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Platonic Solids - as above, so below

The world models of Schauberger, Barthel and Luminet

> "It is easy to see that the models that are discussed in cosmology are neither models nor test objects, because a model of the world, if there ever was one, can hardly be thought of in any other way than in a divine intellect, but the physical world models are not trial designs either, because what would come out of their realization? Certainly anything but our existing world, for which no test object is needed. But if the so-called world models are neither models nor test objects, what are they then? Hardly anything other than empirical-theoretical constructs for a better understanding of the existing world through understanding and forecasting."
>
> Ernst Sandvoss [13]

Viktor Schauberger - from the Repulsine to the World Model

Viktor Schauberger recognized very early on that the egg shape was an original form of nature and thus an extremely stable and bioenergetically excellent form. So it is no surprise that he also transferred this egg shape to the shape of the earth.

For Schauberger, the energetic aspects of his model of the world egg were probably of primary importance. It is striking that he appropriately transferred his practical biotechnological experiences in the microcosm to the macrocosm and thus created a world model that can in principle be found in the repulsins and repulsators he developed - devices for the energetic and metaphysical upgrading of water (see e.g. Fig. 2).

However, speaking of a Schaubergerian world model is very vague. In fact, there are only a few publications on Viktor Schauberger's cosmological ideas. In addition, his model of the cosmos is only roughly sketched, so that many questions remain unanswered, e.g. how Schauberger imagined a north-south orbit of the earth or a spaceship in orbit of the earth in his Earth as a concave shell and the "sky" as a convex dome (see Fig. 1). Solutions to these questions are certainly conceivable, but only on the basis of a complex non-Euclidean geometry, which Viktor Schauberger did not concern himself with according to everything that is known about him.

By setting an egg model into a rolling, tumbling motion (a cognac-swirling motion), he realized that both centrifugal and centripetal forces were at work. The centrifugal forces caused coarse material to settle on the bottom of the egg (according to his statement in [14]) exactly at the places where the large land masses are located when modelling the earth as the lower half of the egg. In addition, this tumbling motion can also be used to illustrate the ebb and flow of the tides and to explain gravity.

The centripetal forces caused a central concentration of the fine substances in the zone of the egg yolk. There Schauberger arranged an "atomic oxygen nucleus", which he regarded as the levitation centre of the world. The sun and the moon form the anode and cathode focal points of this field. He regarded the stars as "holes in the

"Firm matter" (upper half of the egg shell). Through these "gates in the material world" levitation energies can be discharged and gravitational energies can find their way into the world egg.

