## Short guide to mosaic art

Mosaic is intended as a technique of decorating an architectural surface using pebbles, small worked stones, terracotta, pasta vitrea juxtaposed and fixed on a layer of plaster and other formations to the exterior of a smooth surface decorated with geometric motifs and/or with figures. Mosaic decoration is particularly adapted to large smooth surfaces like pavements, walls, vaults and ceilings.

The term mosaic, whose etymology is uncertain, was used in Medieval Latin as "musaicus" which probably derives from the Greek word "mousa" that referred to the cave decorations in Roman gardens dedicated to the Muses. The term and the use, in decorating the fountains of the gardens, was probably a tribute to the fountain of Hippocrene. The nine Muses, protectors of the arts and daughters of Zeus and Mnemosyne (memory) gathered around this fountain to sing and dance. The mosaic artist was called musivarius when he decorated walls and tessellarius or tessellator when he decorated pavements. These last two names came from tessellae, tesserulae and tesserea, which were the names used to designate the small stones characteristic to this artistic composition. In Greek the stones were called "psefoi" or "abakiskoi".

The documented use of mosaics in Italy starts from the 2nd century BC and is found in a verse by the Roman poet Lucilius. Two citations about the distinctive technique of this art come from Vitruvius the Roman architect of the 1st century BC who was famous for his treatise De architectura (Vitr., De Arch., VII, 1, 1-7) and Pliny the Elder, scholar and scientist, who died during the famous eruption of Vesuvius in 79 AD. who wrote the "encyclopaedic" work la Naturalis Historia (Plinio, Nat.Hist., XXXVI, 186-187).

The most complete description about the preparation of tessellated mosaic materials dates back to the Roman era. It is a marble document housed in the "Museo degli Scavi" in Ostia which shows some workers cutting stone. In this image we see two workers sitting on wooden chairs with a chisel and a rectangular steel tool with the cutting edge facing upwards on the stump in front of them. The fragments of

stone situated above are broken up by hitting them with a little hammer and a tapered tool with sharp edges, similar to the kind still in use today.

The construction of a mosaic started with the set up of the infrastructure which was divided in three parts: the Statumen, a bed of various pebbles; the Rudus, a layer consisting of a mixture of lime, sand and crushed bricks, on which the Nucleus was then laid. The Nucleus was a coating made of plaster, sand and hay; its thickness was variable and would then be covered by a marble dust mixture. This last mixture was poured on a little at a time, according to which part of the decoration the artist wanted to work on that day. While the surface was still wet, the motif design was drawn (often coloured). This was a preparatory drawing or sinopia made of red ochre drawn on the still damp surface (the artisans probably used stencils or collections of patterns; generally they were portfolios, actual albums of decorative motifs and human or animal figures rather than general projects or iconographic themes). Afterwards, the tesserae were applied with a kind of cement or with putty.

The mosaic pavement was usually made at the end of the building's construction when the flooring was levelled. Generally the materials used came from the local area. The oldest mosaic decorations were created by juxtaposing small river pebbles or cuneiform pieces of polychromatic terracotta. When tesserae started to be used they were created by cutting thin marble or local stone slabs into strips of a few millimetres laying them at regular intervals along clear-cut lines. Tesserae in pasta vitrea were created by pouring the melted glass paste on a levelled surface then adding metallic oxides to create the desired colour. The resulting glass sheets were scored with a specific tool and then cut. Gold and silver tesserae were created by applying sheets of the precious metal to neutral glass sheets. It was fixed with a thin layer of glass dust and then fired in the oven. After the firing the glass sheet was cut into shapes. Using tesserae in pasta vitrea and in precious metal gave a mosaic a transparent colour, shine and greater esteem. The lithostroton was a type of decorated mosaic pavement in ancient times and was generally one of three typologies: opus signinum, a bed of pink concrete made with beaten lime and crushed bricks, used in the Republican Era; opus

tessellatum, simple geometric motifs using predominantly black and white marble (braids, losange, checkerboard, meanders); opus vermiculatum, made with different sizes of very small stone or marble fragments tightly arranged to depict the represented subjects (allows for complex polychromatic compositions); opus musivum, parietal decoration with enamel and pasta vitrea tesserae; opus sectile, pavement made of stones and marble in differing dimensions. In opus sectile, the pieces of marble, cut into shapes, are arranged against each other without leaving any space between them as there would be in a tessellated design. The creation of this type of pavement requires specialized craftsmen and more time, carrying with it as a consequence, higher costs. Therefore, its use not only highlights the importance of the setting but also comments on the economic and social rank of its purchaser.

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## The origins and the history of the mosaic

The origins of the mosaic art form are very ancient and date back to the 4th and 3rd millennium BC where a mosaic decoration created with small terracotta wedges painted red, white and black was found in the Mesopotamian area. These terracotta wedges were fixed into clay brick wall creating ornamental motifs and a protective layer.

Between the 17th and 11th century BC mosaics were already present in Crete and archaic Greece. The first mosaics were created out of the necessity to cover pressed dirt pavements in order to protect them from humidity and make them cleaner and smoother; later they were also used to make them decorative. The oldest mosaics were natural black and white pebble used to pave courtyards, outside areas and also interior spaces in houses. In the 5th century BC, during the classical period in Greece, mosaics were widely used passing from geometric and natural designs of black, white or coloured pebbles, to figurative mosaics. Examples of these figurative mosaics have been documented in the Greek area of Euboea and Macedonia. By the 4th century BC there was a marked development in the technique and artistry of mosaics which had rich geometric and ornamental motifs. From mosaics made with pebbles we pass to an intermediate technique using small multicoloured stones and pieces of red terracotta that were irregular in size and form. In the 3rd century BC these were replaced with tessere of stone squares or tasselli of glass or enamel making the mosaics smoother, more durable and allowing for richer detail in the designs. In the Hellenistic period in Delos and Alexandria this art form reached extraordinary heights, creating amazing pictures. An excellent example of a figurative mosaic, from the house of Fauno in Pompeii, is "battaglia di Alessandro" ("The Battle of Alexander") by alessandrini artists which is now located at the National Museum of Naples.

