



Cosmatesque

Obsessive geometric patterns and quasi-fractals in XII century

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One of the most intriguing and visual striking kind of mosaic decoration is that of the Cosmatesque style. Cosmatesque refers to a geometric inlay, made of marble, glass and hard stones, used to decorate church floors and church walls, developed between the XII and XIV century, mainly in Rome and its surroundings.

Cosmatesque artisans inherited the Byzantine and Roman architectonic employment of the so called *opus sectile marmoreum*, a technique where a small number of different and multicolor polygonal tiles, – regular such as triangles, squares, hexagons, or not, like rhombus – sliced from marbles and hard stones, are strictly assembled, side by side, following more or less complex patterns, to solve the problem of floor revetment.

Many different kind of designs have been developed for the inlay floor decoration during the centuries, from the three color rhombic tiles giving the perception of cubes, as in the house of Faunus in Pompei, to the alternation between squares frames and squares with circles inscribed, made of huge slabs of marbles, as in the Pantheon in Rome, from the most intricate relationship between bands and patterns of Byzantine period, up to the elegant Cosmatesque solutions.

Cosmatesque represents one of the highest artistic achievements of the Romanesque period. From the stylistic point of view, Cosmatesque decoration redefined the previous Byzantine models in term of a more classical and well balanced harmony as concerns the formal composition, linking these medieval stoneworks with the Roman heritage. However the origins of this style could be traced up to the Benedictine Abbey of Monte Cassino, one of the most important Christian building of the XI century, founded by abbot Desiderio. In the context of this fabric, marble workers coming from Constantinople were involved in order to realize floor decorations of the church, so the rediscovery of the *opus sectile* in Rome area passed through the Byzantine style.

Under the name of Cosmati can be grouped many different families which have transmitted skills and workshop secrets from father to son, such as Magister Paulus Family, Laurenti Family, Vassalletto Family, Mellini Family, for a total amount of about one-hundred workers, a rather small group for an exceptional kind of mosaic technique, which has spread its influence up to the Westminster Abbey in Great Britain. The golden age of these decorations can be included within the papacy of Pasquale II (1099-1118), when an intense activity of new buildings construction and ancient buildings restoration was conducted.

From the formal point of view, the main characteristic of the Cosmatesque style is the presence of different levels of patterns. A first level in the macro-scale and others in the medium and micro-scale, are organized according to a periodical alternation between flat and solid area and fractured and patterned ones.

The macro-scale defines intersecting and interconnected sets of parallel bands, which form sine waves and circles, arranged around central focal points made of large discs of porphyry or other colored stones. The discs are laid in sequence along the nave of the church or in the typical composition of the quincunx, where a central disc is surrounded by four angular discs, in the intersection between nave and transept.

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The parallel bands around the discs are constituted by white bands made of marble slabs, alternating with dark patterned bands, filled with geometric decorations. These latter are the medium-scale decorations. They are made of a huge variety of patterns, more or less complex, created from a small set of polygons, mainly rectangular triangles, squares, hexagons, in various colors, red, green, gold-leaf glass, and various materials.

Within these tessellated bands, differently scaled patterns can be found too. An example can be sufficient. One typical pattern is a chessboard-like alternation of equilateral triangles where one of them is a solid marble tile and the other is filled with a micro-scale pattern of even smaller equilateral triangles.

The whole decoration could be perceived in a similar way one perceives the fractal forms. We can move progressively ever more near the surfaces, discovering similar and ever more small structures. It is no coincidence that this kind of decoration is strictly related to a mathematical and highly rational subdivision of the plane. On the other hand, some current art practices, like coding in video installations or software art, seems to convey comparable interests in highly formalized and mathematical forms of visual experimentations.

DCCAC supports contemporary art projects which would intend to find their embodiment through the Cosmatesque handcraft skills, offering the unique opportunity to develop fruitful relationships between artists and the most experienced artisans still practicing this exceptional technique.

