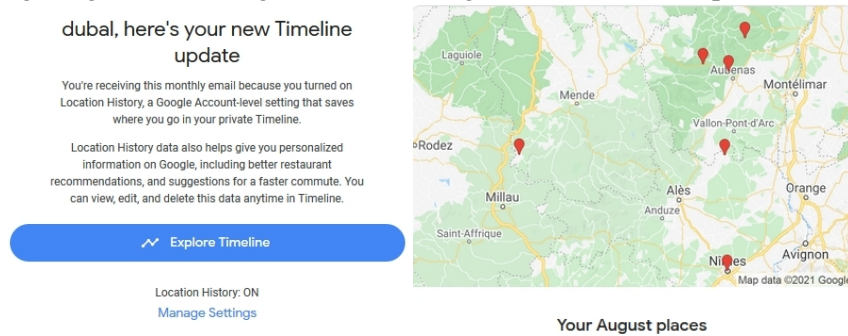


## Timelines Overview Leo Dubal, PhD [chronist@archaeometry.org](mailto:chronist@archaeometry.org)

This chronic is the free script of a lecture (in French) at url: <https://www.archaeometry.org/timeline.m4v>

Though Big Brother Google is now mailing to some of us their personal **Timeline** update, e.g:



the concept of monitoring events on a *linear time scale* (i.e.: ranging from minus to plus infinity) might be linked to the emergence of patriarchy. Timeline represents a kind of mental revolution in the History of mankind. Our primal perception of time is a chain of cycles: daily cycle (earthly spin), monthly (lunar spin), seasonal & annual (earth rotation around the sun). To free oneself of *timeless* circular thinking, numerous steps have been necessary because the way our brain works is intimately involved. Our right cerebral hemisphere has the astonishing ability to catch a scene *all at once*, as coined by the neurosurgeon Leonard Shlain. It is able to synthesize a huge amount of elements, to generate emoticons, metaphors & dreams. On the opposite, our left cerebral hemisphere analyses elements *one at a time*, and is able to translate them into words, to distinguish *before & after*, the past from the future. In other words, the left hemisphere can establish the causal link between events, their order of appearance, their *chronology*. Homo faber succeeded to understand the *trick* to smelt iron ore & discover the role of the father in procreation. Considering the perenniality of the Immaculate Conception myth, this discovery was far from obvious!

Since the dawn of time, women have obviously notice the synchronism between their oestrous cycle and the lunar cycle. During Palaeolithic age, women might have observed the moonset's round trip along the horizon line: the positions of the setting of the Moon, under our latitudes, are ranging between 230° and 310°N. Therefore the tracking from one turnaround point to the next, from the austral to the boreal lunistic, is easy. A 35'000 years old bone found in Sergeac (Dordogne) exhibits an engraved ribbon with about fifteen cup-marks per lace which suggests such a tracking. The writing was not linear, but *plane*, typical design issued from a right cerebral hemisphere. Observations of the solar turnaround points are testified only since 5'200 years Before Present. It is true that longer times of observation have been necessary than for the Moon's ones, but the reason for this late arrival might be else: Donald Cyr suggested that a high altitude permanent layer of clouds (canopy) during the whole Mesolithic could have diffused the direct Solar light in such a way, preventing the determination of the Sun's position. Let us note here the doubts expressed by Françoise Vimeux on the possibility of such canopy over long periods of time. The first marker of the austral solstice (which we, eurocentrists, call winter solstice) is the tumulus of Newgrange discovered in 1963 by Michael O'Kelly. The light-box over the door of the tumulus is framing the solstitial sunrise. The 19 meters long corridor is then illuminated a few second long on December 17th, three minutes long when the Sun reach its meridional turnaround on December 21st, then, declining to a few seconds on December 25th, then nothing during the rest of the year.

In 1984, Mark Lehner discovered, at Giza, a most *unexpected recording device* for the position of the sunset at boreal solstice: a megalithic construction by 600 years younger than Newgrange's tumulus. Juan Antonio Belmonte succeeded, just before the shortest night of year 2006, to frame there the Sphinx haloed by the Sun. Thereafter, one no longer can discard the hypothesis of a Master plan behind this artificial landscape. Was it inspired by hieroglyph *akhet* (horizon) depicting the Sun framed by two mountains? In *The Riddle of the Pyramids* published in 1974, the physicist Kurt Mendelssohn insists on the matriarchal character of the ancient Egyptian society: only direct filiation and wedding with the queen allowed access to power.

