Growth: An Architectural Study In Wall Design

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Growth is a three-dimensional, modular, open-work, masonry wall design. The modules take the form of tetrahedrons which are attached at a connection point located on a shoulder detail; each pair produces a hexagonal solid. The special quality of the design is its simultaneous simplicity and complexity. The basic tetrahedron shape provides one of the simplest, most stable forms in nature and as such, can be translated and rotated in order to produce a variety of simple, repetitive geometric patterns. However, the thickening of this basic shape at joints and subsequent thinning of the shape in between joints gives the work an “organic” feel which underlies a more complex set of dialogues. The unique moulding of the form is reminiscent of things in nature such as bones and coral reefs which reflect a quality of life inherent to the work. In fact, each unit, with its three “feet” and one “nose”, takes on a subtle sense of individual personality and together with the others, seem to produce a colony of primitive beings. The design therefore takes on two pursuits. One is classic, in its minimum mass, maximum strength approach. The other is more modern: the subtler qualities of the work extend its dimensions beyond simple geometry, into a world of biomimicry and animated gestures which speak of life, and thus a more responsive, intelligent architecture. These simultaneous pursuits explore the connection between science and art in the manner of Buckminster Fuller and Frei Otto and reflect the tremendous value of taking a more interdisciplinary approach in design.

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