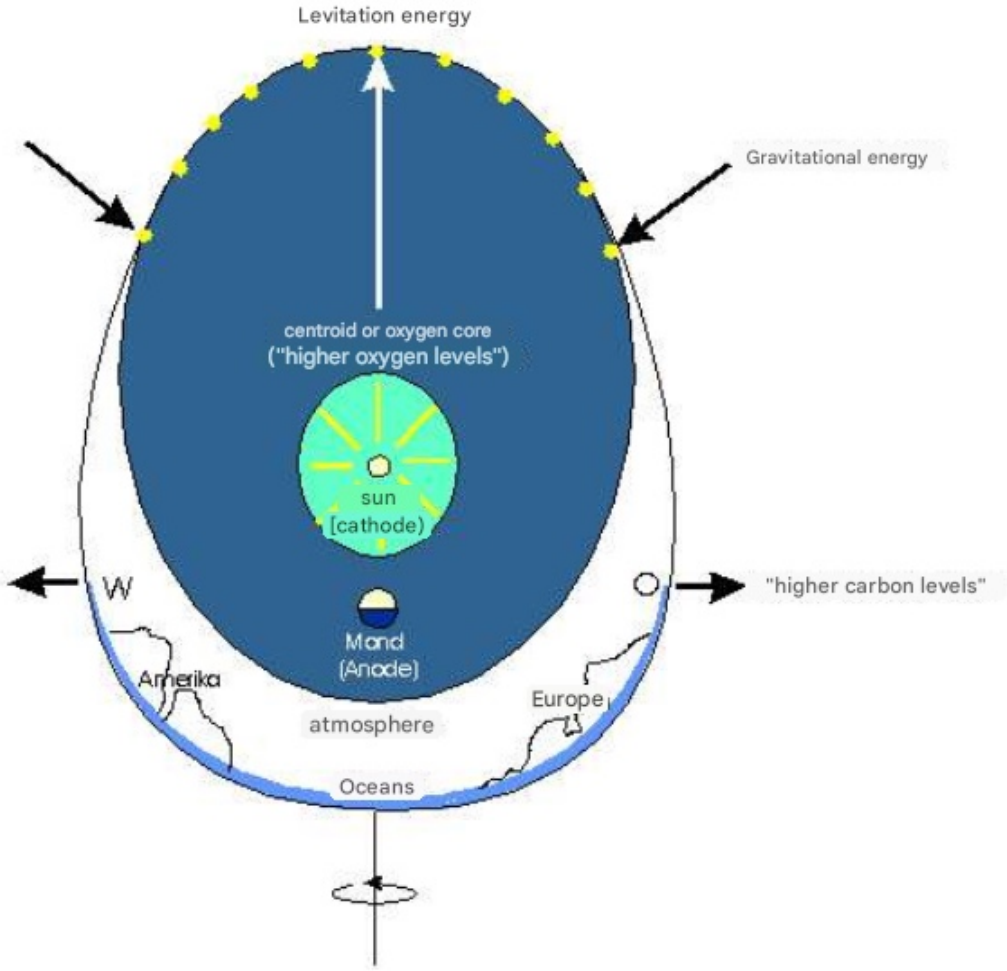

Figure 1: World model by Viktor Schauberger

Anyone familiar with Schauberger's vocabulary will suspect that by "atomic oxygen" he did not mean oxygen in the chemical sense, but a "higher-value substance" with an immaterial structure! Viktor Schauberger always suggested that atoms and their components are far from being the source of matter and energy. When he spoke of "higher-value diffusion material values" or of "atomic oxygen and sweetener or higher-value carbon or fat values", he did not mean, in the author's opinion, material chemical and physical elementary structures, but immaterial or imaginary structures beyond real space-time. In today's language, one would probably use terms such as "vacuum field", "zero-point field", "quantum potential"... As a result, the author uses the term "vacuum structures" in this regard.

Schauberger always thought in polar terms. In the author's words, for him material structures were the result of a combination of negative and positive vacuum structures. In the opposite way, vacuum structures (without space or time) are created by the splitting of material structures. Schauberger saw the fundamental life process of the world in the permanent alternation of the implosive formation of bipolar matter from positive and negative vacuum structures and the explosive splitting of matter into positive and negative vacuum structures.[1]

[1] It is not difficult to make the connection to Ernst Barthel (see below), but also to the author's Platonic solid model [6], provided that one uses "positive convex" and "negative concave".

