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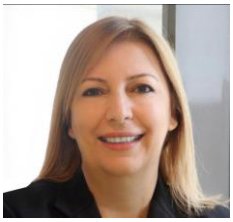
Stone And Memory: The Use of Kufeki Stone in Mimar Sinan's Architecture in Istanbul



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ABSTRACT

This article focuses on the use of küfeki stone—a type of limestone with extensive reserves historically located in Istanbul's Bakırköy district—in Classical Period Ottoman architecture. Known colloquially as "Bakırköy stone" and among specialists as "Maktra limestone," küfeki stone has historically been a commonly used construction material in both Byzantine and Ottoman Istanbul due to its durability and ease of workability. Containing fossils and seashells within its composition, küfeki stone distinguishes itself among other natural stones by exhibiting increased compressive strength over time, thereby enhancing its performance as the structures age.

Mimar Sinan, who emphasized balance, proportion, light, and durability in his architectural designs, consistently chose küfeki stone as a principal building material, particularly in his works across Istanbul. This choice was not incidental, but a conscious selection based on the material's local availability, increasing strength over time, and its pronounced plasticity when worked—a quality that significantly contributes to its visual and structural impact. Within the scope of this study, three of Sinan's works in Istanbul—Süleymaniye Mosque and Şehzade Mosque—have been selected as case studies to examine the use of küfeki stone.

The study also investigates the physical and chemical properties that distinguish küfeki stone within the context of Sinan's architectural practice. In addition to field research, the study draws upon both primary and secondary sources, as well as photographs and cartographic materials.

Keywords: Istanbul, Classical Ottoman Architecture, Mimar Sinan, Küfeki Stone