

# **Stratigraphic Analyses: A tool to understand the historical development of traditional buildings in Hebron-Palestine**

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## **Abstract**

This study presents a modern approach for reading the historical development of traditional architecture. It starts from an archaeological perspective, based on comparing the visible construction of buildings with the archeological stratification underground. This simulates the same stratigraphic analyses that archaeologists perform on archaeological sites, but does not involve any excavations, in order to preserve the authenticity of these buildings for the next generation. In addition, in situations where there are limited textual sources, this study presents stratigraphic analysis as an additional resource for studying the historical development of traditional buildings.

This study applies stratigraphic analysis to a sample of the traditional urban fabric in the old town of Hebron. It aims to explore how such methods can contribute to our understanding of the development of historic buildings in Hebron within specific time periods. In addition, it clarifies how architectural elements of the old buildings' façades, especially the windows, can be studied with the relation of the historical period. Windows are classified according to their shapes and dimensions in an attempt to determine the architectural style that characterized each period, and to study the possibility of using these typologies as a reference to determine the history of any traditional building in Hebron.

The method of this research is based on descriptive analysis of specific case study sites. The stratigraphic analysis was applied to a sample representing a façade in Al-Sheikh neighborhood in the old town of Hebron and one of the hoshes that exists within it. The stratigraphic units of the samples were identified and the stratigraphic relations were studied in order to reconstruct their historical sequence. Then, information obtained from the stratigraphic analysis was compared with those obtained from other historical resources in order to confirm the proposed chronological sequencing. After reconstructing the stratigraphic sequence, the façade's windows were classified according to their types and analyzed in order to study the relationship of these typologies to the history of the structure.

This study showed how stratigraphic analysis can reveal a more nuanced image of the historical development of Hebron's traditional urban fabric. Also, the study showed a repetition of the architectural types of the windows over several historical periods. Therefore, the study concluded that the architectural typologies of windows cannot be used as a reference for determining the history of traditional buildings. On the other hand, the study recommended the use and development of stratigraphic tools towards analyzing the construction materials of these buildings.