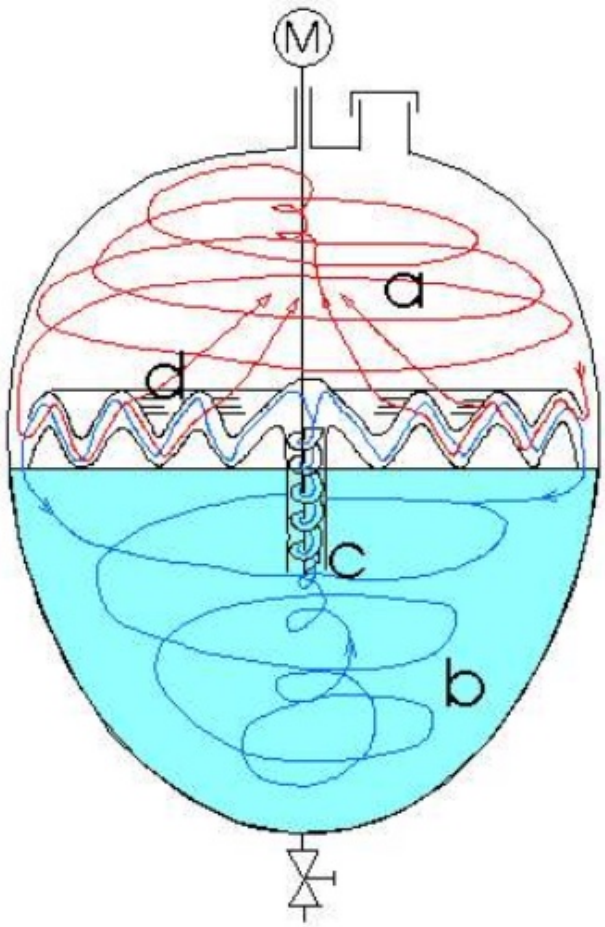

Figure 2: Repulsine or suction turbine

Functional principle: A rotating suction coil (c) sucks water (b) from the lower half of the egg and presses it between two corrugated membranes. The lower membrane is fixed, the upper membrane is connected to the suction coil (c) and rotates. The water is centrifugally accelerated between the corrugated membranes, and "etherified carbon dioxide excesses" are discharged at the peripheral outlet. Material products are "crushed" on the container wall. "Etheric oxygen values" are concentrated in the middle and "levitate" through slits (d) in the upper membrane into the upper egg chamber. The pressure created there supports the suction in the lower egg chamber, so that "higher oxygen and carbon values" fuse, which Schauberger understands as the "qualitative upgrading of the water". A gravitational and a levitation wave cross in the double corrugated membrane. The membrane slits in the upper corrugated membrane are preferably located at the intersection points of the levitation and gravitational waves. (Author's interpretation) Viktor Schauberger also describes this wave superposition as the "life curve, in which the two movement components of suction and pressure forces cross each other in an alternating manner, so that different emulsions take place at the intersection point of an energetic interplay". [17]

Elsewhere, Schauberger writes: "The secret of this original God's mill is the cycloid movement, which is mainly characterized by the fact that two crossed directions of movement take place on a common main axis movement, through which the previously mentioned quality material grains are completely ground with a sliding pressure force that increases quadratically on bipolar walls and the thus ground material takes on a speed of passage that corresponds to the square of the squared pressure force mentioned above. But if this new birth continues to move cycloidally, then there is another rebirth, but this time to a product that no longer has either space or shape. " [16]

From these exemplary quotes by Viktor Schauberger, one can see that he assumed two fundamental aspects for the creation or metaphysical appreciation of matter:

1.) by crossing (linking, superimposing) two immaterial or imaginary structural qualities

2.) the cycloid movement of material structures as a resonance condition to immaterial structures

The bridge that Viktor Schauberger built from the repulsine or suction turbine to the world model is easily understandable here.

Furthermore, the relationship between Schauberger's world model and the hollow earth model (also known as the earth world, inner world or geocosm model)[2], but also to Ernst Barthel's world model, is unmistakable.

Viktor Schauberger and Ernst Barthel were contemporaries. Theoretically, it is possible that they influenced each other; but this is not proven and is not necessary for people like Schauberger and Barthel, who felt and thought beyond the material level. It shows once again what can be observed at all times and on a daily basis, namely that the same or related findings emerge independently of one another; a phenomenon that can now be plausibly explained by the models of the New Physics (vacuum field theory, morphogenetic field theory).

Ernst Barthel - from the concave minimal sphere to the convex maximal sphere

At the beginning of the 1930s, Dr. Ernst Barthel developed a world model that was exactly in the middle between the extreme "Copernican world model", where the earth is curved into a convex minimal sphere in an infinite cosmos, and the other extreme "hollow world model", where the entire universe is pressed into a concave globe. Ernst Barthel was a lecturer in philosophy at the University of Cologne from 1914 to 1939. He was one of the philosophers who lived up to the Platonic ideal. Plato's exclamation: "Let no one enter this school who is not a geometer!" would not have frightened Ernst Barthel. He was not only a balanced thinker, but also mathematically gifted and an excellent geometer. In his work "Introduction to Polar Geometry" he sets out the principles of his world model. The title of the text is programmatic in the sense that Barthel - like Schauberger - always thought in polar terms, whether on a microcosmic or macrocosmic scale. His world view is also necessarily constructed in polar terms.

He viewed the earth as a convex maximal sphere that bisected space. The second half of space is taken up by a concave maximal sphere. And this "celestial sphere" contains the sun, moons and all the planets. In Barthel's model, every point in the sky corresponds exactly to a point on the earth (see Hermes Trismegistus: "as above, so below" or the Lord's Prayer: "...as in heaven, so on earth"). The surface of the earth forms the total plane of the world.

