

Preservation and Public Engagement at Tell Atchana, Alalakh: A Digital Reconstruction of the Middle Bronze Age Gate Complex

Introduction

At many legacy sites in the Ancient Near East, preservation and restoration are challenging tasks, as these concerns were not prioritized in early 20th-century archaeological research. Tell Atchana, Alalakh, located in the Amuq Valley of Hatay, Türkiye, excavated by Sir Leonard Woolley in the 1930s and 1940s, exemplifies this issue. In 2023, partially supported by the ASOR Shephard Urgent Action Grant and the Turkish Ministry of Culture and Tourism, preservation efforts focused on stabilizing the Middle Bronze Age City Gate Complex using mudbrick capping techniques. By integrating archaeological preservation with digital visualization, this project aims to enhance public engagement and understanding of Alalakh’s architectural and urban history, presenting the site’s Middle Bronze Age heritage.



The entrance of the Bronze Age capital of Alalakh

The Level VII Middle Bronze Age City Gate of Tell Atchana, Alalakh, is an example of a tripartite gate, reflecting broader Syrian and Anatolian traditions, functioning as a monumental threshold that controlled movement, projecting political authority, and, through its strategic placement near the Orontes River, facilitating regulated access by land and water.

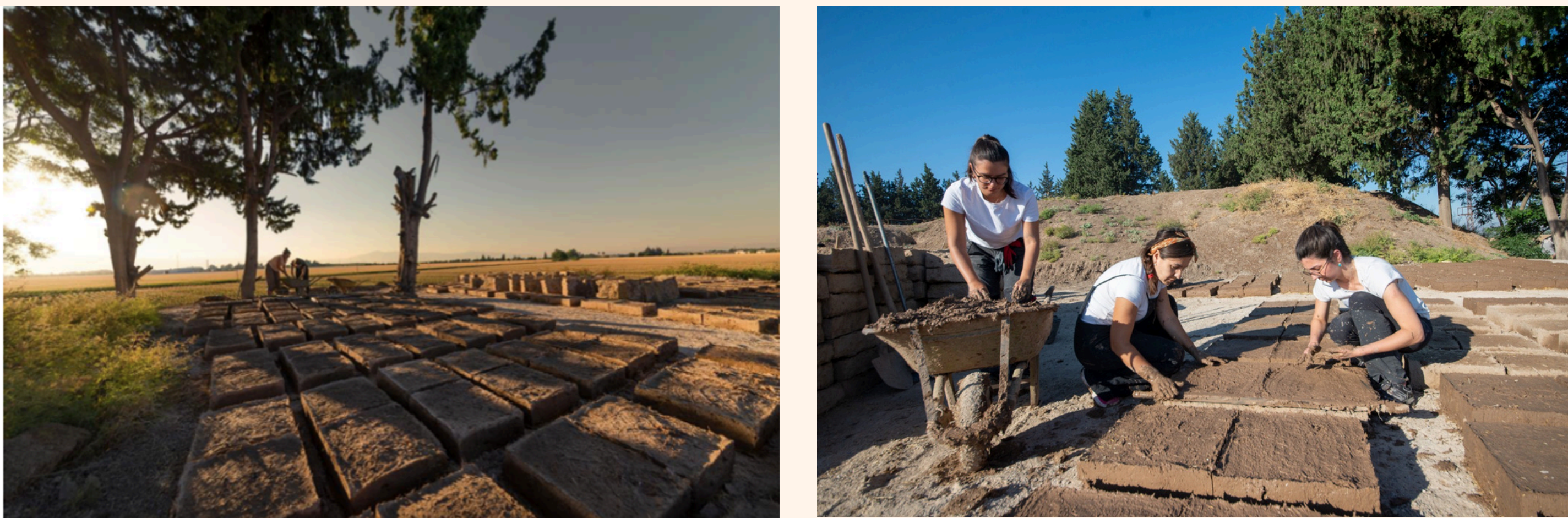


The condition of the Middle Bronze Age Gate Complex before the preservation works

Following decades of exposure, the Middle Bronze Age City Gate of Tell Atchana, Alalakh, had nearly disappeared beneath vegetation and accumulated debris. The 2023 earthquakes further destabilized the remaining mudbrick walls and orthostats, prompting urgent conservation action. What began as a small-scale visual improvement initiative evolved into a comprehensive heritage preservation program.

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Preservation Efforts



For the preservation project, mudbricks were produced using traditional recipes derived from Orontes floodplain silts, with fresh straw and locally sourced water ensuring both material authenticity and sustainable practice. Over 4,500 hand-molded bricks (40 × 40 × 20 cm; ca. 25 kg each) were sun-dried and applied to the structure.



