

ABSTRACT

Integration between material selection and architectural design has; in many incidents, been realized in late stages of project development, where the prime function of materials becomes "dressing the building in the most economical price". Conversely, material involvement in the initial design phases can convey valuable meanings and generate innovative design messages.

Materiality is a branch of science that synthesizes material quality with design intensions. In terms of materiality, materials have several meanings to conduct, which can significantly influence architectural design.

The theoretical framework of this study first addresses the role of materials in architectural design. It also discusses the term *Materiality*; with its two main poles, namely 'design intention' and 'material quality'. Since materials have meanings that are constantly evolving and transforming, the research sheds light upon the definitions of 'meaning' and 'transformation'.

After setting the framework, the theoretical analyses are then applied to the transformation in the meanings of four building materials, namely bricks, stones, glass and metals – being used since early history until present. This is meant to allow a suitable time-span for studying their transformation along every architectural period; starting at the Ancient Egyptian Era until the contemporary architecture, with particular emphasis on the contemporary theme "*Materiality*".

The findings of the above analyses are then empirically examined against a selected case study – Kolumba Museum.

Finally, the theoretical findings are integrated with the empirical verification towards setting a conclusion that identifies the transformation in the meanings of building materials and their impact upon architectural design, in order to respond to designers' inspirations and to fulfill their aspirations.