Whispering Gallery in domes
An acoustical Analysis of Imam mosques dome in Esfahan

Mehri fadaei haghi, Elham Hatami Golzari, Masoumeh Fadaei Haghi

Abstract: In western architecture whether in classic, middle, or modern age, Space has been defined through positive objects like sculpture and building. In other words, it is the object that gives meaning to interior Space. In Islamic architecture, on the other hand, Space is not determined by objects, but it is defined in vacuum. Before going to the main point, there would be some scientific definition of Sound and Whispering Gallery in domes. Imam Mosque in Esfahan, is clear example of a dome, in which if a visitor, from the center point, initially, there would be eighteen times reflection and gradually as he approaches the focus the number of reflections would be reduced to seven times. Finally, relationship with the intensity of sound and whispering gallery is determined by elaborate study of domes.

Keywords: Space, Whispering, reflect.