

INFIL∞TION

INFILOOLION¹

Culture, Dignity, and techniques are the identifying principles of architecture and urbanism in different nations. While current Iranian architecture and urban environment identity are suffering from various inconveniences, Infiloolion is an effort toward reinterpreting dignity of Iranian architecture using digital design and fabrication techniques to develop a new method of representing Iranian Muqarnas art. In this method, Muqarnas is not only dependent on being allocated on the corners but also it can be populated then return to its starting state. Muqarnas in Infiloolion begins and ends in a double curved loop inside a hypothetical cube. circle and square are symbols of human perfection and logic in the Jungian school of thought, similar to their holy and metaphysical perception in iconology of Islamic art.

Infiloolion is a contemporary interpretation of Persian Muqarnas art. Translating the traditional Iranian dome structure to a new form of waffle loop has resulted in a fluid integration of translucency.

During the initial inquiries for Soore faculty of architecture & urban Planning symbol, many demands have been raised. A social interaction space, resting area, translucency, centralization and identified space have been the most outstanding criteria for this figure (installation). Initially, each of these indexes has been interpreted as spatial elements. Accordingly, a waffle structure has been chosen as the primary component to achieve the pre-sets.

Creating a fluid form considering the esthetics to transform Muqarnas art to a contemporary geometry, is in demand of symmetrical visual effects. Therefore, optimizing the form, the algorithm has followed the same attitude.

Introducing an abstract form of Muqarnas geometrical string while concentrating on unification, form optimization matrix variable settings, has been not only set in a way to transform spatial elements to one another by a loop (Ceiling to wall and wall to floor ...) but also has developed a new attitude toward Muqarnas carved structure, according to a rhythmic unification.

Complex geometrical shapes as in Mobius strip or Klein bottle has been derived from loop principles. Therefore, the repeating loop properties have empowered the waffle transition rhythm. The loop itself is framing social behavior inside or outside the pavilion.

The 14-day process of studies, form finding, design and fabrication of Infiloolion had been simplified by (CAD- CAM) and digital fabrication techniques.

Using iron sheets with computed thicknesses (processed and analyzed in grasshopper plugin) for all the structural and nonstructural members of the pavilion has induced a good level of appearance perception.

1- Infiloolion : Infinity + Loop + Pavilion

Date : 2017

Material : Iron

Area : 7.2 Square Meters Structure Type : Waffle Structure Fabricate Duration : 6 Days