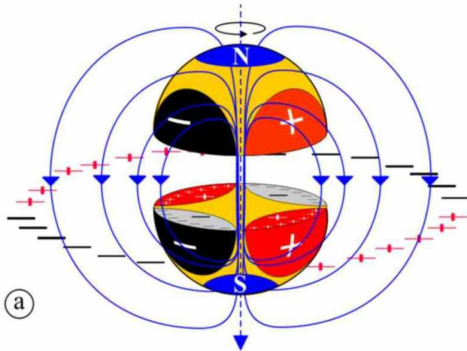


Guest on the [10/18/23 show](#), Maurice Cotterell shares material to accompany his presentation:

The Cause of Sunspots

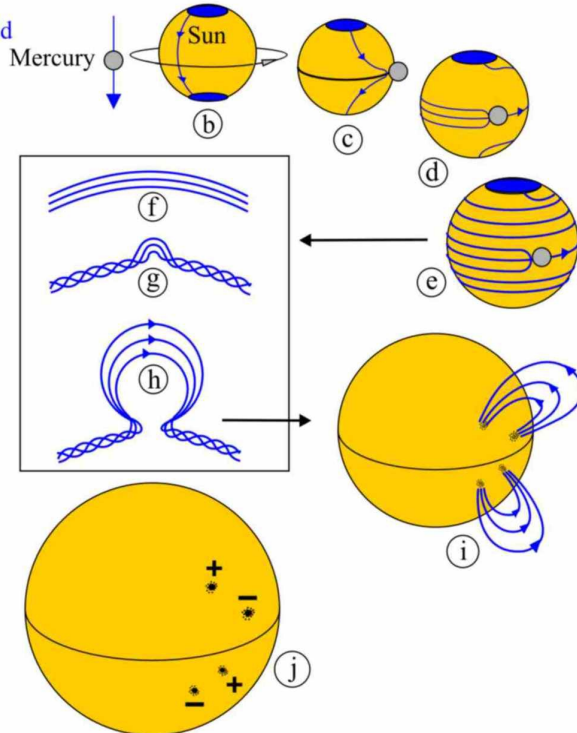


a) Shows, again, the Sun's magnetic fields. The Sun is made of plasma [analogous to a kind of super-heated sticky gas] and, as already mentioned, spins on its axis differentially. In 1961 engineers Babcock and Leighton proposed that sunspots were caused by the winding-up of the Sun's Polar magnetic field by the more quickly rotating Equatorial magnetic field (see below). Orthodox Science does not understand why the Sun's equatorial region moves more quickly than its polar regions—a mechanism to explain this is proposed below.

How Mercury Causes the differential rotation of the Sun's Magnetic fields— [and the Babcock-Leighton Hypothesis]

direction of the Sun's polar dipole magnetic field at one moment in time

direction of Mercury's magnetic field [inferred for purposes of illustration]



b) The solar sphere spins on its axis every 37 days [it moves by 9.729° per day]. In addition ((c) – (e)) the magnetic field of the planet Mercury which *orbits* the Sun every 87.969 days [4.09° per day], drags the equatorial region of the Sun around by 4.09° per day faster than higher latitudes. The *axial* spin of Mercury adds another 0.026° per day to this effect meaning that the equatorial region moves by 13.846° per day [i.e. it takes only 26 days for the equatorial region of the Sun to rotate once (28 days to an observer stationed on the moving Earth)].

