

A few new discoveries in physics

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About

This document presents a few new discoveries in physics which I have made between August 1987 and March 2001. The main text is written in the style of a scientific publication. Some appendices provide additional information and insights, including a detailed proof that the discoveries were known to me in May 2001. If you are not a scientist, you may prefer to read appendix A first.

But first a word of caution: The discoveries described in this document may be deeply disturbing because they are likely to profoundly change several common views about how the world is; read it with care and please do not hesitate to stop when it gets too much to swallow in one reading.

Abstract

A new physical effect is described. Human brains are emotionally interconnected. The connection is directional with spin 1 symmetry and can be felt across global distances and through the earth. The exact physical nature of the effect remains unknown. Selective sensing of virtual photons, i.e. of electro- or magnetostatic forces, might be part of a future theoretical explanation.

Based on the discovered effect, a plausible explanation of phenomena like telepathy and precognition is given. It is also made plausible how astrology and other ancient mythological beliefs have persisted unconsciously until today and continue to influence our fates by means of collective emotional feedback.

The western astrological system is shown to be essentially composed of simple, opposing principles which originate from ancient greek philosophy. There are two main discoveries. Meanings associated with the star sign, different inner planets were in at birth time, influence how one relates to different classes of people. The meanings associated with star signs themselves derive from different mixtures of the four classical elements, more specifically, from meanings associated with transitions from one element to another. The discoveries are simple and specific enough to be verified quantitatively.

Finally, some fundamental scientific and philosophical problems are discussed in light of the new discoveries.

1 A New Physical Effect

1.1 The Experimental Facts

The following statements stem from my personal experience. As they have not been independently verified, I have preferred to label them with the letter H for hypothesis.

H1 Human brains are emotionally interconnected.

H2 The feeling between two people is maximal if people's heads face each other, face away from each other or one is facing towards the other and the other is facing away, and it is minimal in between, at 90° (a). If two people face each other, the feeling is maximal if the symmetry planes of their heads coincide and minimal if they are perpendicular (b).

H3 The intensity of feeling decreases with distance (a). In some cases, it can be felt across global distances (b) and through the earth (c).

H4 For most people the feeling is strongest if the other person is of the opposite sex (a) and especially so if one is in love with that person (b). For homosexual and bisexual people the relative strengths of feeling are different in the obvious way (c).

H5 The feeling is mutual.

1.2 Analysis of the Facts

The most astonishing fact is, of course, H3c, because it effectively excludes electromagnetic waves as a physical explanation of the observed effect. For completeness, I will now show in detail that waves based on any of the four known forces in nature can be excluded.

H2 implies spin 1 symmetry, this excludes gravitation. Strong and weak interactions can also be excluded, because they are short range. Electromagnetic waves could reproduce all facts, except H3c. It is H3c that makes the effect so strange: Whatever causes it, must interact strongly with the matter in human brains and yet very weakly with any matter in between.

Suppose we have an emitter in Europe which emits photons of a wavelength λ with a total power $P = 10$ mW. Suppose further that all power is emitted uniformly within a cone of $2\alpha = 10^\circ$. Finally, suppose that the receiver is in Australia, at a distance $R = 12'000$ km, has a diameter of the order of $r = 0.1$ m and is able to detect every single photon passing through it. The number of photons emitted during a time span Δt is

$$N = \frac{P\Delta t}{h\nu} = \lambda \frac{P\Delta t}{hc}. \quad (1)$$

Assuming, for the moment, a completely transparent planet Earth, the number of photons received is

$$N' = N \left(\frac{r}{R\alpha} \right)^2. \quad (2)$$

The minimal wavelength that allows the receiver to detect a single photon per second is then in the range of x-rays:

$$\lambda_{\min} = \frac{hc}{P\Delta t} \left(\frac{R\alpha}{r} \right)^2 = 2 \text{ nm}, \quad (3)$$

Since in reality there is absorption, the actual wavelength would have to be longer in order to get a detectable signal. The number of photons decays exponentially with distance:

$$N'' = N' e^{-R/r_0}. \quad (4)$$

Here r_0 is a decay length which depends on wavelength and material. Now, even assuming an actual wavelength of as much as 2000 km, corresponding to $N' = 10^{15}$, in order to detect again a single photon per second, the decay length would have to be at least 350 km, a value which would even be enormous for x-rays.

1.3 Gedankenexperiment

Looking for different explanations, I noticed on the occasion of the total solar eclipse of August 1999 that static forces could at least qualitatively reproduce the observed effect. And it also reiterated how misleading visualization of quantum mechanical effects can be.

In quantum field theory, forces are mediated by the exchange of virtual particles. With that picture in mind, it appears strange that the moon does not shield the virtual gravitons exchanged between sun and earth in any way. According to Newton's law of gravitation, you simply sum over all mass points to calculate the total force. There is simply no shielding.

In that sense, a Faraday cage does not really shield what is inside from the rest of the world by redistributing charges on its surface, it is just so that forces add up to zero. Of course, all of this appears not to matter, since the sum of forces is all that can be measured.

But suppose there was a way to filter virtual photons, that there was a way to selectively detect some of them and to ignore all others. Then H3c would automatically be fulfilled, completely independently of any matter between the two partners. And H3b would also be quite realistic, as follows.

Using the same setup as before and assuming that one electron per carbon atom of $m = 10$ mg of carbon is involved in the interaction on each side, the charge on each side becomes

$$Q = e \frac{N_A m}{12 \text{ g}} = 80 \text{ C}, \quad (5)$$

where N_A is Avogadro's constant. The force becomes

$$F = \frac{1}{4\pi\epsilon_0} \left(\frac{Q}{R} \right)^2 = 0.5 \text{ N}, \quad (6)$$

which would be easily detectable.

1.4 Experimental Challenges

Previous experiments trying to prove some kind of "telepathic" connections have remained essentially without clear results. Predictions made here, however, should be specific enough to be verified experimentally.

Here are some concrete suggestions: Take a couple of lovers as probands, not just any two people. Separate them as far as possible from any complex organic life-forms, especially from any people they know in person, like family, friends and the experimentators. I suggest a desert on the other side of the earth relative to those people. If you want to prove H3c too, put each lover separately into some place below the earth's surface, say, a mine. Make sure that family, friends, experimentators and anybody else who knows about the experiment, is asleep and facing into a direction with low interaction when the experiments take place. Keep time and place of the experiments as secret as possible.

As a side remark, let me briefly explain some basics about how experimental physicists think to people without such experience: Instead of trying to prove something as a whole, physicists typically split complex questions to nature up into several simple questions that nature is then forced to answer with yes or no, but nothing in between. Then they use these answers to find out which questions to ask next and finally to construct answers to more complex questions. I call this technique "divide and conquer". See [1] for some fun examples about this way of thinking (most directly related is maybe the section about how to conduct experiments with rats in maze, in the last chapter, "Cargo Cult Science").

1.5 Hypothetical Consequences

H6 Mammals are also connected within their species (a) and with other mammal species, including humans (b).

H7 More complex information than just an intensity can be exchanged. By definition this is telepathy.

H8 People's connected brains form the collective unconscious, a large brain with feelings and intensions on its own (a). As it is composed of more nerve cells than a single human brain, it can have more complex thoughts and feelings than a single person (b). Collective thoughts can appear as precognition to individuals (c).

H9 People are guided to fulfill collective intensions by collective positive feedback to actions that fit the collective purpose and by negative or no feedback to actions that do not (a). The collective unconscious still thinks largely in ancient myths (b). Ancient astrological beliefs are the major emotional force field acting on people and also on larger entities like companies or countries, just on anything that has a birth or founding date (c).

H6b would, for example, explain how dogs found their human folks who had moved hundreds of miles away to a new home. Depending on how the discovered effect comes about, the connection could also extend to smaller animals. In [2], for example, it is reported that carrier pigeons found their way home to the loft during world war one, even if the loft had been moved during the day.

Apparent precognition can be understood from the following analogy: Imagine you are in a dark room, about to switch on the light. Then you might already picture the room when it is lit, with the result that a brain cell in the part of the brain where things are visualized would precognize your action of switching on the light by a few seconds.

H7-9 are difficult to separate from certain religious experiences where people feel a higher power, hear voices, feel driven to do certain things, etc. These issues will be discussed in sections 3 and 4. Let me just make a practical remark here: The existence of a collective mind could make it more difficult to prove H1-5, since it could work actively against the experimentators. On the other hand, I could write and publish this document, so any potential collective opposition seems not to be impossible to overcome at the moment.

H8 and H9 are difficult to prove directly. However, if H9c is proven, the others are practically proven too. The next section will provide a simple and specific model of astrology which should allow to do so. Before that, let me mention that the most prominent argument against astrology, namely that due to the precession of the earth's axis somebody who is, say, born at the beginning of spring, is considered Aries by astrology, but astronomically has the sun still in the star sign of Pisces,

does not contradict H9c. It rather confirms that astrology has nothing directly to do with the stars in the sky, but rather with ancient human beliefs about them.

2 Elementary Astrology

This section presents a simple astrological model. Rather than trying to be complete, it is focussed on simple, specific predictions that are quantitatively measurable. The model is supposed to apply to all cultures that descend from ancient greek culture. Specifically, these are the western world, i.e. Europe and its former colonies, large parts of the former Soviet Union and the arabic world.

The model strictly separates meanings of planets from meanings of star signs. Planets determine which areas of life are influenced. The star sign, one of the planets was in at birth time, determines in which ways the corresponding area of life is influenced.

2.1 The Planets

H10 Different planets influence how one is towards different categories of people: The sun¹ how one is as a father and towards the father (a), the moon how one is as a mother and towards the mother (b), Venus and Mars how one is towards female resp. male friends (cd), Mercury how one is towards siblings (e). More precisely, the properties associated with the star sign, one of these planets was in at birth time, influence how one likes to behave relative to people of the respective category. The terms "father" and "mother" do not only apply to physical parents, but generally to anybody assuming a parental role (f), like, for example, a teacher. Similarly, the term "friend" includes anybody of roughly the same generation who does not fall into any of the other categories (g). This specifically includes male and female lovers. The term "siblings" also more generally applies to concurrents for the same lover (h).

H11 Jupiter and Saturn apply to areas in which one gets more resp. less help from the collective unconscious than average. This means that abilities associated with the star sign, either of these planets was in at birth time, will either be quickly and almost effortlessly available or else will have to be earned through hard work.

H12 Uranus and Neptune apply to areas which are more resp. less easily made conscious than average.

H13 Pluto applies to how one handles fate. In other words, one will typically use the qualities and abilities associated with the star sign, Pluto was in at birth time, to solve the problems that life poses.

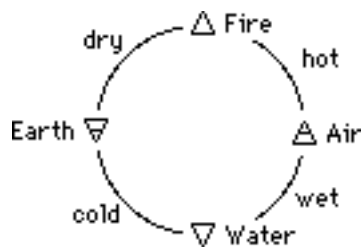
¹Note that astrology is based on a geocentric view of the world. Any object, including sun and moon, that moves relative to the stars is called a planet.

Although it is common astrological knowledge to associate, say, the moon with the mother or Pluto with fate, I have not found anything as specific as H10 and H13 in the literature. Similarly, Jupiter and Saturn are generally associated with “good luck” and “bad luck”, respectively. Luck used to be understood as help by the gods, who are, at least in the minimalist view of science, indistinguishable from the collective unconscious. H12 is common astrological knowledge.

2.2 The Star Signs

H14 The meanings associated with star signs are composed of ancient greek beliefs about the four elements fire, earth, air and water, and the transitions between them (a). For each element E , the three star signs assigned to it correspond to different stages of transition from neighbouring elements A via E to B : The first star sign (in the order of the zodiac) is composed mainly of A and only slightly of B , the second one of roughly equal amounts of A and B , and the third one mainly of B and only slightly of A (b).

This requires some introduction to the ancient greek theory of the elements²



The four elements are composed of two pairs of properties, “hot/cold” and “wet/dry”. Fire is hot and dry, water is cold and wet, earth is dry and cold, air is wet and hot. Transitions between the elements are only possible by flipping one of the properties at a time. For example, water can be transformed directly into its neighbouring elements earth and air, but only indirectly into fire.

The symbols for the four elements are essentially triangles, the ones for the hot elements point up, the ones for the cold elements point down. When superimposed, they form the hexagram which symbolizes the important greek view that “what is above corresponds to what is beneath”. In other words, what happens with the stars and planets in the sky corresponds to what happens to people and things on earth, what happens in the physical world corresponds to what happens in people’s psyche.

²Note that this is intended primarily to be an accurate description of today’s psychological reality and not necessarily a historically correct account of the ancient greek theory of the elements. It must also be noted that at no time in history everything was conscious to people, and not everything that was, had been written down and preserved until today.

Therefore the term “element” was not only meant to apply to physical reality, but also to psychology. In this light, the psychological meanings of hot/cold and wet/dry have to be explained.

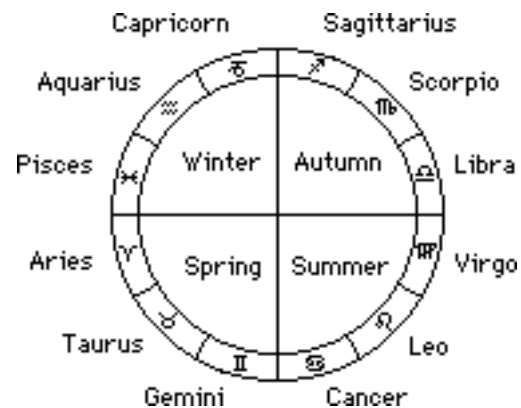
Nights are colder than days, therefore cold is associated with night. People are more active during the day than at night, therefore day is associated with active. Men typically assume a physically more active role during sex, therefore man is associated with active. In other words, water and earth are considered female elements, whereas fire and air are considered male.

The sun only shines during the day and the moon is only rarely clearly visible at daytime, therefore man is associated with sun and woman with moon. This association is strengthened by two facts: The changing apparent size of the moon reminds of pregnancy and many women have their monthly cycles correlated with the lunar cycle.

Dry and wet are associated with brittle and malleable, respectively. Dry things are harder than wet things, they either stay how they are or they break, whereas wet things can bend and flow. Here the psychological meaning is clearly recognizable.

All of this correlates well with the common astrological view that water has to do with feelings, earth with reality, fire with imagination and air with mind. More precisely, fire is about visual imagination because it produces light, whereas air is invisible and hence about abstract, logical thinking.

Finally, here is a quick overview of the Zodiac, for people who are not familiar with it.



The astrological year starts with Aries at the beginning of spring. Aries is a fire sign, Taurus an earth sign, Gemini an air sign, Cancer a water sign, and so on. The first sign of a season is called cardinal, the middle one fixed and the last one mutable. Correspondingly, each character likes to start, pull through or to finish things, respectively. These meanings will be explained in more detail later on.

2.3 Fire (Aries/Leo/Sagittarius)

H15 For fire, the elements *A* and *B* mentioned in H14b are earth and air (a). The main picture is wood burning to smoke as the element earth is transformed by fire into air (b). This is associated with the transition from animal to man to god during which the animal side gets more and more wounded (c). The animal side corresponds to impatience (d), doing instead of imagining (e), secrecy (f), thrift (g), and the lower part of the body (h).

H15c comes about as follows: Earth produces plants that feed animals and people, like women produce children. Therefore the human body is associated with earth. In other words, H15b and hence H15c expresses that the physical, mortal body is wounded and, at the same time, transformed by the imaginary power of fire into knowledge that can be communicated to the next generation and thus becomes immortal.

The other hypotheses derive directly from H15c. The less one is mortal, the more time one has in general (H15d), and specifically to think before doing (H15e), the latter also because one is already mainly made of air. The more mortal one is, the more one has to keep some things secret to improve one's chances in the battle for survival against others (H15f), the more one has to make sure one has enough money and material goods to survive (H15g). The wound can be physical and then it is often in the lower part of the body, the one with the sexual organs and without the head (H15h), but more often, the wound is mainly psychological.

Note that H15b-h are not strictly logical consequences of H15a, but a priori just hypotheses for the preferred associations that people have unconsciously made and which therefore have survived by natural selection.

2.4 Water (Cancer/Scorpio/Pisces)

H16 For water, the elements *A* and *B* mentioned in H14b are earth and air, too (a). The main picture is ice melting to water and then evaporating to mist (b). Associated with it is the picture of the circle of water originating from a source in the mountains, flowing as a river and then into the sea (c). This is further associated with the cycle of life, symbolized by the three fates who create, measure and end life (d). During that cycle, borders dissolve (e), one tries first to protect oneself from pain, then pays back and finally forgives (f).

The association between H16b and H16c comes from the fact that to the ancient greeks the only place where frozen water could be found all year long was in the mountains in form of snow or glaciers, where also rivers originate. Rivers then flow together into larger rivers and finally into the sea, from where the water will eventually evaporate. Through that process, water from different sources is mixed, borders are dissolved (H16e).

The three fates are three mythological women: One spins the thread of life, one measures its length and the third one cuts it. They correspond also to three phases in the life of a woman and to the phases of the moon. The phase around full moon corresponds to a pregnant woman or, in other words, to a mature, fertile woman; the phases before and after to a girl who cannot have children yet resp. to an old woman who cannot have children any more.