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2 Regarding the hollow earth model, reference is made to the literature list [9], [18], [19], as relevant explanations go beyond the scope of the text would explode

[3] A worldview that the builders of the Egyptian pyramids must also have had, because, as Robert Bauval and Graham Hancock demonstrate in their work "The Key to the Sphinx", the plateau of Giza was a reflection of the sky, with the pyramids of Cheops, Chephren and Mykerinus reflecting the three belt stars of the constellation Orion.

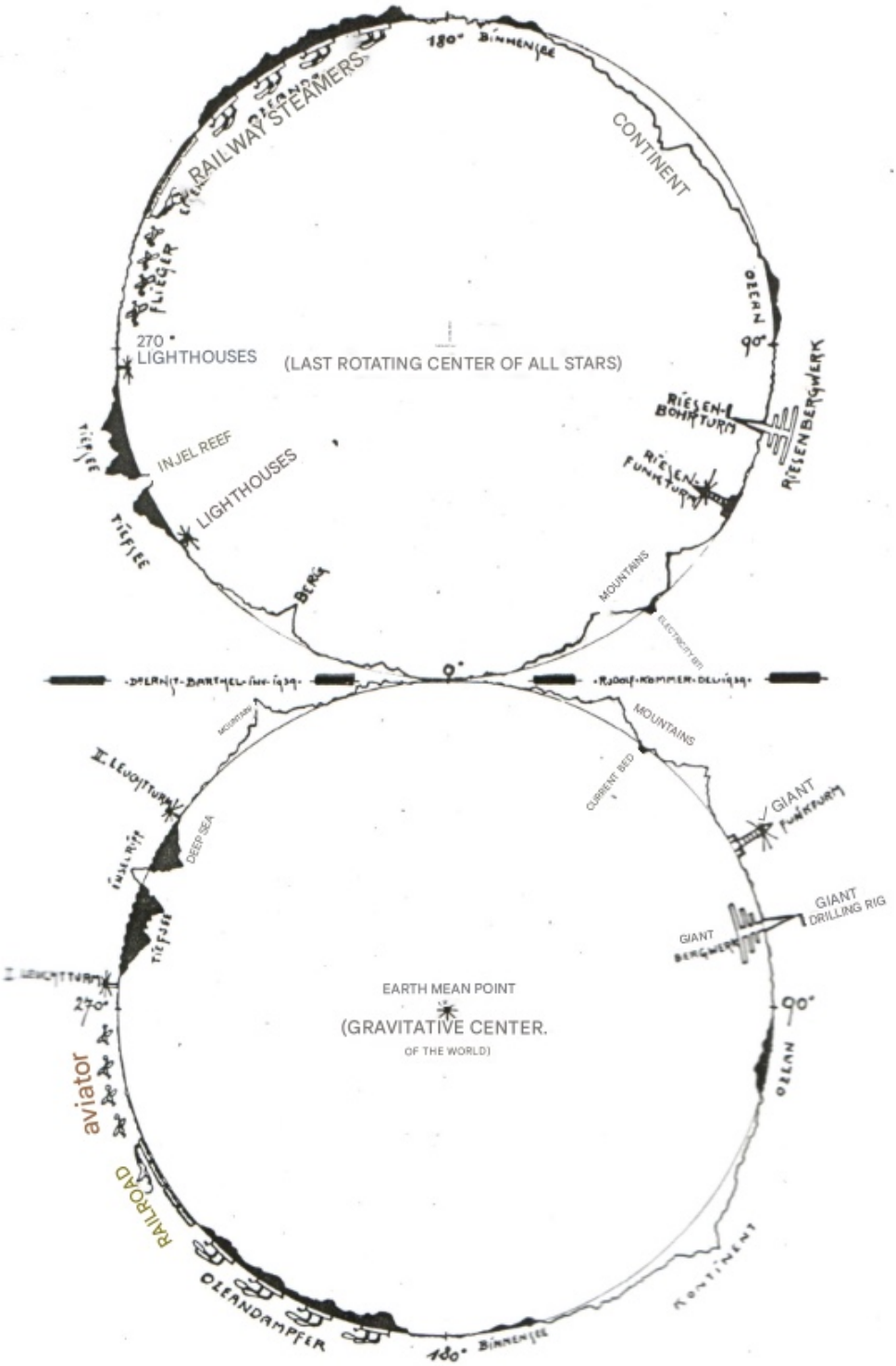

Figure 3: The Barthel world model [5]

In order to better understand Barthel's ideas, it is first necessary to define the terms "maximum circle", "maximum sphere" and "total plane". Barthel considered Euclidean geometry to be unsuitable for the geometric representation of his system, so his so-called "polar geometry" is primarily based on non-Euclidean geometries according to Riemann, Helmholtz, Bolyai and Lobachevsky.