The tripartite Middle Bronze Age gate complex following mudbrick capping and mud plastering works

The excavation team, working in collaboration with the local community, employed traditional mudbrick techniques, thereby ensuring the site’s authenticity and symbolic continuity. Each newly formed brick carries the imprint of its maker, reinforcing the link between community identity and cultural heritage, and inviting continued community participation in the preservation of Hatay’s intangible cultural heritage.

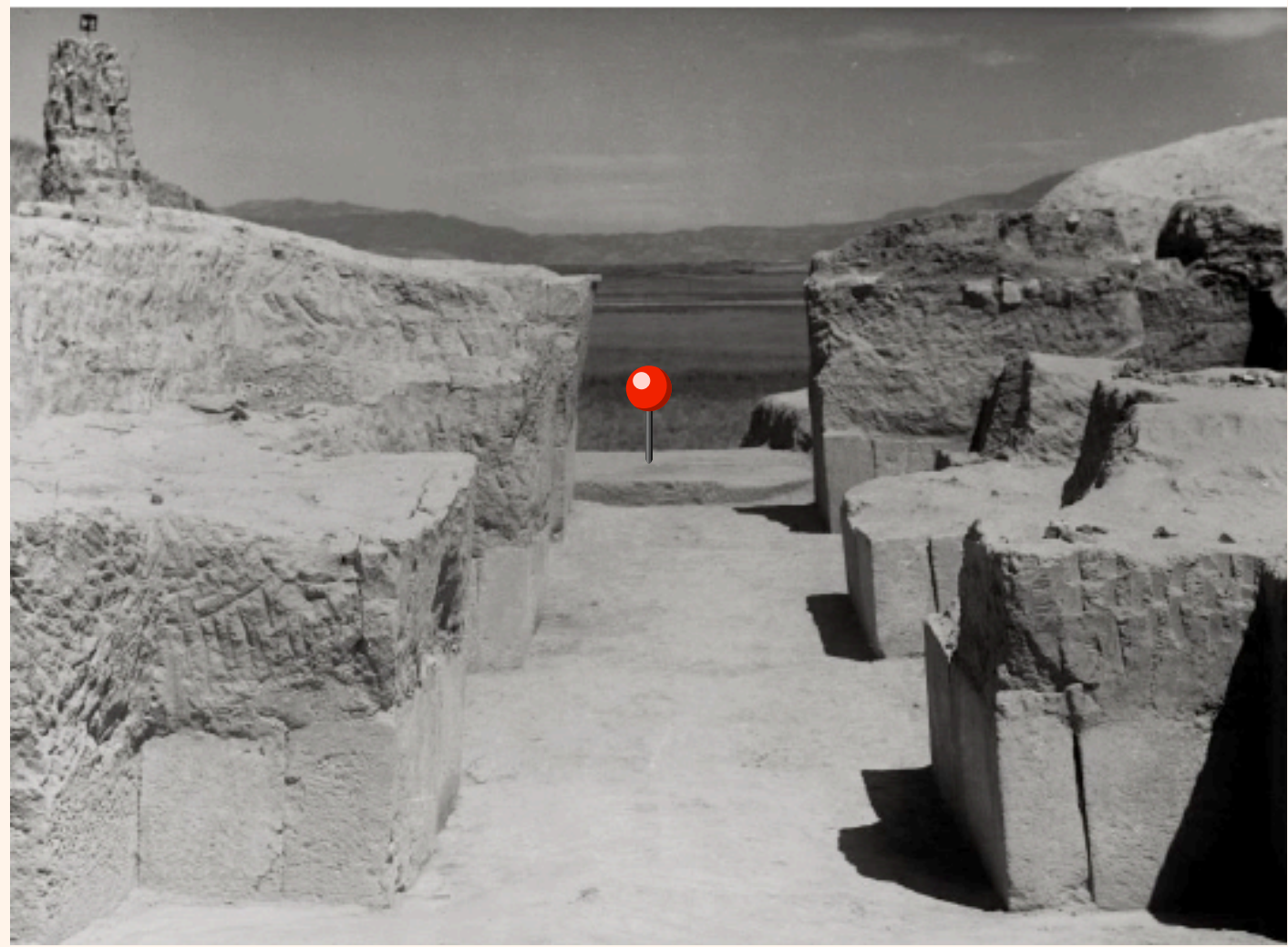


Scan Me

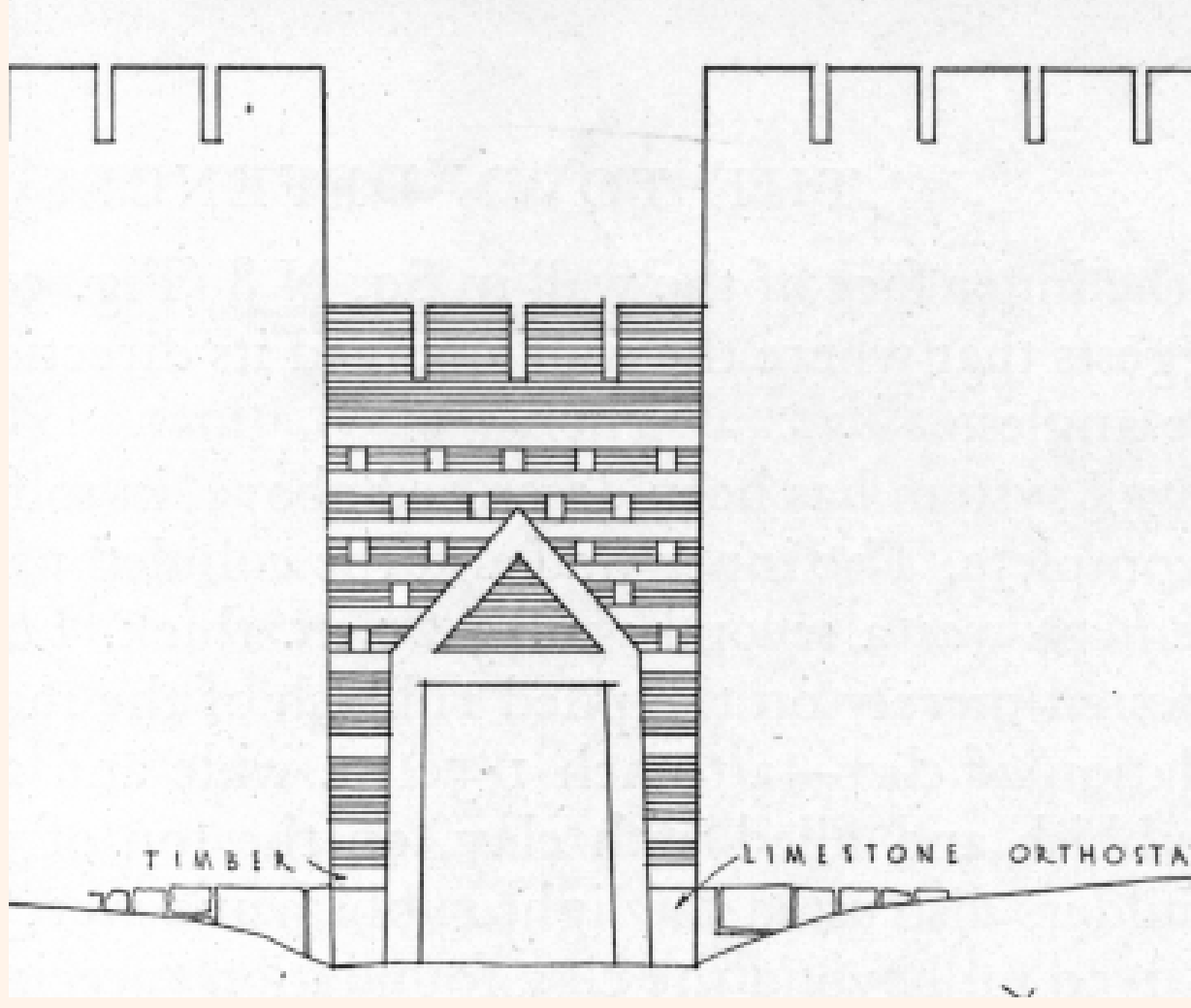
Scan the QR code to watch how mudbricks are made!



From Woolley’s Drawings to Digital Model



The tripartite-plan Middle Bronze Age city gate and its associated guard tower uncovered during Woolley’s excavations.



Woolley’s reconstruction drawing of the Middle Bronze Age city gate



A detailed 3D model was produced by using RealityCapture to document these preservation efforts.



Complementing these physical preservation measures, a 3D reconstruction of the gate’s entrance, which was created in Blender, was developed to visualize the monument. By combining the current archaeological state with Woolley’s reconstruction, the model integrates the past and present to enhance visitors’ understanding of this monumental gate complex. Further steps aim to reconstruct the entire gate complex and design a tourist information panel for the Gate Complex.

Selected Bibliography
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