Contents

Introductory note

Geoffrey Dean and Graham Douglas would like to know:

1. Are the smooth waves on my graphs deceptive simplifications?
2. Are my allusions to the cabbala due to editorial pressure?
3. Am I opposed to the Gauquelins?
4. Am I continuing my analysis of the birth-data of common Parisians?

Waves

The smooth waves on my graphs are *reliable* simplifications. The fewer the data, the greater the fluctuations and the wider the zones should be, or viewers may fail to see the wood for the trees. However, some fluctuations will be shown below for the sake of tree-lovers.

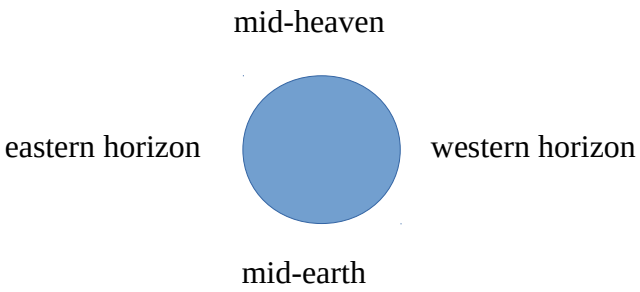
The cabbala

Anthropologists have often surmised that earlier man, whose beliefs may have trickled down to us in the form of mysticism, lacked abstract thought, but humanity is devolving, not evolving.

> Over the past 20,000 years, the average volume of the human male brain has decreased from 1,500 cubic centimeters to 1,350 cc, losing a chunk the size of a tennis ball. The female brain has shrunk by about the same proportion. “I’d call that major downsizing in an evolutionary eyeblink,” he (the anthropologist John Hawks) says. “This happened in China, Europe, Africa—everywhere we look.” If our brain keeps dwindling at that rate over the next 20,000 years, it will start to approach the size of that found in *Homo erectus*, a relative that lived half a million years ago and had a brain volume of only 1,100 cc.[1]

The Gauquelins

They gathered many valuable data and wrote about cosmic clocks but neglected to use a scale of hours and minutes. The same is true of recent astrologers, whose so-called house systems are really a circular scale with four main calibrations:



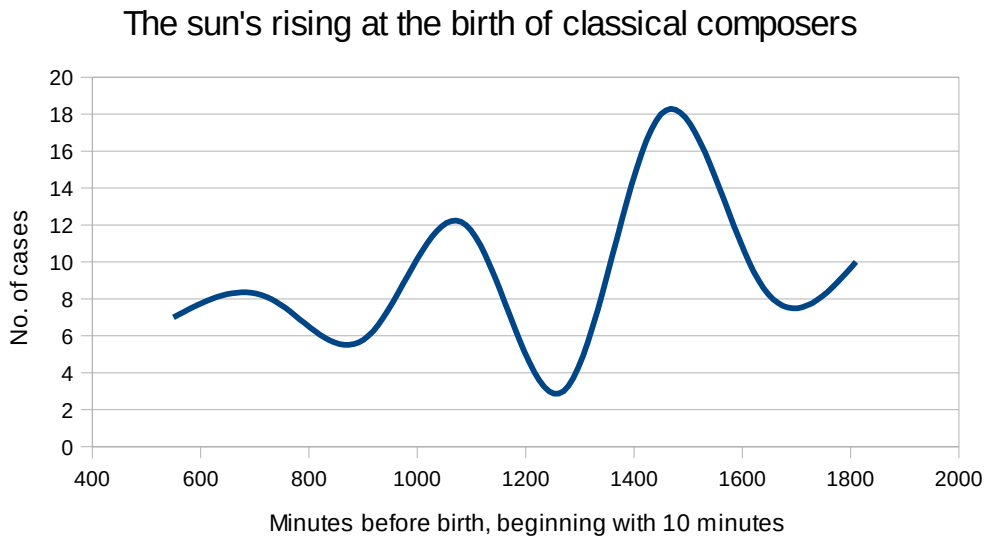
Mid-heaven and mid-earth are always 12 hours apart but at no fixed intervals to the ends of the horizon, and these are at no fixed interval to each other, so they cannot all be used as calibrations on

1 McAuliffe, K. If modern humans are so smart, why are your brains shrinking? www.discovermagazine.com, 20 Jan 2011

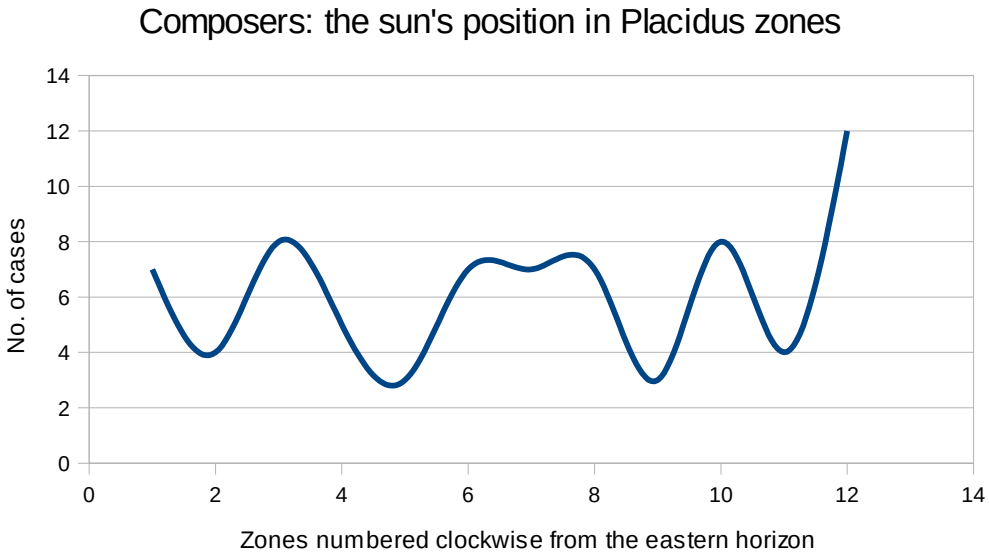
a scale of equal intervals. A researcher must firstly find out whether births are timed by a planet's rising or setting or its passing mid-heaven or mid-earth.

Scales suitable & unsuitable

The effect of using a suitable scale is shown here. Lists of composers were taken from the Wikipedia and the tallying data sought at www.astrodata.com. To increase the number of data, those of modern British composers were sought but only the data of Delius found. Here are the results on a scale of equal intervals leading back from the eastern horizon:



The waves have a regular frequency and are also very significant if assessed by the chi-test. Here are results on the Placidus scale, on which the Gauquelins' was based.



The waves have become irregular, since the wave in the middle has broken up into two, about 4 hours apart. This is because, at the latitude of Paris, the interval between the ends of the horizon

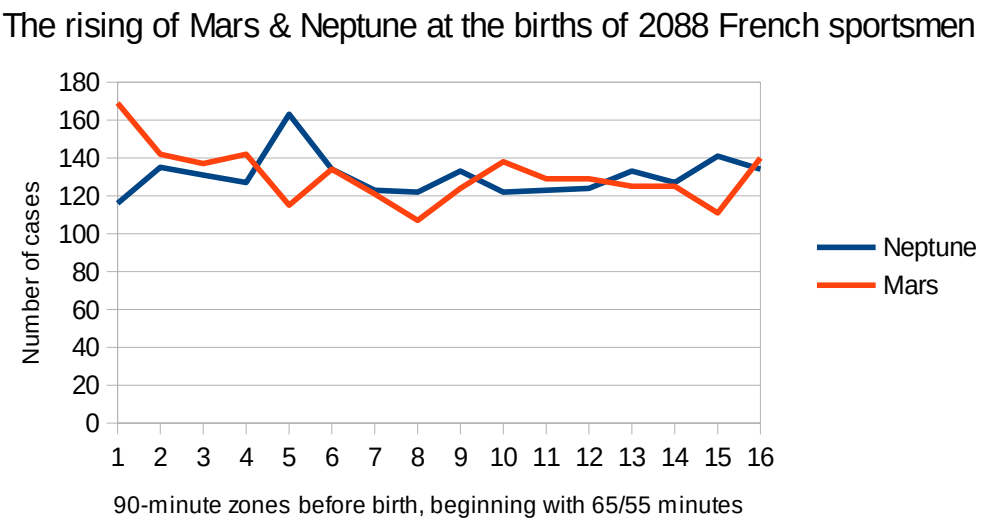
varies in the course of a day between about 8 and 16 hours, so a point 12 hours away from the eastern horizon may be 4 hours above or below the western. Like a pendulum the point swings to and fro but dallies by its extremes, so a single crest 12 hours away from the eastern horizon becomes two crests on a strip of oscillating elastic whose mid-point is the western horizon.

