

ABSTRACT SUBMISSION

Innovative Techniques for Analyzing Architectural Heritage in the Central Bekaa, Lebanon

ALMOKDAD Y. 1*, CHAHOUD J. 2

¹ Lebanese University, Beirut, Lebanon

² UniversitLumie Lyon 2, Lyon, France

*Corresponding author

Abstract

The Central Bekaa, Lebanon, rich in historic temples and architectural heritage, faces ongoing threats of destruction and insufficient documentation. As part of the 'Mission archéologique de la Bekaa Centrale' Project, this study focuses on the Majdel Anjar temple as a representative case within the broader research framework. The project investigates settlement dynamics and occupation patterns from the Neolithic to Late Antiquity, considering the influence of political, socio-cultural, economic, and environmental factors on regional evolution. Employing advanced techniques such as photogrammetry, three-dimensional scanning, and Heritage Building Information Modeling (HBIM), the project undertakes a virtual reconstruction of the Roman Majdel Anjar temple. This methodology enables precise architectural analysis while contributing to preserving the Bekaa Valley's cultural heritage. The resulting digital model supports broader preservation initiatives, offering a replicable approach for safeguarding other historic sites and fostering accessibility for future research and public engagement.

Keywords

Bekaa Valley, Archaeological Heritage, Photogrammetry, HBIM, VirtualPreservation

Session

3. Heritage and archaeology

Type of paper

Poster session