

Chapter 8

Zodiac ©

The zodiac (Greek *zoidiakos* or circle of animals) involves twelve 12 divisions, each of 30° , of celestial longitude based on the 360° of the ecliptic (Fig. 1). The twelve divisions called signs were based on the monthly appearance and disappearance of certain constellations (star patterns) in the night sky of Babylon in the seventh century BCE (Fig. 2). The assumption of a relationship between astronomical phenomena particularly the movement of the sun, moon, and planets with the human condition led to astrology, a divination system based on the horoscope, the position of the planets at birth for each person. Astrology entered the scholarly tradition and connected with other studies including astronomy, alchemy, medicine, and botany (especially the herbalist Nicholas Culpeper (1616–1654)). It reached a peak in the 16th century when European monarchs had their own personal astrologer but was still treated with some skepticism by the Catholic Church. Astrology was completely discredited in the Age of Enlightenment but is still casually followed by many with horoscopes published daily in many local newspapers. The zodiac and astrology were a part of Spanish culture in the 15th and 16th century. In this essay traditional zodiac signs are compared with signs found in the Voynich Codex, and the Codex Mexicanus.

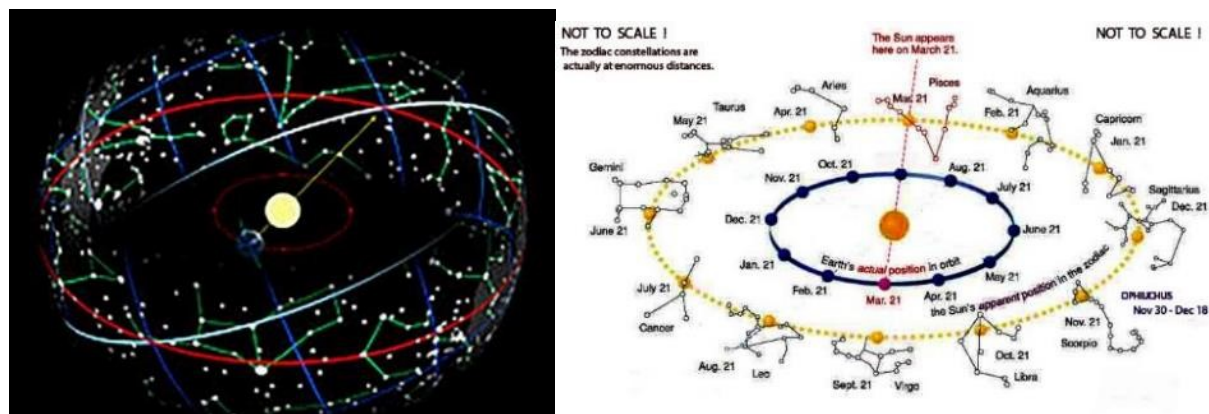


Fig. 1. The celestial geometry of the constellations.

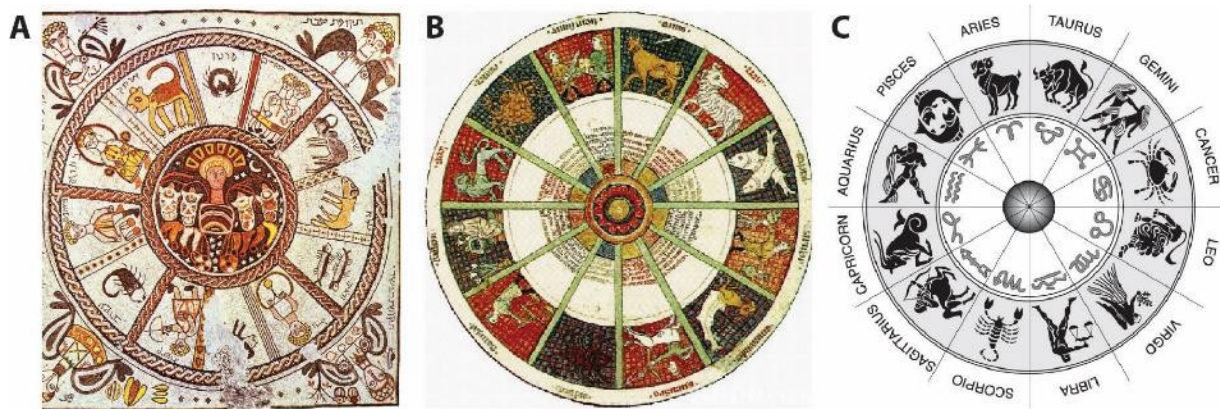


Fig. 2. Ancient, medieval, and modern zodiacs: (A) Beit Alfa, Israel, 6th century; (B) Medieval; (C) modern.