Had birth been timed by the sun's setting, the crest by the eastern horizon, not the western, would have broken up, and had it been timed by the sun's crossing mid-heaven or -earth, it would have affected crests at both ends of the horizon, so what is the Mars effect like on a suitable scale?

The Mars effect

This I checked in the early 1990s by using data from the first half of the Gauquelins' Book of American Charts. The results were regular waves for Mars and Neptune, both with a likelihood of only 1 in 1000 but different in other respects. The waves for Mars were made up equally of waves 6 hours long and 3 hours long, but the waves for Neptune were only 6 hours long. The last crest for Mars was at about 65 minutes before birth and for Neptune about 145 minutes before birth. Apparently cells were able to sense and identify Mars about 1½ hours sooner, since Mars is nearer, though smaller. There was no Gauquelin effect, misleadingly shown on the book's cover.

I sent the results to the British Astrological Association, where they were checked by using the original French data. The new results for each planet were different, so I put them together:



There are two main crests, showing that Mars often rose about an hour before birth and Neptune about 6 hours earlier. In effect births were timed by Mars with Neptune as a chance auxiliary. I called on the Association to complete the investigation by showing the effect properly on a single unified scale, but it refused to do so because

1. I had failed to predict the new effect,
2. adjusting scales is unscientific, and
3. the findings were unimportant.

The prediction

A burglary can have a real effect, whether predicted or not, but in fact I had predicted the above effect to a German professor, whom I had met at a conference on astrology in Berlin shortly before. Over a cup of coffee I had suggested that the familiar Mars effect, in having 2 main crests about 6 hours apart, may be due to two different planets. He replied he had thought of that and checked, but only Mars was involved. I asked if he used a scale of regular intervals or the Gauquelins' elastic band, and he admitted to using the band. I now needed only a confirmation of our chat so sent him the graph above. He wrote back he would be happy never to hear from me again. He offered no confirmation.

The adjustment of scales

Lacking this confirmation, I explained to the Association that the effect could still be validated. The scale could be adjusted separately for Mars and Neptune, to reveal that the two crests are 6 hours apart to within a few minutes and that the crest for Mars is less than 65 minutes from the horizon. This would show that an increase in the waves' amplitude, owing to Neptune, had let cells sense and identify them faster. The Association replied that adjusting a scale or focusing a microscope biases observations so is unacceptable. But how were the findings unimportant?

The findings' lack of importance

The Gauquelins' findings were first published in 1955, and the British Astrological Association was founded only three years later in 1958, as if to explore and explain them. Indeed John Addey, one of its founders, began to explore the effect himself, objecting rightly that the scale used by the Gauquelins was elastic. Unfortunately he replaced it with a scale of regular angles open to the same objection, since the earth is tilted and various parts of the zodiac rise at various rates. Since the Association's aim was to place astrology on a firm and transparent foundation, the smokescreen being cast with the help of a top academic was strange indeed. The more technical implications of the Neptune-Mars effect are the following.

Implications of the Neptune-Mars effect

The significance

The relevant parts of the Mars effect were long known to be the crests near the eastern horizon and mid-heaven, tallying roughly with zones 1 and 5 on the graph above, so the significance of the effects in these zones on the graph may be compared with the significance of the effects in the Gauquelins' zones. Taking the two crests and two troughs on the graph into account and using the chi-test yields a likelihood of only 0.00004. In other words the effect is likely to occur by chance only once in 25,000 trials, though the scales have yet to be properly adjusted. It remains for the Association to show that the effect on the Gauquelins' strip of elastic is bigger.

The primacy of intervals

The effect is not only significant but also meaningful, since our cells have no means of measuring angles between planets but have resonance bodies attuned to atmospheric waves. A planet rises once in 24 hours, of which a 6-hour cycle is the second octave, so if 6-hour waves from one planet are in phase with those from another, the planets are sensed as being merely two aspects of one series of waves. Hence planets whose waves are in phase were said to be ‘in aspect’.

The quality of aspects

Planets were thought to regulate organs in the sense of establishing and fixing the cell line identity, so blends of planets should be harmful to the extent to which they are effective. In acoustic and similar systems, octaves tend to predominate, and the aspects tallying with those of a cycle of 24 hours are conjunctions (fundamental), oppositions (1st octave) and squares (2nd octave). Oppositions and squares are said by modern astrologers to be harmful and conjunctions to be helpful, but on the graph a crest for one planet tallies with a trough for the other, showing that conjunctions between Mars and Neptune are rare among top sportsmen. In other words these planets as such are favorable but conjunctions between them are not, so conjunctions are unfavorable as such. This confirms the underlying theory, known for instance to the cabbalist Abraham Abulafia (1240-1291/92), and refutes modern beliefs.

Norms & variants

The Mars effect gained little recognition outside the domain of astrology, in seeming to be too small to be plausible but as shown on a suitable scale of regular intervals, it is seem to be a chance combination of two planets, so is a rare variant, not the norm.

Mountains & molehills

The graph also shows clearly the lack of a crest for Mars at or near mid-heaven around zone 5, so the Mars effect, as shown by the Gauquelins, was due more to wishful thinking than to waves. It is hard to make a mountain out of a molehill, but they managed to make a crest out of a trough.

Epigenetic regulation

The Gauquelins believed that planets are purely timers, not regulators. Indeed a child’s choice of Mars as a timer may be inherited, but if a second planet happens to blend with it, the child’s temperament too becomes hybrid.

Epigenetic markers

The effect of a blend of planets at birth remains for a lifetime, as shown by the later success of the children at sport. Allergies too have shown that epigenetic tags from the time of birth may stay in place:

> The season a person is born in influences a wide range of things: from risk of allergic disease, to height and lifespan. Yet little is known about how a one-time exposure like the season of birth has such lasting effects.
>
> The Southampton study, published in the journal *Allergy*, conducted epigenetic scanning on DNA samples from a group of people born on the Isle of Wight. They found that particular epigenetic marks (specifically, DNA methylation) were associated with season of birth and still present 18 years later. The research team was also able to link these birth season epigenetic marks to allergic disease, for example people born in autumn had an increased risk of eczema compared to those born in spring. The results were validated in a cohort of Dutch children.[2]

Indeed, some epigenetic tags outlast a lifetime:

> We used to think that a new embryo's epigenome was completely erased and rebuilt from scratch. But this isn't completely true. Some epigenetic tags remain in place as genetic information passes from generation to generation, a process called epigenetic inheritance … In mammals, about 1% of genes escape epigenetic reprogramming through a process called imprinting.[3]

The inheritance of acquired characteristics has a key role in survival. Natural selection may narrow a range of variants down to the point at which an ethnic group is adapted to only prevailing conditions, not the Olympic Gamest, so it needs to produce new variants at random. One way is to use the roulette wheel of the zodiac as a random generator.. Some challenges to a species, like the change of a green age into an ice age, last much longer than a lifetime, so successful variations need to be passed on from parents to offspring.

A trigger-release mechanism

Mars and Neptune cannot be sensed and identified with equal ease, as shown by the fact that the last crest for Mars occurred 65 minutes before birth and for Neptune 145 minutes before birth in the case of US sportsmen. The amplitude of atmospherics due to Mars must have been greater than those due to Neptune, letting Mars be sensed and identified faster. Given such inequalities, one series of waves may be overwhelmed by another, but the tallying organ should not be overwhelmed, so the cell mechanism must be trigger-release, not analogue.

Internal entropy

Nonetheless the success of French sportsmen is increased by the Neptune→Mars combination, as shown by the crests, and decreased by the Mars→Neptune combination, as shown by the troughs, so cycles triggered off in cells must steadily decline in amplitude and their relative contribution to the main crest of a joint series determine their effect on organs.

2 DNA markers link season of birth and allergy risk. University of Southampton, News online, 26 March 2016
3 Learn.Genetics. Epigenetics & inheritance, Genetic Science Learning Center, Utah University online, 2016

Non-linear effects

The differing effects for US and French sportsmen show that ethnic groups differ in their leanings towards planets. Not all planets are favored by all ethnicities, so what effects might an ethnically mixed sample of the following kind yield?

1. The main sub-group favors planet A, uncorrelated with success in a certain profession.
2. A lesser sub-group favors planet B, correlated moderately with success in this profession.
3. A tiny sub-group favors planet C, correlated highly with success in this profession.