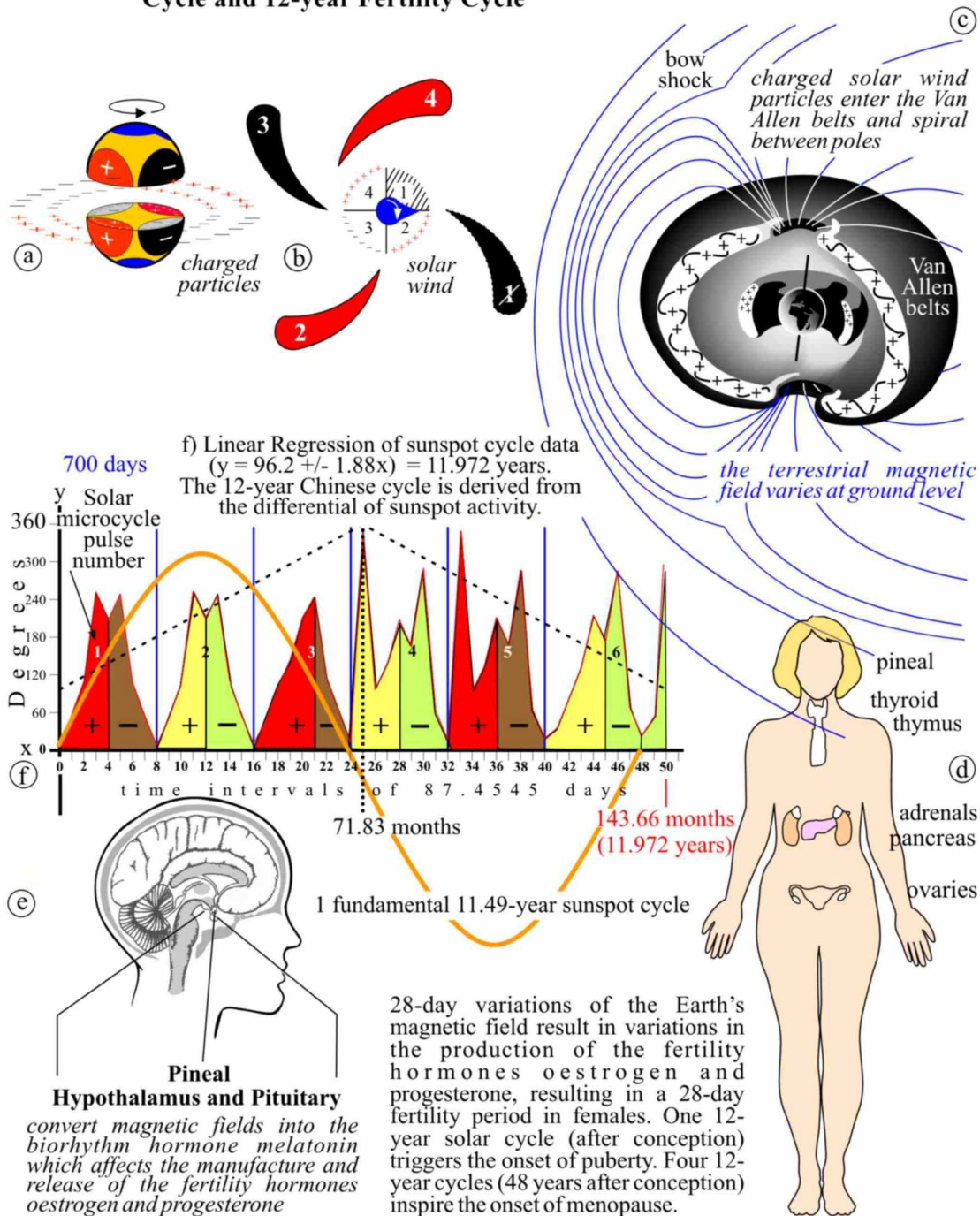
sunspots are regions on the solar surface that have been pierced by magnetic loops from the interior

b – e) The magnetic field of Mercury drags and, according to the Babcock-Leighton model, cumulatively wraps the Sun's dipole field around the solar sphere. f – g) The coiled dipole magnetic lines of force become entangled beneath the surface of the Sun causing bubbles of magnetism ((h) – (i)) to burst-out of the surface. j) Light emitted from sunspot regions is bent-away by the intense associated magnetic fields, making those areas darker relative to non-active areas. The areas of relative darkness appear as dark spots on the surface, pairs of which appear firstly at higher latitudes and then migrate towards the solar equator as the cycle progresses. After 11.4929 years the Polar field reverses direction and a new cycle begins with reversed polarity sunspot pairs.

figure 81.