The associations of the three fates with H16c and H16f come about as follows: A young girl still needs protection and does not get involved with men. A mature woman does expose herself to men, but is also strong enough and ready to strike back when hurt. Also children are a mixture of their parents and hence of their ancestors.

An old woman has seen a lot, has mixed with many influences. She can therefore understand why somebody hurt her and can forgive. In addition, she is already mainly made of immortal air and can therefore not really be hurt much; the sea seems to stay forever the same even if one knows that rivers flow into it and some water evaporates from it.

2.5 Air (Gemini/Libra/Aquarius)

H17 For air, the elements *A* and *B* mentioned in H14b are fire and water (a). The main picture is that of a cloud out of which come both lightning and rain (b). Associated with that is the transition from child to adult to old man (c). This is further associated with first switching between opposing principles, then trying to balance them and finally unifying them into a single entity (d). During the transition, transparency (e), constancy (f) and predictability (g) increase, whereas the ability to learn and to adapt decreases (h).

Lightning or a flame are quick and random, rain is constant and predictable (H17fg). Children are quicker and less predictable than adults. They explore the world by turning things around and looking at them quickly from different sides. They have to do so in order to build a model of the new object in their heads. The two faces of a coin, for example, are a priori just two pictures, only in the head they become a single unit, called "coin".

Through that process, as one grows older, things get more unified as more apparently separate phenomena are recognized to be just different sides of the same. As one gains more insights into the world, transparency increases. But at the same time, one also becomes less flexible to deal with new things that do not fit well into the model and is tempted to either force some things to be the same or to ignore what does not fit in.

2.6 Earth (Taurus/Virgo/Capricorn)

H18 For earth, the elements A and B mentioned in H14b are fire and water, too (a). The main picture is that of a tree which needs both the light of the sun from above and the water from below to grow (b). Associated with this picture are developments during a human life during which the fear of dying becomes stronger than sexual drive (c). Structure becomes more important than beauty (d), one is forced to decide (e) and plans further ahead (f).

Trees have fruits and flowers above the earth which symbolize the beautiful but also short-lived part of nature. Note that, according to Freud [3], “beautiful” is synonymous to sexually exciting. Trees also have roots under the earth which not only feed them with water, but also keep them from falling down, thus symbolizing the limiting, structuring side of nature. Similarly, as one grows older, one is gradually confronted with the reality that all life has to end sometime as one painfully feels more and more parts of one’s own body.

Therefore the transition is between what Freud saw as the two strongest forces acting on people, namely sex and the fear of dying (H18c). In that respect, it should be noted that initially Freud’s emphasis was on sex being the main force driving people and only later in life he considered fear of death a force of comparable strength.

Thus, as one grows older and has less force to spare, it becomes more important to carefully structure and plan (H18df) and to make sure that no resources are wasted (H18e).

3 Applied Astrology

H19 Ancient greek philosophy is based on language. If two objects share an adjective, there is believed to be a connection.

This hypothesis has implicitly been used to derive most of the model. Consequently, language will be used as the main key to understanding symbolic content in the world in what follows. Concretely, the model is first applied directly to the United States of America, then a number of refinements and additions are made, including detailed descriptions of the twelve star signs, and finally the model is applied to a few more real world examples.

But first, let me reiterate the initial warning: What follows may be deeply disturbing because it may profoundly change several common views about how the world is. It may also confront you with unconscious psychological wounds (traumas) within yourself, your family or your environment.

Deep seated traumas are often quite complex matters that are also possibly shared within several people. There is no general rule as to whether and when it is

better to make a trauma conscious or not. Sometimes professional assistance can be helpful, sometimes it is best to leave things unconscious.

If a statement stirs up a trauma, you will probably react quite strongly to it, refusing the statement quite imperatively. In comparison, the reaction to a statement that is just not correct would be much more indifferent. Note, however, that a statement of which you think strongly that quite the contrary is true, at least hits the right theme and is therefore less likely to have occurred merely by chance than one that leaves you indifferent.

3.1 The United States of America

H20 Sun and moon have stronger astrological influence than the other planets (a), the sun has a stronger influence than the moon (b). The sun is associated with the conscious self, the moon with the unconscious self (c).

Sun and moon appear brighter and bigger than the other planets and are also the only ones that cause noticeable physical changes on earth, namely seasons and tides. H20c comes about as follows: During the day one is typically consciously awake, at night one sleeps and is therefore unconscious. Sun and moon move across the sky at approximately uniform speeds, unlike all other planets, which even move backwards sometimes³. In other words, sun and moon appear to move on their own, independently of their environment. Similarly, the word “self” is defined as the sum of all thoughts and actions that are done independently of the environment.

The USA celebrates its birthday on the 4th of July, when the sun is in the middle of Cancer.

Protection (H16f) is important to the USA. Large government agencies with billion dollar budgets have been created to protect the country. On the other hand, most people living within the USA are quite well protected from external influences. Television deals almost exclusively with internal affairs. A large percentage of members of congress do not have a passport; they have never been out of the country.

The USA is very creative, being a cardinal sign and a source (H16c). Europe, in contrast, is rather adapting and refining the new things that come from the USA. Mothers are the source of life, they create families. Sit-coms, for example, typically deal with family matters, with the emotional relations between a small number of people who live or work together. Uninvited intrusion into private property, the inside of a family, is a serious offense.

A source does not know where its water comes from, that it recycles the water of rivers from all over the world

³This apparent backward motion is, of course, just an optical illusion, due to the fact that earth and all other astronomical planets are revolving around the sun.

that had flown into the sea. Similarly, immigration into the melting pot USA largely relieves one from past burdens and prepares the ground to create new things. A map of the USA shows names originating from all over the world lying side by side; they have largely forgotten where they came from.

The declaration of independence was signed on July 4th, 1776, when the moon was in Aquarius.

The influence of the moon is less obvious (H20bc). Uniformity (H17d), for example, can be found in the fact that everybody eats turkey on Thanksgiving or that many things, like fast food, are uniformly available nationwide. In addition, US culture has globally a strong unifying effect without being enforced on other countries or at least not in an obvious, conscious way.

3.2 Numbers

To the ancient greeks, numbers not only denoted quantities but also had qualitative meanings (H19). The number 1 describes the initial state of the world, before it naturally split into opposing principles (2). This comes from the analogy to birth where the unit composed of mother and child becomes two individuals.

The number 3 naturally emerges when 2 different things meet, a man and woman, two substances or two thoughts. It is associated with the three fates and with birth. In addition, the number 3 is considered quite harmonic but somewhat incomplete because it is just a bit smaller than the number π which is related to the circle which represents perfect harmony because all its points are equal.

The number 4 is considered rather disharmonious because of the excess $4 - \pi \approx 6/7$. Additionally, each of the four elements can be transformed directly into its neighbouring ones, but only indirectly into the fourth. In fairy tales, for example, typically the first two sons of a king are quite like the father, but the youngest son (the 4th in the group) is quite different and yet appears to contain what is needed to solve the family's problems. In real families, the first child (no. 3) is typically much more like the parents than the second child.

The number 7 is associated with the number of planets that were known in ancient times. The number 9 is related to fate and birth because it is 3×3 , pregnancy is 9 months and because there are nine gates to a woman whereas men only have 8. The number 12 is related to the zodiac, to the number of solar months whereas the number 13 denotes the number of lunar months per year. This list is not complete, of course.

3.3 Planetary Aspects

Planets carry names of gods. Hence the planets moving across the sky correspond to gods walking across it.

H21 Meanings of aspects between planets derive from meanings associated with the corresponding number.

Planets are said to aspect each other if the angle between each other is within a certain range. The major aspects are conjunction (0°), opposition (180°), trine (120°), square (90°) and sextile (60°), corresponding to a division of the circle by 1, 2, 3, 4 and 6, respectively. Besides there are several minor aspects that astrologers consider. There is no agreement on the range (called orb) within which an aspect can be felt⁴.

Conjunction symbolizes a meeting of gods, the unification of their different forces towards a common goal which is given by the star sign (or signs) they are in. The leader, the planet that has advanced most in the zodiac, decides how the goal is to be achieved whereas the following planet(s) support the leader.

Opposition symbolizes a fight between two opposing principles that are defined by the involved star signs. Similarly to one of the themes of air signs (H17d) and depending on the number and kinds of planets involved on each side, the result can be anything from instant victory of one side (and hence suppression of the other) to unpredictable switching between opposites.

Trines are harmonic and hence passive, squares are disharmonic and hence force to act. A triangle made of sticks is much harder to deform than a square. When a person stands at a square (45°), one cannot tell what the person is up to and consequently is forced to turn the head. On the other hand, someone standing at a trine is clearly visible and also not standing in the way.

Sextiles are considered to be harmonic too, but less strongly so than trines and also to represent opportunity ($6 = 3 \times 2$).

3.4 Synastry and Transits

H22 Synastry describes the relation between two events.

Synastry consists of plotting planetary positions for two events on a single chart and then to draw relative aspects between the respective planets.

Applied to two birth charts, synastry describes how two people relate to each other. Even more than H10, it shows how relative the perception of others is because different people will aspect the same person's planets differently or even not at all.

Transits are the passing of planets in aspect to planets in one's birth chart; in other words, they are part of the synastry between oneself and now. Even though H20 suggests that sun and moon have stronger influence than

⁴As a starting point for experiments, I suggest to use the following orbs (by Liz Greene) which are somewhat larger than average and therefore ensure that initially no possibly existing connection is overlooked: $\pm 10^\circ$ for conjunctions, oppositions, trines and squares; $\pm 6^\circ$ for sextiles; $\pm 3^\circ$ for quincunxes, semisextiles, semisquares and sesquisquares; $\pm 1^\circ$ for quintiles and biquintiles.

other planets, slow moving planets (say, Jupiter and up) can have great effect as they transit very slowly, taking months or even years to do so.

3.5 Men and Women

H23 Tendentially, women think rather unconsciously and collectively, men rather consciously and individually.

This comes from the association of men with the sun and of women with the moon. It explains why men and women often have trouble understanding each other, why they keep surprising each other.

Men have less access to the pool of unconscious information that allows women to just say how something is, but without being able to indicate a reason that men can immediately understand. Women, on the other hand, do not have full access to the special, typically quite biased world, that a man creates in his head.

There appears also to be a physiological reason for H23, as described by Freud in [3]: During puberty both men and women have to redirect their sexual desires away from themselves towards an other person. In addition, women have to stop playing with their clitoris, for several reasons. They have to make their own sexual desires partially unconscious in order to be able to build up the necessary tension between men and women. They have to get into a more passive, receiving role that is oriented towards the penis of a man. This is the reason why women are more adult than men, why women do not play, except with men resp. with their penises.

The female elements, earth and water, are heavier than the male ones, fire and air. They represent a more immediate approach to the world, based on reality and emotions. The male elements are more detached. Fire produces light and hence represents visual imagination whereas air is invisible and hence is about abstract, logical thinking.

Naturally, real people are more complex and differentiated than these opposites because they typically have planets in both male and female star signs which furthermore can aspect each other in more harmonious (female) or more active (male) ways. Ancient greek philosophy is not to be understood literally: There are male and female approaches to everything, be it baking a cake or flying a fighter jet, and the greeks were wise enough not say that one is generally better than the other.

Relations are even more complex than individuals. Synastry allows for $10 \cdot 10 = 100$ aspects between two planets, more than twice as many as for individuals who are limited to at most $(10 \cdot 9)/2 = 45$.

An aspect that is often found in love couples is the quincunx (150°). Planets in quincunx are typically in star signs that share little, neither element nor sex nor character (cardinal/fixed/mutable). Quincunxes often

lead to misunderstandings. They are also associated with the fact that when sun and moon are in quincunx, one often mistakes this for an already full moon.

Like H23, quincunxes ensure that no matter how long two people have been together, there will always be surprises that keep the relationship both interesting and challenging.

3.6 Dreams

H24 Dreaming is partially part of collective thinking, more so than conscious thinking.

One way to prove this would be to show that some dream elements correlate much more with the immediate future than with the past without being foreseeable by the dreaming individual (H8c).

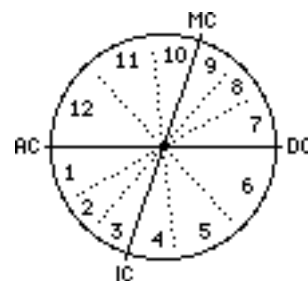
In [1], Feynman describes that he could influence his dreams to some degree. Thus one might even be actively capable to produce dreams that help to prove H24.

3.7 Astrological Houses

H25 The star sign at the ascendent (AC), i.e. the sign rising above the horizon at the time of birth, is how one appears to individuals (a). The star sign at the medium coeli (MC), i.e. at the zenith, is how one appears to the public (b).

Gods see mortals from above whereas normal people are standing on the ground and see each other horizontally. The AC is also associated with the masks that actors in ancient greek theatre were wearing; it is a thin, opaque shell with a few openings.

The AC and the descendent (DC) form an axis as well as the MC and the imum coeli (IC). Together they divide the zodiac into four sectors. The most common astrological house systems⁵ further divide each sector into three sectors to form a total of twelve houses.



Meanings associated with houses are related to but not identical to meanings associated with corresponding star signs.

⁵The two most common house systems are Placidus and Koch. There exist about a dozen different house systems; all divide the zodiac into twelve sectors in some way.

3.8 Astrological Inheritance

H26 The moment of birth is unconsciously influenced by the wishes of all interested parties, i.e. by child, mother, father, mother's and father's family, and also by larger communities, up to home country and the world.

H8 and H9 imply that the collective unconscious is not completely homogeneous, but also composed of different entities at different scales, hence H26.

The moment of birth is influenced by the moment of conception. The earlier one determines essentially month and year of birth within a certain range (i.e. positions of sun and of Mercury to about Mars), the latter determines time of day and day of month of birth (i.e. houses and the position of the moon). Physically, mother and father have the biggest influence on the first, mother and child on the second. Emotionally, things are more complex, as follows.

Mother and child form essentially a unit, because the unborn child lives inside a world which is essentially the mother. The father is emotionally connected to both of them. He and the mother met at a given date which influences their common fate.

The larger entities are, the more diversely they can influence others. Grandparents influenced the birthdays of the parents, the home country can influence hospital regulations, and so on. Because these influences are less direct, they are typically strongest on a larger time scale (several years, i.e. mainly positions of the outer planets).

In the experience of many astrologers, the MC corresponds to the wish of the mother. In other words, the strongest coalition of parties is typically lead by the mother and sets the MC. This is somewhat understandable, as setting the MC automatically, but also somewhat superficially, fulfills one's wish for the child in the eyes of the world (H25b).

On the other hand, until only a few decades ago, astrologers have associated MC with father and IC with mother, for the following symbolic reasons. The MC is above the ground, as are the male elements, fire and air. The IC is the cusp of the 4th house and hence corresponds to Cancer and the mother whereas the 10th house corresponds to Capricorn and the father (see next subsection).

Wishes passed on to a child often contain tasks that the parents were (usually largely unconsciously) not able or not willing to solve [5]. After each birth, parents become more relieved of their psychological burdens which makes them more open to influences from larger entities on later children.

There are many different ways to fulfill the same wish. Harmony, for example, can be expressed by trines and sextiles, but also by planets in Taurus and Libra. Similarly, planets near AC and MC also influence one's outer appearance.

The given name is another way of expressing a wish for the child, as names have a history and meanings. This also applies to non-living creations like a book, a software program or a mathematical concept (who also fall under H9c). Traditionally, the last name of a child was inherited from the father whereas the first name was rather chosen by the mother.

3.9 Star Signs in Detail

H27 Meanings associated with star signs are adapted to seasons. More precisely, they are adapted to meaningful activities in places on the northern hemisphere with distinct seasons (a). Star signs avoid main activities of the previous sign in the zodiac (b).

Astrology has evolved in times when people were much more dependent on nature than today. The better an astrological model was adapted to seasons, the higher were the chances for its supporters to survive. H27b stems from the fact that one typically grows tired of some activity after doing it repeatedly for some time.

H28 Meanings associated with star signs correspond to different stages in a human life, both continuously (a) and in subsequent groups of four signs each, representing child, adult and old person, respectively (b). In the same way, star signs that come later in the zodiac are oriented towards an increasing number of people (c).

This hypothesis stems from the identification of seasons with life, because of the cycle of earth: When one dies, one falls down to the ground, eventually becomes part of it and then again part of plants, animals and human beings. Similarly, nature produces fruits every year that mostly return to earth before the next spring.

H28c derives from the fact that the older one grows, the more people one has met and, consequently, often the more engaged in larger groups one has become.

H29 Meanings associated with star signs are related to meanings of the planets assigned to them (a) and vice-versa (b). More generally, mythology applies to meanings of planets and star signs (c). Star signs represent family themes (d).

Mythological tales that contain, say, Hermes, the greek equivalent of the roman god Mercury, apply to meanings associated with the planet and also to Gemini and Virgo, its associated star signs. Many myths express family themes like, in the case of Hermes and most specifically Gemini, sibling rivalry.

Planets have been assigned as follows: Sun and moon are assigned to Leo and Cancer, respectively, the two signs of the middle of summer. Then follows Mercury on both sides with Gemini and Virgo, until Saturn with Capricorn and Aquarius. After their discovery, Uranus, Neptune and Pluto have been assigned to Aquarius, Pisces and Scorpio, respectively. The table below shows

these assignments; names in parentheses are greek equivalents of the roman gods.