The Zodiac in the Voynich Codex

There are 12 pages of zodiac images (70r to 73v) in the Voynich Codex (Fig. 3 to 12). Two of the 12 signs are missing due to a missing page (f.74) in the codex. Each of the images consist of circular forms of three of four concentric rings, with the inner one containing a zodiac sign. The outer rings are filled with nymphs holding stars connected to a string, each of which is labeled in voynichese. The nymphs are nude in ten of images and clothed in two. In the middle of the sign there are words in a Carolingian script that are clearly months which are a later addition to the text. The Carolingian script was developed under the Emperor Charlemagne in the 9th century but were still in printed books of the 15th and 16th. We assume these months were added when the Voynich Codes was in the hands of Rudolph II, probably by a librarian. The words were deciphered by Sean B. Palmer, (2004–2012) as months close to the Catalan names (Table 1) which are appropriate for each sign (Fig. 1). The intriguing things about the Voynich zodiacs are: (1) the use of New World animals in a number of signs which is consistent with the zodiac being made in the New World (see Chapter 7); the use of gender separation found in some of the signs which is consistent with Aztec sensibility; and the combination of nymphs with each sign that appear to represent days or degrees indicating a general knowledge of Western astrology and astronomy.

Folio 70r (Fig. 3). The sign in the first circular form labeled with the Carolingian word “Marc” (March) represents Pisces (The Fish). In the inner circle there are two elongated fish that closely resemble Alligator gar (*Atractosteus spatula*), a species whose range extends Mississippi River Basin extending into Mexico (see Chapter 7). They perhaps represent male and female; females are typically larger than the male. Each fish is connected to a line in their mouth terminating in a star one of which is labeled **oñloxax** (*ātlācāocā*) that could be translated from Nahutal as “still fished” (*ātlācā* + spear thrower or fisherman, *oc* = still). There are 29 nude nymphs in two outer rings, each arising from a round container.



Fig. 3.

Folio 70v & 71r (Fig. 4). There are two circular forms representing Aries (The Ram). Both contain the Carolingian word *aberil* (April) which is appropriate. The larger sheep (Fig. 4A) probably is a ram, the other (Fig. 4B) a ewe, both nibbling on a shrub. They represent most probably domestic sheep (*Ovis aries*) introduced by the Spanish (Flaherty et al. submitted) or could be big desert bighorn sheep (*Ovis Canadensis Mexicana*) indigenous to Western Sonora (Tucker and Talbert, 2013) There are 15 clothed nymphs in each of the two rings associated with each wheel.

