Geometric Decoration

Geometry is a predominant decorative theme in Muslim art, usually dominating other ornamental motifs. Geometric decoration appears both in architecture and in the applied arts: ceramics, textiles and in the arts of the book. Regardless of material, scale and technique, the motifs used are practically always the same. Muslim artists did not 'invent' geometric decoration, but they developed it to its full potential. The achievements of the Muslim world in geometric decoration were made possible to some extent by the interest that mathematical studies, such as Pythagorean mathematics, generated in Islam. This is evident in the geometric knot, inherited from pre-Islamic decoration, which was developed into complex combinations of intertwining ribbons or knot-work. Starting from the circle, an extraordinary variety of figures were generated (squares, diamonds or rhombuses, hexagons, octagons, stars with six-, eight-, ten-, twelve- and more points) by applying the principles of symmetrical repetition, multiplication or subdivision on any material and any scale. The wealth of colours and the skill used to combine different tones help the compositions to stand out, creating the illusion of several different planes. Three-dimensional effects were used to enrich compositions, either through the repetition of motifs (such as sebka a pattern created from a network of diamond shapes), contrasting textures or the widespread use of mugarnas (known as mugarbas in North Africa) a three-dimensional geometric stalactite-like decoration. Geometric motifs, occasionally based on abstractions from the natural world, also have a symbolic meaning in keeping with the function of the object or building.



Bowl with radial decoration
Hegira second half of 3rd century /
AD second half of 9th century
Abbasid
Museum of Civilisations | Museum
of Oriental Art "Giuseppe Tucci"
Rome, Italy



Frontispiece of a Qur'an Hegira 4th century / AD 10th century (second half) Fatimid–Zirid Museum of Islamic Art Raggada, Kairouan, Tunisia



Alhambra
From Hegira 636 / AD 1238 to the reign of Muhammad V (AH 754–94 / AD 1354–91)
Nasrid
Granada, Spain