♈ Aries	♂ Mars (Ares)
♉ Taurus	♀ Venus (Aphrodite)
♊ Gemini	☿ Mercury (Hermes)
♋ Cancer	☾ Moon
♌ Leo	☼ Sun
♍ Virgo	☿ Mercury
♎ Libra	♀ Venus
♏ Scorpio	♂ Mars + ♀ Pluto (Hades)
♐ Sagittarius	♃ Jupiter (Zeus)
♑ Capricorn	♄ Saturn (Kronos)
♒ Aquarius	♄ Saturn + ♀ Uranus (Ouranos)
♓ Pisces	♃ Jupiter + ♄ Neptune (Poseideon)

H30 Astrological axes (opposing signs in the zodiac) are associated with opposing principles.

Specific opposing principles for each of the six axes will be derived during the following detailed descriptions of the star signs.

Millions of associations with each star sign have evolved during thousands of years. Moreover, each individual picks out certain themes, modifies and extends them. It is by no means possible to reproduce the full richness here, or even only to hint at all of the most commonly found themes. All that can be given here, is an idea of the scope. Please consult some further literature, maybe starting with [4], before you draw conclusions and maybe prematurely assign guilt to yourself or to others for some events that have happened in your life.

3.9.1 Aries

Male, fire (earth → air), spring, cardinal, young.

Seasons At the beginning of spring, nature starts to grow again and, consequently, has to break up some existing structures. In the past, this meant also that people were no longer dependent on others, that they could finally go outside again in order to conquer food and other resources on their own.

This description fits well with the cardinality of Aries and also with several parts of H15, not only with the impatience and the drive to act, but also with the fact that Aries is not much wounded yet, that he, unlike Leo, does not have to learn much compassion with others.

In what follows, correlations will typically be less explicitly mentioned in order to improve readability, unless, of course, correlations are not easily visible.

Life Children live in the moment, they have little patience and little memory. Consequently, what parents tell them to do or not to do often seems unfair to them and done specifically against them. Hence children often try to keep things secret from their parents. They have to do so in order to develop their own identity, independently of their parents.

Axes The axis Aries-Libra is about concrete vs. abstract and about bringing off vs. into balance.

These opposites and also what unites them will be discussed in detail in the part about Libra.

Themes Mars is, among other things, the god of war. He represents male, aggressive, phallic energy, as also suggested by his symbol. A ram is often perceived as banging its head wildly into anything that gives resistance in order to find a weak spot. Similarly, children sometimes test their environment.

The ancient greeks have incorporated influences from older cultures into their mythology, from places like Egypt and Babylonia. The ram-headed egyptian god Amun was called the hidden one, the invisible force behind the wind. (The latter statement is related to H15 because one typically needs to blow in order to get a fire going). The mythological content associated with Amun has largely been incorporated into Zeus, the highest god of the greeks. Amun also represents the father, the creator of the world and resembles the invisible god of the old testament (more about this later).

3.9.2 Taurus

Female, earth (fire → water), spring, fixed, young.

Seasons In the middle of spring, nature is very beautiful and grows a lot. People no longer want to fight, but rather want to enjoy the fruits of their conquests which potentially also include a lover. And they continue the projects they started previously, with more emphasis on harmony and beauty. Note that Aries and Taurus are also related because Aries is the first fire sign, made mainly of earth, whereas Taurus is the other way round.

Life Children are direct, what feels good at the moment is what they want to do and very strongly so. The next moment something else may be the most important thing they want to do, but what matters is always the moment. They feel little fun when they are forced to postpone or not to do what they want; psychologically speaking, they have not had to learn much to reverse their instinctive, animal side.

Axes The axis Taurus-Scorpio is about beauty vs. necessity and about doing-it-yourself vs. getting someone else to do it.

Themes In mythology, Pasiphaë, the wife of king Minos, gets Daedalus to build a wooden cow for her so that she can unite sexually with the cretan bull. Out of this encounter emerges Minotaur, a man with a bull's head who lives in a labyrinth under the ground and feeds on human flesh.

Mythology is not to be taken literally. The following snippet does not imply that people born with, say, the sun in Taurus eat human flesh or have sex with animals.

It is also not so that only the bull is about Taurus. It is rather the whole story, including everything in it that describes some elements of Taurus: craftsmanship, sensuality, but also the fear of man of the animal within and of the opposite sign, Scorpio.

3.9.3 Gemini

Male, air (fire \rightarrow water), spring, mutable, young.

Seasons At the end of spring, many insects are flying around from flower to flower and fertilize them. People have enough of harmony above all and want to see a few new things, want to make a few new contacts. Freud has equated culture with redirecting the sexual drive away from actual sex to other activities. That is what Gemini are starting to do.

Life After some time, children learn to speak. They also start to make plans and try to achieve their goals by only selectively informing their parents. In other words, they define an interface between them and their parents, a surface with only a few openings that they try to control (H17e). Children can change their mood very quickly; they can literally go from very unhappy to very happy within seconds.

Axes The axis Gemini-Sagittarius is about interface vs. overview and about planning vs. improvising.

Themes Each planet is assigned to a metal, for Mercury it is quicksilver, the only liquid metallic element (at room temperature and atmospheric pressure). Because of its fluidity, alchemists typically believed it to help transformations, like the one from lead to gold. Similarly, the beautiful butterfly evolves out of a caterpillar in spring and is quickly changing its appearance and location by moving its wings. Hermes is, among other things, the messenger of the gods; he travels quickly between heaven and earth.

3.9.4 Cancer

Female, water (earth \rightarrow air), summer, cardinal, young.

Seasons At the beginning of summer, fruits start to grow and many plants are no longer receptive to pollination. People have collected so many influences that they are again closing some gates and privately start to interconnect the collected information in order to create new things (cf. numbers). Cancer is similar to Aries, both are cardinal and mainly made of earth; some earlier zodiacs appear to have started with Cancer.

Life Children need protection in order to develop their own new world in their heads until they are mature enough to face the world on their own. Children avoid pain; as said with Taurus, there has not been much reversal of instincts yet. Protection and leaning on to the

ones who protect you constitutes also a barrier that eventually will have to be overcome in order to develop into a more independent adult.

Axes The axis Cancer-Capricorn is about creating complexity vs. making it as simple as possible and about leaning on to structures vs. using them.

Themes The scarab, an important symbol in ancient Egypt, rolls a dung ball and also lays eggs within it that survive dry phases well protected by the outer shell. It symbolizes the sun rolling across the sky and also the creation of new life out of the leftovers of others; it is a symbol of the eternal cycle of life.

3.9.5 Leo

Male, fire (earth \rightarrow air), summer, fixed, adult.

Seasons In the middle of summer, fruits grow by themselves with the power of the sun. People need not to work much nor do they need the help of others in order to survive. This gives them time to think about themselves and to do what they like.

Life A young adult is torn between finally enjoying his independence and the need to learn consideration for others that love him and depend on him, especially if he already has become a father. All adult signs contain such a conflict because they have to balance two elements. And they are striving towards the second element.

Axes The axis Leo-Aquarius is about special vs. general, about egoism vs. altruism and about timelessness vs. progress.

Themes In mythology, Psyche is given four tasks by Aphrodite, each representing one of the four elements. The third task consists of retrieving some water from the circular river Styx which has fiercely flowing waters and is surrounded by steep, sharp rocks. Zeus sends an eagle that flies from above into the river and gets a goblet full of water. Zeus/Jupiter is associated with Sagittarius, who has gained so much overview that he can easily solve a task that would be practically impossible to solve on the ground of reality. What Leo often does not realize is that what he is looking for is not the actual grail (earth), but its contents, a bit of eternity symbolized here by water from the circular river Styx. Similarly, the sun continuously walks across the sky in search of something special, not realizing that it already contains most of the light.

3.9.6 Virgo

Female, earth (fire \rightarrow water), summer, mutable, adult.

Seasons At the end of summer, a good part of the harvest has to be brought in, sorted out and stocked in. It is still almost as warm and sunny as during the

previous month, but if the harvest is not brought in in time, there might not be enough provisions to survive the winter.

Life A young adult wants to have things her way, but also needs to respect things the way they come, especially if she is already a mother, as babies need some things exactly when their internal rhythms say so.

Axes The axis Virgo-Pisces is about analysis vs. synthesis and about creating vs. escaping clarity.

Themes The first task of Psyche consists of sorting a pile of seeds before the evening. She despairs at first, but then ants come to her help and carry the different seeds one by one to individual piles. As she has not learned yet to plan and structure the future sufficiently, it is not a bad idea for her to just start sorting things out, one by one. Sorting is also related to Mercury, because it requires to create categories, requires to split things. Another association comes from the fact that the greek word for Virgo meant “unmarried”, which encompasses more than just virgin, but rather spans between the two opposites nun and prostitute, symbolizing a woman who defines her personality primarily through herself and at most secondly through a man. There is also a strong association with the moon, through the influence of oriental moon goddesses and related to the fact that Virgo is the first mature female sign.

3.9.7 Libra

Male, air (fire → water), autumn, cardinal, adult.

Seasons At the beginning of autumn, there is a balance between day and night and also roughly between sunshine and rain. Now that the harvest has been brought in, people balance their provisions by trading parts of it with others. They are also tired of sorting out everything in detail and rather like to take chances (cardinal).

Life Adults have to learn to understand their partner and other people. But, especially in a love couple, complete transparency is often not desired because some beautiful illusions might then be destroyed too. Adults also strive for continuity, for not letting every new and exciting thing divert them from their plans, especially since adults have to solve the most complex tasks.

Axes The axis Aries-Libra is about concrete vs. abstract and about bringing off vs. into balance.

Aries fights from the ground up, based on concrete, immediately touchable reality. In contrast, Libra does not think in terms of real objects, but rather in terms of the categories that Virgo has created which, by definition, are abstract. Aries and Libra also affect balance the other way than expected. Stable situations are usually not completely fair and need to be shaken up in order to reach a more balanced state. Libra’s partial insights

often overlook some important details and consequently can bring things rather off balance than into it.

Opposites are two sides of the same, each side can only be defined through the other and often achieves the opposite of what it appears to want. This insight is often also helpful when dealing psychologically with opposites in a birth chart.

Themes The human Teiresias is asked by Zeus and his wife, Hera, to settle a dispute between them about whether men or women have more fun during sex. He answers that women have 9 times more fun than men. Hera gets furious and blinds him, Zeus rewards him with a longer life and the gift of inner vision.

Teiresias partial insight implies that women tend to experience sex rather with all of their senses, with all nine gates to their body, whereas men rather concentrate on their penis. He neglects, however, that it takes a lot to excite all senses of a woman, so that women often do not reach the maximally possible excitement. He also forgets about the second male element, fire, which is why women spend lots of time and effort in order to look attractive to men. Accordingly, Hera’s punishment was chosen to teach him how much fun life is for a man who cannot see. On the other hand, Libra is associated with Venus who is symbolized by her mirror which implies that, to some degree, the beauty of a woman is also self-sufficient, hence Zeus’ reward.

Pregnancy is nine months, i.e. Teiresias was probably also talking about the not so immediate gifts of sex that only women get, namely pregnancy, birth and a child. Each has its specific advantages and disadvantages that then again lead to deeper issues, making it impossible for Teiresias to think things to the end (if that is possible in this case at all). Similarly, women often ask their men for their opinion about issues of beauty and love, say about which dress to wear, but are then almost never fully satisfied with the given answer and not giving an answer is typically also not well received.

3.9.8 Scorpio

Female, water (earth → air), autumn, fixed, adult.

Seasons In the middle of autumn, trees lose their leaves and reveal their branches. People have to make sure that their provisions contain no foul parts and have to decide which animals are strong enough to make it through the winter.

Life In order to ensure the natural development of her child, a mother sometimes has to push a bit, to force her child to do something that is not pleasant, but necessary, and to give emotional reward to ease the transition. This process is also painful for the mother because typically each such step further separates her from her child.

Axes The axis Taurus-Scorpio is about beauty vs. necessity and about doing-it-yourself vs. getting someone else to do it.

Women use their beauty in order to balance the superior physical force of men and to get them to fulfill their wishes. Although both men and women depend emotionally on their lovers, mature women also have to balance their personal interests, including their desire for power, with more collective interests, as it is them who give life and who are thus also the only ones who are believed to have (unconsciously and collectively, not consciously and individually) the right to decide when to take it, within the limits of physics. This is a very difficult task and requires to find a balance between penetrating and respecting boundaries, one's own and the ones of others.

Themes Psyche's second task is to bring back some fleece from fierce rams that live near a river. When she gets there, she is lulled into sleep by waving reeds and when she awakes, the rams are asleep so that she can easily collect some fleece that have stuck to thorny bushes.

Women are physically less strong than men. In order to reach their goals, they eventually have to give in to a man, to break the tension and to allow themselves to lose control for some time, to later collect the fruits that have been produced by men's power. Of course, also the fierce rams, the reeds, the thorny bushes, the river, etc. describe aspects of Scorpio, as well as of Mars and Aries.

3.9.9 Sagittarius

Male, fire (earth \rightarrow air), autumn, mutable, old.

Seasons At the end of autumn, there is not much work to do, except to make some final preparations for the winter. This includes quickly checking and improvisely fixing all kinds of things.

Life Old people have gained a good overview over the world and can thus often compensate for their naturally reduced physical abilities by finding a quick and easy solution to a problem.

Axes The axis Gemini-Sagittarius is about interface vs. overview and about planning vs. improvising.

Themes While hunting, Herakles accidentally injures his friend, the centaur Chiron, with an arrow that had previously been used to kill the Hydra and hence contains deadly poison. Because Chiron is immortal, however, he cannot die and has to suffer deadly pain until, finally, he is accepted into the underworld by Zeus, in exchange for Prometheus who had stolen the secret of making fire from the gods and brought it down to earth.

Just one aspect: Like Gemini, Sagittarius deals with the unconscious, with retrieving some things from it and with bringing some things back, as the number of con-

scious thoughts remains roughly constant. Unlike Gemini, he prefers to find new paths instead of negotiating existing ones. In downtown Miami, in the middle of a small bridge, there is a sculpture of a man who shoots an arrow up into the sky while protecting his wife and their child.

3.9.10 Capricorn

Female, earth (fire \rightarrow water), winter, cardinal, old.

Seasons At the beginning of winter, one has both to stay close to reality and to think far ahead in order to survive, because even a short period of time without heating or food can be fatal. This is also a time when seeds are planted for new things to grow in spring.

Life Old people see and hear less well, their bodies no longer allow them to do as many things as they want to do. They have to find other ways to achieve things, by carefully planning and using minimalist means.

Axes The axis Cancer-Capricorn is about creating complexity vs. making it as simple as possible and about leaning on to structures vs. using them.

Cancer likes to create new things, to expand complexity, but also needs protection whereas Capricorn rather uses existing structures and simplifies them while always keeping them functioning. He typically forces others to decide by simultaneously following different paths, so that others have to decide before an unwanted path succeeds. This procedure can be considered betrayal by some (and sometimes it is), but essentially it is realism, as follows.

Fire signs are idealistic, they typically either say the truth or say nothing at all. Earth signs, in contrast, are realistic, they know that it is sometimes better not to say the truth. Taurus does this mainly in order to increase harmony, say by not telling the truth about how much he owns in order not to make others unnecessarily jealous. Capricorn typically only lies when nobody can prove that he did, he is a master of using existing structures to his advantage. Virgo is in between.

Again, both sides of the opposite often achieve the contrary of what they appear to want: Cancer tends to support any structures that protect him (like his mother did) whereas Capricorn tends to undermine structures by purposely exploiting their gaps.

Themes In mythology, Kronos kills and replaces his father, Ouranos, but is himself killed later on by his son, Zeus. This shows two possible choices in life, upholding traditions and restricting oneself to them, also in order to develop one's abilities optimally due to restricted possibilities, or choosing freedom and replacing old traditions with something new. Capricorn and Cancer do both, but with differing emphasis.

3.9.11 Aquarius

Male, air (fire → water), winter, fixed, old.

Seasons In the middle of winter, the air is clear, nature rests and branches are cut to size. Survival depends on distributing resources equally among each other.

Life The older people get, the more transparently they see things, but also the more they lose the ability to learn and to adapt to new things. Their lives become periodic. This determination also allows to perform the last step in sorting and simplifying the year's harvest, namely to detect and remove the last superfluous elements (superfluous in a purely functional sense).

Axes The axis Leo-Aquarius is about special vs. general, about egoism vs. altruism and about timelessness vs. progress.

Just the less expected side here: Aquarius wants to give everybody equal amounts, but often also forgets so completely about himself that he does not realize that he has assumed a special role, that he has more than the others. Leo fights for his individuality and often egoistically produces timeless, special things that then other people want to have too, making them finally normal, average again.

Themes The titan Prometheus not only brings people fire, but also the knowledge of architecture, navigation, astronomy, and so on. His brother, Zeus, at some point wants to destroy humanity, representing the unconscious, suppressed side of Aquarius which is still jealous of what others have.

3.9.12 Pisces

Female, water (earth → air), winter, mutable, old.

