

**The philosophical significance of Islamic engineering design and its effect on
the pottery architectural vocabularies.**

Assist.pro.dr./Ola Hamdy Al-Sayed Attaia

Ceramic department-PHD. In philosophy -faculty of applied arts-Helwan
university.

Abstract;

Islamic art is considered one of the applied arts that provided the Islamic culture with special features and distinguished it from other civilizations, as it is characterized with unique integration between the aesthetical and functional values in most of their vocabularies. The architectural heritage of mosques is a lighting mark of the creativity that the Islamic civilization contributed with to enrich the human civilizations. The Islamic architectural art was based at its beginning on the decorative architectural elements that match its spirituality so it evolved almost the same at most of the Islamic countries with simple differences due to climate, environment and inherited experiences of the people in building and in architecture.

The first interests in studying program is searching for Islamic architectural theory, beside the fixed mathematical and geometrical rules, there are values and significances that link the Islamic dogma to the architectural thinking, and they are considered the theory that by it the Islamic architectural design can be realized.

The research is handling the Islamic engineering design that digs deep to the core of meditation of the artist philosophy in the Islamic age, and the brilliancy in stripping of plants, leaves and nets beside studying the variation and continuation in the design.

The research contains study and analysis of the various architectural pottery vocabularies' design and study what they include of various designing, functional solutions and aesthetical formulations whether inside or outside the mosque especially in Egypt, Iraq, Turkey, Iran. That is by descriptive, analytical studies that explain the special trimming elements and shapes that are used in the engineering design and study the used pottery technics.

The research also study how to utilize the philosophical concepts and designing basics that are used in the Islamic geometrical design and making new designs to architectural ceramic units that can be used outside or inside the building with environmental functions that match life progress and development.

Key words; (philosophical concepts- geometrical design- architectural ceramic units).
DOI:10.12816/0040818