Checking the timing of birth of the whole sample would reveal the relevance of planet A, but of B or C only if the sample were big enough; checking the timing of birth of the more successful would reveal the relevance of planet B, rather than A or C; and checking the timing of birth of the highly successful would reveal the relevance of planet C. But what if researchers cast a smokescreen over the investigation by ignoring ethnic differences and misinforming fellow researchers and the public about the relevance of all planets apart from B?

Given a big enough sample, it might be possible to show the relevance of planet B without applying any selection then to increase the significance of its effect by selecting the successful, but selection of only the more successful of these would weed out planet B and replace it with planet C, whose effect would then be willfully ignored. This has been done.

> Gauquelin's eminence hypothesis predicts that planetary effects increase with increasing professional renown. The author's former findings, however, did not always support this hypothesis. For some samples of professionals, planetary effects tended to decrease succeeding an initial increase along the eminence scale. Another perplexing result was Müller's observation that professionals whose eminence exceeded that of all former Gauquelin samples did not exceed them regarding planetary effect. Müller's sample even lacked any such effect. This gave rise to the hypothesis that the relationship of planetary effects to eminence might be curvilinear, instead of linear, across all planets and professions.[4]

Given a huge group and a selection of only the outstanding, even a tiny sub-group may be decisive.

> Jews are remarkably over-represented in benchmarks of brainpower. Though never exceeding 3 percent of the American population, Jews account for 37 percent of the winners of the U.S. National Medal of Science, 25 percent of the American Nobel Prize winners in literature, 40 percent of the American Nobel Prize winners in science and economics, and so on. On the world stage, we find that 54 percent of the world chess champions have had one or two Jewish parents … Their average IQ has been measured at 108 to 115, one-half to one standard deviation above the mean. But statisticians have long known that a moderate difference in the means of two distributions translates into a large difference at the tails. In the simplest case, if we have two groups of the same size, and the average of Group A exceeds the average of Group B by fifteen IQ points (one standard deviation), then among people with an IQ of 115 or higher the As will outnumber the Bs by a ratio of three to one, but among people with an IQ of 160 or higher the As will outnumber the Bs by a ratio of forty-two to one. Even if Group A was

4 Ertel, S. Puzzling eminence effects might make good sense. Journal of Scientific Exploration, 7: pp. 145-154, 1993b

a fraction of the size of Group B to begin with, it would contribute a substantial proportion of the people who had the highest scores.[5]

Orbital periodicity

If the French have no inherited leaning towards Mars and can become top sportsmen only when Neptune rises 6 hours *before* Mars and have minimal chances when Neptune rises 6 hours *after* Mars, there should be a notable periodicity in the births of top sportsmen. Graham Douglas has noted such a periodicity, which he associates with alignments of the sun, earth and Mars. He may care to repeat his analysis, using a suitable scale and taking the Neptune-Mars effect into account.

The Hauptmann von Köpenick effect

In Carl Zuckmayer's 'German fairytale' of the Captain of Köpenick, a tramp dresses up in a military uniform and at once becomes a figure of authority. This has continued to happen. Some years ago in Berlin a penniless person decided to improve his income so went out onto a main road and stopped motorists, one after the other, and asked them with manic authority to recite from memory Traffic Regulation X, Paragraph Y, Sentence Z. None of them could, so each was fined 30 euros, till finally – hours later – one of them, maybe a foreigner, phoned the police, by which time the inspector had earned about as much as an office-worker in a month.[6]

Years later, on television, the German chancellor emeritus, Helmut Schmidt, sat on a panel on equal terms with the new minister of defense, tipped as a future chancellor on account of his Hollywood looks and blonde wife, his aristocratic ancestry and honors doctorate. Perusal of the Internet later revealed that his thesis had been a collage of plagiarized passages, as if he had been unable to think for himself. Even without glimpses behind the scenes, Dr. Geoffrey Dean might have paused to reflect that the passion of top academics for a scale as elastic as a lady's garter does less to upgrade the scale than to downgrade the academics.

The Parisian data

The data used in my investigation were gathered by the Gauquelins for the sake of checking heredity so are the data of parents and children. The parents are listed in nearly chronological order, so theirs are the data used here. On each graph the horizontal axis shows hours before birth, the period encompassed by zone 1 being from 0 to 1 hour, and the vertical axis shows how often the respective orb was there.

Irregularities

The advantage of using data from a brief period is that the level of solar activity may vary less and be taken into account as a relevant variable, not as wild interference. The disadvantage is that the intervals between outer planets remain similar throughout the period, so a primary effect for one

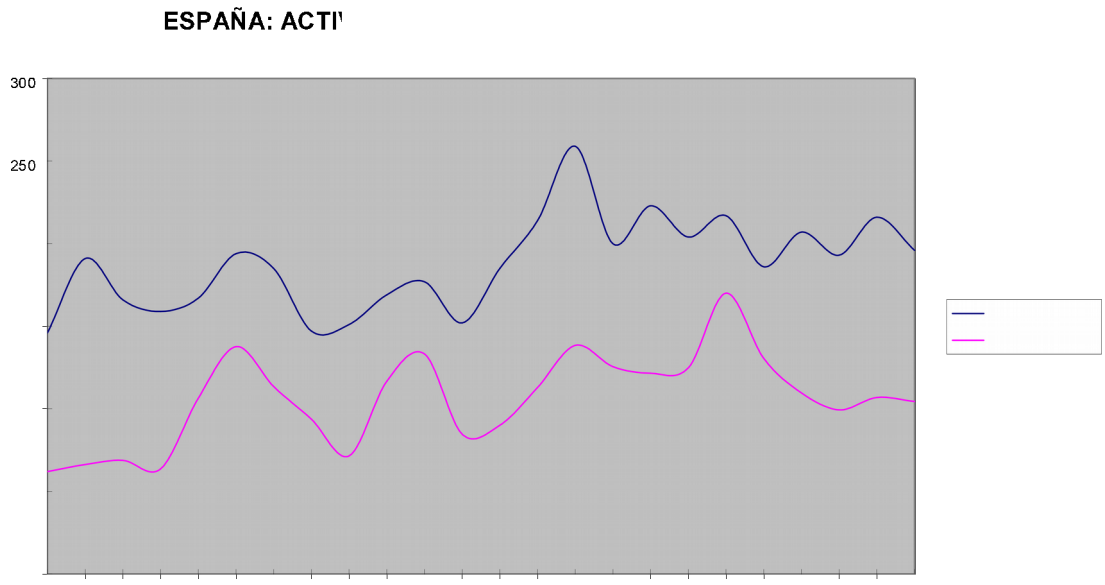
5 Pinker, S. https://newrepublic.com/article/77727/groups-and-genes

6 Told in the presence of the author during a lecture on manic depression at the Karl-Bonhoeffer-Nervenklinik in the 1990s

planet causes secondary effects for others. As seen from the earth, the sun, Mercury and Venus tend to be near each other at all times, so here too there may be primary and secondary effects. Moreover the outer planets do not move wholly independently of the sun as seen from the earth: If a child is hiding behind a tree, and its father is faraway and moves to one side, he may be able to see his child, but the nearer the child to the tree, the longer it takes. Likewise, the nearer an outer planet is to the sun, the longer the conjunction, so effects are slightly contagious. If Geoffrey Dean is keen on irregularities, he may have more than enough, but these may not be the most interesting features.

Cycles of solar activity

There are cycles within cycles, and cycles within these, and even monthly changes in the level of solar activity affect organisms.[7] On the graph below, the labeling of the x-axis is optically unclear but covers a period of 2 years, month by month.