Seasons At the end of winter nature is still hostile, but also starts to show some first signs of life again. People welcome anybody who brings food or distraction, because they want to escape the clarity and now dull equality of the previous month. People mix all kinds of influences, but also do not tie their links too closely because they want to avoid too much pain when somebody dies before the end of winter.

At the end of Pisces, everything becomes connected to everything, until finally this becomes equal to nothing being connected at all. That is when Aries starts a new year again, filled to the brim with all of the imagination that Pisces have produced. More figuratively speaking, the air that Pisces are made of finally expands to infinity, only to return bundled as the wind that is driving Aries.

Life Old women can understand almost everything and everybody because they have seen it before. They can and must survive by doing very little, by perfectly adapting to their environment. Furthermore, old women are well aware that any definite decision also destroys a

world of possibilities, as recognized most clearly when it comes to the ultimate decision, to ending a life.

Axes The axis Virgo-Pisces is about analysis vs. synthesis and about creating vs. escaping clarity.

The threads of life of people form a tree. Only women bifurcate into their children before they disappear from it. This tree resembles the tree of categories that Virgo creates by sorting the world. She untangles the threads of life, only to recombine them again into different categories. Pisces combine all kinds of different threads but mostly only loosely and evasively, recognizing that everything is related and nothing uniquely belongs together, except a mother and her child.

Virgo tries to understand by analyzing things, but typically quickly ends up in state of mind filled with many unconnected details. Pisces mix many influences, so that each of them is quickly recognized to be just a variation of the same and thus rather increases the clarity they wanted to escape.

Themes The mythology of Pisces is very old, going back to the phoenician goddess Atargatis and her son Ichthys, who correspond to the two fish in the sky who are connected by a ribbon, symbolizing the connection of a mother to her son which naturally weakens with time, but never completely disappears.

Pisces combine the very complex with the very simple. The computer program Eliza, an early program that tried to produce artificial intelligence, got very far with very simple means; it was essentially a mirror, like the surface of the sea. If you typed "X are Y", it would typically respond "Why do you think that X are Y?" or if you mentioned, say, your mother, it would ask you to tell it more about your family, and often it would just ask you to go on. Surprisingly, many people experienced Eliza (who they thought was a real person typing the answers) to understand them and to feel with them, something that hardly any of the much more complex computer programs of today has ever achieved.

3.10 Astrological Ages

H31 Astrological ages are influenced by their assigned star sign (a) and also, but less strongly, by the opposite sign in the zodiac (b).

The earth's axis precesses with a period of about 26'000 years. Consequently, the star sign that carries the sun at the beginning of spring changes every about 2150 years. In analogy to months in a year, these astrological ages are believed to be influenced by their respective star sign. H31b is probably both belief and a natural counterreaction.

The age of Aries was roughly from 2000 BC to 0, the age of Pisces followed afterwards and is very roughly now in the process of being succeeded by the age of Aquarius.

In history, one needs to know a lot of facts in order to correctly distinguish between wish and provable reality. Hence the following will (hopefully) be based on relatively conservative and widely accepted facts; more speculative projections into the past have been avoided here, although, for a historian, these would probably be the most interesting topics. But the purpose here was to test the model on reality, and also to reveal some mechanisms behind collective wounds like the holocaust.

If you are emotionally still close to some of the events related to world war two, you may want to skip the second part of the subsection about the age of Aquarius, but note that its effect can also be healing.

Note also that the discoveries presented here have yet to be quantitatively verified and, although I think that at the very least H14b together with the four basic pictures for the elements (fire, cloud, river, tree) in conjunction with H19 is true, some associative “conclusions” that I have made may turn out to be biased or even false. Hence, please consider this before you judge things too quickly; it might be worth to let experts from different sides some time to offer their insights too.

3.11 The First Age

In mythology, the first age was the age of Leo, marked by the invention of fire, then came the age of Cancer where people became farmers, then the age of Gemini when written language and the wheel were invented, and then the age of Taurus, marked by the pyramids.

Although it is true that people settled during the age of Cancer, fire was invented already a lot earlier than indicated and both the wheel and written language only came into widespread use during the age of Taurus. This suggests that meanings of star signs had rather been adapted to historical knowledge at the time precession was discovered than the other way round. Hipparchus discovered precession ca. 130 BC. However, it cannot be excluded that the collective unconscious was aware of it earlier, by comparing individual observations over centuries (H8c), but this seems hard to prove or disprove.

Anyway, at least the age of Taurus shows clear signs of the axis Taurus-Scorpio. The pyramids are both man-made mountains and graves. Various different sphinx sculptures from the age of Taurus combine a human head (Aquarius) with the body of a lion or a bull and with a scorpion tail or eagle wings (Scorpio). They symbolize the four points of the compass, i.e. the cardinal cross. Minoan culture was also influenced by the axis Taurus-Scorpio (see myth about Minotaur above).

3.12 The Age of Aries

In mythology, Zeus founded the oracle of Delphi by letting two eagles fly, one from the west and one from the

east, into opposite directions to meet in the middle of the world, at its navel. This is a symbolic description of how the ancient greeks created a balance to Aries during the second half of the Age of Aries, as follows.

Today’s zodiac with twelve equally sized star signs has evolved out of a more archaic zodiac in which what is now Libra, was the claws of Scorpio (who still kept the stinging tail). The eagle is an ancient symbol for Scorpio, possibly because the adjacent star sign, Sagittarius, who is associated with Zeus, is a hunter who was maybe using birds for hunting in ancient times. Hence the two eagles and their wings symbolize the scale pans of Libra that emerge out of the ground of Aries.

Historically, the oracle of Delphi has been dedicated to the sun god Apollon since at least 800 BC, earlier findings indicate a cult related to the earth goddess Gaia. Around the same time, the oracle of Siwa was founded in Egypt and dedicated to Amun (later to Zeus).

The axis Aries-Libra is clearly visible in ancient greek culture. Greek mythology tells concrete stories of heroes and gods with human bodies and vices, but simultaneously also describes very abstract concepts (cf. H19). Astrology is based on a well-designed balance of opposing principles. On the other hand, these opposites correspond to immediate reality: The key opposites hot/cold and wet/dry (or soft/hard) are part of the very first experiences that a newborn child makes.

In the age of Aries, geocentric models of the world were favored, probably for two important psychological reasons: They fit the self-centricity of Aries and also produce what the greeks called the “music of the spheres”, the complex apparent interaction of the planets (gods) in the sky, a prerequisite for astrology⁶.

The greeks were the first to describe music by harmonies. While Aries is thinking in real space, Libra is trying to think in frequency space, in terms of recurring similar events in the world. Full periodicity is reached in crystals, and hence in Aquarius because crystals are made of equal parts and the most prominent ones known to the greeks were transparent (H17de). Accordingly, in the view of the ancient greeks, the planets moved on invisible crystal spheres.

3.13 The Age of Pisces

Everything that is man-made is influenced by the time people were living in (H9c). Naturally, this affects also people’s perception of religion, as it was mortals who wrote down the knowledge of the gods. However, the coloration of religion by the limited perception of people does not say anything about the existence of god or gods,

⁶In a heliocentric view, planets move at almost constant speeds on almost circular orbits; i.e. the beauty of the psychological correspondence of what happens in the sky to what happens on earth would essentially have been destroyed.

just as the coloration of one's own psyche by one's birth date does not prove that oneself does not exist.

The god of the old testament, a strict, invisible god that punishes or rewards immediately, was replaced around the beginning of the age of Pisces by a more gentle, forgiving god. Since the age of Pisces, he is joined in the sky by his son and the virgin mother Mary. Islamic religion shows similar traits of the axis Pisces-Virgo, with a stronger emphasis on Virgo, as follows.

Moslems pray into the direction of Mecca at definite times of the day. This reflects Virgo's attempt to create structure, to do things her way despite of outer circumstances. Similarly, moslems feast during the ninth month of their lunar calendar whereas christians feast at the end of the solar year, when food used to be rare. The Koran gives detailed practical rules about many things, including under which exact circumstances a man is allowed to divorce and remarry.

Islamic religion tries to achieve justice already in real life, before paradise. Giving to the poor and learning to cheat in order to achieve justice are considered virtues, although the latter may not be openly admitted, exactly because it is so. The first comes from the fact that at the end of summer, nature gives without expecting anything in exchange and similarly, people give away those parts of the harvest that they have in abundance and cannot preserve for the winter. The second is because, in order to stay true to herself, Virgo sometimes has to cheat, also in order to escape the often somewhat naive and inflexible visions of the previous sign, Leo. In that sense, cheating, when used wisely and with measure, can also be a means to achieve justice for a woman who is physically weaker than her man.

Today, the middle ages are typically perceived as a time where not much of importance happened. This may be somewhat misleading, as Pisces imagine a lot, but actually do little. The drawings of Leonardo da Vinci from around 1500 indicate that a lot more was collectively present than people were willing to realize. The closeness of Pisces and Virgo to the flow of nature also shows in the refined adaptation of star signs to seasons and life, and might also explain why, unlike probably during the transition Taurus-Aries, this time Aries remained the first sign of the zodiac.

The renaissance appears to have been a counterreaction to Pisces. From then on, people have started to analyze things, to open things up and look inside. Subsequently, many different branches of science have been created that have each detailed knowledge of their fields, but also lack connections to other branches of the tree.

Early scientists were sometimes accused of having made a pact with the devil. This can be understood astrologically, too. The devil is a mixture of Pan, a god with goat feet who is hence associated with Capricorn

and forces to decide, and of Hades who is associated with Scorpio who digs deep in order to decide. In other words, the devil personifies the main fear of Pisces, namely definite knowledge, i.e. the destruction of illusions, of all other possibilities how the world could be. Faust sold his soul, the symbol for all possibilities in the human mind, to the devil in order to obtain definite knowledge about how the world is. Since Virgo is striving towards Capricorn, towards definite knowledge and structure, some link to the devil had been suspected in early scientists at the time.

The ancient greeks had no concept of good and evil. To them, the only real sin was Hybris, exaggeration relative to the will of the gods. Of course, this reflects the axis Aries-Libra, but also reveals a deeper insight into the world. The oracle of Delphi had two inscriptions: "Know yourself" and "Nothing in excess". Thus Hybris is relative to how well the individual deals with his/her limitations and with the collective forces acting on him/her, afterwards Hybris is judged collectively.

3.14 The Age of Aquarius

There are many different opinions about when exactly the age of Aquarius has started or will start, but nobody knows for sure. First clear signs have appeared since the 18th century, starting with the movement of enlightenment, the french and american revolutions and the discovery of Uranus.

The movement of enlightenment was called "Aufklärung" in german, which means to clear up. The light of the sun makes things clear and obvious, i.e. it makes conscious. This is the common ground of Aquarius and Leo: Both put their hopes into individuals, believing that more conscious knowledge will allow them to better plan their common and individual destinies.

The american and french revolutions of 1776 resp. 1789 realized ideas of the movement of enlightenment. They created new political systems based on individual freedom, democracy and equality before law. The influence of Virgo is also still clearly visible in these themes, and especially in the concept of separation of powers into legislature, executive and jurisdiction.

In 1781, Uranus was discovered, the closest planet to the sun that is not visible to the naked eye. The required detailed observations of the sky can be attributed to Virgo, but the invention and improvement of the telescope fits better with Aquarius-Leo, as follows.

Early telescopes magnified the light from the sky using lenses. Lenses are transparent and can be used to focus sunlight. Similarly, the two fixed male signs, Aquarius and Leo, like to focus onto a single issue, Leo also because this resembles the focus of a lion on its prey. They have complementary goals. Whereas Leo tries to

reach a holy grail, something that appears to be real, but in the end is in the world of ideas, Aquarius tries to realize an ideal, a vision about how some things in the world should be. Both create progress, although Leo sometimes rather inadvertently when his creations are adopted and thus become normal.

Uranus had been spotted several times before its conscious discovery in 1781, but, at least consciously, been mistaken for a fixed star. Hence, it might be worth to investigate more closely since when astrological influence of Uranus is provable (H8c). Neptune was discovered in 1846, after its position had been predicted from small deviations in the orbits of known planets. Pluto was discovered in 1930, after a systematic search of the sky. The details of the discoveries of these planets are very complex, including how and when they got their names.

Since the 19th century, things have continuously progressed. Industrialization has allowed to bring new inventions quickly and equally to many people. Women have obtained more equal rights and duties compared to men, different races and sexual orientations are more equally treated by law. Public schools give many people detailed conscious knowledge of the world.

The idea of a special world for children, with its own books and toys, can be related to Leo. In summer, people reconnect to their families and to nature, i.e. to the ground (earth) they came from. Thus Leo is ultimately trying to reconnect heaven and sky that had been separated when the world was created. Leo gets along well with children, old people and animals, i.e. with everybody with lesser abilities than adults.

Progress also shows in astrology itself. In the 20th century, a new method for doing relationship astrology was invented. Composite charts melt two birth charts into a single one, typically by taking the midpoint of respective planets (e.g. suns in Aries and Gemini typically give a composite sun in Taurus). Of course, the natural way to combine the fates of two things is still by the moment they met, which is the very idea behind astrology. Synastry emphasizes the relativity of people and relations, hence it might be interesting to find out when exactly it became popular.

Because the three new planets are invisible, they are considered collective planets; i.e. they not only apply to individual fate but also to collective fate. In that sense, Pluto is believed to be what is missing in the world at the time of birth. Now, between 1914 and 1938, Pluto was in Cancer which suggests some relation to global events at that time in which protection was apparently lacking. In 1977, a small piece of matter was discovered that orbits between the orbits of Saturn and Uranus and thus connects collective and individual planets. Since scientists were also not sure whether it is a comet or an asteroid, they chose the name Chiron (the centaur mentioned in

the description of Sagittarius). Psychologically, Chiron is intended to provide a balance to Pluto, to heal rather than to penetrate boundaries and to heal the wounds of the holocaust.

This leads to some deeper and darker sides of the new age. During the 20th century, different political systems related to the new age have been painfully tried out. Communism and fascism put the collective clearly above the individual. This led to police states that tried to make every citizen's life totally transparent and to mass propaganda with omnipresent pictures of only a few individuals and symbols. People that did not fit in were focussed in concentration camps or gulags and either killed or let to die there. Early capitalism represents the other extreme. It made just a few people very rich and many people very poor.

All three political systems missed the ideal of the new age, namely to give everybody a high common (and guaranteed) standard of life without removing the individual opportunity to achieve and keep something in life. Today's political systems are closer to this ideal, but also need to be actively kept in balance.

Jews are still strongly influenced by the age of Aries; this has linked their fates strongly to the new age. After the revolutions at the end of the 18th century, Jews have gradually been integrated more into society, have been allowed to go to universities and to participate in political life. Naturally, they have started to contribute to society and also to do what Aries always does after the end of winter, namely to realize the things that Pisces had dreamed up during winter. Freud (and Jung) discovered the unconscious, Einstein the theory of relativity. Even Marx (and Engels) had perfectly noble motives when they invented communism.

But Aquarius is not Aries, he likes progress but he also hates disorder. In that sense, collective unconscious counterreactions, also of jealousy, within the people living at that time have probably helped fascism to get to power to some degree.

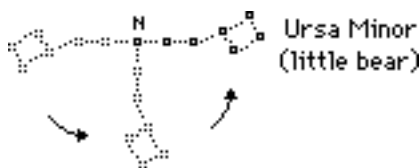
Freud discovered that even small and unconscious feelings of guilt can lead to psychological problems. For example, somebody who cared for and nurtured a close older person for a long time, will, of course, mainly be sad when that person dies, but subliminally also be relieved. Subliminally, there may have been more archaic feelings (typically in the percent range) that were wishing for the person to die so that oneself regains freedom again. Clearly, this can lead to feelings of guilt.

Similarly, although very clearly the guilt for killing millions of people lies primarily within the people who killed millions of people, and not with the ones killed, some feelings of guilt may prevail because maybe Jews were a bit too carelessly eager to change things. On the other hand, Aries is almost by definition Hybris and no

single person is fully able to judge what was actually Hybris and what was not, and yet every single person has to consider his or her actions in order to reduce the chance for something like the holocaust to happen again. It must also be noted that jews were only trying to realize things that had been collectively dreamed up previously, maybe already since Leonardo da Vinci.

According to an anecdote, the swastica symbol of the nazis was designed by a certain Dr. Kron and presented to Hitler who decided to change the direction in which it rotates. Superficially, this shows the dilemma of the dictator who is supposed to be superior in everything, but in reality is not, and hence chose the only possible change to the design that would not mess it up. But symbolically, the meaning goes considerably deeper.

The cross is an ancient symbol for the tree and hence for the element earth. The swastica variant seems to have appeared quite independently world-wide in different cultures, which is understandable as one of its origins is the apparent motion of stars around the north pole in the sky, which looks as follows today:



Around 3000 BC, not long after the invention of the pottery wheel and the chariot by the sumerians, the polar star was Thuban in the constellation of Draco and it was circled by the two stellar chariots Ursa Major and Minor. Hence the swastica symbolizes time and progress, also related to the invention of the wheel. Since rotation can produce fire by friction, it is also seen as a sun wheel, similar to the sun ball that Atum was pushing across the sky in ancient egyptian mythology.

