Effects of Climatic Elements on the Formation of Traditional Architecture in Sana'a City-Yemen¹

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Abstract

This research aims to assess to what extent Yemeni traditional architecture of Sana'a is in harmony with climatic environment. and cover the knowledge gap between the extent to which traditional architectural elements consonance to suit problematic climatic elements of Yemeni traditional architecture and to what extent the impact affects building's design and elements formation, in order to create a convenient internal environment. This paper focuses on studying orientation in thermal consonance and determining the correlation between climatic treatments, fenestration's ratio and sizes and orientation of living and service spaces, subject to climatic consideration (Solar Radiation and Wind) via an analytical study of a number of traditional buildings.

¹ For the paper in Arabic see pages (227-240).

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