The craft of "minakari" enamelling in Iran

Freely adapted from an article of Hoda Sadough for La Revue de Téhéran

The enamelling of "minakari", known also as fire miniature is one of the essential elements of Iranian arts and crafts. The enamel technique comprises the painting, colouring and decoration of the metal surface or ceramics through the fusion of bright colours decorated according to motifs and drawings with a fine design.

The word "mina" is the feminine form of Persian noun "minou" meaning heaven. "Mina" refers to the sky blue colour. The minakari craft takes its origin from the Sassanid epoch, originally conceived and practiced by the Iranian artisans before they spread it to India through the Mongols. Nevertheless, the practice of this craft left no trace for the Islamic period before the reign of the seventh Mongol sovereign, Ghazan Khan. The latter had a solid chemical knowledge that he used primarily in the field of enamelling, contributing to promote its use. A few centuries later, the French tourist Jean Chardin, after visiting the reign of the Safavids, mentions in his travel diary an enamelled work of art decorated with birds, animals and flower motifs in light blue, green, yellow and red enamel colours.

From a technical point of view, the minakari craft is a technique based on the melting of glass powder, generally at a temperature between 750 and 850 °C. The powder fuses and hardens on the metal, glass or ceramic, forming a smooth, resistant and vitreous surface. Silver is one of the base materials for enamelling that favour the bond between enamel and metal. The paintings and models used for the enamel works in Iran are traditional motifs, whose choice depends on the taste and preferences of the artist.



Objects in the Isfahan minakari technique

In the Persian version of enamelling, the enamellists use copper and silver for the most part. The specials tools used for the technique are kilns, tongs, printing machines and presses. Enamel is generally used to embellish vases, jewels and chandeliers as well as the doors and vessels for the temples. Gold has been used traditionally for the enamelling of jewels because of its resistance and brightness that makes the enamel colours shine. Silver has been introduced later and for objects like boxes, bowls, spoons and other objects with an artistic style. On the other side, copper has been introduced for the arts and crafts since the introduction of the Gold Control Act.

when the enamellists around the world were forced to replace gold with new materials.

The province of Isfahan is doubtless the cradle of enamel craft in Iran. The decoration of metals is one of the most characteristic arts of this city. Mina here is a reference to the vitreous colour layer that crystallizes on metal, mainly copper, through the power of heat. Even if this denomination is used abundantly in the industry for the production of metal tools, it has been attracting the attention of painters, goldsmiths and engravers for a lot of time. The minakari can be split in three subcategories: enamel painting, charkhaneh or chess-like enamel and cavity enamel.

The enamelled painting remains today the only form of minakari craft that has come down to us in Isfahan; the museums of Iran and abroad witness the attraction of artists to this art during the Achaemenid and Sassanid periods. The enamels are so delicate that a few of them have survived to this day. At present, some historical documents indicate that during the Islamic period under the Seljuk, Safavid and Zand dynasties produced enamelled dishes and objects in a great number. The large majority of ancient enamelled dishes are dated to the Qajar dynasty, from 1810 to 1890. Dated to this period, we can find earrings, bracelets, boxes, dishes and vases made of gold with beautiful blue and green enamel paintings.

The precision and the perseverance are two essential qualities in the practice of this form of art. The geometric patterns of minakari symbolize many elements of a belief system that evolved over the centuries, after the domination of Mithraism up to our days, such as the eslimi, one of the most used traditional motifs or the central medal that can be found on the enamelled plates is a symbol for Mithra, the sun god.

The fabrication process of these objects isn't too complicated. First of all, we choose a metal base such as gold, silver and steel, where it is worked and it is shaped by fire. The metal object will become the base for the enamel. In the past, enamel was applied also to clay, ceramics and glass, but today copper is the most frequent support because it is malleable and ductile. It is preferable to use a first-hand copper sheet rather than a recycled one. The object is covered in enamel by immersion. It is later fired at 750 °C and matted. It is then re-fired. This passage is repeated up to 3-4 times. Generally, the enamel is made of silica, magnesium, potassium, lead, precious stones, feldspar, kaolin, zirconium, tin and boric acid. The metal body after firing and vitrification is ready to receive all the kinds of decoration, according to the creativity of the artist. Once the painting step is over, the enamelled plates are put back in the fire at a temperature of about 600 °C, producing the final colours. In the past, this art used inorganic pigments but today chemical colours are preferred.



Minakari craft from Isfahan. Photo: Rezâ Milâni

The criteria that influence the quality of the object are the selection of the right metal base, the decoration, the kind of kiln and, of course, the personal taste and skill of the artist. The enamelled work of art may be damaged on the borders because of the mechanical shocks or an incorrect firing temperature, but also the defects in the metal base or the loss of a solid link between the different layers.



Minakari craft from Isfahan. Photo: Rezâ Milâni

The World War One and the social revolution in Iran have caused a period of stagnation that lasted until the half of the last century. Nevertheless, this art spread again, both from a quantitative and qualitative point of view, thanks to the efforts of Ostad Shokrollah Sanizadeh, a great master of enamelling and noteworthy painter of Isfahan during the years 1930-1970. This great master had a renowned painter as an ancestor. One of his priceless works has been used for the creation of a stamp dedicated to the Iranian arts and crafts in 2008. The original object is preserved in the Museum of traditional arts and crafts. One of his disciples who distinguished themselves is Gholamhossein Feizollahi, noteworthy for the beauty of his decorative patterns. At present, some artists from Isfahan continue to produce objects of great quality. Some of them present their works in the Chahar-Bagh street near the palace Nagsh-e-Jahan.