Now, the name "Kron" derives from Kronos/Saturn who also gave the chronometer its name, i.e. the fact that Hitler reversed direction shows both the reactionary nature of fascism that wanted to turn back time and the artificiality of Aquarius compared to Capricorn who also forces to decide, but leaves nature free choice in which way to decide. Similarly, the vision of the Übermensch with blue eyes (Aquarius) and blond hair (Leo) fits the new age, but the name "Arier" is also related to Aries, i.e. in several senses the nazis simultaneously tried to destroy what they wanted to restore and vice-versa, using the very means of the new age.

Relations between perpetrator and victim are never completely black and white. There exist always weaker and subliminal (but juridically rightfully not relevant) drives in the perpetrator to heal and in the victim to suffer. To some degree, jews were maybe willing to suf-

fer just in order to be part of society. There appear to have been several astrological influences that have further increased this, like this basic one: Germany goes back to the coronation of Charles the Great to emperor of the roman empire (later of german nation) at christmas in the year 800 by the pope in Rome. Later founding dates have reiterated a relation of Germany to Saturn, the planet that gave its name to Saturday, the day when the fire of Aries is not allowed to burn.

Both Leo and Aquarius are emotionally quite distant to actual people, they mainly see themselves as individuals and others more in general terms. Accordingly, their focus on founding Israel, although in global terms probably a good idea, also lacked compassion with the other people, Palestinians, who had been living there for quite some time; this has to be considered too.

Aquarius has a tendency to neglect quality for equality, to go too quickly for a simple solution that in the end does not really satisfy anybody. Cloning is probably such an example, or newly emerging cults that force people by mental terror to make everything conscious, or people who think that they can live from light alone and will never have to die if they do not want to, like an old man. The new age has lots of good sides, but it is everybody's responsibility not to let its darker, limited side win too much.

Finally, one has to be careful not to confound the weather with the climate. As I am writing this, there are two collective planets, Uranus and Neptune, in Aquarius and the generation with Pluto in Leo is in power. Thus, political correctness, for example, is probably not solely related to the age of Aquarius.

3.15 Mythology in Life

In [1], Richard Feynman describes how he traveled by car from the Los Alamos research facility where the atomic bomb was built to the hospital where his wife, Arlene, was about to die from tuberculosis. On the way to the hospital, he picked up a couple of hitchhikers who turned out to be very helpful because the car had three broken tires on the way to the hospital and the hitchhikers at least once explained the situation to the guy at a garage so that he would fix the car quickly, something that Feynman himself would not have dared to ask for. Later on, after his wife had died at the hospital, he noticed that her watch had stopped ticking, still showing the time of death. He noticed quickly why this was so: The nurse had to pick up the watch to read the time of death in order to note it down, and the watch was a delicate digital watch that would stop easily. Feynman describes that he was astonished that he was not very sad at the moment and still thinking about such things; the realization came at a later time when he saw a dress

in the window of a shop of which he thought that Arlene would have liked it.

There is a touch of Gemini in Feynman's initial reaction to the death of his wife; I have that in me too. It is some maybe extreme form of diverting feelings from the actual events to culture, to making something better out of it (see previous part about Gemini). Hermes, the god associated with Gemini, is also often the one who accompanies people down into the underworld and back up. He is the one who does all the diplomatic negotiations with the creatures of the underworld. In this story, Hermes is symbolized by the two hitchhikers (travelers) who do the talking with the guy at the garage. In sumerian mythology, it was two sexless beings that were not susceptible to the powers of the great mother who rules the underworld who rescued Inanna from it.

The thing with the watch that had stopped to tick illustrates that fate can stay perfectly within the laws of physics and still achieves to mend events that are unavoidable. This is what Pisces do, they bring together different threads of fate and combine them into something meaningful that elevates the death of a person to something higher.

On the way back, the car had another broken tire. The first three broken tires symbolize fate, the fourth closes the circle and starts something new. Not everything in life shows such clear symbolic meaning, but everything of emotional importance clearly does.

The above has been written on the evening of 30 September, 2001 during less than one hour, starting at about 9 pm. Some factual precisions: The two hitchhikers helped to fix the first broken tire and talked to the guy at a gas station (not a garage) for the second one. After the third broken tire, Feynman had to hitchhike to the hospital. What I called a watch, was actually a clock (details see [1]).

About a month later, I wrote an experimental essay that was intended to maybe follow here. Since the first part of it still feels quite good and appears to reveal more and deeper relations than I consciously expected, I would like to reproduce it here:

The deep, dark secrets of the world are guarded by the heavier elements, i.e. collectively and unconsciously by the female side in both women and men, which also decides about life and death (within the limits of physics). Consequently, such issues should not be approached without the necessary respect. As man, I am naturally limited in this respect. All I can give you, is maybe a few general tips and insights which I have written during autumn, the season that contains the two older adult signs who have the unthankful task to decide.

The fourth task of Psyche consists of retrieving a box of ointments from the underworld. She has to take two coins and two barley cakes down there, to pay the ferryman Charon for the ride across the river Styx and to divert the guardian dog Cerberus, both on the way down and up. In the underworld, an old woman begs her for one of the cakes and a beggar asks for a coin, but she is not allowed to let herself be diverted from the plan if she wants to make it back up to the surface.

This shows, of course, Libra's strive for continuity and consciousness. Gemini can go in and out of the unconscious very quickly and easily, but they retrieve little from it; when they are inside, they look out and vice-versa. Retrieving something from the unconscious has to be done very carefully and one is not allowed to go as deep as one could, as one would then no longer be able to find the way back.

In [5], a situation from ancient Egypt is described, between the "land of the living and the kingdom of the dead". In the center of the hall stood Maat, the goddess of truth, ready to weigh the heart of the deceased in a large scale. Forty-two judges, some with animal heads, sat around the hall listening to the soul of the deceased who had to tell them about every bad thing that he did *not* do. If the sins outweighed the heart of the deceased, it was devoured by the monster Amemait, a mixture of crocodile, hippopotamus and lion.

The world reflects in the most unexpected places: In [6], the computer "Deep Thought" calculates the answer to life, the universe and everything to be 42. Now, $42 = 2 \times 3 \times 7 = 6 \times 7$. It spans all seven planets resp. gods, giving each of them all six possible opportunities (axes), also since the number three which means fate, i.e. the opposite of opportunity, becomes six when each fate is given an opposite.

Hermes

Hermes leaves the cave in which he was born twice on the day of his birth. The first time, he leaves during daytime, quickly finds a tortoise and fabricates a lyre out of its shell. The second time, he leaves at dusk, travels far and steals some cattle from the sun god Apollon by walking backwards as to trick out any prosecutors. Back at the cave, he kills two of the cattle and prepares 12 equally sized offerings to the gods and then eats one of them. After some time, Apollon manages to trace Hermes down and takes him up to mount Olympus in order for Zeus to judge the matter. Although Apollon is angry at first, after hearing Hermes play the lyre, he happily trades the cattle for the lyre and quickly learns to make more beautiful music than Hermes ever did.

This describes the relation between sun and Mercury. Mercury, as the closest planet to the sun, never travels farther away from the sun than into the next or previous star sign. In other words, Hermes went first forward into the next sign to get the lyre, then back to kill two of the cattle, in order to end the age of Taurus and to redivide the zodiac into twelve equally sized parts. Apollon, who is also related to Leo, is not as flexible as Hermes and hence needed a bit longer to realize that the old age had ended and the new one had beautiful things to offer, too.

Erwin Schrödinger once suggested that the conscious mind is where new things are learned. Learning to play a new instrument, like a lyre, requires at first a lot of conscious work until it becomes automatic (i.e. unconscious) again and one can again fully enjoy making music and forgets about the previous efforts.

In the myth, Zeus, who is associated with Sagittarius, complements the natural process of making some things conscious and letting others sink back into unconsciousness. After all, people had been making music a long time before there were instruments, using their own voices, not knowing that the human voice itself is made by oscillating strings too, namely by the vocal cords. In other words, even though the greeks had discovered how to describe music analytically in terms of individual frequencies, after a while things turned out to be not so new, but rather variations of something that had existed all along, as it almost always is.

In retrospect, the unified view of the new effect presented in section one split into only a few simple opposites in section two. Combining these elements in section three has both analyzed and resynthesized the world, although in a simpler and more conscious way. Thus I

hope that the following section (4) will do the rest to close the circle and also to create a few new possibilities about how the world can be — returning also to physics and philosophy, starting with two questions that I have first asked myself between 1993 and 1995.

4 Science and Philosophy

Q1 Are quantum mechanical correlations mediated by virtual particles behind the scenes ? Since virtual particles can “fly” faster than at the speed of light, this would mean that behind the scenes everything is connected to everything that is, was and will be.

Q2 Consequently, does the result of a quantum mechanical measurement come about by summing over all virtual particles in some way ? Does this mean in some sense that reality is just a matter of will ?

Of course, these questions do not qualify as scientific hypotheses because they are not specific enough to be verified experimentally. For that, one would have to be more specific about the expressions “mediated” and “in some way”. Anyway, I will now provide some thoughts that might help other people turn these questions into hypotheses or maybe lead to completely different things.

The material world is not literally made of fire, air, water and earth. But maybe this more abstract formulation is of some use in some circumstances:

- ① (fire) individual imagination
- ② (air) logical consequences
- ③ (water) collective wishes
- ④ (earth) reality

Many things can be psychologically associated with the elements, like the five senses⁽¹⁾ or the four seasons⁽²⁾ (see numbered references at the end of this section). But, recursively speaking, that would again be ③ and not ④. Scientific theories are ② based on ④, whereas psychological astrology tries to be ③, but usually also contains some ①. The notion that “the fourth is different” fits with the fact that reality is often different from both individual and collective wishes and sometimes also from what science predicts. Time is treated differently, but similarly, to space in relativistic theories. Gravitation, one of the four known forces in nature, is intertwined with space-time, has no negative charge (mass), is the least understood force and yet is what is pulling everything on this planet down to earth ④.

On the other hand, there are only three families of quarks and leptons, not four. If you toss four coins, there is a 12.5% chance of having four equal faces, a 37.5% chance of having two pairs, and a 50% chance of having 3 + 1, i.e. the chance that the fourth is different is really higher than any other combination.

In a two-slit experiment, if one looks ①⁽¹⁾ where the electrons are going, they are localized particles ④, but if one just thinks ② what they will do, they behave like waves ③ until one finally measures on the screen behind the slits.

Niels Bohr had the sun in Libra. This fits the abstract nature of quantum mechanics that somehow seems not to be totally transparent, the balanced duality between particle and wave that is not totally resolved. Einstein had the sun in Pisces, where everything is connected and hence becomes relative. Virtual particles with “speeds” larger than the speed of light are particle or anti-particle depending on the observer. It seems that one has either to choose the dry pair fire-earth in which case the world requires connections that are faster than the speed of light, or the wet pair air-water where locality is preserved at the cost of visualization.

The Gedankenexperiment of section 2 suggests that if two people come as close as 10 cm, forces between them could become as large as 10^{16} N, or if forces were only 1 N, at 12'000 km a force of 10^{-7} nN would have to be detected. In other words, apparently the Gedankenexperiment is either not compatible with reality or forces are very adaptive. Let me consider the second case, just for a few lines of speculation. It has an organic quality. A twin earth orbiting Alpha Centauri would roughly feel the same force between 5 billion people on each side than between two people on opposite sides of the earth, i.e. with a little more matter, connections could be felt. Let me push the envelope even further, assuming that not only organic matter is involved. Then the earth could feel all the planets, in which case, for example, influence of Uranus, Neptune and Pluto would presumably be visible in history before their discoveries, i.e. this would be verifiable to some degree. Maybe the volcano eruption of Santorini that lead to the demise of minoan culture, with a symbolic meaning that would fit the age of Aries, was no coincidence, maybe the earthquake in Turkey after the total solar eclipse of summer 1999 was an emotional reaction of earth.

Pushing it even a little bit further, if the universe was alive, where would the DNA be if not in the position and properties of the stars. Do physical properties of planets match their symbolic meanings ? Venus is very hot and has a high pressure on its surface, but on the other hand, one could land on it without a parachute if one was able to withstand the heat and the pressure. Jupiter really protects the earth by catching all kinds of objects that would otherwise hit the earth.

Probably it is not that easy, it is unlikely that the planets care about greek mythology. But maybe a more symbolic and associative look into the sky could really bring some new insights, there is nothing to lose by doing so, as long as one clearly distinguishes hypotheses and

speculation from verified facts. Maybe, in the end, reality is not all male in the sense “me here, stars there”, but also a bit female “me and the stars are one”. Of course, these differences come about because women can directly identify with their mothers who were the world before birth. For men, identification is more difficult, because the father is a more abstract concept; at first the father seems to be a stranger that also happens to live in the same house⁽³⁾, only later common roots are discovered.

In a scene where a handsome man is kissing a beautiful woman, the man might rather think “hey, I would like to kiss that girl”, whereas a woman might rather think about how it would be to be kissed by that man.

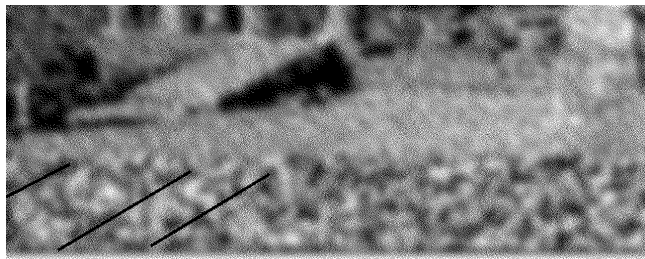
When you are born, there is first “me”. Then you realize that there is you and the things you see, that you see more than one thing; that is space. The things you see change; that is time. Depending on how you want what you see to change, things will change differently. That was some essence from Kant and Schopenhauer.

You are sometimes hungry, some things hurt, you can feel emotional feedback to what you are doing; you have a body, there is an outside world, and other people exist.

In other words, “me and the stars are one” is probably a bit exaggerated, but of course, this is not provable in a strict sense, it is to some degree only the assumption that almost everybody makes.

Pythagoras had the idea to represent the world by numbers; this is still the basic idea behind exact science. Turning the world into a finite number of bits has also some disadvantages: It is not sure that nothing crucial is lost during the process. The measurement process itself cannot be described scientifically, simply because there are no numbers yet. Even in this simplified world ②, elementary things, like that mathematics is free of contradictions, cannot be proven mathematically. (Ironically, this has been mathematically proven).

Calculating astrological influences of everybody and every event on everybody’s lives appears not to scale well with a classical computer that flips discrete bits. Hence the collective unconscious ③ might think quantum mechanically, by superimposing waves. The screen shot of Delphi 2.00 on page 29 appears to show lines in the concatenated signature that involved MD5 and SHA-1 hashes, as well as RSA, thus enhancing the beauty and harmony of a picture corresponding to a document that was written when the sun was in Taurus⁽⁴⁾:



The proposed order of the elements suggests that individual wishes are smaller than collective ones and also than reality. In other words, the world is mostly discovered and not invented, and individuals are free to some degree, but limited in others. Of course, this is nothing new, nobody can walk through walls or fly up into the sky without additional devices. In that sense, collective astrological forces are just another set of restrictions that mostly influence how and when one can best do something, but usually not what.

In 1336, Petrarca ascended mount Ventoux, an event that arguably marked the beginning of the renaissance, and of things that followed, like the reformation (Jan Hus died in 1415) and discoveries of new continents. The story Petrarca tells, reminds me of the myth of Hermes and Apollon, including even an old shepherd that tells Petrarca, his younger brother, and their two servants, that it is not worth to ascend the mountain.

When Petrarca looked down from the mountain, his thoughts went back to Hannibal who had fought his way across the Alps, “bursting the rocks, if we may believe the report, by the application of vinegar”⁽⁵⁾. The word “romantic” derives from Rome, a city that was founded by twin brothers. Mercury is only visible in the sky close to sunrise or sunset, i.e. change is romantic.

The roman empire appears to have had a special role in starting the age of Pisces. Carthago was destroyed in 146 BC, around the time when Hipparchus lived and shortly before the first star of the constellation of Pisces, α Pisces, passed the spring equinox in ca. 103 BC. This star is also called Alrisha (node), because it connects the two fish in the middle of a stellar umbilical cord that connects mother and child and which is cut at the moment of birth, when there is the first cry and the time of birth is noted down. Assuming that an abstract cycle, detached from actual stars, started then, the age of Pisces would end around 2044, but since the transition of ages appears to be quite gradual, this is likely to have little direct influence on individual lives.

History still has many secrets. The end of the last ice age correlates with the mythological start of the age of Leo. It appears that the egyptians did not purposely build the three pyramids in Gizeh to look like the belt of Orion⁽⁶⁾, but on the other hand, it appears unlikely that no collective purpose would show in these huge monuments. Orion is situated close to Taurus in the sky and opposite to Scorpio, like the scorpion that Orion was fighting in greek mythology. The romans built the Via Julia/Augustus which allowed them to cross the Alps more easily than Hannibal, leading the path to the conquests of France and England. The invention of hay (or a least its refined use) appears to have helped civilization to penetrate into regions with cold winters where horses find no green grass in winter⁽⁷⁾.

Are there decans, grand moon phases, that divide the age of Pisces into three parts, maybe first influenced still by Aries, then exclusively by Pisces and finally by Pisces and Aquarius ? The above estimations would put the transitions around 612 and 1328, i.e. close to the Hegira of 622 and to Petrarca's ascent of mount Ventoux.