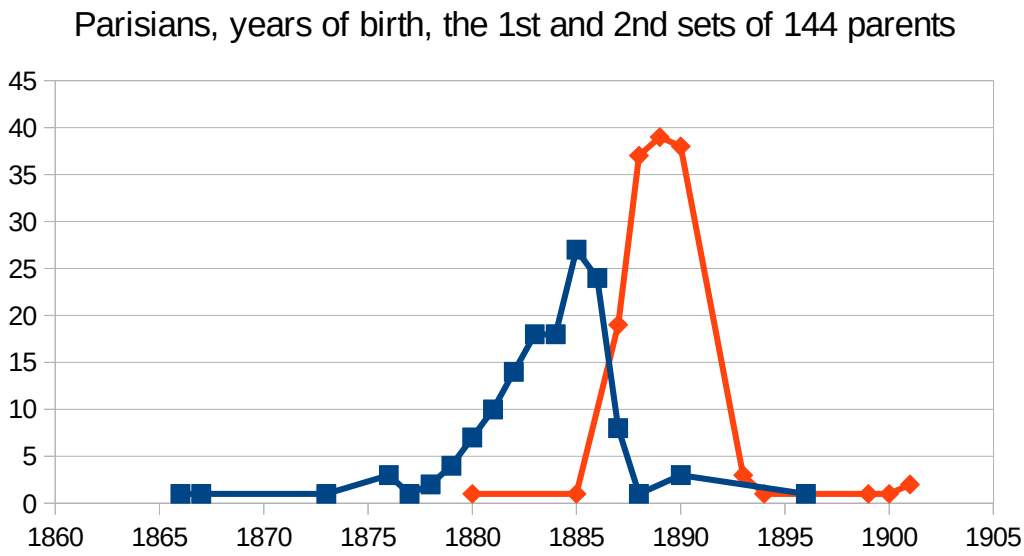


As I have pointed out elsewhere,[8] a higher level of solar activity is typical of interglacials, when plentiful greenery leads to a higher density of population. Microbes can more easily move on from host to host so can afford to become more virulent. The human immune system preemptively raises its defenses, which may also clutter a brain with traps for microbes and thereby lead to Alzheimer's as the lesser of two evils. From what periods were the first two sets of 144 Parisian data taken, and what were the levels of solar activity at the time?

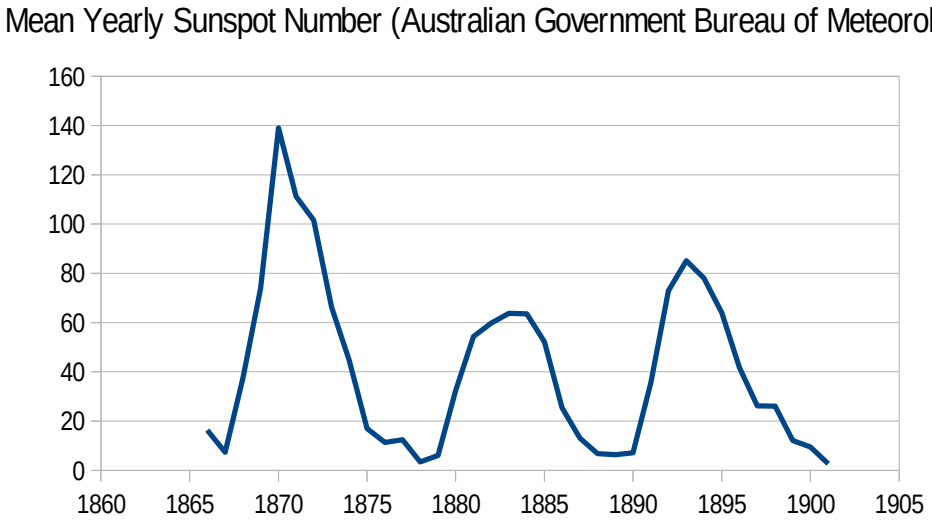
Periods of the data

These are shown on the graph below.

7 Álvarez, A.S. Radiaciones atérmicas y enfermedades de transmisión hereditaria, Ourense, 23 Feb 2010
8 Stanway, P. Schizophrenia and related ailments as adaptations, www.aulis.com, 2016

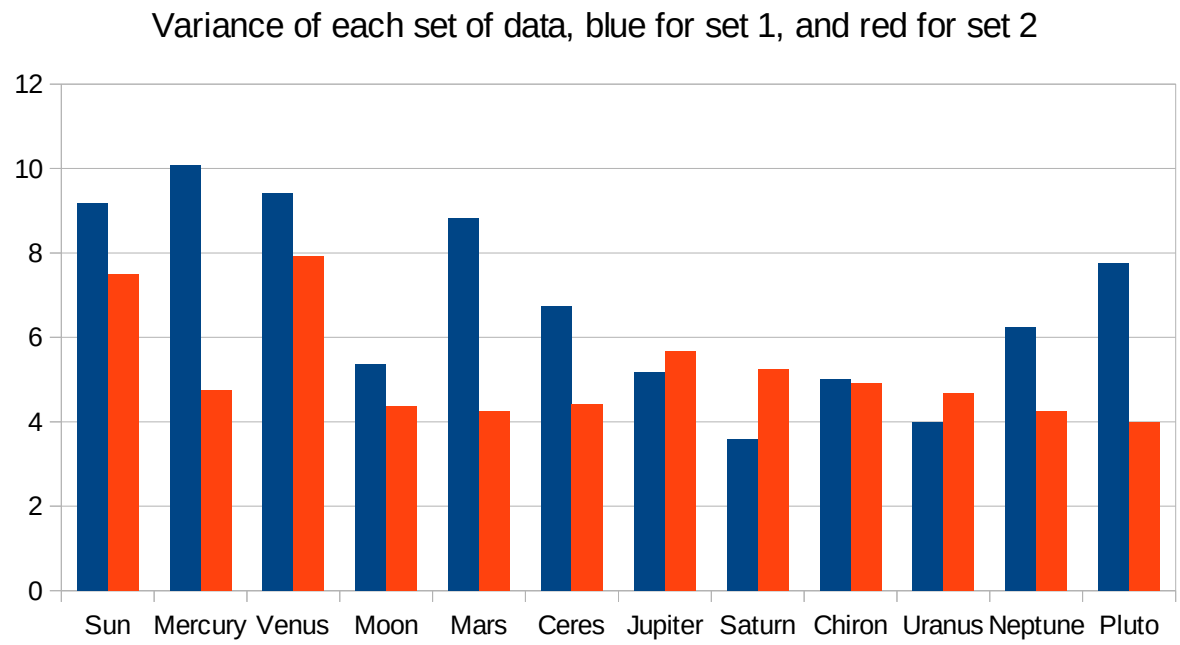


The order is not strictly chronological, since wives and husbands are not always the same age, but there is a 4-year difference. The crest of the first group tallies with a crest in solar activity, and the crest of the second with a trough.



Variance

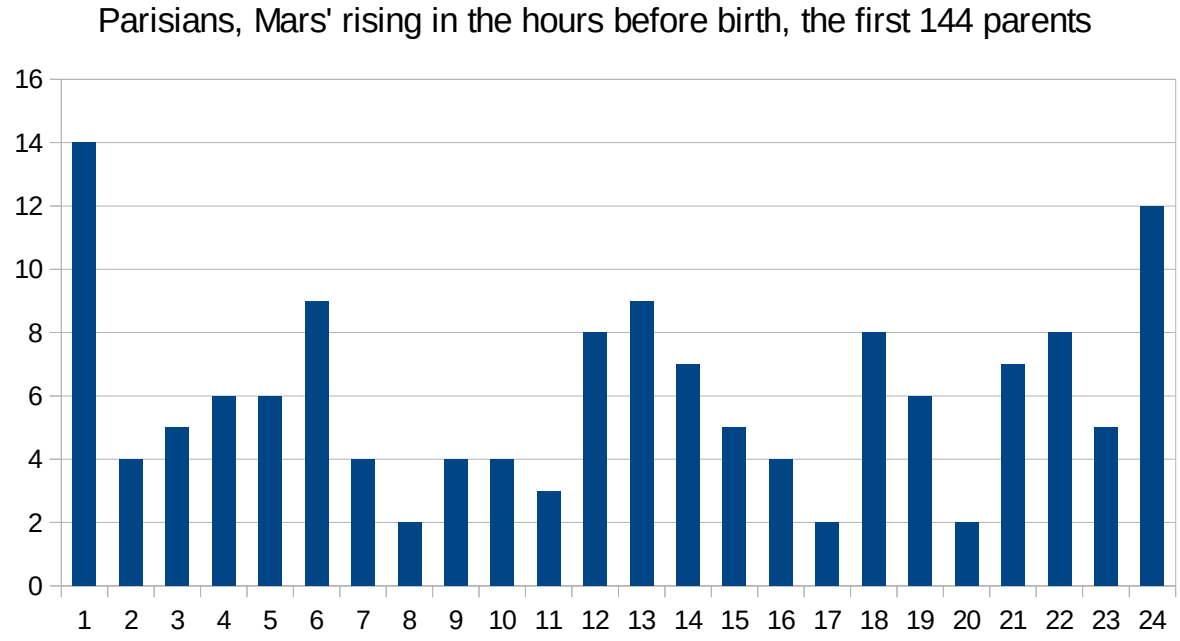
The relative popularity of the various planets as timers may be assessed in terms of variance. If, say, for one planet there is one 24-hour wave with the same amplitude as four 6-hour waves for another, each planet has been used as a timer equally often. This measure becomes unreliable only if waves have a relatively high frequency, and more than a crest fits into a zone, since the amplitude of the crest is effectively lessened. Here are the results for the two periods in terms of variance.



