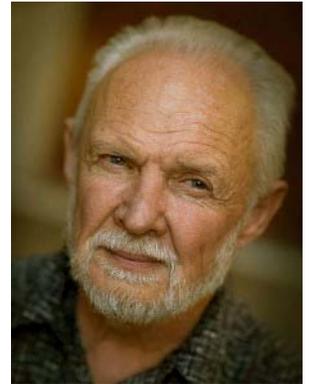


Mysterious Heart: The Chestahedron of Frank Chester
by Ulrich Morgenthaler (translated from German by Dr. Karl Maret)
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Abstract

The California artist, sculptor and geometer, Frank Chester, inspired through Rudolf Steiner's planetary seals and capitals of the pillars in the first Goetheanum, discovered the geometrical form associated with the human heart and the earth. He was helped through the discovery of the so-called "Chestahedron." During the Whitsun Conference held at Forum3 in Stuttgart, Chester will speak about the results of his latest research.

Occasionally one is blessed with the good luck to be allowed to meet a phenomenal human being: The kind of person who has followed his individual path to discover mysteries of our world, and who then continues, without distraction, to follow his path in order to bring one treasure after another into the light and life. Such human beings inspire and vitalize, solely through their presence and their inner dynamic, and leave one somewhat speechless and in awe. Among such humans, I count Frank Chester. His life theme arose from a study of the so-called platonic solids that have the fundamental property of being constructed only from identical equal-sided polygons.



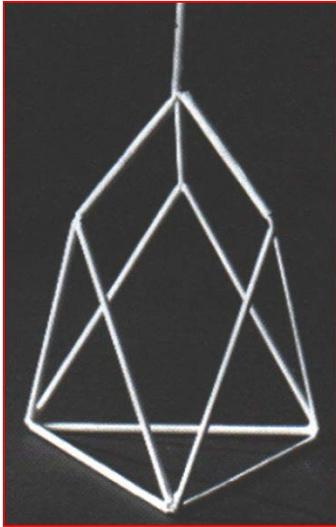
The Discovery of the Chestahedron

A European journey in the 1990's led Frank Chester, the San Francisco retired teacher, sculptor and geometer, to Dornach in Switzerland. Prior to this journey he had never heard anything about Rudolf Steiner or Anthroposophy. He was immediately impressed by Steiner's two-dimensional, seven-sided planetary seals, and equally by his seven-sided capitals on top of the columns within the model of the first Goetheanum. While gazing upon these forms a question arose in him: Could a three-dimensional, seven-sided form exist that might also demonstrate the harmonic nature of a platonic solid?

Not being satisfied with existing seven-sided models, Frank Chester began to experiment: with clay, string, straws, wire, paper, soap bubbles, and all manner of forms. After many failures he discovered, in the year 2000, while artistically playing, an entirely new, never-before seen geometric figure that was simpler and more elegant than anything seen before. He called his discovery the "Chestahedron" (Chestaeder in German).

This solid has seven surfaces with exactly the same surface area. It consists of four equilateral triangles and three additional, four-sided surfaces which resemble kites. It shares the same property with the five regular platonic solids in that each of the seven surfaces has the same area. It is unique in that it contains two different shapes and two different side lengths while in the five platonic solids these are always the same. Interestingly, Chester could utilize two circles in the ratio of the golden section (Phi) to lawfully and reproducibly develop the surfaces of his form.

The Heart as an Organ of Flow



After he had discovered this new form, Frank Chester was not at all clear what its importance would be for the world. A quote from Rudolf Steiner guided him: 'Geometry is knowledge that appears to be produced by human beings, yet whose meaning is totally independent of them.' Chester continued to experiment for ten years more. Among the most important findings that he has discovered to date is the following: After he had seen that his seven-sided form can be harmonically integrated into a cube when it is oriented at an angle of 36 degrees, and that it appears to resemble a kind of heart shape when he dipped the wire frame model into a soapy liquid and created convex surfaces by expanding the enclosed soap bubble gently with a straw, he had an idea: He took a solid model of the expanded, seven-sided form and dipped it along its axis into a water-filled vortex chamber. When he spun it vertically, the resulting water vortex was stable. However, when he spun the form attached to a high-speed drill and introduced it into the water at an angle of 36 degrees, a type of pocket-shaped vortex developed on the side of the main water vortex.

Through what he saw developing within the water, Frank Chester developed a sculpted model and then opened it in cross-section. This result reminded him immediately of an image of a vertical cross-section through the human heart. Driven by curiosity, his joyous experimental nature, and further inspired by a drawing from Rudolf Steiner, he finally arrived at a three-dimensional depiction of the formative forces which underlie the human heart and create its asymmetric form through its muscular layers. His conclusion: the formative forces which form our heart muscle are active as vortices and are oriented and maintained through the seven-sided form discovered by him.