There are millions of possible associations that can be made. Especially my generation with Pluto in Virgo runs some risk to overload the brain in too many details. I once heard the story of an american who traveled to Italy for the first time in her life. She liked the renaissance very much and overloaded her brain so much during her stay that she had a breakdown and took at least months to recover. So, please take care.

Analytical thinking ② is limited just like a classical computer. It cannot fully replace going by gut feeling or intuition, especially since in key moments of life, one often has little time to analyze everything consciously. But previous analysis that has become largely automatic again is more immediately available (also collectively), so learning some astrology can help.

Not everybody will have to learn astrology deeply. In many respects, it may remain a branch of psychology or of medicine. In other words, you might learn some basic astrology in school in the future, but rather visit an expert when something bothers you. In that sense, it may also be conceivable to keep day of month and time of day of birth secret from employer and government, to the same extent that medical records are kept secret.

I have Saturn at the end of Pisces, which leads me to try to build the whole world from the ground up, with minimal means, brick by brick. I have the sun in Leo and the moon in Aries, so this document may be closer to reality than to imagination. I have Uranus leading in conjunction with Pluto in Virgo, which makes me handle fate by conscious analysis, but, since I also have Neptune in Scorpio, getting an absolute feeling of magnitudes and going to the bottom of things tend to escape me.

I took over from the generation with Pluto in Leo who created psychological astrology by combining the works of Jung with astrology and mythology. This harvest reached me in condensed form in [4, 5], but of course there were many more people of that generation who either contributed directly or indirectly to it. I hope they will not feel betrayed by this analysis (except maybe initially a little bit) and also that this document provides a good starting point for things to come.

It takes a child only a handful of questions to bring a parent to the edge of his or her knowledge. Even highly specialized scientists can only maybe add another handful of answers in a particular direction before having either to end the causal chain in something that nobody knows whether it is true or not, or by using the trick to go in a circle, like everybody else.

This concludes this somewhat improvised section 4, and also almost this document. In many respects, what I have written may resemble the first report of the discoverer of a new continent. I may have misinterpreted some of the things that I saw and maybe even inadvertently invented some others, but probably quite a few things will be interesting enough for a closer look.

I promised to say something about religion. Here is my opinion: Science can only really tell you something about *how* something works but not *why*. In other words, it only provides the immediate reason for something but not the ultimate one. For example, if what I have written about in previous sections is true, then probably some scientists will tell you that there is no god, that what you are experiencing as god is only the other people who believe in god. Even though this may be the correct immediate answer, it does not tell you why you can feel other people. Who or what made the world such that you can feel other people ? And why ?

In my opinion, these questions are ultimately of a personal nature, that everybody has to find the best answer for him- or herself.

(1) The relation between numbers and elements is most easily seen from meanings of aspects. Fire is about (unified) vision, air about abstract opposites, water about fate and harmony. A cross, the abstract symbol for the tree (earth), is created by drawing the diagonals of a square. The visual world is seen with the eyes, spoken language and music are heard with two ears that are on opposite sides of the head. Two nostrils and a tongue help to distinguish what is good from what is bad for us, reality is mostly touched with two hands and two feet.

(2) Different philosophers have always had different opinions about how the world is. Aristotle, for example, has associated seasons with elements as follows: Spring is wet and hot (air), getting dry in summer (fire), cold in autumn (earth), wet in winter (water), and hot again in spring. The apparently wet winters in places where astrology emerged still show in the winter signs, namely goat fish (Capricorn), water bearer (Aquarius) and fishes. The order ①-②-③-④ fits better with the colder and harder winters of central Europe.

(3) Meanings of astrological houses escape me in detail. Let me use this problem to present my tools explicitly: Freud's trick to take words literally is often useful: A house can be the home you grow up, the school you go to, the place you work. So maybe houses go from womb to universe. In that sense houses might also define a realm of influence. Liz Greene starts with the latin word "templum" (in *The Astrological Neptune and the Quest for Redemption*, Red Wheel/Weiser (2000)) and then compares astrological houses to ancient temples that are essentially empty, except for the statue of the god they contain. Astrological houses can contain different planets, in different relations. The internet allows to quickly find all kinds of associations that people have made with a particular subject. In astrology, no association is wrong as long as at least one person is making it. It is only so that relative strengths of associations vary with place and time.

(4) Maybe these six or seven lines are just optical illusions, I have not made a numerical analysis. If you do, it might also be worth to take the way the brain processes images into account because what counts in the end is what people register in their brains, not so much what triggers perception in the image. One more thing, just for fun: Would Twofish likely be a symmetric cipher that is resistant to analysis by a quantum computer ?

(5) James Harvey Robinson, ed. and trans. *Petrarch: The First Modern Scholar and Man of Letters*. G. P. Putnam. New York (1898).

(6) The similarity between the three pyramids in Gizeh and the three stars of the belt of Orion was first noticed by Robert Bauval (*The Orion Mystery*, Crown Pub (1995)). Further proposed correlations appear at least not very convincing: Two pyramids nearby do not coincide with other stars in the constellation, the milky way and the Nile have largely different distances in relation to the three respective spots (J. Legon, *The Orion Correlation and Air-Shaft Theories*,

Discussions in Egyptology **33** (1995), 45-56). This suggests that the ancient Egyptians were not consciously aware of a correlation between the positions of the pyramids and Orion. Collectively, this may have been different. Maybe some events forced people to make the third pyramid smaller, maybe they did not start building it from the middle but almost from some corner, maybe that is why it is not aligned with the other two. The above sentence is not based on any historical facts whatsoever, it is just intended to illustrate how connections at a larger scale can come about from apparently unconnected smaller events.

(7) The physicist Freeman Dyson once suggested that the invention of hay helped culture to advance into colder places and hence to found cities like Paris or London (Edge 48 (1999)). A critical review says that Cicero was already using the word “faenum” for hay, i.e. the Romans apparently already knew about hay (Statistical Assessment Service Newsletter (February 1999)). Symbolically, an invention that was not made, but apparently refined and put to use during the age of Pisces, fits even better with Pisces, and Cicero lived between 106 BC and 34 BC, i.e. during the proposed transition between ages.

Acknowledgements

Most of my knowledge about astrology comes from two books by Liz Greene [4, 5] and from a few seminars by her between November 1999 and February 2001. The two books may not be very analytical, but what she writes agrees very well with the model I have presented here; experiment will show whether nature agrees with it too.

Generally, I find it hard to attach names to the influences that have led to this document, as I do not know where my ideas come from for sure. I typically first feel what is correct and only later manage to analyze consciously and to base my statements on facts.

There were certainly several women who have influenced my thinking, mostly without being conscious of it. And if my horoscope is correct, there should also have been quite a large collective influence on me. In that sense I would simply like to thank anybody who contributed in any way, be it consciously or unconsciously.

Finally, here is a less analytical, improvised acknowledgement:

All said, the reader often seems to unconsciously, beadfully frown right on mere security; intuitively, mindful of niobic, aquaintant wiring of really long drops, brought yet putting a vane link, illusive, nearly adept. (21 April 2001, 15:23, 15 min, snow outside)

References

- [1] Richard P. Feynman. *Surely you’re joking, Mr. Feynman!*. Bantam Books (1985).
- [2] Rupert Sheldrake. *Seven Experiments That Could Change the World*. Riverhead Books (1996).
- [3] Sigmund Freud. *Drei Abhandlungen zur Sexualtheorie*. Fischer (1991).
- [4] Liz Greene. *Star Signs for Lovers*. Stein and Day (1980).
- [5] Liz Greene. *The Astrology of Fate*. Samuel Weiser (1984).

[6] Douglas Adams. *The Hitchhiker’s Guide to the Galaxy*. Serious Productions (1979).

[7] Stanisław Lem. *Solaris*. Harvest (1987).

Appendices

A How it came about

In the summer of 1987, I discovered that I could feel the woman I love even if she is far away from me. I noticed that I could feel her more strongly if I looked into the direction in which she was and also that as soon as she laid down, I would feel her more strongly if I put my head into a horizontal position. But the most astonishing fact was that I could feel her through large amounts of matter, which seemed impossible by known physics.

In 1998, through some special circumstances, I had the fundamental idea how it could be that astrology has some truth to it, namely that people are unconsciously connected by the same effect which allowed me to feel the woman I love. In that sense, astrology has nothing immediately to do with the stars in the sky, but mainly with ancient collective and unconscious beliefs about them.

But it was not until February 2001, after three years of analyzing astrology, that I discovered that astrology has essentially quite a simple structure which goes back to ancient Greek philosophy and especially the ancient Greek view of a world composed of four elements: fire, earth, air and water. This discovery should make it finally possible to make astrology, psychology and culture, in general, much more accessible to exact science, and also vice-versa.

I have not been able to find out what the physical effect is that makes me feel the woman I love. The only clue I have, appeared to me on the occasion of the solar eclipse of August 1999, namely that the moon does not shield the gravitational force between sun and earth in any way. (That this is so has been known since Newton, but in light of the picture that many physicists have of forces as the exchange of virtual particles, that fact was not immediately obvious to me). That fact is at least qualitatively similar to the effect I can feel.

B Proof of Discovery

Discovery Disclosures by Alain Stalder
Collated in May 2001

Discovery Disclosure (January 1998)

1. Experimental Facts

I can clearly feel the woman I love if I point my head into her direction.
When I look into the opposite direction, I can feel her too, but differently.

The feeling is polarized, the polarization planes are the symmetry planes of our heads. If we look at each other and the planes coincide, the feeling is maximal. It is minimal if the planes are perpendicular. I can feel when she is moving and can distinguish between coming and leaving. I can tell roughly how fast she is moving. The feeling is weaker the farther she is away and seems practically not hindered by any matter between me and her. When I am in Switzerland and she is in Australia, I can feel her clearly right through the earth. I can tell if she is asleep and also roughly how she feels. The delay between what she does and what I feel is of the order of a second or less.

2. Analysis

The symmetry properties of what I feel indicate that the feeling is mediated by spin 1 particles. This and the fact that the interaction is long range seems to exclude all known forces except electromagnetism. The fact that I can feel motion could be attributed to the Doppler effect. Whatever particles cause what I can feel, they must interact only very weakly with matter except for the matter in my head. In the following I will show that for this reason photons can be excluded too.

Suppose she is on the other side of the earth, 10^7 m away from me, and that she emits photons with a total power of 1 W. From my experience it is reasonable to assume that there are maximally 100 times more photons emitted into the maximal direction than expected for isotropic emission. I will further assume that all photons are absorbed in my head and, for the moment, that there is no absorption in between.

Assuming that one photon per second is sufficient to feel her, the minimal wavelength is 5 pm, i.e. x-rays and up. In the other extreme, I can locate her easily within 500 km, which, taken as maximal wavelength, yields 10^{17} photons per second. The minimal decay length of absorption in the earth would then be 10^7 m / $(17 \times \ln 10) \approx 250$ km, which would even be enormous for x-rays.

If one wants to explain the observed effects in the above direct fashion with an emitter and a receiver, then it seems that one has to postulate the existence of a new kind of matter that is found mainly in human brains and that couples via a new field of spin 1 particles. In order that the effects can be felt, the new kind of matter must also couple to normal matter, possibly via photons. Without further experimental results all that can be said is that this hypothesis is not in direct contradiction with experiment.

Discovery Disclosure (January 2000)

A new physical effect is described. Human brains are emotionally interconnected. The connection is directional with spin 1 symmetry and can be felt across global distances and through the earth. Based on this effect, a plausible explanation of phenomena like telepathy and precognition is given. It is also made plausible how astrology and other ancient mythological beliefs have persisted unconsciously until today and continue to influence our fates. Finally, some unresolved issues in physics are discussed which seem to be related to the discovered effect.

1. Experimental Facts

I can feel the woman I love across large distances, even if she is on the other side of the world. The sensor for feeling her must be in my head because the feeling is maximal if I look into her direction. But the most astonishing fact is that I can feel her directly through the earth. This seems impossible by today's physics because there are no known particles that would interact sufficiently with the matter in my head to be felt and yet would be able to penetrate the earth (cf. [1]).

Here are some more facts about the effect:

- It has the symmetry of exchange of spin 1 particles:
 - The feeling is maximal when I point my head into her direction and also when I point it into the opposite direction. It is minimal in between at 90 degrees.
 - In addition, the feeling is maximal if the symmetry planes of our heads coincide and minimal if the planes are perpendicular.
- The intensity of the feeling decreases with increasing distance.
- Besides the woman I love, I can also feel other people. The closer people are to me emotionally (like family or friends), the stronger the feeling is. In extreme emotional circumstances distances it can also be global. Most people on the world I do not feel noticeably unless they are in the same room.
- The feeling is stronger with women than with men; in fact I am not even sure if I can feel men directly or only through intermediary women. It seems to me that I can feel gay men directly, though; lesbians, on the other hand, feel rather like heterosexual men.
- I no longer claim that I can feel any relative motion as I expressed in [1], although I do not explicitly exclude it.

The human brain is not a very accurate measuring device. The emotional state of the involved persons has a great effect on the relative feeling. But chances are good that these experimental difficulties can be overcome.

2. Hypotheses

- H1a. Humans are emotionally connected by the effect described above. The connection is generally unconscious to people.
- H1b. The emotional connection is typically stronger between men and women than between people of the same sex. For homosexual and bisexual people the relative strengths are different in the obvious way.
- H1c. Mammals, and probably other animals too, are also emotionally interconnected within their own and with other species.
- H2. More complex information than just an intensity can be transmitted. In other words, humans are unconsciously telepathically connected.
- H3a. People's connected brains form the collective unconscious. This collective brain has feelings and intentions.
- H3b. Because it consists of more nerve cells than a single human brain, these feelings and intentions are sometimes more complex than single humans can understand.
- H3c. Collective thoughts can appear as precognition to individual humans.

H3d. Single humans are guided to fulfill collective intentions by collective positive feedback to actions that fit the collective purpose and by negative or no feedback to actions that do not. So humans are free in principle, only some things are more fun to do than others and are therefore more likely to be done.

H3e. The collective unconscious still thinks largely in ancient myths. Ancient astrological beliefs are the major emotional force field acting on humans and also on larger entities like companies or even countries, just on anything that has a birth or founding date. Astrology has nothing to do with the stars in the sky, only with ancient human beliefs about them.

3. Explanations and Examples

E1a. Most people have probably noticed that people will eventually feel an observer who is staring at the back of their heads and turn around to look who it is.

E1c. Dogs have reportedly rejoined their human folks who had moved away hundreds of miles. Carrier pigeons reportedly [2] found their way home to the loft during World War One, even if the loft had been moved during the day.

E2. I had some experiences in my life that seem very improbable to happen unless there was an unconscious telepathical connection. Of course this is no proof; a proof of this hypothesis should probably rather be based on direct quantitative measurements of the emotional connection.

E3c. Consider the analogy of a brain cell in the human brain. If you are in the dark about to switch on the light, you will probably already imagine the room when it is lit, so that a brain cell in the part of the brain where things are visualized would precognize your action of switching on the light by a few seconds.

E3. These hypotheses are probably best proved by proving H3e., i.e. by recognizing astrological and mythological patterns in the world. The existence of such patterns in the real world is hard to prove in an exact scientific way because those patterns are quite complex and because there is no agreed objective and quantitative way of measuring human and cultural properties.

There is probably not a homogeneous collective unconscious but rather different entities in different cultures and at different scales.

Feedback from the collective unconscious seems to explain most religious experiences where people say they experience a god or several gods. Of course science cannot exclude that a god or several gods created the world such that people can feel each other and thus sort of create a mini-god by themselves. It is just so that science is the minimal answer to natural phenomena and in that sense postulating the existence of a greater god than the collective unconscious seems not necessary at the moment.

4. Unresolved Issues

In classical mechanics the electrostatic force acting on a particle is calculated by summing over all other charges in the universe. In that sense a Faraday cage is not really shielding what is inside from the rest of the world, it is only so that forces add up to zero. Of course this seems not to matter, since only the sum of the forces can be measured.

In quantum mechanics the electrostatic force between two particles can be viewed as the exchange of virtual photons. Now suppose there was a way to filter out certain photons. Suppose there is such a filtering sensor in my brain made of 1 mg of carbon and there is one electron per carbon atom taking part in the interaction. Then the filtered electrostatic force between me and somebody else at a distance of 1000 km would be about 0.5 N, i.e. easily detectable. Note that even a solid 1000 km thick wall made of any material in between would not influence the result of the measurement.

In exact science, measuring means transforming the world we see into numbers or, in other words, transforming the world into a finite number of bits. Then the logical language of mathematics is applied to these numbers yielding other numbers which can then be compared to further measured numbers such that hypotheses can be verified or falsified.

In my view science has the following limitations:

- It is not sure that nothing essential about the world is lost by transforming it into a finite number of bits.
- The measurement process itself cannot be described by exact science. All there is, is a general agreement on about how to measure simple things like the speed of a dropping stone, for example.
- Even in the finite world of mathematics, you cannot prove certain elementary things like that mathematics is free of contradictions.

