

LABRYNTHS MYSTERIES and METHODS

“3D Thinking” Page 32 Neolithic Geometries: Labyrinths are constructed with a single path that winds forwards and backwards, multiple times, before arriving at a central point. The oldest surviving labyrinths appear as Neolithic and Bronze Age rock carvings – a petroglyph labyrinth in Usgalimol, India has been estimated to be 10,000 years old. By the time of the middle ages labyrinths were fairly sophisticated. The 13th Century CE floor labyrinth in Chartres cathedral, France, is about 42 feet (12.8m) in diameter with a path length of about 800 ft (245m). One possible way of constructing the Chartres labyrinth is to start with eleven concentric rings (in the example octagons are used but the Chartres labyrinth is actually circular) – where the center stands as the 12th layer. The method shown below involves placing “switch” tiles positioned within the parallel lines of the concentric arrangements – where the switch tiles are initially aligned with the parallel lines and then rotated 90° to create the labyrinth. The second in the sequence is the Chartres labyrinth. The other labyrinths have been created positioning the “switch” tiles in different places.

<http://rogerburrowsimages.com/wp-content/uploads/2018/01/My-Movie-3.mp4>

One of the oldest techniques for constructing labyrinths appears to be that of the ‘key’ method – a method that starts with a number of lines radiating from a point, ‘cups,’ and dots, see below. A chapter in the author’s, “**3D Thinking in Design and Architecture from Antiquity to the Future,**” is devoted to labyrinths: methods of design; their uses; and mysteries associated with them. Thames and Hudson Ltd is the publisher, April 2018. The “switch” tile method shown above was inspired by the paper, “Following in the Footsteps of

Daedalus," <http://archive.bridgesmathart.org/2013/>

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Labyrinths served, according to Homer, as the dancing ground of the Goddess Ariadne; as the Minotaur's prison according to Cretan legends; as a path for chanting and meditation in medieval cathedrals.