

Spiritual and Cultural Sustainability: Preserving Heritage in Antakya, Turkey, After the Earthquake

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ABSTRACT

The devastating earthquakes that struck Turkey on February 6, 2023, profoundly impacted Antakya, necessitating urgent preservation of its cultural and spiritual identity. This project focuses on two pivotal case studies: the Habibi Neccar Mosque and the Greek Orthodox Church. These iconic religious landmarks epitomize Antakya's rich cultural heritage and serve as integral components of the communities they represent. Our dual-component approach documents intangible cultural elements through personal narratives and rituals while comprehensively documenting tangible heritage using 3D scanning and photogrammetry. On a 10-day site visit in August 2023 we captured extensive data on earthquake damage and community experiences. By interweaving personal stories, meticulous documentation, and community engagement, this project advocates for preserving cultural heritage as a cornerstone of community identity, resilience, and sustainability in the face of natural disasters.

1. Introduction

Antakya has a rich and diverse history dating back to the 6th millennium BCE. Throughout its existence, Antakya witnessed significant religious transformations, transitioning from pagan beliefs to early Christianity and later encountering Islam and other influences through various conquests. Despite the recurring seismic devastations, Antakya has consistently demonstrated remarkable resilience, rebuilding itself while preserving its diverse architectural heritage, which encompasses mosques, churches, and synagogues. However, the catastrophic earthquake on February 6, 2023, had a profound impact on the city, resulting in staggering losses across 11 provinces and gravely imperiling Antakya's rich multicultural heritage. In the aftermath of this crisis, preserving Antakya's cultural and spiritual identity has become a critical imperative. Through this project, we aimed to document and preserve the tangible and intangible dimensions of Antakya's cultural legacy by focusing on two iconic religious landmarks: the Habibi Neccar Mosque and the Greek Orthodox Church. In this project, we employed an interdisciplinary approach that integrated advanced digital techniques and qualitative methods. We documented the earthquake damage to the selected religious sites using 3D scanning and photogrammetry, captured the intangible cultural elements and community experiences through interviews and personal narratives, and advocated for the preservation of cultural heritage as a cornerstone of community identity, resilience, and sustainability in the face of natural disasters.

2. Preserving Heritage

2.1. Methodology

This study adopts a mixed-methods approach to investigate Antakya's cultural and spiritual heritage, integrating advanced digital techniques for documenting tangible heritage and qualitative methods for capturing intangible elements. The methodology is divided into two main components:

3D Scanning and Photogrammetry: To document the tangible heritage of the Habibi Neccar Mosque and the Greek Orthodox Church, we employ state-of-the-art 3D scanning technology using the Scaniverse application (Scaniverse 2021) on an iPhone 14 Pro Max. This method enables the creation of detailed, high-resolution 3D models of the damaged religious sites, preserving their architectural features and structural integrity for future reference and potential reconstruction efforts. Additionally, we use digital and 360-degree photography to capture comprehensive visual documentation of the sites, providing a complementary record of the earthquake's impact.

Interviews and Qualitative Analysis: To explore the intangible aspects of Antakya's cultural heritage, we conduct in-depth interviews (Berry 1999) with local inhabitants, including religious leaders, community members, and individuals with strong connections to the Habibi Neccar Mosque and the Greek Orthodox Church. These interviews aim to document personal experiences, narratives, and the social significance of the religious sites within the community. By gathering these firsthand accounts, we seek to gain a deeper understanding of the intangible cultural elements that contribute to Antakya's unique identity and the impact of the earthquake on the community's sense of place and belonging.

By combining these methods, the study comprehensively investigates Antakya's cultural and spiritual heritage, documenting the physical damage to religious sites and capturing the invaluable human experiences and narratives tied to these spaces.

2.2 Findings



Figure 1: 3D scan samples of the Habibi Neccar Mosque: top view of the prayer room (left) and the remaining western wall (right).

During the site visit to the Habibi Neccar Mosque between August 10-14, 2023, we discovered the extent of the earthquake's devastation. The mosque, featuring a rectangular plan with a dome, arches, masonry walls, and a separate minaret, had suffered significant structural damage. The dome and minaret had collapsed, and nearly half of the courtyard was filled with debris from the fallen walls and dome (Figure 1). However, amidst the rubble, a repurposed Roman column serving as a sundial remained standing, a testament to Antakya's resilience. We meticulously documented all remnants, including the courtyard, entrance, prayer hall, and the largely intact ablution fountain, using 3D scanning and photography.