How the Sun causes the 12-year Chinese Astrology Cycle and 12-year Fertility Cycle

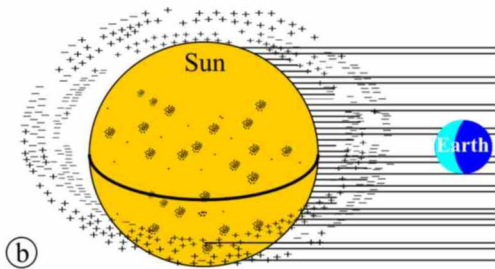


a – e) The solar hormone mechanism: f) A 'Linear Regression' (broken-line)—a straight-line graph showing the [best-fit average] angular difference between the Sun's Polar (P) and Equatorial (E) magnetic fields and the Earth (W). The saw-tooth ramp peaks after 71.83 months; meaning that the 'differential cycle' lasts for 11.972 years. a – d) The cycle is based on the fundamental 28-day solar cycle. The ancient Chinese used the 29.5-day 'Moon cycle' to track the solar cycle, which meant that (by the end of each year) an 'error' of 18.6 days would accumulate. This error was used to re-calibrate the cycle each year, by 18.6 days, from the 'spring new Moon'—the second new Moon following the winter solstice on 21/22 December; which explains why each Chinese New Year begins on a different date each year.

figure 82.

Sunspots and mini ice-ages

a) An inverse relationship exists between the number of sunspots and temperatures on Earth, and also between the number of sunspots and variations in the amount of Carbon 14 in the growth rings of trees. The exact mechanism for this is not known, but it is believed that (b) *increased* particle emissions from the Sun during periods of high sunspot activity prevent some solar rays from reaching the Earth, resulting in less evaporation of water from the oceans, fewer rain clouds and an increase in temperatures.



c) During periods of low sunspot activity fewer particles are emitted from the solar surface allowing more solar rays to strike the Earth causing a disproportionate *increase* in rain-clouds that lower temperatures. Hence, cooler temperatures (mini ice-ages) are associated with low sunspot activity. At the same time, more Carbon 12 in the atmosphere is converted into C14 due to the increase in solar ray bombardment, hence the increases in the levels of C14 during sunspot minimums.

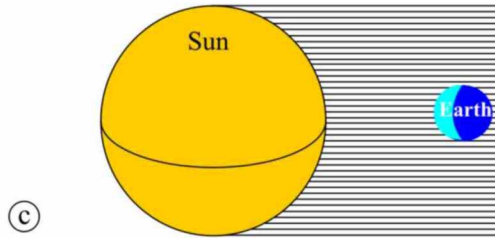


figure 45.

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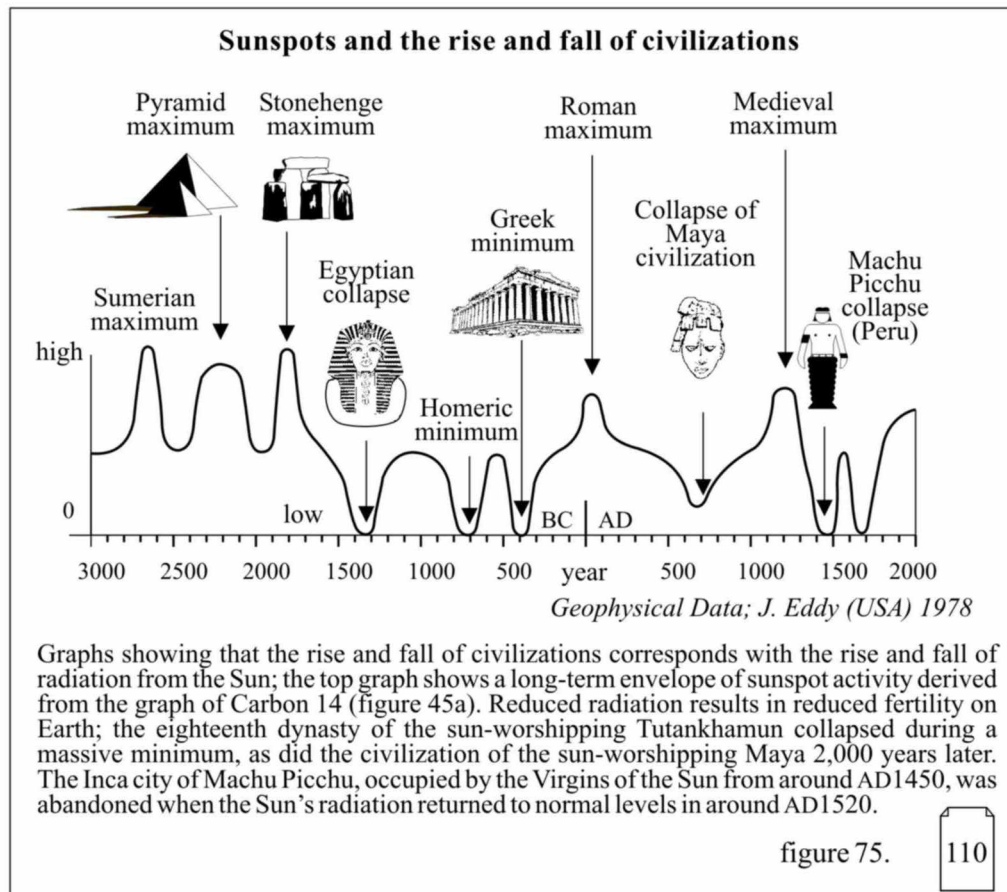
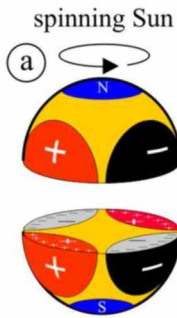