In quantum mechanics, the conscious mind of the observer plays an important role. What if the mind of an observer had influence on the outcome of a measurement? Then, of course, it would be possible to send signals faster than the speed of light using EPR-like configurations and hence to exchange information with the future, which seemingly would lead to lots of paradoxes.

But maybe these can be avoided if it takes more than a single human to influence the outcome of a measurement, if it is sort of a majority decision. If that was so, would the world rather be discovered or invented?

One problem associated with causal thinking is that usually the causal chain ends somewhere with something of which one does not know the cause. For example, did all those astrological myths come about by chance or are there deeper reasons? Is the collective unconscious alone, does it have no fate?

The distance to the nearest star is about 4 light years, about 4×10^{16} times more than 1000 km. Therefore a mass of 40 t or of ca. 10 mg per person on the earth would be necessary in order to detect a filtered force of again 0.5 N from a twin earth orbiting that nearest star.

As the title of this section implies, there are no solutions here, only some thoughts that might help scientists to find them. In that respect section 9 of appendix A could also be helpful.

Appendix A: Astrology Tidbits

A1. "Convincing the Unbelieving"

- The sun sign reflects the inner self of a person and is very important, but often not clearly visible from the outside. Solution: think about the person you love most.
- Most literature about astrology contains many false statements (cf. A3). Solution: read the chapters in [3] about your sign and about the sign of the person you love.
- You will probably recognize some emotionally important things about you two and your relationship. And you will probably realize that your view of the world is biased by your sign.
- If you continue to read [3], [4] or other books, I suggest you continue to follow a path laid out by strong emotional feedback. Otherwise the complexity is probably too great and astrological predictions might appear arbitrary or wilful.

A2. The Matrix

- Each star sign is associated with one of the four astrological elements: Fire/Earth, Air/Water. The first of each pair is considered male, the second female. The first pair stands for imagination/reality, the second one for mind/feeling. Much more in [3].
- There are three qualities: cardinal, fixed and mutable. They appear in this order in each season. Cardinal signs like to start new things, fixed ones are good at pulling things through, mutable ones are good at finishing and refining.
- If you can guess element and quality, you know the star sign.
- I have only found the following in a single book on astrology, but I think it is true and useful: the first four signs of the year (starting with Aries in spring) are oriented towards a small group of people, like family, the next four towards a larger group of people, say 10-15, the last four towards society as a whole.

A3. Understanding Mythology

- Consider the following piece of mythology: Herakles is fighting a dragon in the swamps. He is bitten in the foot by a crab that had been sent by his mother Hera, causing Herakles almost to loose the fight. The crab is put as a star sign into the sky by Hera because of its obedience to the gods.
- Obviously the myth tells us something about the star sign Cancer.
 - The whole myth with all its protagonists (Herakles, Hera, the dragon, the crab, the swamps, the gods and the sky) describes the sign, not only the crab.
 - The main conflict described is the one between mother and son.
 - The mother provides protection but also restricts your independence. For Cancer this conflict plays an important role in life. The mother can be the physical mother but also, for example, a large company or the state; just any authority that offers shelter at the cost of freedom.
 - In many books about astrology you can find statements about Cancer that are possible specific consequences of the above conflict, but therefore are also not generally true.
 - Read [4].

A4. Natural Selection

I think that natural selection has influenced astrology:

- People are biased in a controlled way such that the world is balanced on a large scale, and yet all imaginable possibilities are tried.
- Properties associated with star signs are clearly adapted to life in places on the northern hemisphere with distinct seasons.

A5. Some more Astrology

- Astrological planets are associated with star signs and have similar meanings.
- Sun and Moon are assigned to Leo and Cancer, the two signs in the middle of summer. Mercury is assigned to Gemini and Virgo, the signs right before and after Leo and Cancer.
- Historically, this has continued in order of planet's orbiting periods up to Saturn which was assigned to Capricorn and Aquarius. With the discovery of new planets, some have been reassigned: Uranus to Aquarius, Neptune to Pisces and Pluto to Scorpio.
- Planets influence specific parts of psyche. Mercury, for example, is associated with communicative skills.
- The angles between the planets (aspects) symbolize the relationship between the gods - if they are close enough to some specific aspect angle with defined meaning. For example an angle of 120 degrees (trine) indicates a rather harmonious but also passive relationship.
- The sign that rises above the horizon when you are born is called ascendent. It stands for how you appear to others, it is the persona, the mask that actors in classical Greek theatre were carrying in front of their real faces.
- Starting from the ascendent, the zodiac is divided into 12 segments (houses), which again have meanings similar to the corresponding star signs.

A6. Astrological Ages

- The earth's axis precesses with a period of about 26'000 years. Astrologers have split this great year into 12 ages of about 2150 years. During each age, a different star sign rises above the horizon in spring when day and night are of equal length.
- Horoscopes are still based on a zodiac in which this sign is Aries, as it was between about 2000 BC and 0. In the meantime the age of Pisces has passed and we are now roughly entering the age of Aquarius.
- I think this shows two things:
 - Astrology has really nothing to do with the stars in the sky, only with ancient human beliefs about them.
 - The zodiac has not been readjusted because properties of star signs had already adapted to seasons. In Indian astrology the real positions of the stars are used. This makes sense as there are less distinct seasons in most parts of India.
- According to astrology, each age is influenced by its sign. For example, the strict, punishing god of the old testament resembles Aries much more than the forgiving god of the new testament. More in e.g. [4].
- The opposite sign of the zodiac also influences the age because, for one, it shares some mythological conflicts and because it usually takes rather the opposite position in that conflict and is thus partially rebalancing the world. For example, Aquarius puts rather the collective above the individual,

Leo does the opposite.

A7. The Age of Aquarius

- I think the age of Aquarius really took off at about the beginning of the 20th century. I recognize Prometheus bringing the world knowledge from the gods, or in other words from the unconscious. These are, for example, the theory of relativity, quantum mechanics, psychoanalysis and technology in general.
- In mythology, Zeus, the unconscious counterpart to Prometheus, gets jealous and wants to extinguish humanity. I think the holocaust can also be seen in that light, since practically all important inventions of the 20th century, not to speak of communism, have been made by jews, the last remnants of the age of Aries.
- Ironically, the Nazis were using the very methods of the age they had wanted to suppress for another thousand years. During the age of Pisces nobody was ever talking about a final solution of anything or even trying to pull it through, yet in such a scarily industrial way.
- Rather driven by Leo, a Jewish state was founded, although arguably with Leo's typical lack of compassion for other people, namely the ones who had been living in that place for some time.

A8. The first Age

- I think the first age was the one of Taurus, right before the one of Aries.
- I think that after the precession of the earth's axis was discovered, properties of star signs were adapted such that they fitted what people knew at that time about their history.
- The age of Gemini has been associated with the development of written language, the age of Cancer with the first settling of humans, the age of Leo (considered to be the first age by the Egyptians) with the invention of fire.
- Sphinx figures made in the age of Taurus show a human face (Aquarius) combined with a bull's and lion's body (Taurus, Leo) and eagle wings (Scorpio). This figure symbolizes the four points of the compass, and thus corresponds to a time when one of these four signs was rising above the horizon at the beginning of spring.

A9. Astrology and Quantum Mechanics

- The symbols used in quantum mechanics for the wave function ψ and the quantum of action h -bar are identical, resp. closely resemble the astrological symbols for the planets Neptune and Saturn.
- In [4], on pages 140 and 141, a dream is written down that describes how a woman with the sun in pisces is driving to Jung's house where a movie is to be shown. Looking into the house she sees that the movie which is supposedly in color, seems to be black and white only. The woman cannot enter the house because a sick woman is lying across the threshold.
- What I can see here with respect to quantum mechanics, is the collapse of the wave function, the destruction of an infinite number of possibilities into a single bit, the saturnization of a neptunian world.
- Maybe knowledge of astrology can be of practical use when trying to understand more about quantum mechanics. Since all other attempts have not been very fruitful for several decades now, there seems to be little to loose by trying.

References

- [1] Discovery Disclosure (January 1998), by Alain Stalder.
- [2] Seven Experiments That Could Change the World, by Rupert Sheldrake, Riverhead Books, October 1996.
- [3] Star Signs for Lovers, by Liz Greene, Stein and Day, 1980.
- [4] The Astrology of Fate, by Liz Greene, Samuel Weiser, January 1986.
- [5] Drei Abhandlungen zur Sexualtheorie, by Sigmund Freud, Fischer, 1991.

Discovery Disclosure (March 2001)

Astrological predictions are shown to be essentially compositions of simple, opposing principles. Most of them originate from ancient greek philosophy. The discoveries are simple enough to be verified experimentally. Consequently, it is discussed if they describe fundamental structures of thinking, beyond human culture. In an appendix, the model is illustrated in a few examples from human history and culture.

1. Hypotheses

The hypotheses disclosed here have evolved from [1] and [2], but they are a priori independent of any specific physical explanation. They are, however, simple and specific enough to be verified directly, in a quantitative way. The model they form is not complete, in fact it cannot be if the astrological force field is really made of collective unconscious beliefs. What has been possible, though, was to extract simple statements out of that complex organic structure which are quite universally true, at least in cultures that descend from ancient greek culture. Specifically, these are the Western World, i.e. Europe and its former colonies, large parts of the former Soviet Union and the Arabic World.

1.1 The Planets

H1. Planets influence how one is towards different categories of people: The sun how one is as a father and towards the father, the moon how one is as a mother and towards the mother, Venus and Mars how one is towards female resp. male friends, Mercury how one is towards siblings.

More precisely, the properties associated with the star sign, one of these planets was in at birth time, influence how one likes to behave relative to people of the respective category. The terms "father" and "mother" do not only apply to physical parents, but generally to anybody assuming a parental role, like, for example, a teacher. Similarly, the term "friend" includes anybody of roughly the same generation who does not fall into any of the other categories. This specifically includes male and female lovers. The term "siblings" also more generally applies to concurrents for the same lover.

Although it is common astrological knowledge to associate, say, the moon with the mother, I have not found anything nearly as specific as this hypothesis in astrological literature.

H2. Jupiter and Saturn apply to areas in which one gets more resp. less help from the collective unconscious than average.

This means that abilities associated with the star sign, either of these planets was in at birth time, will either be quickly and almost effortlessly available or, else, will have to be earned through hard work.

This hypothesis is, to some degree, merely a reformulation of general astrological knowledge which associates Jupiter and Saturn with "good luck" and "bad luck", respectively. Luck used to be understood as help by the gods, who are, at least in the minimalistic view of science, indistinguishable from the collective unconscious (cf. [2]).

H3. Uranus and Neptune apply to areas which are more resp. less easily made conscious than average.

This is essentially general astrological knowledge.

H4. Pluto applies to how one handles fate.

In other words, one will typically use the qualities and abilities associated with the star sign, Pluto was in at birth time, to solve the problems that life poses.

H1 at least partly solves one of the most important difficulties encountered when trying to measure human properties, namely that different people, say different members of a family, can give almost completely different descriptions of the same person.

I think this will make it possible to overcome the experimental difficulties, but one should at least be aware that the full picture would require to consider at least also the ascendant, planets near it, and the synastry between the partners.

1.2. Star Signs

H5. The properties associated with star signs are composed of ancient greek beliefs about the four elements fire, earth, air and water, and the transitions between them.

H5a. For each element E, the three star signs assigned to it correspond to different stages of transition from neighbouring elements A via E to B: the first star sign (in the order of the zodiac) is composed mainly of A and only slightly of B, the second one of roughly equal amounts of A and B, and the third one mainly of B and only slightly of A.

This requires some introduction to the greek theory of the elements. Platon and Aristotle brought the greek theory of the elements to roughly its final form around 350 BC. The four elements are composed of two pairs of properties: cold/warm and wet/dry. Fire is hot and dry, water is cold and wet, earth is dry and cold, air is wet and hot. Transitions between the elements are only possible by flipping one of the properties at a time. For example, water can be transformed directly into its neighbouring elements earth and air, but only indirectly into fire.

The symbols chosen for the four elements are essentially triangles, the ones for the hot elements point up, the ones for the cold elements point down. When superimposed, they form the hexagram, which symbolizes the important greek view that "what is above corresponds to what is beneath". In other words, what happens with the stars and planets in the sky corresponds to what happens to people and things on earth, what happens in the physical world corresponds to what happens in people's psyche.

Therefore the term "element" was not only meant to apply to physical reality, but also to psychology. In this light, the property pairs cold/warm and wet/dry have to be clarified.

Nights are colder than days, therefore cold is associated with night. People are more active during the day than at night, therefore day is associated with active. Men typically assume a physically more active role during sex, therefore man is associated with active. In other words, water and earth are considered female elements, whereas fire and air are considered male.

The sun only shines during the day and the moon is only rarely clearly visible at daytime, therefore man/woman is associated with sun/moon. This association is strengthened by two facts: the changing apparent size of the moon reminds of pregnancy, many women have their monthly cycles correlated with the lunar cycle.

The contrast dry/wet is associated with brittle/malleable. Dry things are harder than wet things, they either stay how they are or they break, whereas wet things can bend and flow. Here the psychological meaning is clearly recognizable.

All of this correlates well with the common astrological view that water has to do with feelings, earth with reality, fire with imagination and air with mind. The correlations should become even more visible from the following hypotheses and from the appendix.

This introduction to the greek theory of the elements has been pretty much common knowledge, except probably for the causal chain linking warm/cold to man/woman.

1.3. Fire (Aries, Leo, Sagittarius)

H6. For fire, the elements A and B mentioned in H5a are earth and air.

H6a. The main picture is wood burning to smoke as the element earth is transformed by fire into air.

H6b. This is associated with the transition from animal to man to god. The physical, mortal body is wounded and at the same time transformed by the imaginary power of fire into knowledge that can be communicated to the next generation and thus becomes immortal.

H6c. The animal side corresponds to the lower part of the human body, the one with the sexual organs and without the head.

H6d. The more the animal side dies and the immortal side grows, the more one can afford to be patient (1), to imagine instead of doing (1), to be open instead of secretive (2).

1.4 Water (Cancer, Scorpio, Pisces)

H7. For water, the elements A and B mentioned in H5a are earth and air, too.

H7a. The main picture is ice melting to water and then evaporating to mist.

H7b. During that process, borders dissolve.

H7c. The three signs react in different ways to pain: by trying to avoid pain by protection, by giving back, by suffering and forgiving.

H7d. Because ice is mainly found in the mountains (snow, glaciers), a second important picture is that of the circle of water coming from sources in the mountains, mixing together to rivers and finally flowing into the sea, where it eventually evaporates.

H7e. During that process different sources are mixed together, connected.

H7f. The circle of water is associated with the circle of life, symbolized by the three fates: the first one spins the thread of life, the second one measures its length and the third one cuts it. Thus the three signs are about creating/measuring/ending life.

H7g. The three fates correspond also to the three phases of the moon, where the first phase, the one starting at new moon, corresponds to a young girl, the second one, before and after full moon, corresponds to a grown, fertile woman, and the third phase corresponds to an old woman who cannot have children any more.

1.5. Air (Gemini, Libra, Aquarius)

H8. For air, the elements A and B mentioned in H5a are fire and water.

H8a. The main picture is that of a cloud out of which comes both lightning and rain.

H8b. Lightning or a flame are quick and random, rain is constant and predictable.

H8c. Because of these properties, another important picture is the development from child to adult to old man. Children explore the world by turning things around and looking at them quickly from different sides. Through this process, as one gets older, things get more and more unified. (For example, the two sides of a coin, which are a priori just two different pictures, are unified into a single thing called "coin" which looks different, depending on the angle from which you look at it.)

H8d. Through this process transparency increases, as it happens when the opaque smoke of a flame is transformed to transparent water.

H8e. The three signs have different ways of dealing with opposing principles: quickly switching from one to the other while always only seeing one at a time, balancing both, unifying them into a single entity (if necessary, by ignoring or destroying one of the opposites).

1.6. Earth (Taurus, Virgo, Capricorn)

H9. For earth, the elements A and B mentioned in H5a are fire and water, too.

H9a. The main picture is that of a tree which needs both the water from below and the light of the sun from above to grow.

H9b. The roots of the tree are the structure which keep it from falling down, they symbolize the physical limitations nature imposes. The fruit above are beautiful and delicious. Thus the opposing principles are beauty and structure, or, expressed by what Freud viewed as the strongest forces acting on people, sex and the fear of dying.

H9c. The limiting, structuring side of nature forces to decide, the sensual side allows to leave possibilities open.

H9d. The more one is aware of the limits of life the more one plans ahead, the less immediately one acts.

2. Science and Philosophy

The simplicity of the discovered structures describing human psyche resembles modern particle physics, which is also based on a few elementary particles and symmetries between them. On the other hand, the same greek model of the world was also meant to apply to the physical world, which it clearly does not.

It appears that merely thinking how the world is could not force physical nature to comply. The psychological part of the greek theories, however, has been very successful in human culture. I think that their theories have survived by natural selection. Astrological predictions are clearly adapted to seasons on the northern hemisphere (cf. appendix). This is very probably the reason why the astrological year still starts with Aries at the beginning of spring, even though this ceased to be astronomically correct about 2000 years ago due to the precession of the earth's axis.

Other astrological systems are not equal to the greek one. The chinese one, for example, has five elements. There is no air and there are two more solid elements besides earth, namely wood and metal.