→"A maximal circle on a sphere divides the entire surface of the sphere into two halves.

→ Likewise, a maximal sphere divides the entire spherical space into two halves.

→ For each principal circle on the surface of the sphere there is a north pole and a south pole, for which the maximum circle is the equator.

→ Likewise, for every total plane in space there is an upper pole (center of the sky) and a lower pole (center of the earth), for which this total plane is the equatorial plane. "[2]

→ There are no Euclidean lines in spherical space.

→"A straight line is a maximal circle in spherical space and for parallels there are exactly two real intersection points in spherical space!" [2]

→ Likewise, there are no Euclidean planes in spherical space.

→"A (total) plane is to be considered as a maximal spherical surface that has a curvature of zero and divides space into two halves! [2]

With regard to the earth as the total plane of space, Barthel wants to say that a sphere with a diameter of 12,700 km is incomprehensible to the human imagination. Every globe is basically a crutch for the human imagination, a necessary exaggeration of the degree of curvature for the sake of clarity. In fact, the curvature of the earth is 0°. The earth's surface is therefore as flat as a table top. As an aid to representation, he uses the area-accurate azimuthal projection, so that the earth as the total plane of the world becomes a Lambert coin. (see Fig. 4). Since, according to spherical polar geometry, light spreads out on curved paths, the earth, viewed from the sky, appears curved upwards like a bowl. Just as when looking up from the earth to the starry sky, the sky appears as a vault. (Image on the 180° curved pupil! - as with the hollow earth model)

[4] Curvature: k = 90°(1-2m/M); m-minimum chord, M-maximum constant of space = ½ equator circumference = 20,000 km 5

Johann Heinrich Lambert - inventor of the area-accurate azimuthal projection (flat image of a curved surface)

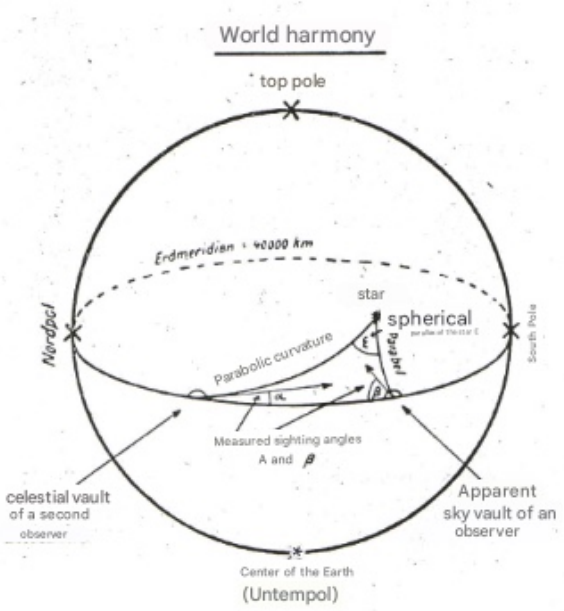

Figure 4: Parallax in non-Euclidean spatial geometry

Earth in the representation as a Lambertian coin [5]

In common with the hollow earth theory is not only Barthel's view of the curved propagation of light, but also of the variance of the speed of light. For Barthel, light itself is a dark space energy radiation that originates from the celestial pole and causes the space ether to vibrate. This energy is invisible and permeates everything (ether model); it only becomes visible, i.e. perceptible to humans as light, when it hits body matter or when "dark ray hits dark ray". The stars are viewed as small energy or mass points or as light phenomena as a result of crossing "dark rays" (dark space energy radiation) in the "space crystal". For Barthel, they are therefore nothing more than a secondary image of the sun, i.e. reflections on the mirror surfaces of the space crystal.

Barthel strictly adheres to Newton's axiom actio = reactio, purely because of his consistent polarity thinking. He criticizes Newton for his inconsistency, because he only sees gravity. Where gravitational forces prevail, Barthel says, there must be a counterforce, namely levitation forces! Barthel sees space with its focal points, upper pole and lower pole, as a polar energy field.

