

A Geometry of Early Islam – The Dynamic Circle Method

“3D Thinking” Pages 187, 274: Using close-packing circles to create surface designs, during the early years of Islam, requires a method to generate different close-packing circle arrangements. The [dynamic sphere geometry](#) provides such a method. Applying the geometry, starting with a 5-circle arrangement within the unit triangle of a square, generates many arrangements including the arrangement (8th in the sequence) that was used to create the window design of the [1356CE Madrasa of Amir Salf al-din Sargatmish in Old Cairo, Egypt](#). Basically the method requires algorithmic steps where circle sizes and positions are changed in a step-by-step fashion. Once one understands the dynamics of the geometry then looking at the Madrasa window in old Cairo becomes a dynamic experience that couples with the numerology of the window itself, for example, 5, 6 and 7 (سنع; نخ; نود) – a repository, a place of wealth. Connecting circle contact and center points with rosettes and straight lines will create surface designs or lattices of which some will have been used in the past.

[Supplement](#)

<http://rogerburrowsimages.com/wp-content/uploads/2017/12/NEWCircles-5.mp4>