1'400 years after the erection of the pyramids, two colossal statues, near Luxor, are watching out the sunrise at the austral solstice: there, Pharaoh Amenhotep III is, metaphorically speaking, seated on matrilinearity, on each side of his legs are standing his mother Mutemuia and his spouse Tiyi ! It is this same queen Tiyi who chaperoned her son Amenhotep IV for his coronation at the age of ten. At fifteen, under the name of Akhenaten, he has a new capital built: Akhet-Aten, an event we attempted to date precisely: March 2nd, -1336 CE, CE standing for Common Era, the secular & universal calendrical era introduced by the *politically correct* astronomer Johannes Kepler, *not in its year 0*, but in its year +1616 ! The border stele K indicates that the laying of the foundation stone took place on Pharaoh's 5th regnal year. Here, only the social function, i.e. Pharaoh, is quoted, not the individual. Concomitantly, the cult to Solar Disk Aten, with Akhenaten as his *earthly representative* sounds as the first cult of personality! At Akhenaten's death, Tutankhaten being too young, his sister (and mother ?) Meritaten took the throne. Once she passed away, Tutankhaten, aged of 7, keeping away other pretenders to the throne, married his 13 years old sister (and ant ?) Ankesepaaten. He was crowned under the name of Tutankhamen. At his death, his widow Ankesepaamen married her maternal grandfather Ai (Nefertiti's father ?). Matrilinearity was obviously still very popular during the 18th Dynasty!

One thousand years after Akhenaten, a stele testifies for the fading of the anonymity of social function. Kings no longer hesitated to declare the number of THEIR regnal years. On a southern-arabic stele, Seleukos (Alexander the Great successor), let engrave: *year second / SLK / king*, i.e.: the second regnal year of king Seleukos (whose consonantal skeleton is SLK). Thereafter, the individual will come first, before his social function, while the exclusivity of cyclic times (lunar, solar, then imperial) will break apart. Babylonians astronomers (experts of the sexagesimal numeration system!) sixty one years after the take-over of Babylon by Seleukos, invented a linear timescale for the recording of their astronomical observations, a *timeline* which we call today Seleucid Era, but which could as well be called *Patriarchy's timeline!* On a clay tablet, written in cuneiform, a total solar eclipse is reported in all details. Peter J. Huber & Herman Hunger deciphered that this eclipse occurred in year **175** of this calendrical era, and they identified this total solar eclipse over Babylon as the one on CE -**135.04.15**. Just one year before this eclipse, a self-declared *philhellenist*, the Arsacid king Mithridates minted a tetradrachm at Seleucia o/T. The mint year there is written with the miletian numeration system, i.e.: Delta Omicron Rho for **174** (CE -136). Among other artefacts *dated Seleucid* let us mention a tetradrachm minted, in Akko, in year Zeta Pi Rho for **187** (CE -124/) by Cleopatra Thea when she was ruling alone over the Seleucid empire. Another interesting item, written in Edessa and dated, in Syriac in full, **723** (CE +412) is the oldest Christian manuscript (a copy of Eusebius' martyrology). The colophon of the latest manuscript dated Seleucid was written in Syriac letters with numerical value: **1795** (CE +1484). Seleucid era can therefore claim the absolute record of longevity, and of course aroused followers. Let us look at the case of the Era Hispanica. A manuscript reports a solar eclipse having occurred in ERA **1117**. Thanks to the retrodiction software *5 Millennium Canon of Solar Eclipses* of Xavier Jubier, we could identify it as the total solar eclipse over Coimbra which occurred on July 1st +1079 CE. Era Hispanica is therefore 38 years ahead of Common Era. The date ERA CCCCLXXX on a funerary Arianist stele testifies for the use of this new calendrical era in its year **480** (CE +442), i.e. 3 decades after the above mentioned Arianist martyrology. Among ERA-dated artefacts, the sole coin is a dinero minted in Toledo in ERA **1204** (CE +1166).

As demonstrated by our two examples, one can *tune* perfectly a timeline as long as ancient total solar eclipses observation reports exist. Particularly enlightening for timelines is the listing of their *dates of first registration*:

Common Era in its year **+1616**, by Kepler.

Anno Domini, in its year **725** (CE +725), by Bede the Venerable.

Anno Hegirae, in its year **67** (CE +686), by Abdalmalik ibn Abdullah.

ERA Hispanica, in its year **480** (CE +442), on a funerary stele in Merida.

Ab Urbe Condita, in its year **700** (CE -52), by Varro.

Seleucid Era, in its year **61** (CE -250), by Babylonian astronomers.

Unfortunately, no solar eclipse observation report has been found in terms of the Maya era.