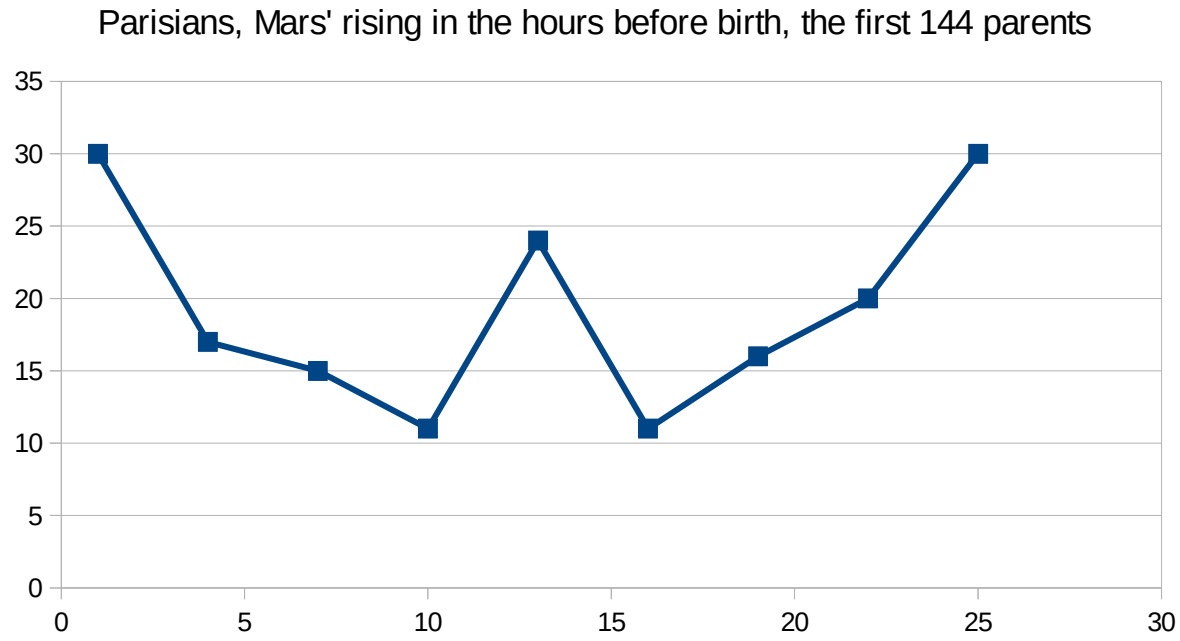
The variance in the second period, with less solar activity, is only 76.2% of the variance in the first period, but not all effects wane to the same extent, and those for Jupiter, Saturn and Uranus wax.

The ‘waning’ of the Mars’ effect

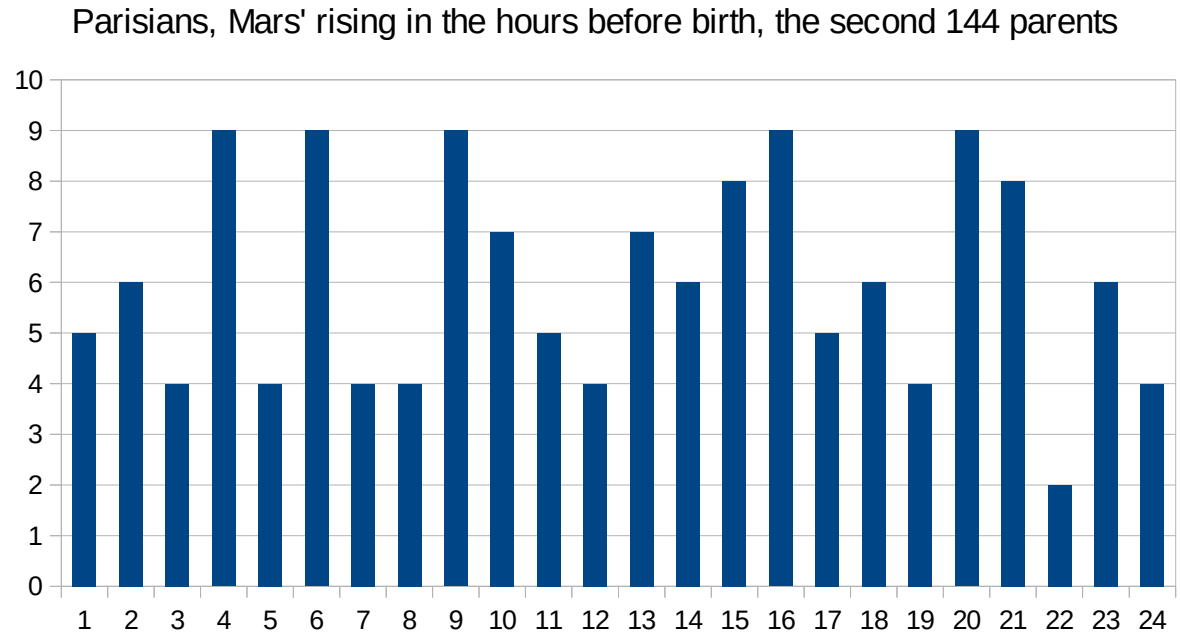
Mars is one of the planets for which the effect wanes most and is the one to whose waning Graham Douglas has drawn attention. The question is whether it wanes in reality or only on graphs, for if birth is timed by the rising of planets under *some* conditions, it is likely to be timed by their rising under *all* conditions. Here is the effect for the first period:



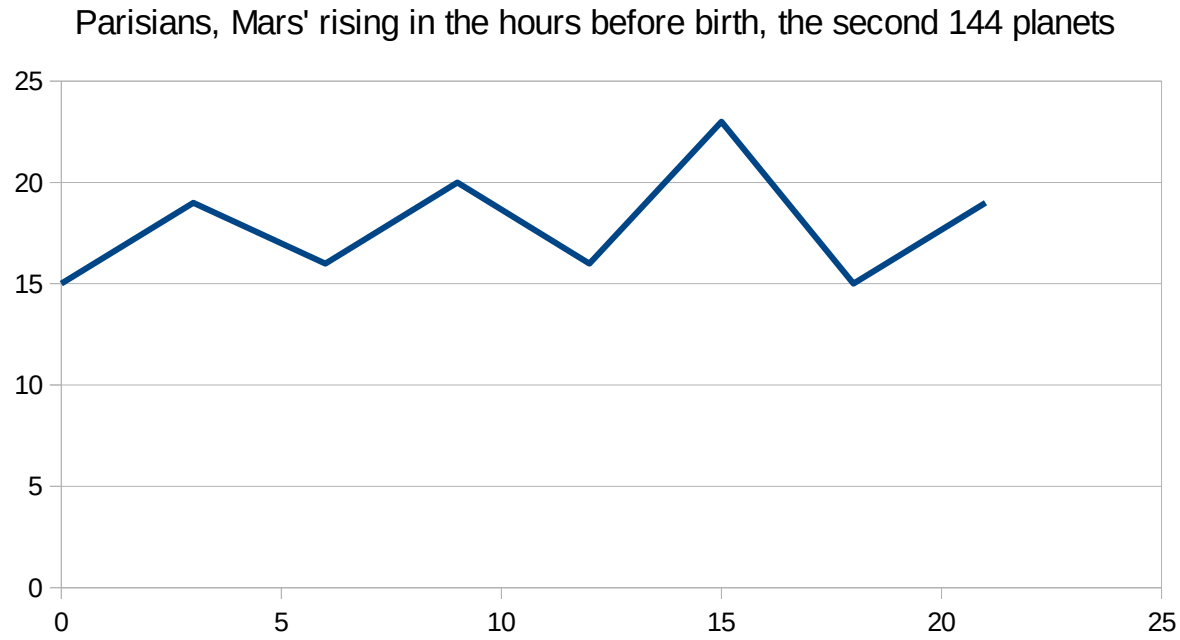
I can now wait till Dr. Dean is looking the other way and furtively ‘smooth’ the effect a little, to let readers see the wood in spite of the trees. The smoothing is done quite simply by grouping the zones into sets of 3, to lessen the fluctuations. The point on the left is repeated on the right, to show the symmetry of the effect.



