

SACRED GEOMETRY AND ARCHITECTURE



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MICROCOSM AND FRACTAL SCIENCE

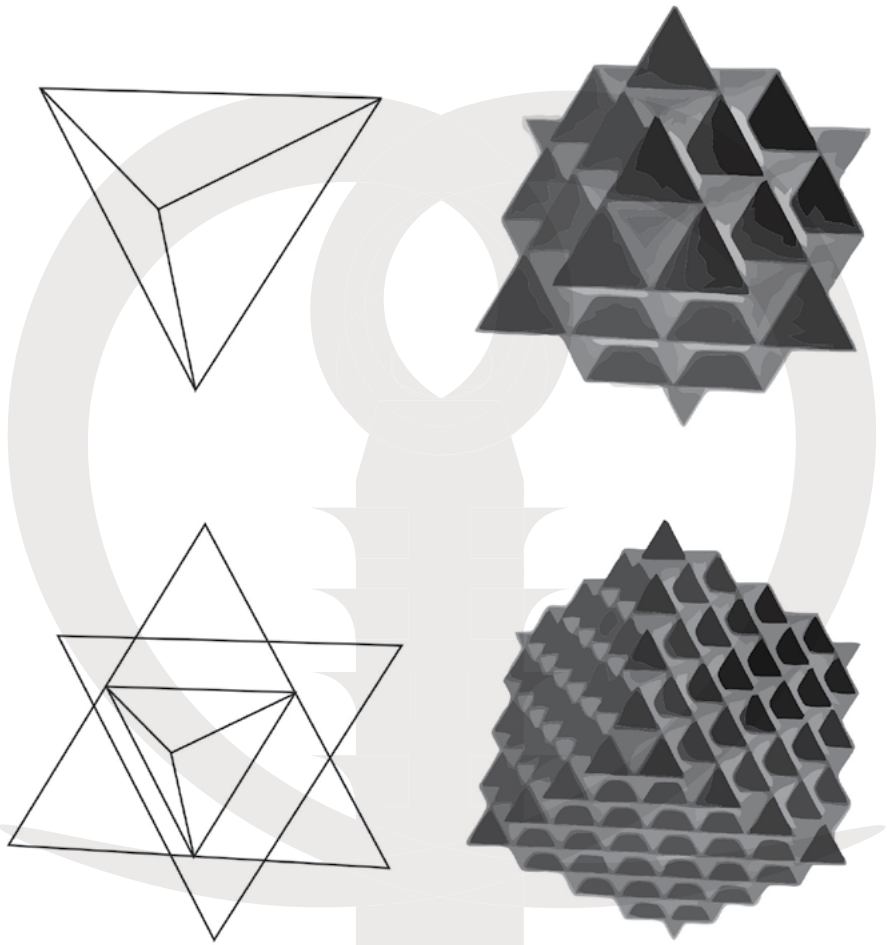
3.11- The tetrahedron as a geometric minimum unit

In the book *Three Paths to Quantum Gravity* we read how Lee Smolin provides very important bridges to link the cosmic micro and macro worlds. Space / time are described as an independent system, that is, the “empty” space / time can be a grid-like factory filled with interconnected energy grids. This would mean that the particles and waves that we experience are only emergent patterns of this fundamental factory.

In contrast, string theory seems like a waste of time to explain 3D reality. There is a beautiful mathematics in the vibrational resonances in their theories but it is not comprehensible three-dimensionally. An image of unification emerges when we see the fundamental patterns observed in Nature through biology, geology, and cosmology where the basic patterns are found in space / time.

The spiral galaxies, the tornadoes, the shell of the Nautilus lead us to conceive a flow created by a spiral of Phi proportion in different scales. Mapping the fundamental geometric patterns found in all fields of science, as well as in almost all the spiritual traditions of the planet, leads us to think of simplified primary patterns as three base geometries and their constitutive geometries. The pentagram (five-pointed star), the hexagram (six-pointed star), as well as the equilateral triangles that form it and the heptagram (seven-pointed star).

The pentagram consists of the proportion of Phi, which describes meteorological weather patterns such as tornadoes and hurricanes, the



growth of plants (phyllotaxis), galactic spiral arcs, even the ratio of the wavelength width of DNA.

The hexagrams are formed by the simplest possible packing of circles and spheres are made of equilateral triangles in equilibrium with each one. This basically describes the most balanced state of energy possible in the universe, and can be understood as the ground state of any highly efficient energy lattice. We find it in the structures of the carbon molecules (essential for life) even in the hives, leaves, and flowers and at the poles of Saturn.

Heptagrams are most commonly seen in integrative symbolism through human societies and culture. Perhaps archetypally rooted in the seven planets visible to the human eye from Earth, the expression of the seven is found through the Christianity, Hinduism, Islam, Judaism, Norse