

Technical factors affecting the luster and shine development in Islamic metallic luster between (9-15) AD

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Abstract:

Islamic metallic luster is one of the historical Islamic ceramic techniques that appeared in some Islamic states in periods of the century (9-15) AD, it appeared at first in Iraq, then in Egypt, then in Syria and Iran, then in Andalusia (currently Spain), and which is a style of ceramic decoration through drawing with copper and silver compounds on the glaze, At first starting with oxidizing fire and we end with reduction to convert the copper and silver oxide to the copper and silver to metal case, which appears in the beautiful mineral image, These resulting colors and their degrees depend on several factors, including the size and quantity of silver and copper particles, the composition of the glaze and fire (atmosphere of the reduced kiln), After studying the historical models of metallic luster products, performing chemical analyzes, x-ray analyzes, and others, It turns out that the glaze composition used in metallic luster contains lead because it gives the distinctive luster of metallic luster as well as tin that gives opacity in the glaze. The Iraqi metallic luster was distinguished by its multi-colored decorations resulting from the addition of silver and copper in different proportions. Multiple colors appeared, including golden, silver, copper and combinations of brown, ocher, greenish-black, copper and silver-white, and the multi-colored metallic luster did not appear again in Islamic ceramics until it appeared in Italy in the fifteenth and sixteenth century AD, while the Fatimid Egyptian luster was distinguished as monochromatic rich in silver and the colors of green, yellow and metallic brown appeared and they used clay rich in lime. As for the Syrian metallic luster, it was different, it depended on copper, and it appeared ruby red and did not use lead oxide in the glaze, the Syrian metallic luster was less luster than Fatimid, Abbasid and Spanish, As for the Iranian metallic luster was at the same time with the Syrian metallic luster, but it was similar to the Fatimid metallic luster in terms of the intensity of luster for their use of lead-glaze like Fatimid luster, while the Spanish luster used tin glaze with lead-rich and its colors were based on copper like the Iranian luster.

Key words:

Islamic metallic luster, copper, silver, glazes, reduction.