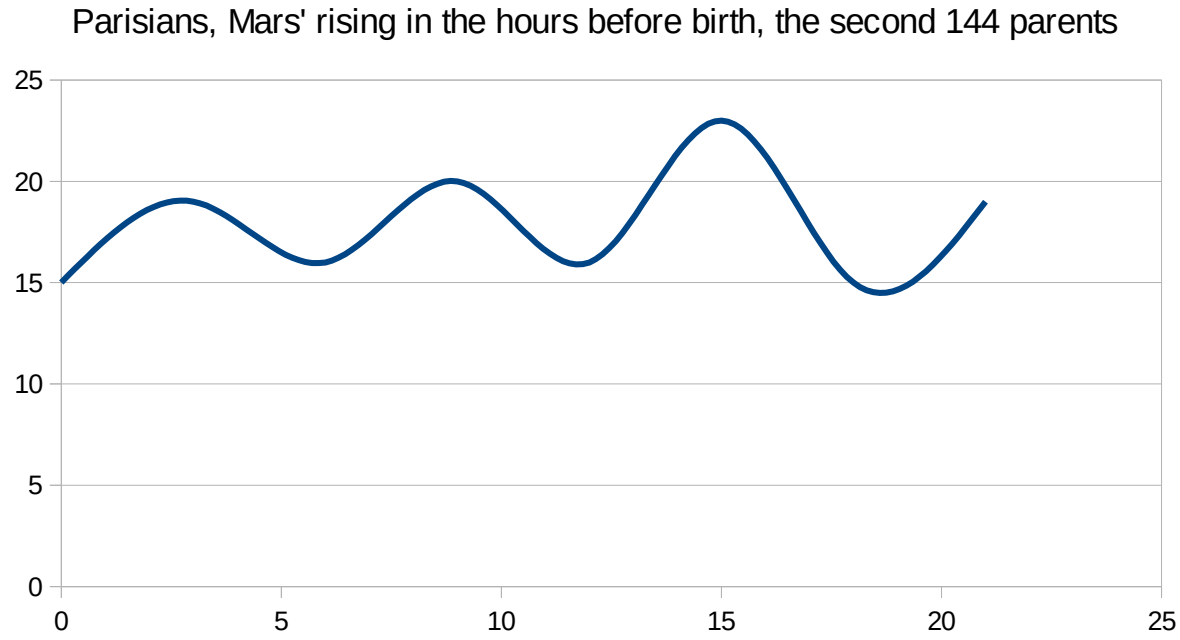
As a sine wave this is not quite convincing, but Mars is the outer planet nearest the sun, and the sun often rose at about the time of birth so the sun effect lifts the ends of this curve by being contagious. This aside, there is a 24-hour fundamental with the 1st octave – a 12-hour wave. Moreover this effect – the true Mars effect – is much stronger than the one shown by the Gauquelins by using their eminence filter, so how did they overlook the paradox? Here is the effect for the second period.



Let us now group the zones into sets of 3 as before, likewise doubling the point on the left.



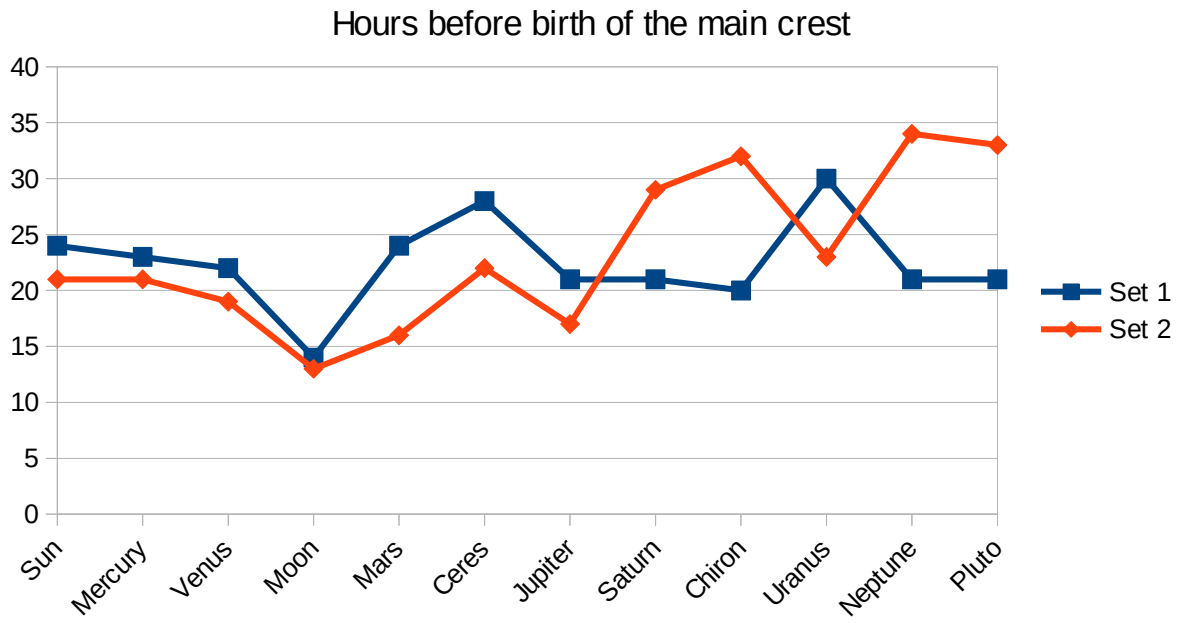
The effect is no less clear, but there are now 4 main waves, not 2, as if a drop in the level of solar activity lessens turbulence in the electromagnetic current sheet on the plane of the system, letting cells sense the relevant waves in more detail. These being waves, they can also be shown as such.



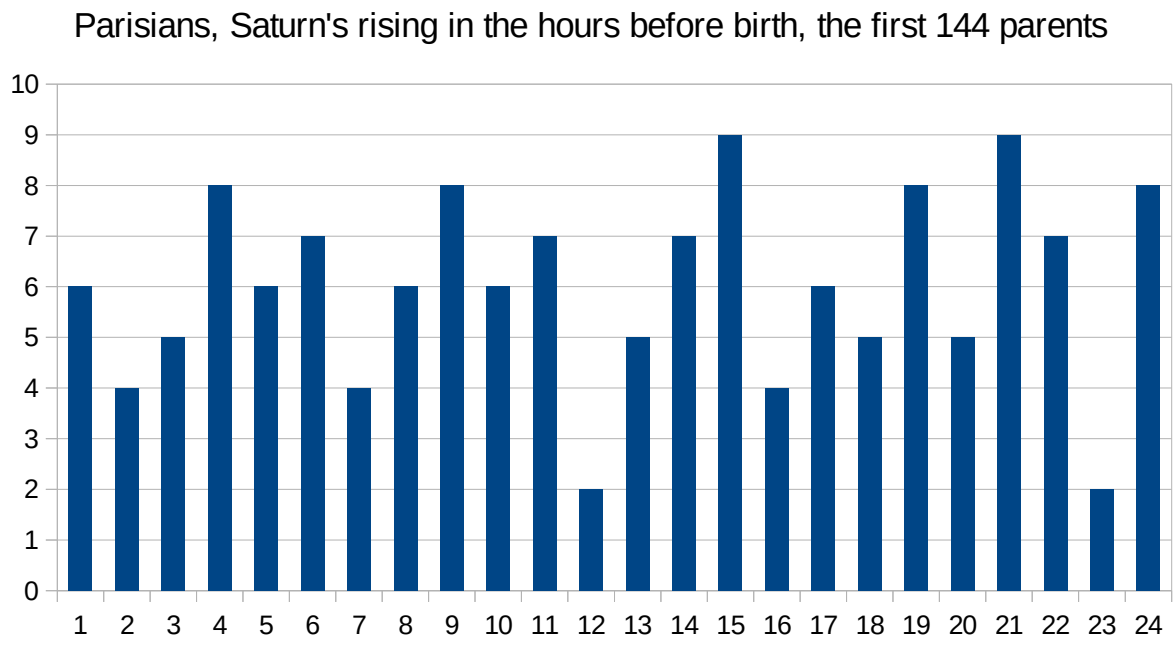
The rise in relevant frequencies may explain how the effect, like the Cheshire cat in Alice in Wonderland, may seem to vanish, leaving only a smile behind. If waves are much wider than zones on graphs, the crests' apparent height is a guide to amplitude, but if waves become narrower, a zone may include not only a crest but also a flank or even a trough and thereby lessen the effect. In other words the effect remains as strong in reality but not as seem or measured on graphs.