Since Frank Chester developed this insight, the heart is no longer a pump. For him, it has instead become an organ of flow (regulation). If the heart were a pump, the paper-thin tissue at the apex of the left ventricle could never withstand the developing pressure. However, from the perspective of a vortex model of the heart, it becomes understandable why this part of the heart is never exposed to these higher pressure dynamics.

In the developing human embryo, blood is already streaming rhythmically through its blood vessels before the heart has even formed. Something other than the heart, therefore, must be responsible for this movement of the blood. The heart that develops later appears to function more like a balancing brake: blood streams into the left ventricle in a clockwise direction and then vortexes around itself, finally emerging from the left ventricle in the opposite, counter-clockwise direction. At the moment when the blood flow reverses, there is no movement; absolute stillness reigns. However, this is a dynamic rest. This is the exact moment, simultaneous in time and space, that for Frank Chester represents the eternally present heart-centered state in each human being.

“A Kind of Tetrahedron”



After addressing the human heart, Chester then turned his attention to the earth. A further statement from Rudolf Steiner gave the impulse: In a lecture about the causes of earthly volcanism, Steiner indicated that on the basis of his spiritual scientific researches, the earth in its foundational form was not a sphere but rather had at its basis a “kind of tetrahedron”: In Middle America, at the south pole, in the Caucasus (mountains) and in Japan, are the four corners of the tetrahedron, a form that was created out of the cosmos through the joining together of four triangles.¹

Chester’s calculations showed that an equilateral triangle would be created if one joined points together in Japan, the Caucasus, and a third point in Kansas, North America, rather than the point in Middle America mentioned by Steiner. An inverted tetrahedron constructed downward from this triangle would be short of reaching of the South Pole (inside the earth) by 4,132 kilometers. In order to reach the South Pole from this tetrahedron, one would have to equally stretch its three south-pointing faces. However, with this construction, one no longer has an “exact” tetrahedron, but rather a “kind of tetrahedron.” According to Frank Chester, one can open the downward-pointing sides of the tetrahedron (hinged to the base triangle) at an angle of 94.8304 degrees. At this point the three triangles stand in the exact relationship to one another as the four equilateral triangles in the Chestahedron. An inverted Chestahedron constructed on the above triangle, formed by Japan-Caucasus-Kansas, touches the South Pole exactly with its lower apex point. Perhaps it was the Chestahedron that Rudolf Steiner saw clairvoyantly as the basic form on which our earth is based and had tried to suggest in his lecture? Because a Chestahedron could also be described as a “kind of tetrahedron.”

Understanding Earthly Phenomena

Subsequently Frank Chester found phenomena which appeared to confirm his suggestion that the Chestahedron acts as a fundamental geometric form within our earth. If one follows a lawful transformation involving surface-point-surface mapping, it can be shown that the Chestahedron has a cube as its foundation (ed.: within it). With reference to the dimensions of the earth, this cube has the same diameter as our moon (the earth’s core has a diameter of 3400 km; the diameter of the moon is 3474 km). In 2008, scientists at Uppsala University in Sweden published findings that appeared to confirm that the core of the earth is a cube (Translator note: Specifically, the round earth’s core has a cubical iron crystalline structure and not a hexagonal one as assumed in older models).²

These findings, which are aligned with the idea of a Chestahedron in the earth, offer an explanation why seismic waves travel (through the core) faster along the Earth’s axis (from pole to pole) in comparison to their movement from equator to equator. It can also be shown that notable synchronic lines that join regions of cooler, warmer, and hotter earthly

zones in seismic maps correspond essentially to the suggested Chestahedron model within the Earth.

Perhaps the most impressive application of this work may be an explanation for the underlying phenomenology in the appearance of the northern lights: The distribution in the appearance of both the northern lights (aurora borealis) and the southern lights (aurora australis) (on the earth's surface seen from space) appear to be in alignment with the rings that Frank Chester found in his experiments with the Chestahedron creating water vortices while studying the energetic origin of the human heart. Using the Chestahedron, Chester found a common denominator, a starting point which promises to offer a deeper understanding of both earthly phenomena as well as those of the human heart.

Questions upon questions now arise in me, but simultaneously wonder and awe-filled inwardness are present: Could it be that not only geometrical forms lie at the basis of the human heart or the earth, but specifically the same geometrical structure appears to be the basis of both, namely the seven-sided Chestahedron discovered by Frank Chester? And further: If the heart is "the center of the human being" and the heart and Earth stand in such an inward relationship to each other through the Chestahedron, what then is the Earth? How can such questions bear further fruit and insights?

References:

1. "One could long ago have seen through the matter, what kind of form the earth actually has, that she is not like a round cabbage head, but rather has something reminiscent of a tetrahedron." (Rudolf Steiner in "The Evolution of the Earth and Man and The Influence of the Stars" GA354, Lecture on 18 September 1924, Dornach.
2. See German article from news magazine Der Spiegel, on-line at www.spiegel.de/wissenschaft/natur/0,158,533866,00.html

For further Information, go to: www.frankchester.com Also see excerpts of lecture, demonstrations and interviews under <http://www.youtube.com>