In Rome, mosaics made of tesserae were introduced toward the end of the 3rd century BC as decorations in public buildings but were also used in private buildings. The first mosaics were opus signinum followed by opus sectile and then lithostroton with opus vermiculatum emblems. The term "vermiculatum"

probably derives from the fact that when very small tesserae were carefully placed together, they looked like stone vermicelli. Emblems with the smallest tesserae belong to the oldest eras. As time passed the emblem continued to enlarge until it disappeared, blending into the central decoration of the pavement on a tessellated geometric composition. The use of terracotta tesserae arrived late and was very rare in the Roman world. Gold tesserae were used starting from the time of Emperor Nero.

With the beginning of the Imperial era, mosaic decorations changed from a luxury item to something found absolutely everywhere. Fresco and mosaic artists could now find pattern books from which they could choose motifs, symbols and figures to make their design and would travel from province to province with their assistants making mosaics for local workshops. In the Roman Empire, there were regional mosaic schools with distinct decorative and chromatic repertoires. For example, the famous school of Antioch preferred figurative panels; geometric decorations were characteristic of German schools; the use of monochromatic mosaics of black on white backgrounds was limited to Italy and Gaul. The 4th century AD marks the beginning of decline for the production and use of this artistic technique.

Even in early Christian art the use of mosaics was very popular. Without changing the mosaic technique, the portfolio of figures changed. The Roman-pagan figures were replaced by Christian symbols like the fish, the grapevine, the peacock, the monogram and figurative scenes of biblical subjects. The main Basilicas of Rome had many walls decorated with these mosaics. Mosaic art flourished in the Byzantine Empire. The most famous Byzantine mosaics without a doubt are the ones in Ravenna which reach all the way to our province. The Byzantine influence can be felt for many centuries in cities like Venice, Rome, Palermo, Cefalù'9d and Monreale. Much later during the Renaissance, the major production centres for mosaics were found in Venice and in Rome. In Venice there were stencils to create mosaics of famous painters like Tiziano, Lotto, Tintoretto and Veronese. The fortune of this art declined over the next centuries even though there were specialized studios and families of noted mosaic artists still active (such as the Zuccato or the Bianchini family). In the 1600's and the 1700's mosaics were considered undignified

and mere mechanical copies of paintings.

Only much later in the 19th century did mosaic art become popular again proving its great decorative and expressive potential. The best examples of this new era can be found in the neo-Gothic and in the Art Nouveau themes excelled at by the Spanish modernist Antoni Gaudi' (among his numerous mosaics, note his Casa Battlò'98 and Parco Guell in Barcelona) and the Austrian painter of the Viennese Secession, Gustave Klimt (note his decoration of the Stoclet House 1905-1909).

In the 1900's the art of mosaics was updated especially in architecture where the mosaics reflected the fashionable tendencies and styles of modern paintings. A good example of this orientation is the big mosaics covering many of the buildings in Mexico City. In Italy there is no lack of versatile artists such as Carpi, Cascella, Casorati, Funi, Sironi and Severini who used mosaic expression over the course of their career.

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## Dating elements and mosaic iconography in the roman World

Dating a mosaic is very difficult and complex. In fact, the relationship between the mosaic and the building or its surroundings isn't always clear. Frequently, a mosaic artefact has been taken out of context and setting by the excavation. It is very rare to find a mosaic with a date inscription like paintings have. Emblems in very small tesserae are definitely older just as opus signinum pavements can be ascribed to the Republican era.

Pavement decorations like the cassettoni are frequently an imitation of the ceiling decorations. Cassettoni decorations are definitely prior to the volte a crocera (crossed vaults) which were only created starting from the Flavia era (end of the 1<sup>st</sup> and 2nd century AD). Other useful dating elements can be the style (i.e. Byzantine mosaics), the use of subjects and references belonging to a specific era and specific symbolism which can determine a relative chronology (i.e. early Christian mosaics).

No mythological subject, scene from life or element of the ancient decorative repertoire is absent in mosaic art. The choice of subject was frequently based on the destination for the mosaic pavement but also on the personal preferences of the purchaser or artist and the availability of geometric and figurative repertoires. In Bath houses, the most popular subjects around the basins and fountains were water and sea creatures. such as Poseidon and his wife Amphitrite, Oceanus and Tethys, the Nereids, mermen, crabs, fish, dolphins etc. Mosaics of sports scenes, wrestlers and athletes can be found in gyms and sports buildings. In the foyers or on the thresholds of important houses we find cave canem (beware of dog) motifs or the Medusa head which had protective properties against evil and inscriptions to bring good luck. In the lounges we find checkerboard mosaics or cock fights dedicated to free time activities. In the dinning room we frequently find representations of still life, every kind of food, banquets, Ganymede cupbearer of the gods and Dionysus in his ceremonial dance. Because of the subjects represented, in mosaics we can see

and evaluate every aspect of the lives, thoughts and religious

beliefs of ancient populations. Moments from their everyday life, including the common allegories of the seasons which represented protection against their superstitions, are captured in hunting scenes, horse races, circus games, gladiators, farm scenes, animals, theatrical masks and geographic representations of cities, turreted walls and amazing countryside like the Nile

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Sant'Angelo in Vado, mosaico geometrico

