

# SACRED GEOMETRY AND ARCHITECTURE



Written, edited and illustrated by  
Carlos Arturo Alvarez Ponce De León

Illustrations and photos of projects and studies by  
Carlos Arturo Alvarez Ponce De León  
Ninón Fregoso Fregoso  
Michael Rice  
Jenniffer Hassey  
John Stuart Reid  
Dan Winter  
Juan Schlosser

# 2

## THE MESOCOSMOS AND BIOLOGICAL ARCHITECTURE.

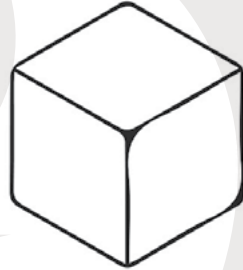
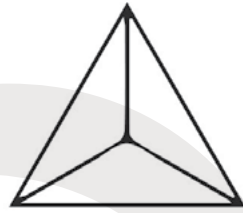
### *2.6- Evolution of scientific thought*

Next, we will describe the contributions of some of the scientific thinkers who have been helping to evolve the paradigm of thinking towards a paradigm that reflects the objective reality. Pythagoras described mathematics as the universal language of nature. His significant contribution was the Pythagorean Theorem and the basic precepts of Musical Theory (harmonic relations). Pythagoras traveled to Egypt, where he studied with the Egyptian priests, possibly learned religious rites, mathematics and cosmological concepts from the ancient Egyptian tradition. The Tetractys was the heart of the Pythagorean School and were the highest level of initiation for its students. It consisted of the triangulation of points such that together they generated the geometry of four triangular levels that closely resemble the isotropic vector matrix of four frequencies of B. Fuller.

Eventually, for various reasons, the Tetractys was used by the mystical Kabalistic traditions to represent the Tetragrammaton which is the representation of the four flaming letters of God, clearly connecting the geometry of the Tetractys to the force of creation, the cuboctahedron.

Another great thinker was Plato, a Greek philosopher, and mathematician. He wrote extensively about the five basic forms that bear his name, although they were originated by the influence of the Pythagorean schools, the Platonic solids. In his book *Timeous*, Plato proposes the correlation of these forms to the four elements and the celestial kingdoms. Tetrahedron / fire, Octahedron / Air, Cube / earth, Icosahedron / Water, Dodecahedron / Ether. Plato's ideas of the realms of perfection or ideal forms are also found in Rupert Sheldrake's modern scientific theories about morphic fields (The presence of the past: morphic resonance and habits of nature, 1990), and in "The End of the Time", by Julian Barbour, where the collector of configuration of Barbour is called Platonica, by the inspiration of the world of ideal forms of Plato.

The most famous student of Plato, Aristotle, who is considered the first Western scientist since he pursues an empirical study of nature, renouncing the traditional philosophical approach of pure logical reasoning. Plato has held the conviction that the Universe is a living system and that the musical



*Platonic solids*