The lag

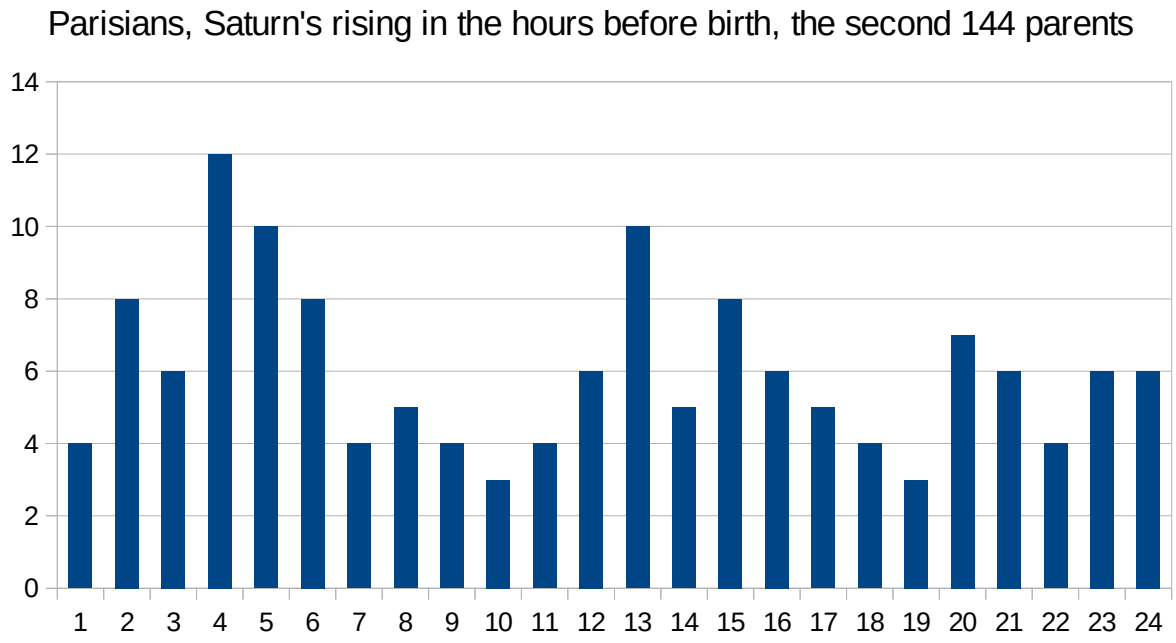
As Dr. Dean has pointed out, there is no reason to suppose that cells can sense and identify atmospherics from all planets equally fast or from any one planet equally fast under all conditions, so what happens when the level of solar activity falls? The main crest can be chosen for each planet as being the mid-zone of the set of three containing the planet most often.



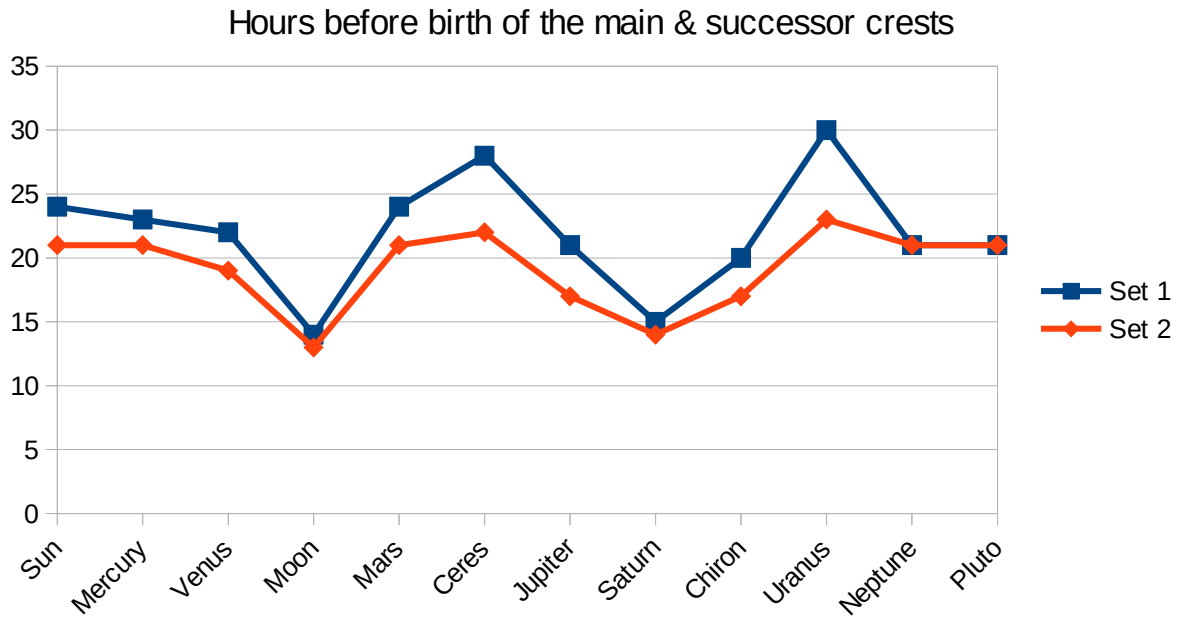
In 8 out of 12 cases the red line lies below the blue, but there are two main crests of equal size for the moon, one of which I have chosen, so the ratio is not 8:4 but 7:4. This still suggests that a fall in the level of solar activity may generally shorten the lag between the rising of a planet and birth, so can the anomalies somehow be resolved? The results for Saturn offer a way out.



One of the two main crests is in zone 15, and the tallying crest below is in zone 13.



In effect, the main crest on one graph may no longer be the main crest on the next, so it is safer to look for a crest at a similar interval. The lags now become:



The graph, if reliable, implies that a lag between the rising of a timer and birth is less under less solar activity, which otherwise interferes with the sensing and identifying of planets through the electromagnetic current sheet.

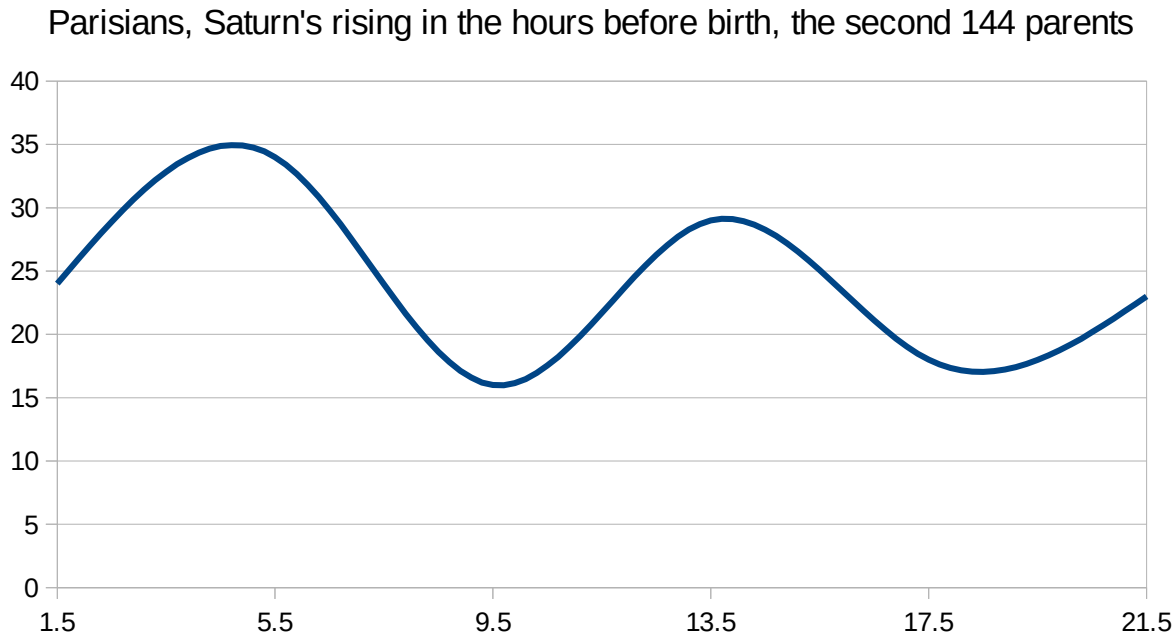
The rates of reaction

The Parisian Mars effect in the true sense of the word – birth due to the rising of a single planet, not to a combination – would be shown more realistically, were the frame of the graph shifted by 12 hours to the right, to show the main crest in the middle and two smaller crests at the sides. The effect would then be seen to be made up of 12-hour carrier waves in a 24-hour envelope. This package of events ended about half a day before birth, so Mars' presence in many cases by the eastern horizon at birth was no sign that birth had been triggered off and accomplished within minutes but a sign that it had taken on average about 24 hours.