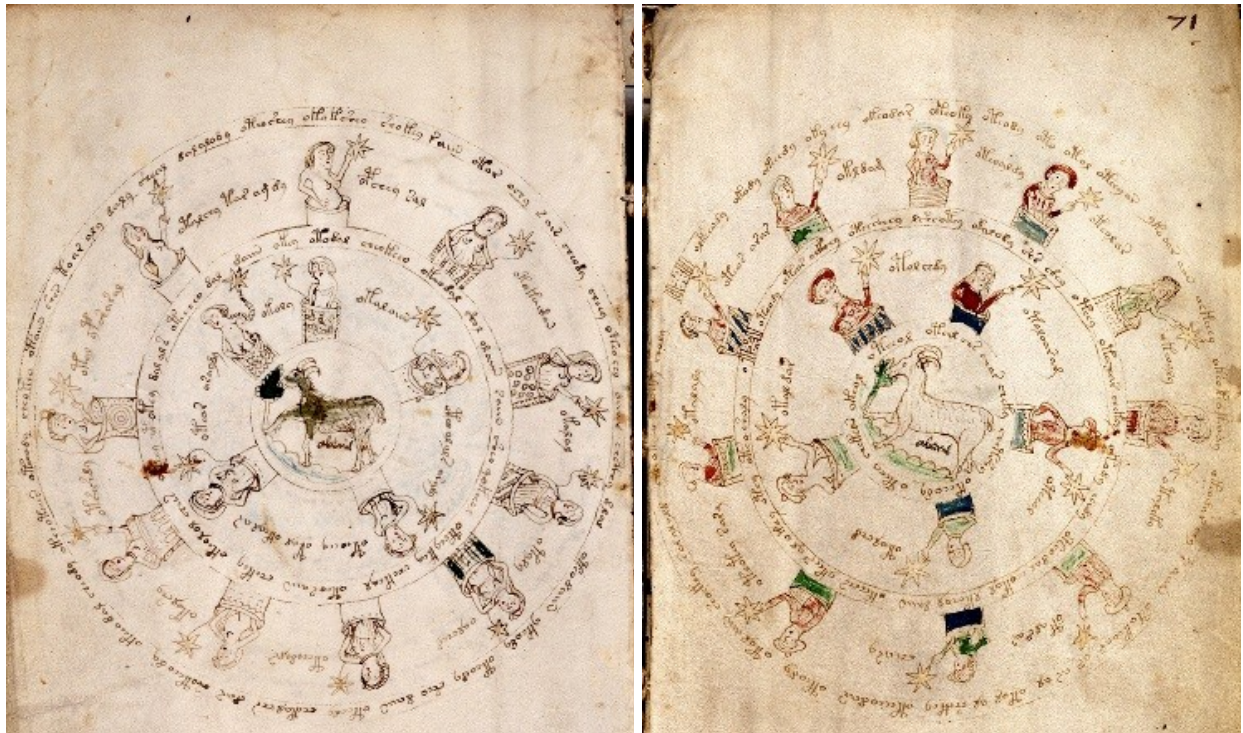


Fig. 4.

Folio 71v-1 & 2 (Fig. 5). There are two wheels, both labeled *may* (May), that represent Taurus (The Bull). Each illustration a breed of cattle (*Bos Taurus*). The first sign (Fig. 5A) is a light red horned cow (*Bos taurus*) that resembles the Andalucian Red breed introduced by the Spanish into Mexico and the second is a dark red Retinto bull, clearly indicated by the penis, ancestor to the Texas longhorn breed. There are 15 nymphs associated with each image, the nymphs associated with the cow are clothed and arise from a container but the nymphs associated with the bull are standing nudes.



Fig. 5.

Folio 71v-3 (Fig. 6). The sign labeled *Yuni* (June) representing Gemini (The Twin Brothers). However, in the Voynich Codes, the twins consist of a couple holding hands; the male is dressed in a hat and tunic and the woman in a blue gown. There are 30 standing nude nymphs in the three outer rings. The replacement of the traditional male twins with a couple is a clear indication of Aztec sensibility for gender equivalence.



Fig. 6.

Folio 71v-4 (Fig. 7). The sign for cancer (The Crab) labeled *iollio* (July) is represented by a pair of Mexican crayfish (*Cambarellus patzcuarensis*) perhaps male and female. It should be noted that the classical image may be a crab or a crayfish. There are 30 standing nude nymphs in three rings.



Fig. 7.

Folio 72r-1 (Fig. 8). The sign labeled with *Augst* (August) instead of Leo (The Lion) is an ocelot (*Leopardus pardalis*) indigenous to South America. Note that the tail, positioned between the legs resembles the tail position in the medieval image of Leo indicating the painter was aware of the classic depiction of Leo. The page is incomplete so the number nude nymphs in a standing position cannot be accurately determined. It appears there are 11 figures in the first ring and 18 or 19 in the third ring for a total of 29 or 30.



Fig. 8.

Folio 72r-2 (Fig. 9). The figure of Virgo (The Virgin or Maiden) associated with *septēbr* [note that *ē* is pronounced “em”] (September), is a woman in a long blue voluminous gown wearing a blue hat holding a star and standing on turf with a flower. There are 29 nude nymphs in two circles.



Fig. 9.

Folio 72v (Fig. 10). The sign Libra (The Scales) labeled novēbre (November) are represented by the traditional scales of justice. There are 30 standing nymphs in two rings.



Fig. 10.

Folio 73r (Fig. 11). The traditional sign Scorpio (The Scorpion) labeled *novēbre* (November) is represented by a black cat-like creature with a string in its mouth connected to a star. The animal resembles a jaguarundi (*Puma yagouarundi*) with a long curved tail, suggesting the curved tail of the Scorpion. There are 30 standing nude nymphs in three circles above the central sphere.



