

***The Golden Ratio in The Subdivisions of Islamic Wood Lathe in Architectural
facades***

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ABSTRACT:

Our Islamic heritage is full of many aesthetic values whether in architectural elements or interior design works. The mashrabiya and the window are considered architectural elements that were used in treatment of the architectural openings in Islamic age, and they had a major impact on interior spaces design. They were used to link between inside and outside with a special character which achieved the wanted function of mitigation of the light strength, that enters the house and letting air to penetrate through them to ventilate the interior spaces with maintaining interior privacy to the occupants of the space . It is observed that the mashrabiya and the window have good harmonic proportions which gave them regularity and rhythm where the Muslim designer excelled in determination of their proportions , dimensions and division of their parts .

The research **problem** is;

Concentrating on the lack of interest in the aesthetic proportions that are inspired by the Islamic architecture elements in contemporary interior design and furniture works, for many reasons such as narrow interior spaces, the cutout of the link between the present and the past and the dependence of the Islamic art on geometry and mathematics that the contemporary designer thinks they are difficult to quote or to be inspired by .

The research **assumes** that;

The golden ratio was found somehow in the internal divisions of the Islamic mashrabiya and window, and this assumption is largely based on the proportions of rectangles used in the distribution of works of wood lathe in them and some of these rectangles are applied to what is known as the golden rectangle.

This study **aims** to;

Analyze the aesthetic values of models of mashrabiya and window used in the treatment of architectural facades through doing an analytical study of some models of the mashrabiya and the windows located in one of the Islamic heritage houses in Egypt and the analysis of the proportions and dimensions that are used in their design to determine the presence of the golden ratio in their dividing their parts, because that proportion has an aesthetic value which made it used throughout the ages because it is found in the nature Clearly and significantly

– Finding out the extent of the contribution of this ratio in consolidation of the aesthetic values in the vocabulary of architecture and interior design of that era.

Key Words: Aesthetic Proportions , Mashrabiya , Golden Section , Wood Lathe ,
Islamic Art .