figure 75.

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The Sun, Magnetism and Fertility



a) Schematic of our 28-day spinning Sun: A dipole magnetic field (blue) extends between polar regions and four 'bubbles' of magnetism subsist around the equatorial region.



b) Celtic crosses from Rame Church, Cornwall, England c. A.D. 1259 showing the magnetic structure of the Sun together with the 5 magnetic reversals every 18,169 years.

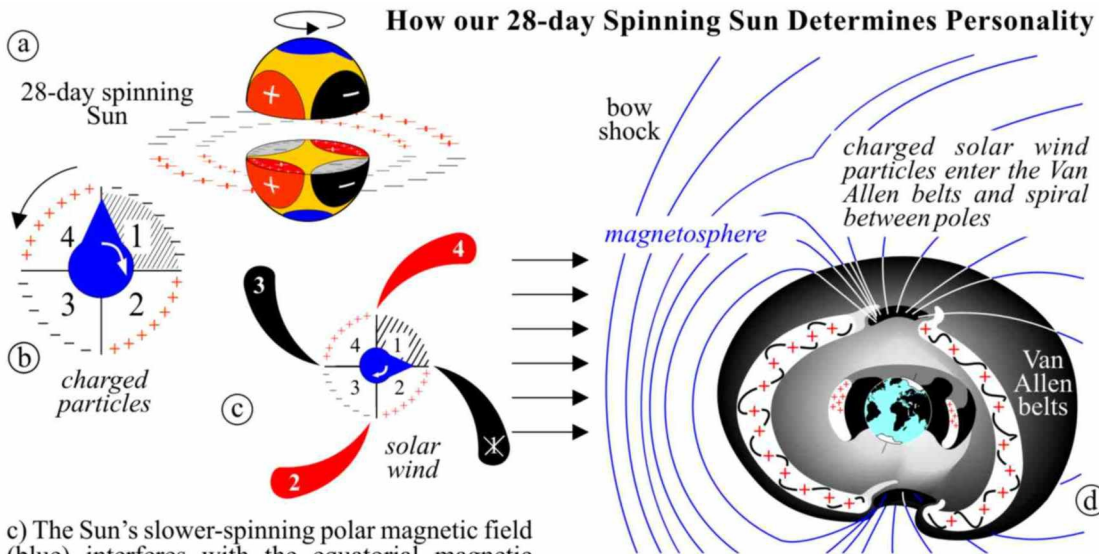


d). Machu Picchu, secret sanctuary of the Incas, 2,500 metres (8,300 feet) above sea-level in the Cordillera Vilcabamba, Peru. The centre flourished around A.D.1450, the time of a sunspot minimum, and was abandoned around 70 years later as radiation from the Sun returned to normal levels. This mountain-top retreat was the last refuge of the 'Virgins of the Sun', concubines of the Inca (emperor). Evidence from the site suggests that the Incas understood the super-science of the Sun.