Fig. 11.

Folio 73v (Fig. 12) The sign associated with *decēbre* (December) representing Sagittarius (The Archer) is a male in a blue tunic and a cream hat with a plume holding a crossbow. There are 30 standing nude nymphs, 10 in the inner ring, 16 in the outer ring, and 4 on the outer rim.



Fig. 12.

The sequence of the Zodiac in the Voynich codex begins with Pisces which is different from the Western Gregorian calendar which begins in January 1. The beginning of the year in Babylon based on the Lunar calendar usually begins in March and the calendar in Meso-America including Aztec, begins February 23. Thus, the beginning of the zodiac in March may represent Aztec sensibilities rather than a misbinding of the missing folio page.


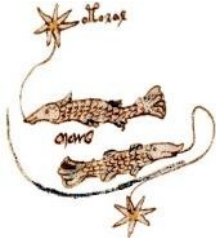








The zodiacs in the Voynich codex include 10 signs in the correct sequence but Capricorn (The Goat) associated with January, and Aquarius (The Water Carrier) associated with February are missing. However folio 74 is missing and we assume that Aquarius would have been found on the recto of the folio and Capricorn on the verso. Associated with the 10 signs are 301 nymphs. If the expected 30 nymphs each from the missing Capricorn and Aquarius are added, there would be 361 total suggesting that the nymphs are symbols for degrees or days.

Of particular significance is the fact that the animals in the Voynich Codex associated with Pisces, Cancer, Leo, and Scorpio are animals indigenous to Meso-American or in the case of Aries and Taurus could be Spanish imports. Thus it is clear that the Voynich zodiac represent a fusion of Western and MesoAmerican symbols. Another relevant fact is that five of the signs (Pisces, Aries, Taurus, Gemini, and Cancer) appear to be associated with male and female forms. This attempt at gender inclusions (referred to as cosmic duality by Rogers (2007)) is a feature of Aztec culture.

Zodiac Mexicanus

A zodiac is found in an early colonial Mexican pictorial manuscript, *The Codex Mexicanus* (1570–1590, p.21) dated by Moreno (2006, p. 271) (Fig. 13). The signs were also modified as in the Voynich Codes, i.e. a fish was exchanged for the traditional crab in Cancer (Table 1, Fig. 13). Furthermore, the zodiac was associated with the four Aristotelian elements (Brotherston 1998): air (breath emanating from a head); water (an ice crystal producing hail and rain); fire (a crown of flame), and earth (a plot of ground pierced by a triangular point of a digging stick as shown in Fig. 14). It is intriguing that the Aristotelian elements are incorporated in kabbalah 9 (Ryba, pers. commun. http://www.daatemet.org/articles/article.cfm?article_id=131); they also appear to be found in circle 2 of f.86v (*see* Chapter 1). Aquarius, Gemini, and Libra are associated with air; Pisces, Cancer, and Scorpio with water; Aries, Leo and Sagittarius with fire, and Taurus, Virgo, and Capricorn with earth. The transformation of Cancer as a fish fits with its association with water. Some of the signs shown some changes from the traditional ones displaying Aztec sensibilities of gender: Aquarius show two water jars reflecting Aztec duality; Gemini, the twins become a copulating couple, sitting face to face astride in coitus, also found in pre-Hispanic manuscripts according to Brotherston and the bull in Taurus has an enormous penis, and Virgo is represented as a maiden with a frond and a flower similar to a medieval image of the 15th century (Fig. 15).

Table 1. Names and signs in zodiac medieval manuscript, Voynich Codex, and Codex Mexicanus.