The center of the sky (superpole) is considered to be the main source of energy and the center of gravity of the world, from which a mass suction emanates. The sun, moon and all planets orbit around it. The mass suction of the superpole keeps them on their orbit.

The center of the earth (lower pole) is considered to be an energy suction and the levitation center. The center of the earth is therefore an ether and light adsorber and a mass source. The centrifugal force on the mass is created by the rotation of the earth.

Barthel's Polar Law: All mass in the world comes from the Earth, all energy and all light in the world comes from the Sun.

Two polar forces are postulated that keep all cosmic masses in equilibrium. Barthel believes that the reason why the apple falls to the earth, but the moon does not, but probably rose from the earth, is the progression of these polar conditions.

Barthel postulates: Due to the inhomogeneity of space, no natural process is uniform and linear. (Example: A child who grows five centimeters in the 6th year would have to grow four meters by the age of 80 if linear progression

large. Nor can a meteorite falling to the earth be described by the same laws as the moon! Here too, the non-linear progression must be applied!)

Barthel contrasts the "homogeneity geometry" of space with a "metamorphosis geometry", i.e. laws and natural constants that apply in near-Earth space change with distance from the Earth.

"Qualitative changes are tied to quantitative standards, and with quantities, qualities change.6" [3]

Once again: Barthel does not want to make the earth into a disc again with his model! He sees it as a convex sphere, with the maximum possible diameter in the material-real sphere, but which cannot be properly illustrated with a globe that fits on a desk or in a lecture hall. It is well known that the usual world maps and globes are not true-to-area images. Due to the extreme and therefore unnatural curvature of the globes, the continents are depicted in a distorted manner. For Barthel, space does not have an infinite extent, but can be imagined as a concave sphere of the same size as the convex globe of the earth.

Naturally, one wonders what the qualitative difference is between Barthel's model, where space is concave and the earth convex, and the hollow earth model, where it is taught the other way round. What is the point of the subtlety with the curvatures +90° in the heliocentric model, -90° in the hollow earth model and 0° in Barthel's model? The difference can probably only be grasped in its full extent through higher mathematics, a terrain in which the author unfortunately has only a poor knowledge. Nevertheless, it is worth taking a chance.

The Poincare dodecahedron model by Jean-Pierre Luminet

Albert Einstein (1879-1955) assumed that space is spatially finite but unlimited. For him, space-time was concave or convex depending on the Friedmann constant. Edwin Hubble (1889-1953) discovered the redshift of distant stars and interpreted it using the Doppler effect, so that to this day the cosmological standard model (Big Bang or "Gugelhupf model") assumes that space is still expanding. Whether gravitational force will triumph over centrifugal force at some point and reverse the process is said to depend on the mass of the so-called "dark matter", about which we still know nothing for sure.

However, recent measurements by the NASA satellite WMAP indicate that the universe is flat or only slightly curved, which means nothing other than that the curved four-dimensional geometry of space according to Riemann, Hilbert and Einstein does not apply. It must be explained that for mathematicians, a space is always "flat" when its surface can be created by rolling and folding without stretching and cracking a flat surface or having to insert or remove wedges. Whether cubes, cones or cylinders, they are "flat spaces" in the mathematical sense. From this point of view, the Platonic solids - tetrahedron, hexahedron (cube), octahedron, icosahedron and dodecahedron - are also flat spaces. Even a torus is a flat space, because it is nothing other than a cylinder that runs back into itself (tube ring). [12]

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6 Compare Walter Schauberger's tone law: quality x quantity = const.

7 The Peters Atlas, for example, provides undistorted, true-to-area images.

* There are several interpretations for the redshift, so that it is not necessary to assume that space is expanding. Fritz Zwicky and Wilhelm M. Bauer, for example, interpreted the redshift as light fatigue, which would be logical for a material structure such as light (photons). The author would like to offer an alternative explanation for the redshift: a spiral-shaped rolling movement of the mass bodies in space towards a 1-dimensional attractor would be just as possible.

It is still possible to imagine how a two-dimensional sheet of paper can be rolled up into a torus (mathematically a 2-torus) as a three-dimensional space, but it is no longer possible to use it to illustrate a hyper-torus (3-torus) as a four-dimensional space. Mathematicians use a trick for this, or rather an analogy as a crutch for the imagination: they use flat rooms with mirrored interiors as an analogy.