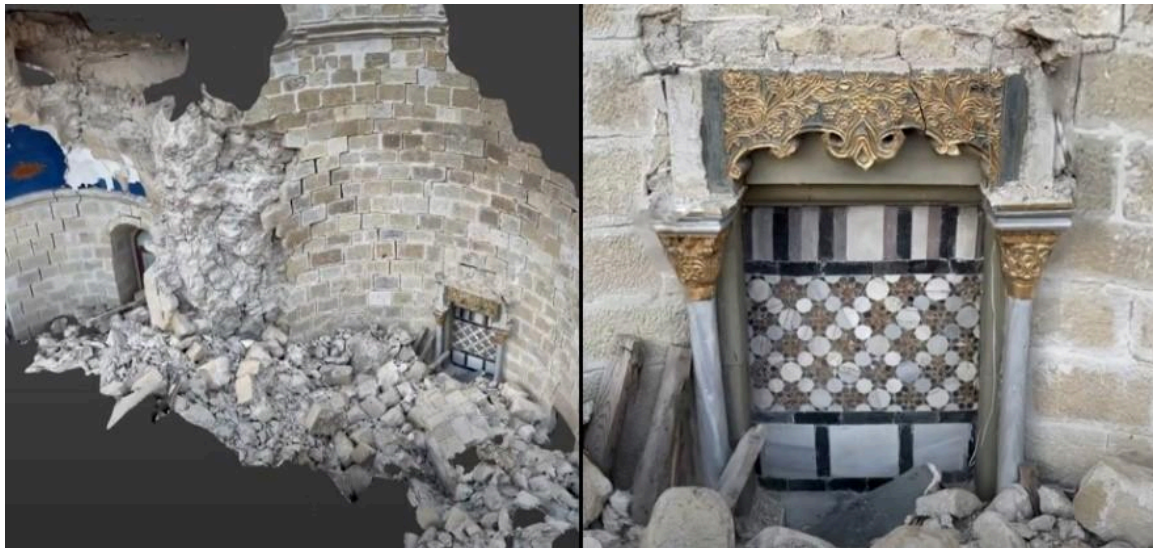


Figure 2: 3D scan samples of the Greek Orthodox Church: top view of the sanctuary (left) and a close-up of the ornamentation on the eastern wall (right).

Similarly, the site visit to the Greek Orthodox Church, conducted between August 15-17, 2023, revealed the profound impact of the earthquake (Boyoglu 2023). The church, featuring a rectangular plan with a bell tower, had been reduced to rubble, with only the significantly damaged eastern and south-eastern walls partially standing. The main area had collapsed inward, burying sacred artifacts like the iconostasis beneath the debris (Figure 2). We comprehensively documented all remnants, including the main and secondary entrances, bell tower, and standing walls, using 3D scanning and photography.



Figure 3: Collage of interviews conducted at various sites.

We conducted a total of 12 interviews with local community members, including religious leaders, historians, and individuals with strong connections to the Habibi Neccar Mosque and the Greek Orthodox Church. The interviews revealed the profound impact of the earthquake on the community and the significance of these religious sites in preserving Antakya's cultural heritage. The interviews yielded several key findings. The participants recognized Antakya's historical resilience while acknowledging the unprecedented nature of the recent earthquake. They emphasized the role of religious sites as common public spaces that foster coexistence and shared cultural identity, and expressed their emotional attachment to the damaged sites, along with a strong desire for their reconstruction and preservation. The interviews also provided insights into the intangible cultural elements, such as personal narratives, traditions, and the spirit of interfaith harmony that characterize Antakya's unique heritage.

3. Conclusion

The earthquake in Antakya on February 6, 2023, highlighted the vulnerability of cultural heritage to natural disasters. The damage to the Habibi Neccar Mosque and the Greek Orthodox Church threatens not only the physical structures but also the intangible elements that define Antakya's identity. This study has taken a crucial step towards safeguarding this heritage through comprehensive documentation and community engagement.

However, more work is needed, both in Antakya and in cities worldwide facing similar risks. Preserving cultural heritage is essential for building resilient and sustainable communities. Moving forward, we must adopt a holistic approach that recognizes the interconnectedness of tangible and intangible elements and prioritizes the needs of local communities.

This study underscores the resilience of Antakya's people and serves as a call to action for the international community to support their efforts in protecting their irreplaceable cultural legacy. Together, we can ensure that Antakya's story endures for generations to come.

References

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