## 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

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## **BIOFRACTAL DESIGN PROCESS**

## 4.8- Primordial Design Geometry: toroid and cubo-octahedral / dodeca-icosahedral matrix

The basic geometry of a project depends first on the conceptualization of it and this geometry is chosen according to its function. The function that a construction will perform will determine the features and characteristics of the geometry used. For them we have to know how the Universe is built and what are the laws that operate it. The Universe is built in a static and dynamic way. The dynamic aspect of the Universe is the double toroid that generates the energetic flows both electromagnetic in their explosive movement and gravitational in their implosive movement.

The static aspect of the universe is the double cubo-octahedral / dodeca-icosahedral matrix. Thus we have the basic conception of the universe that can be used faithfully or metaphorically for design. A toroid can be designed (as in the Amma Center project), a double toroid (as in the Aiki center or the Lotus of the Heart temple), or the spirals of the toroid emanate either left or right spirals (as in the Bioss Lilah School Montessori). The function of design thinking about the toroid or its abstractions is to distribute and move the electromagnetic and gravitational field of the organic life that lives or visits.

It is very common to find orthogonal constructions. This is due not only to the ease of accommodation of the physical body in a space that dictates the square shapes of a bed, a table or an armchair and therefore of a house or building but also by the resonance that is generated with the network cuboctahedral that emanates as static geometry of the Universe. The cuboctahedron contains both a cube or hexahedron and an octahedron. The

octahedron can be seen physically in the pyramidal constructions throughout the globe.

Orthogonal or cubic constructions are even more frequent in the vast majority of dwellings, buildings and meeting centers in planetary regions governed by a Western philosophy of life. On the contrary, the philosophies of indigenous life tend to build circular dwellings since they have a resonance with the dynamic toroidal aspect of the universe, their social and family structures are more nomadic than they are sedentary. The use of private property as a means to preserve land tenure, families, sexuality, emotions and thoughts of the individual is reflected by the orthogonal architecture of their constructions.

It is also true that constructively it is much simpler and more economical in time, materials and all kinds of and hydraulic, sanitary resources installations, orthogonal gas constructions since the industrial design and the prefabricated ones have been made based on these criteria. The practicality to build foundations, walls and straight roofs makes the labor specialize in it. Modern aesthetics has accustomed the eye to seeing linear purisms as a synonym of elegance, practicality and refinement. Although in nature there are no straight lines. It is in these orthogonal architectural worlds where we live, where we spend the vast majority of our time. And these buildings shape us, they transmit