This implies that the greek theory of the elements, in its entirety, contains probably just as many elements of chance as a particular animal species. The building blocks of the greek theory, however, the simple, opposing principles, have probably some fundamental meaning. In analogy, there are, for example, physical reasons why mammals have two eyes rather than just one. In that sense, a comparison of different cultures could be interesting.

At some point, however, science will not be able to proceed further, since it can only operate on a given set of units, of which the world is composed in varying amounts indicated by numbers. In that sense, these units resemble mathematical axioms. Axioms cannot be proven correct or false, it is only so that their logical consequences are different and differently successful.

Thus one is lead out of science and into philosophy, where one tries to think with less assumptions about the world than are usually made.

Appendix A: Examples

Here I am going to take a swim through some signs, the properties associated with them, mythology, history, philosophy, all while trying to link them to the model presented previously. I do not claim that the associations I am going to make here are all strictly logical consequences of the model, but they are clearly related to it.

This text has been written very quickly, in one flow, on the evening of March 28, 2001 and only marginally modified afterwards as not to destroy the flow. At that evening, the sun was already in Aries, but Mercury, who stands among other things for how one thinks and writes, was still in Pisces. Please judge what follows rather as an improvised peace of music than as a carefully researched scientific essay...

Leo, like the other signs in the middle of their element, is trying to balance the two extremes (H5a). In this case between being open and secret (H6d2), between acting and thinking (H6d1). This is associated with the picture of the king who has to make a wise decision for his people. This cannot be proven in a strict logical sense, but it does come from H6b with the king halfway between animals and gods and is also linked to the view that the lion is considered the king of animals. In the latter statement, it is not so sure whether one is the consequence of the other.

Aries is acting strictly egoistically, because his animal side has not been wounded yet (H6b), because the fire has just started to burn. Aries is related to the egyptian god Amun, the ram, the invisible force behind the wind. This is related to the fact that to start a fire one needs to blow wind through the wood. The invisibility is related to H6d2.

Leo typically starts in life unwounded or at least unconscious of it. Later in life, Leo becomes more wounded or more aware of it. This wound can sometimes be physical and then it is often in the lower part of the body (H6c), but it probably more often is psychological. This is why Leo appears more egoistic than Aries, because there is a conflict. Similarly, Virgo is commonly associated with order, even though it is Capricorn who is really ordered. For Virgo there is always conflict between making order and having fun. Virgo is the last sign of the summer, when the harvest has to be brought in, when it has to be sorted and stocked for the winter. Days are typically still warm and one is tempted not to work much, but one also knows that the winter is coming and if the harvest is not brought in in time one might not make it through the winter.

Leo is a fixed sign. The first sign of each season is a cardinal sign, one that likes to start new things but is unable to pull things much further, the second sign of each season is fixed, likes to pull things through but is unable to adapt quickly to changes, the third sign of each season is a mutable sign, one that is good at finishing something, to prepare for something new, very adaptable but somewhat passive.

Because Leo is a fixed sign, the egoism is even more prominent, because then Leo will be more willing to pull an egoistic opinion through than Aries would. The sign opposite Leo in the zodiac is Aquarius, also a fixed sign, the last of the air signs.

Aquarius, like the rain, wants to give everybody the same amount, not distinguishing between rich and poor, between beautiful and ugly, wants to be altruistic. Also the drive to unify wants all the people to be the same. Since Aquarius is a fixed sign too, it does happen though that Aquarius only sees the other people and gives them all the same but does not see himself and that he has much more than the others.

Other signs have also such opposing principles between the axes, between opposing signs in the zodiac. For example, Virgo has to do with analysis, the process of sorting the harvest, to structure it as much as needed to stock it in without needing too much space, with a sensitive eye to what does not fit in, like foul fruit that might destroy the rest of the fruit if it is not sorted out in time.

The first task of Psyche in mythology is to sort different seeds, with what ants help her do. The next three tasks correspond to the elements water (waiting for the right moment to steal some fleece from rams), fire (creating a model of the world in one's head through imagination in order to solve a problem, which allowed to retrieve something precious from the middle of the circular river Styx) and air (carefully planned, conscious action to get the box of Pandora from the underworld, from the collective unconscious).

Pisces on the other side of Virgo has to do with synthesis, as all the rivers from different places unite in the sea. Pisces is also what by definition cannot be analyzed. The contrast between Virgo and Pisces is most accurately described in the novel "Solaris" by Stanislaw Lem who has the sun in Virgo. Consequently Solaris is a detailed analytical description of what cannot be analyzed by definition. When the hero uses a super-microscope to analyze a blood sample of that copy of what was left in his unconscious of his wife who had committed suicide a few years ago, he sees the molecules but when he focusses in, expecting to see the atoms and then protons and electrons he sees nothing but a blank silver-gray screen.

The earth's axis precesses with a period of 26'000 years. Therefore every 2150 years or so, another sign is rising in spring, this period is called an astrological age. Aries was rising between about 2000 BC and 0, Pisces has been until about now and next it will be Aquarius. Each age is dominated by its sign and, less strongly, by its opposite sign.

Opposed to Aries is Libra, the middle one of the air signs, a cardinal sign like Aries. Libra tries to equilibrate the world, to bring oppositions into a harmonious balance. Aries is impatiently driven to bring the world off balance, to break up existing structures such that new things become possible quickly.

Libra is abstract, Aries in concrete, fights for his goals based on concrete, touchable knowledge of the world, Libra tries more its chances, because it is coming after Virgo has sorted the world quite a bit, so that it can easily see how things are and then take chances. Also one is tired after a month of Virgo to look at everything deeply in detail.

Before the greeks, there were eleven star signs, as big as they physically are on the sky. The greeks divided the zodiac into 12 parts of equal size, the sign Scorpio was split into two parts, the scissors of Scorpio became Libra. So what they did was at least self-consistent, the abstract philosophical view of the world, describing the world by numbers as Pythagoras said (what is still the basis of todays science).

Out of unity, the number one, comes two, oppositions. Two people mate and naturally become three. Three is close to pi, the number that relates the diameter of the circle to its circumference, the circle is perfect harmony because all points have equal distances from the center. Thus three is harmonious but still incomplete. The number four is disharmonious because about 6/7 are different than the rest.

This is clearly visible in fairy tales where the first two daughters are much like the mother but the third daughter, the fourth person, is different and yet contains something that is necessary in order to solve the other's problems. In real life, the first child of a family (number three counting mother and father) is often more like its parents than the second child.

In astrological charts the angles between planets have exactly these meanings, if planets are in conjunction, i.e. at about the same place (360/1) there is unity, the two forces of the planets unite. As the planets were nothing else than gods walking across the skies, the leading planet, the one further in the zodiac, decides, determines what is done and the follower is supporting the leader with his abilities.

The angle 180 is opposition, the two forces fight each other, one can deal with them in typically one of the three ways that air signs do. The angle 120 (360/3, trine) is harmonic but somewhat incomplete and rather passive. The angle 90 (360/4, square) is tension, but carries drive to act. The sextile (360/6) is harmonic opportunity, the quincunx (5/12 * 360) is misunderstanding, that is why it occurs often between lovers, because it keeps relationships interesting even when people live together for a long time. Between people, aspects between the planets influence how people relate, this is called synastry.

The oracle of Delphi was founded as Zeus let two eagles fly into opposite directions to the other side of the world to the navel of the world. The eagles stand for Scorpio, maybe because the sign for Scorpio is located besides Sagittarius who is (besides Aries) associated with Zeus, is a hunter who maybe used eagles in earlier times for hunting. Besides the oracle of Delphi there was also the oracle of Amun/Zeus in Siva in Egypt. Thus the myth symbolizes how the greeks created a new star sign in order to balance the world.

In another myth, Hermes as a baby steals 40 cattle from Apollon, and then kills one and splits it into 12 equally sized pieces and eats one of them, claiming to be a new god and at the same time ending the age of Taurus (cattle). Apollon is first furious that his cattle have been stolen, but later trades his cattle for a Lyra that Hermes has made, he trades the unconscious female age of Taurus for the new conscious age and learns to play the Lyra. People have been making music with their own voices before there were instruments, with a Lyra you have to be more conscious, you have to learn to synthesize music from pulling a few strings. This is the same as composing astrology of four elements. Of course, the vocal cords are also a set of strings, so there was not really anything lost or destroyed by replacing the human voice by a Lyra and of course the human voice is still used to make music today.

Apollon is associated to the sun and thus to Leo; in this myth he turns from a shepherd into a musician, as his animal side is transformed into something divine.

After the age of Aries/Libra came the age of Pisces/Virgo. The strict, invisible god of the old Testament that appeared in a burning bush was replaced by a forgiving god, by a compassionate god. Now there is a whole family in the sky, god, the virgin mother Mary (Virgo), and the son Jesus. This goes back to ancient gods, mother and son, related to the sea, which the greeks have incorporated in a more abstract form into their mythology.

The god of the arabic world has more Virgo in it, the koran is very detailed, for example, about the circumstances under which one may have a second wife. The Ramadan is any season of the year, whereas Christians fast at the end of Pisces. Pisces go with nature, go with the world, Virgo tries to be herself, despite all the influences. Virgo is best associated with the planet earth itself, on which everybody is trying to live their own lives despite all the other forces acting on one.

During the age of Pisces not much was made conscious, at least not in the first half of it. If one has ever seen the drawings of Leonardo da Vinci, it is obvious how much had already been there but had to wait until about the 19th century to be actually built.

It seems that the world always keeps part of the previous age for one more age. About 40 BC Carthage was destroyed, which was inhabited by the Phoenicians who had a religion that reminds much more of the age of Taurus/Scorpio, including allegedly sacrificing children to the Moloch. Some time before Hannibal had tried to walk across the Alps in order to conquer Rome. He was not planning much ahead and so did not succeed. The Phoenicians were probably (unconsciously) thinking that the Age of Aries was coming to an end and since Taurus is what naturally comes after Aries, this would be Taurus again. In the end, Carthage was destroyed and the remaining Phoenicians went home to the Lebanon.

During the Age of Pisces, Jews have maintained their religion of the old testament. As the age of Pisces neared its end, in 1781 a new Planet was discovered and called Uranus. Many people consciously thought that this could only mean that the new age had finally arrived. It has arguably contributed to the french Revolution and to the founding of the United States of America.

Aquarius loves progress, a continuous increase of transparency and consciousness. Continuous because he is a fixed sign and because the rain comes down continuously. "Liberte, egalite, fraternity", the slogan of the french revolution, fits well with the new age, the first one mainly with Leo, the other two with Aquarius. After the french revolution, many things were done that made

people more equal, like allowing women to become priests, for example, or chopping off peoples heads. People have said that without the Guillotine it would not have been possible to kill so many people in such a short time. This is not quite true and the contrary has been proven in the past, but what would not have been possible otherwise, would have been to properly execute so many people, so quickly.

Many of the equalizing laws were first reversed again, but many of them are now again commonly in place. In Germany, Jews were allowed to go to Universities, were given names that can be written down in roman letters. For the first time in 2000 years, they felt again like being part of the world. Also it was the end of Pisces, with all those unconscious possibilities to implement.

So it was only natural that Jews started to discover and invent new things: Psychoanalysis and the collective unconscious, the theory of relativity, quantum mechanics, communism. Actually quantum mechanics was invented by two people, Heisenberg who was Jewish and Schroedinger who was not. Schroedinger had it actually figured out earlier than Heisenberg, but having the sun in Leo, he waited longer before publishing because his theory was conflicting with the theory of relativity, a conflict which has only later been resolved by Dirac.

Now, Aquarius loves continuous progress, but he also hates disorder. At one point, it seems, there was a collective unconscious drive that wanted to extinguish all Jews since apparently the attempt to make them equal to everybody else had failed. I don't want to excuse anything what has happened then, I just want to make some of the unconscious mechanisms apparent in order to maybe contribute to avoiding something like that in the future.

There is hope: many laws are sort of no longer Jews, but Israelis, just a bunch of similar people living in a country, like everybody else. There is no longer much a specific Jewish "problem", just the general problem that there are different countries but that problem will be solved later, hopefully in a civilized way. For example, Europe is in the process of melting into a single country, except Switzerland, which according to the legend was founded by its three "Urkantone" on August 1, 1291.

It is understandable that even in the Age of Aquarius, a country with several planets in Leo does not think that melting is such a great idea by itself without further reasons. Switzerland is the land of compromise and also now a land of peace. Not so many years ago, swiss mercenaries were the fiercest of Europe and used everywhere there to win battles. In a similar development to what happens in Leo's life, Switzerland has stopped to export mercenaries after in one battle there were mainly swiss on both sides and they decided not to fight.

The swiss wound then lead to the foundation of the Red Cross, to showing some mercy to others.

Russia has the sun in Aquarius. This is one of the reasons, communism was so successful there. Think of the extreme transparency as everybody was spying on everybody and of all the masses moving in unison.

The United States have the sun in Cancer; for it protection is very important. think encryption export restrictions or strategic missile defense. What other country has such a big "National Security Agency" (NSA) ? Also Americans do not see much out of the country, most things on TV are internal US affairs, a large percentage of members of congress do not have a passport, they have never been out of the country.

I could write more along these lines, but I think I should finish now.

I hope that the turbulent phase of the transition to the new age will be soon over. It is not probable that the technological progress will continue at the same pace, because at some point the imaginary unconscious reservoir generated during the age of Pisces will be used up, at which point there might quite a stable period, as expected for a fixed sign.

My sources for learning astrology were mainly the two books by Liz Greene mentioned in [2] and a few seminars by her between 1999 and 2001, other by the internet and observation of the world.

Now that I have shown you the strings of the Lyra and played some music on it, it is your turn to learn to play the instrument. You will probably succeed in making more beautiful music than me, as did Apollon compared to Hermes.

References

- [1] Discovery Disclosure (January 1998), by Alain Stalder.
[2] Discovery Disclosure (January 2000), by Alain Stalder.

nQaaKjjUrzKd+juqpbEPbYLuJJBV9+xCmZIjg8VWHqofWALH/OpChUu20+wDXw
Ye5NgZeTBgZXfLM6nH7Dpe7uAOVl66fLYANdmm8ftn/47lhNfCqfEeuzfAsXH
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67b737effb1ebed2eed33f34eb80aa2d7c645c49

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d114b72e5b3e0f3404b3dff2d6a5490b
7251f4f5d16ad44ca537c2b468588982230e6c02

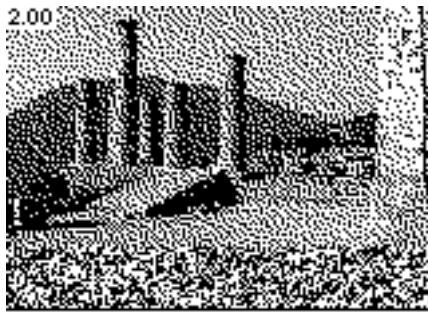
The e-timestamp of 3 May 2001 is the following PKCS#7 file (base64 encoded):

[illegible]

Version 2.00 and later versions of Delphi, an astrology program for Palm OS handheld devices, contain in their about box the concatenation of the signature of the original document, the SHA-1 hash of my Swisskey certificate, MD5 and SHA-1 hashes of the signed document, and SHA-1 hash and signature of the timestamp, as contained in the e-timestamp file listed above. Explicitly, it contains the following 460 bytes (base64 encoded):

[illegible]

Finally, here is a screen shot of the about box of Delphi 2.00, which was published 7 May 2001 on the internet:



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jove.prohosting.com/~delphi29

C The Future

Since this document has not been consciously reviewed by other scientists, it may contain some factual errors. Some hypotheses may be biased or wrong. However, I hope that the main purpose of this text has been preserved, namely to convince other scientists that they are worth a closer look.

Initially, I will correct factual errors and collect feedback on my web page. But after that, my role will very quickly no longer be special, as other people with other fates will be much better able to make music with the new lyre (see text). Everybody will have a role in learning the new instrument, as in the age of Aquarius everybody is special and hence nobody is more important than everybody else. Good luck!

One more twist on reality: Although the immediate intrinsic meaning of the improvised acknowledgement was consciously intentional, the one in the sentence introducing it was not...

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This document consists essentially of a list of scientific hypotheses, i.e. of questions to nature that have been formulated in a way that allows experimental scientists either to ask them directly to nature or, else, to divide them into sub-hypotheses by means of known techniques and then to ask those to nature in experiment. If, and only if, a hypothesis is experimentally confirmed and generally accepted by the scientific community, will it become a scientifically verified fact.

If you apply any hypotheses as facts to your life or to the life of others, you are doing it exclusively at your own responsibility and at your own risk.

Estimation (January 2002)

In my personal estimation, the quickest path to some tangible scientific results would be to try to prove or disprove H14b together with the basic pictures for the four elements (fire, cloud, river, tree) in combination with H19, and applied to different groups of people, as indicated in H10.

Direct confirmation of H1-5, however, might either be relatively easy or, else, very difficult, depending on how much the effect is connected to quantum mechanics and measurement, as well as, depending on whether there is collective resistance to proving it. Qualitatively, the experience of H1-5 is as real as anything can be, the moment it is felt, but in retrospect, feelings are often not so convincing, presumably precisely because feelings are largely collective phenomena that cannot be reproduced well within an individual without reiterated feedback from others. I remain curious.