The main crest in the second set of data is about 16 hours before birth, so on the one hand a fall in the level of solar activity and the tallying turbulence in the electromagnetic current sheet causes the 'planet effect' on the graphs to shift to the left, and on the other hand the effect itself changes, insofar as the main crest, 1 day before birth, subsides, to be replaced by a crest ¾ of a day before birth. In other words not only does the effect as a whole shift to the left but the effect's 'center of gravity' shifts to the left too,. Both changes shorten the process of birth.

Changes of phenotype

The second graph for Saturn can likewise be shown as a smooth series of waves:



This shows that the effect is due to no random fluctuations or to irregular secondary effects from other planets but is more or less self-contained and also that a fall in the level of solar activity does not damp effects for *all* planets, since some become bigger, not smaller, as if a preference for some inner planets as timers may be replaced by a preference for some outer ones. If so, the Gauquelins' belief in the inheritance of temperaments may be an oversimplification in two respects.

1. An inherited temperament may be colored by the presence at birth of an auxiliary timer like Neptune in the case of the Mars-Neptune effect.

2. An inherited preference for one planet may yield to a preference for another following a change in the level of solar activity. More activity may lead to a preference for planets near the sun, and less activity to a preference for others.

If the second point is valid, some or all organisms have two main variants, genetically the same but different in behavior like the aquatic salamander and its terrestrial counterpart. The former may change into the latter like a tadpole into a toad but is also able to complete its life-cycle underwater. Indeed a precondition for changing is the presence of thyroxine, a hormone suppressed by very low temperatures, so the difference is on the one hand between youth and age and on the other hand between green age and ice age, due in turn to solar activity and inactivity.[9] This takes us back into the ice ages to the birth of denisovan science.

The seven ages of man

In As You Like It, William Shakespeare takes listeners through the seven ages of man:

> All the world's a stage
> and all the men and women merely players;
> they have their exits and their entrances,

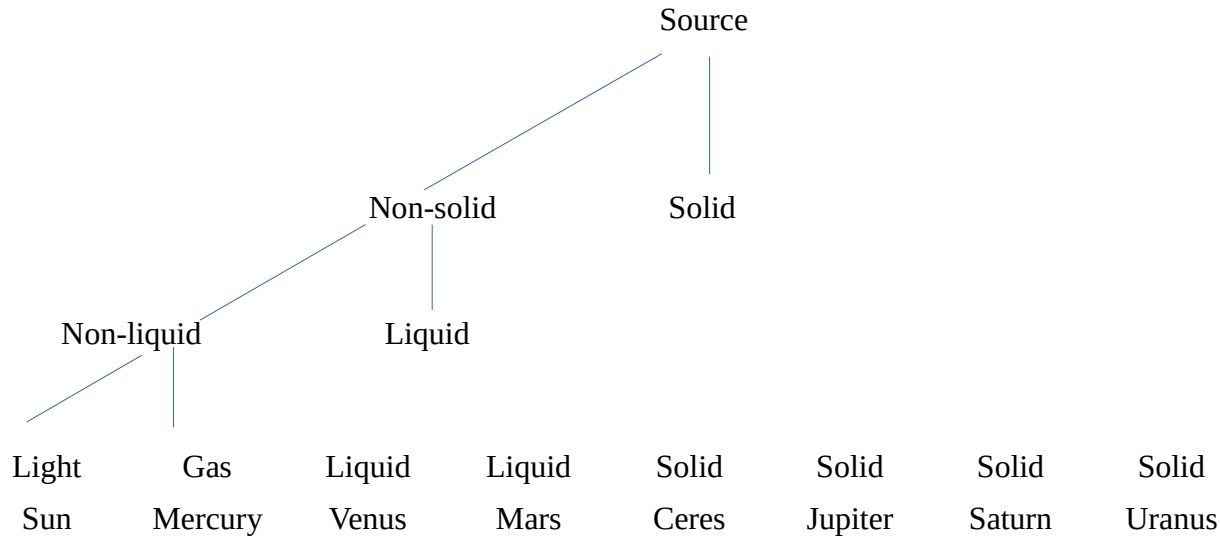
9 Axolotls. Introduction, www.axolotl.org, 2017

and one man in his time plays many parts,
his acts being seven ages.

The word for *stage* in German is *bühne* and the word for *bean* is *bohne*, showing their kinship, since a stage in Peking opera stands for the plane of the planetary system and the characters for planets, and a pole-bean has a stem which divides into tendrils like a spiral nebula dividing and subdividing into a system of planets. In effect William Shakespeare is talking through his character Jacques, or Jack and the Beanstalk, about the system of planets in their series from the hub to the rim of the system. This was no Shakespearean innovation, since drama-time is dream-time, the cosmology bequeathed to Australian aborigines, especially the quinkan, by their denisovan forebears, so according to this scheme there are the following dichotomies

aquatic axolotl	terrestrial axolotl
youth	age
green age	ice age
inner planets	outer planets
solar activity	solar inactivity
yang	yin

This scheme is also reflected by the scheme of astrological elements – fire, air, water and earth – tallying with light, gas, liquid and solid in their series from hot to cold.



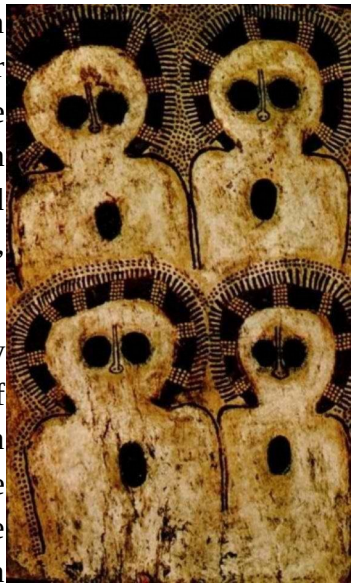
The planets in this series are at continually doubled distances from the sun, which gave rise to the denisovan notion of their having evolved from a spiral nebula. A further relevant dichotomy is between two phenotypes of a single kind of locust.

Swarming and solitary locusts

The swarming or gregarious ones

> are larger, with different body proportions, less sexual dimorphism and a higher metabolic rate. They mature more rapidly and start reproducing earlier but have a lower level of fecundity.[10]

A further key difference is that swarming ones are active by day and solitary ones at night, so the former had to react to sunrise and the latter to sunset. This may have led the former to react more to the rising of planets, and the latter to their setting. This distinction between the diurnal and swarming on the one hand and the nocturnal and solitary on the other may also have distinguished between modern man on the one hand and the inventors of astrology on the other.



The inventors of astrology appear in the zodiac as the horseman Sagittarius, the goat-man Capricorn (also shown as a merman or dugong), and the can-man Aquarius. Aquarius appears in the Chinese version of the zodiac as Monkey, who in India appears as the canoe-man Hanuman, bearing a cone of herbs. The herbs typify him as a medic and the cone as an astronomer, since cross-sections of a cone are ellipses, and planets move in ellipses round the sun.

His appearance as a monkey suggests that astrology was invented not by modern man but a kindred species. East Asia was the domain of denisovans, as shown by the distribution of their genes, so Hanuman may have sailed as a denisovan from Africa on the Indian Ocean gyre past Antarctica to Australia, where his kin are still revered as the wandjina or wand-jinn with their big nocturnal eyes. The horseman Sagittarius rode a nightmare.

The quinkan project

These jinn or geniuses are revered on Cape York Peninsula, a denisovan hot-spot, as the quinkan, alias the kan-quin, pan-quin or penguins, so if Dr. Dean could refrain from becoming infatuated with top European intellectuals and turn to kan-quin or Guanyin, the goddess of mercy, she may mercifully suggest that instead of wasting decades on professors from Köpenick, who see no evil, hear no evil and speak no evil, he might rather turn to aborigines on Cape York Peninsula for help in processing the thousands of Parisian data gathered by the Gauquelins, since the quinkan may welcome an opportunity to honor their illustrious forebears with the help of the Queensland Government. The criteria given by the Department of the Premier and Cabinet in its *Arts and Cultural Investment Framework* are:

* Quality – what artistic and/or cultural quality will be realized?
* Reach – how broad is the reach, how deep is the engagement and what is the demand?
* Impact – what social, cultural and economic impacts will be delivered?
* Viability – is it achievable and sustainable?

10 Wikipedia. Locust, solitary and gregarious phases, 2017

Quality

Working with a proper scale and a few PCs, it should be possible to realize findings of lasting scientific and cultural value.

Reach

Results already achieved suggest that the quinkan were dab hands at astronomy and biology, so further results may lead to a reassessment of their caliber and culture.

Impact

Further findings would offer insights into a society able to engender and sustain scientific activity and would thereby improve the status and income of aborigines.

Viability

The project could be achieved with minimal funding, and the value of the findings be as lasting as the biological systems investigated.