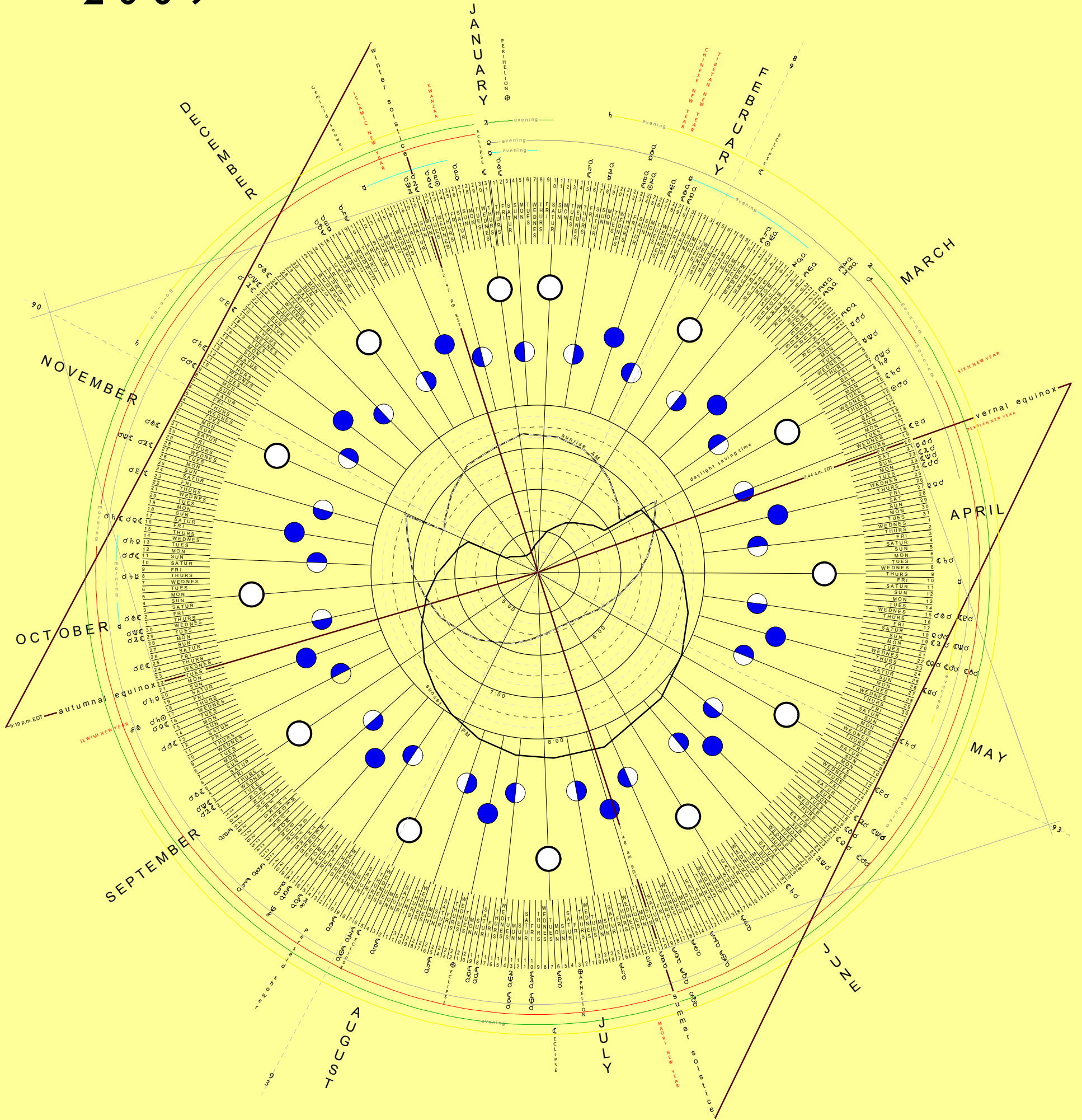


2009



The 2009 Calendar (365 days starting on a Thursday) is also valid for (+ 6 years) 2015, (+ 11 years) 2026, (+ 11 years) 2037, (+ 6 years) 2043, (+ 11 years) 2054, (+ 11 years) 2065, (+ 6 years) 2071, (+ 11 years) 2082, (+ 11 years) 2093, (+ 6 years) 2099.

A calendar's complexity comes from the 3 cycles of day, month and year that do not comprise an integral number, and the astronomical cycles that are neither constant nor perfectly commensurable.

This (Gregorian) calendar was instituted on February 4, 1582 by Pope Gregory. Although its original purpose was ecclesiastical regulation of holidays, today this calendar serves as an international standard for civil use. (There are of course dozens of other nonsecular calendars currently in use...as many as 30 in India alone.)

A common year is 365 days in length and a leap year is 366, with an intercalary day designated February 29. Every year that is exactly divisible by 4 is a leap year, except for years that are exactly divisible by 100. These centennial years are leap years only if they are exactly divisible by 400. The Gregorian calendar is thus based on a cycle of 400 years comprised of 146097 days. Dividing 146097 by 400 gives 365.2425 days, which is a close approximation to the length of the tropical year. The Gregorian calendar accumulates an error of about 1 day in 2500 years, for which no adjustment has been agreed upon.

The rotation speed of the earth on its axis is regular but the speed of its elliptical orbit around the sun is not. Variable speed along an ellipse produces seasons of unequal length. The seasons themselves are caused by the earth's 23.44° axial tilt (and not by its varying distance from the sun along its elliptical path). We are in fact furthest from the sun in July.

By tracing a line from any given date back to centerpoint, sunrise and sunset times along the Hudson River can be determined as the line intersects the two misshapen figures superposed within the concentric circles. Centerpoint represents 4:00, from which 5:00, 6:00, 7:00 and 8:00 radiate (a.m. for sunrise, p. m. for sunset).

- ☉ sun
- ☿ mercury
- ♃ veus
- ♁ earth
- ♁ moon
- ♂ mars
- ♃ Jupiter
- ♄ Saturn
- ♅ Uranus
- ♆ Neptune
- ♇ Pluto
- ☾ conjunction
- ☽ opposition

a bird leaves its branch
lets go for an instant
yet is not lost forever
sings gaily instead
a little anthem of rest

being heavy braves the elements
on hollow bones braves
our oldest ancestor
inertia
inherits stillness
how can there be such thing as
feather

how many spheres
where is our word
for the uncountable

(Susan Gevirtz)