonaleque: deified warriors who died in battle or in sacrifice. They accompanied the sun in the eastern sky (Anders, Jansen, and Reyes García 1993a, 101-102; Miller and Taube 1993, 61).

Tonatiuh: the sun god. He was considered to be a fierce and warlike god. In the codices he is often depicted with red body paint, an eagle feather headdress, and a large solar disk (Miller and Taube 1993, 172).



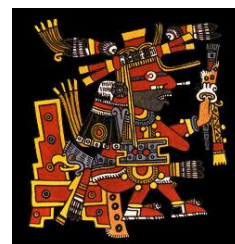
Tonatiuh (after www.famsi.org, accessed 1 May 2013)



Tzitzimime (en.wikipedia.org, accessed 1 May 2013)

Tzitzimime: star demons of darkness. They were often compared with spider hanging head downward from its thread. In codices they are often depicted as skeletal females with a shell fringed skirt (Miller and Taube 1993, 176).

Xiuhtecuhtli: "Turquoise Lord". He is the god of fire and the year. He is also identified with youthful warriors and rulership. When he is depicted he has a lot of turquoise elements. He wears the crown of rulership and a turquoise pectoral in the form of a butterfly. Furthermore he has a turquoise bird against his brow and a fire serpent on his back (Miller and Taube 1993, 189).



Xiuhtecuhtli
(www.azteccalendar.com, 1 May 2013)



Xochipilli (after www.famsi.org, accessed 1 May 2013)

Xochipilli: "Flower Prince". He is the patron of flowers, dancing, feasting, painting, and game-playing, but he could also cause ailments to people who violate times of fasting with sexual intercourse (Miller and Taube 1993, 190).

Xochiquetzal: "Flower Quetzal". She is a young female who epitomizes female sexual power, flowers, and pleasure. Furthermore she is considered to be the patroness of weavers and the arts, but also of childbirth and pregnancy. When she is depicted she often wears luxurious clothing and gold ornaments (Miller and Taube 1993, 190).



Xochiquetzal (after www.famsi.org, accessed 1 May 2013)



Xolotl (www.azteccalendar.com, accessed 1 May 2013)

Xolotl: a canine god. He is the companion and an aspect of Quetzalcoatl. He is often identified with sickness, physical deformity, and twins. As the companion of Ehecatl-Quetzalcoatl he is often depicted wearing shell ornaments. Furthermore, he often has a ragged-edges ear and deeply furrowed face (Miller and Taube 1993, 190-191).

Yoaltecuhtli: "Night Lord" (Holmer 2005, 94).


Appendix 3: 260-day calendar divided in 4x65 days

Green: signs on page 30

Pink: signs on page 31
(down)

Blue: signs on pages 31 (up),
and 39.

Red: signs on pages 32,
and 44.

 signs on page 41

Day nrs	Day signs			
1	Crocodile	Death	Monkey 	Vulture
2	Wind	Deer	Grass	Movement
3	House	Rabbit	Reed	Flint
4	Lizard	Water	Jaguar	Rain
5	Serpent	Dog	Eagle	Flower
6	Death	Monkey	Vulture	Crocodile
7	Deer	Grass	Movement	Wind
8	Rabbit	Reed	Flint	House
9	Water	Jaguar	Rain	Lizard
10	Dog	Eagle	Flower	Serpent
11	Monkey	Vulture	Crocodile	Death
12	Grass	Movement	Wind	Deer
13	Reed	Flint	House	Rabbit
1	Jaguar	Rain 	Lizard	Water
2	Eagle	Flower	Serpent	Dog
3	Vulture	Crocodile	Death	Monkey
4	Movement	Wind	Deer	Grass
5	Flint	House	Rabbit	Reed
6	Rain	Lizard	Water	Jaguar
7	Flower	Serpent	Dog	Eagle
8	Crocodile	Death	Monkey	Vulture
9	Wind	Deer	Grass	Movement
10	House	Rabbit	Reed	Flint
11	Lizard	Water	Jaguar	Rain
12	Serpent	Dog	Eagle	Flower
13	Death	Monkey	Vulture	Crocodile
1	Deer 	Grass	Movement	Wind
2	Rabbit	Reed	Flint	House
3	Water	Jaguar	Rain	Lizard
4	Dog	Eagle	Flower	Serpent
5	Monkey	Vulture	Crocodile	Death
6	Grass	Movement	Wind	Deer
7	Reed	Flint	House	Rabbit
8	Jaguar	Rain	Lizard	Water
9	Eagle	Flower	Serpent	Dog
10	Vulture	Crocodile	Death	Monkey
11	Movement	Wind	Deer	Grass
12	Flint	House	Rabbit	Reed
13	Rain	Lizard	Water	Jaguar
1	Flower	Serpent	Dog	Eagle 
2	Crocodile	Death	Monkey	Vulture
3	Wind	Deer	Grass	Movement
4	House	Rabbit	Reed	Flint
5	Lizard	Water	Jaguar	Rain
6	Serpent	Dog	Eagle	Flower
7	Death	Monkey	Vulture	Crocodile
8	Deer	Grass	Movement	Wind
9	Rabbit	Reed	Flint	House
10	Water	Jaguar	Rain	Lizard
11	Dog	Eagle	Flower	Serpent
12	Monkey	Vulture	Crocodile	Death
13	Grass	Movement	Wind	Deer

1	Reed	Flint	House ▲	Rabbit
2	Jaguar	Rain	Lizard	Water
3	Eagle	Flower	Serpent	Dog
4	Vulture	Crocodile	Death	Monkey
5	Movement	Wind	Deer	Grass
6	Flint	House	Rabbit	Reed
7	Rain	Lizard	Water	Jaguar
8	Flower	Serpent	Dog	Eagle
9	Crocodile	Death	Monkey	Vulture
10	Wind	Deer	Grass	Movement
11	House	Rabbit	Reed	Flint
12	Lizard	Water	Jaguar	Rain
13	Serpent	Dog	Eagle	Flower

Trecenas				Page nrs
1 Crocodile	1 Death	1 Monkey ▲	1 Vulture	30
1 Jaguar	1 Rain ▲	1 Lizard	1 Water	31-bottom
1 Deer ▲	1 Grass	1 Movement	1 Wind	31-up / 39
1 Flower	1 Serpent	1 Dog	1 Eagle ▲	32 / 44
1 Reed	1 Flint	1 House ▲	1 Rabbit	