(e –g) Most of the external ostensible 'windows' at Machu Picchu are blocked with stone, whereas 'windows' between rooms within buildings are open (see-through), suggesting that the Incas understood on the one hand what windows were for, and yet, on the other hand, that they went to extraordinary lengths to prevent light from entering buildings. The perfectly fitting stones and absence of windows together prevented ingress of external light, a known suppressant of the timing hormone melatonin; melatonin fluctuations stimulate the pituitary gland and in turn the production of fertility hormones oestrogen and progesterone in females. As a result fertility levels of the Virgins of the Sun were greatly improved during a period of sunspot minimum. The Incas also connected building blocks together with copper straps to short-circuit electrical currents, and associated magnetic fields, to Earth.

How our 28-day Spinning Sun Determines Personality



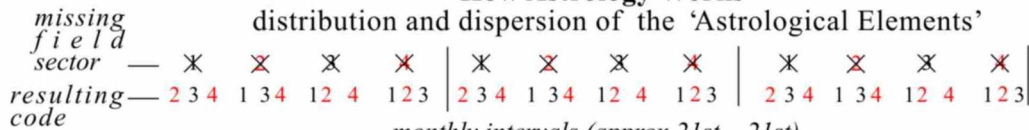
c) The Sun's slower-spinning polar magnetic field (blue) interferes with the equatorial magnetic fields (red, and black) 'neutralising' a different field sector every month. Field sector 1 is 'burned-out' during month numbered 1, sector 2 during month 2, 3 in month 3, and 4 in month 4. So, during month 1 the radiation showering the Earth is net positive (234, two red and 1 black). During month 2 the code is net negative (1 34, two black and 1 red), month 3 net positive (12 4) and month 4, net negative (123). The codes repeat every 3 months, as the Sun continues to spin.

the Earth's magnetic field varies at ground level

d) and e) Magnetic variations change DNA, at conception, resulting in 4 types of genetic mutations, 3 times within every year and, hence, 4 types of personality—referred to as the 'Astrological Elements' of Fire, Earth, Air and Water. The 14-day positive/negative cycle regulates the body's biological rhythms. The 28-day solar cycle regulates fertility in females.

How Astrology Works—

distribution and dispersion of the 'Astrological Elements'



monthly intervals (approx 21st – 21st)

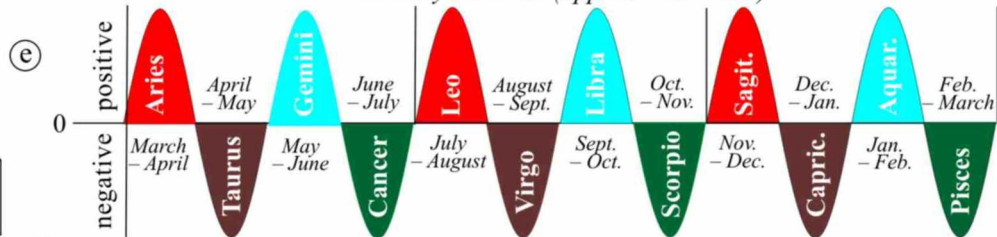
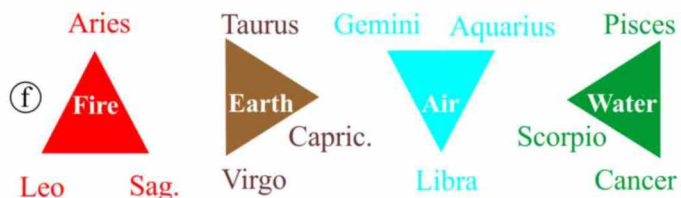
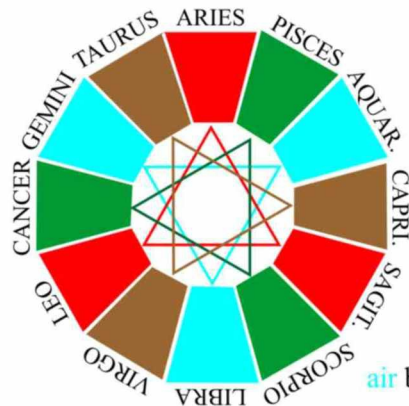


figure 48.

Triplicities (groups of three)—same colours 'agree' and 'get-on'



water flows in the earth = compatible

air helps fire to burn = compatible

water and earth both extinguish fire = incompatible

air blows; water causing waves, earth causing dust storms, fire creating infernos, and itself, causing tornadoes