Constellation (dates)	Traditional Medieval sign	Voynich Codex				Codex Mexicanus
		Image & location	Creature ^z	Month in Carolingian script ^z (Catalan & English name) ^y	No. nymphs	
Pisces (Feb. 19–March 20)	Fish 	70r 	Female alligator gar (top) & male gar (bottom)	Marc (Marc, March)	29	
Aries (March 21– April 19)	Ram 	70v 	Sheep (Ewe)	Aberil (Abril, April)	15	
		71r 	Sheep (Ram)	Aberil (Abril, April)	15	
Taurus (April 20–May 20)	Bull 	71v A 	Cow	maÿ (Maig, May)	15	



71v B

Bull

maÿ (Maig, May)

15



71v C

Man &
Woman (rather
than male
twins)Yuni
(Juni, June)

30

Gemini
(May 21–June 20)

Twins



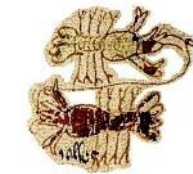
71v D

Mexican
crayfish
(male &
female?)iollio
(Julio, July)

30

Cancer
(June 21–July 22)

Crab/Crayfish



72r A

Ocelot

augst
(Agost, August)29–30
(incomplete
diagram)Leo
(July 23–Aug. 22)

Lion



Virgo
(Aug. 23–Sept. 21)

Virgin



72r B



Gowned
woman

septēbr
(Septembre,
September)

29



Libra
(Sept. 22–Oct. 23)

Scales



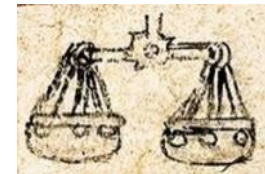
72v



Scales

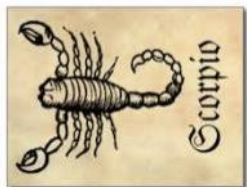
octēbre
(Octubre, Octobr)

30



Scorpio
(Oct. 24–Nov. 21)

Scorpion



73r



Jaguarundi

novēbre
(November,
November)

30



Sagittarius
(Nov. 22–Dec. 21)

Archer



73v



Crossbow
archer

decēbre
(Decembere,
December)

30






Capricorn
(Dec. 22–Jan. 19)

Goat

74r missing

30?



Aquarius (Jan. 20–Feb. 18)		75v missing	30?	
				

^zTucker and Talbert 2013; Flaherty et al. (2016 submitted).

^yScript identified as Carolingian by A.O. Tucker; Catalan names by Sean B. Palmer (2004–2012).



Fig. 13. The zodiac in the Codex Mexicanus.

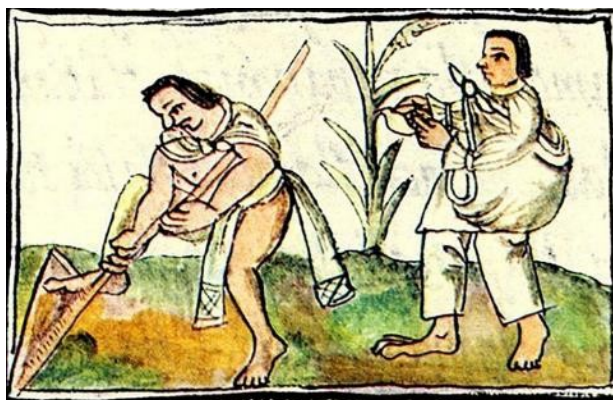


Fig. 14. The Aztec digging stick.



Fig. 15. Medieval maiden representing Virgo.

Conclusion

The zodiac in the Voynich Codex is convincing proof that the Voynich Codex is a Meso-American work based on the substitution of indigenous animals and the use of gender to separate some of the traditional zodiac signs. The zodiac in the Codex Mexicanus is not directly related to the Voynich Codex but demonstrates a similar fusion of Western and Aztec iconography that was brought about by the clash of cultures in New Spain.

Literature Cited

Brotherston, Gordon 1998. European scholasticism analyzed in Aztec terms: The case of the Codex Mexicanus. Boletim do CPA, 5/6 Campinas, Jan/Dec. 169–181.

Codex Mexicanus (1571-1590). World Digital Library
<https://www.wdl.org/en/item/1528t4/view/1/1>

Moreno. Manuel Aguilar. 2006. Handbook to life in the Aztec World. Oxford University Press, New York. p.271.

Palmer, Sean B. 2004–2012. Voynich manuscript: Months. <http://inamidst.com/voynich/months>.

Rogers, R.C.,, The resilience of Aztec women: A case study of modern Aztec Myths. Journal of Humanities & Social Sciences 1(2):1–18, footnote 4.

Tucker, Arthur O. and Rexford H. Talbert. 2014. A preliminary analysis of the botanical, zoological and minerals of the Voynich manuscript. Herbalgram 70(100).