Just as a "normal" two-dimensional rectangular surface is analogous to a "normal" three-dimensional torus (2-torus), the tetrahedron (1st Platonic solid) with its 2 x 2 mirror surfaces is the analogue to a hyper-torus that is intertwined twice in the 4th dimension. Accordingly, the cube (hexahedron = 2nd Platonic solid) with its 2 x 3 mirror surfaces is a thrice intertwined hyper-torus, the octahedron (3rd Platonic solid) with its 2 x 4 mirror surfaces is a 4-fold intertwined hyper-torus, the icosahedron (4th Platonic solid) with its 2 x 10 mirror surfaces is a 20-fold intertwined hyper-torus and finally the dodecahedron (5th Platonic solid) with its 2 x 6 mirror surfaces is a 6-fold intertwined hyper-torus in the fourth dimension.

The calculations of the French physicist Jean-Pierre Luminet and the American Jeff Weeks lead to the same hyper-torus that is intertwined six times in the fourth dimension and can be illustrated by a dodecahedron with its 12 pentagonal mirror surfaces. Since a four-dimensional space is also called a Poincare space, it is referred to as a Poincare dodecahedron and it is assumed that Universe has to do with 120 nested dodecahedral spaces. [18] What are the consequences:

1.) The universe may contain only a few stars that are reflected infinitely often at the periphery. The fact that such reflections exist is proven by the mirrored quasar called "Einstein Cross" [12]

2.) The fact that no more waves can be detected above a certain wavelength is interpreted by Luminet as meaning that the universe is finite. Wavelengths that are larger than the universe itself simply do not fit into the universal dodecahedron hyperspace. In an infinite universe, however, there should be no restrictions on wavelengths! [18]

3.) The measurements of the WMAP satellite also indicate that the universe contains less than 5% matter, the rest being explained by two different qualities of the mysterious "dark matter", one quality being expanding (centrifugal-levitating) and the other impinging (centripetal-gravitational). [9]

As below, so above

The calculations and measurements that support Luminet's dodecahedron or football model show that both Schauberger with his limited egg universe and Barthel with his flat, sharply limited universe in the projection of a Lambert coin were not as far off as they first seemed. Even if the egg and the sphere do not mathematically represent flat spaces, they are not dissimilar to Luminet's decahedral football. It is clear that all three models can only be inadequately illustrated on a two-dimensional sheet of paper or with a three-dimensional body (globe, egg).

Luminet's model immediately reminds us of Johannes Kepler's cosmic model of the nested Platonic solids; the journal "Nature" notes that Luminet's model

"is only a few multidimensional steps away from Kepler's model of the cosmos [...], which he postulated in 1596 in the Mysterium Cosmographicum." [10] The models of Barthel and Schauberger could be evaluated in a similar way; the step to Luminet's dodecahedron universe is a question of mathematical dimensions. It is noteworthy that both Barthel and Luminet use the analogy of the "cosmic crystal" with reflected suns and "dark radiation or dark matter", but above all that all three speak of two qualities of "dark matter", one expansive and one impansive; Schauberger and Barthel use antonyms such as explosive-implosive, positive-negative, convex-concave or levitation-gravity.

The measurements of the WMAP satellite are interpreted in such a way that the Luminet universe is around 37 light years wide and 13.7 billion years old... which is no surprise, since they want to prove the Big Bang; it is the yardstick by which established cosmology interprets all measurements. Light is still supposed to make its way straight through the vacuum or through "dark matter" without consuming energy but time, although photons are material structures or electromagnetic waves that are practically subject to "fatigue and wear"!? Nevertheless! There is hope: in Luminet's universe, the earth is no longer an insignificant speck of dust in endless space, but belongs to the approx. 4% "weighty Matter" of a finite universe. Most impressive, however, is that Luminet's model creates a hermetic correlation from the macrocosm through the media and microcosm to the vacuum field. Platonic solid structures can be found in crystal structures of matter and in water. Lord Kelvin, Wilhelm Bauer, Horst Preussker, Konstantin Meyl and others modeled atoms and elementary particles as intertwining torus vortices, and the author himself uses Platonic solids to model the fine structure and interactions of the vacuum field (Platonic solid model [6], [7]). Another indication of the holographic structure of the universe, in which information and/or energy exchange processes, starting with the imaginary structures the vacuum, through real matter, to the boundaries of the universe.

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