RECONSTRUCTION OF ARCHITECTURAL HERITAGE AFTERMATH OF THE WAR:

ALEPPO ANCIENT CITY

(Madīnat Ḥalab al-Qadīmah)



Thesis submitted for the degree of Doctor of History at

Pázmány Péter Catholic University – Budapest

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Abstract

Importance of Rebuilding and Preserving Cities

The thesis explores the importance of rebuilding and preserving the physical fabric of cities devastated by war, particularly focusing on the restoration of symbols representing a city's ancient culture and identity. It specifically highlights the historical significance of Aleppo Ancient City (*Madīnat Ḥalab al-Qadīmah*), known for its rich history, multicultural communities, and unique architectural style from the ʿOttomān period. The architectural heritage shaped by its diverse history is presented as a key consideration in the reconstruction process.

Impact of War on Historical Cities

The thesis highlights the effects of war on the built environment of historical cities, resulting in the destruction of significant sites. It details the extensive losses in both ancient and modern areas of *Aleppo Ancient City* due to ongoing conflict. Although it may seem counterintuitive to prioritize the restoration of cultural heritage over housing and infrastructure, the thesis argues that emphasizing culture, identity, and community engagement in reconstruction planning is vital for revitalizing communities affected by prolonged wars.

Focus and Goals of the Thesis:

The research delineates the thesis's focus and goals, which include analyzing global post-war heritage scenarios and case studies, exploring international conventions concerning authenticity and historical reconstruction of cultural heritage, and highlighting the significance of Aleppo's ʿOttomān heritage through historical research and architectural descriptions. The study aims to enhance understanding of the role of cultural heritage in post-war recovery by addressing specific research questions regarding the challenges of preserving urban heritage, potential rehabilitation solutions, and the importance of architectural documentation in the rehabilitation process.

Preservation of Cultural Heritage in War-Affected Cities

Furthermore, the study addresses the thesis's focus on reconstruction in two key areas: the *Taḥt al qal'a* (below the citadel) and *Bayt Ajqbāsh*, an important remnant of war. It outlines a proposed conservation plan for damaged built heritage and recommends a re-use design for the building. The study provides a comprehensive overview of the significance of preserving cultural heritage in the reconstruction of war-affected cities, emphasizing the importance of community engagement, traditional knowledge preservation, and architectural documentation in the rehabilitation process.

Keywords:

- Aleppo Ancient City- ʿOttomān architecture - Post-War Recovery - Cultural heritage - Historical cities - War impact - Architectural heritage - Reconstruction planning - World Heritage (UNESCO)– Preservation - Urban heritage - Conservation plan - Re-use design - Traditional knowledge - Architectural documentation.

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Acronyms and Abbreviations

1. AKTC- Aga Khan Trust for Culture
2. AKHCP- Aga Khan Historic Cities Programme
3. DGAM- Directorate General of Antiquities & Museums
4. DSOCR- The Desired State of Conservation for the Removal of the Property from the list of World Heritage in Danger.
5. GIS- Geographic Information System
6. GTZ- German Technical Cooperation
7. ICOMOS - International Council on Monuments and Sites
8. ICCROM- International Centre for the Study of the Preservation and Restoration of Cultural Property
9. ISIS - Islamic State of Iraq and al-Sham
10. NGOs - A non-governmental organization
11. OUV- Outstanding Universal Value
12. UNESCO- United Nations Educational. Scientific and Cultural Organization
13. UNDP - United Nations Development Programme
14. UNITAR - United Nations Institute for Training and Research
15. UN-HABITAT - United Nations Human Settlements Programme
16. WMF- World Monuments Fund
17. WWI- First World War – 1914 to 1918
18. WWII- Second World War -1939 to 1945
19. WHL - World Heritage List
20. WHS – World Heritage Site

Glossary

1.	*Ablaq*	Alternating colors stones
2.	*Al-ʻAjamī*	Wooden panels are intricately painted with motifs and scenes
3.	*Al-Madīnat*	Islamic City
4.	*Al-Malkaf*	Model of ventilation known in the Arab buildings
5.	*ʻAtaba*	High platform in the entrance of the house
6.	*Bāb*	Gate
7.	*Bimaristan*	Hospital
8.	*Dār al-ʻAdl*	Court of complaints or tribunal - The Palace of Justice
9.	*Diwan*	A high government ministry in various Islamic states
10.	*Ḥammām*	Bathroom
11.	*Iwān*	A rectangular hall, usually vaulted, walled on three sides, with one end entirely open to the courtyard.
12.	*Karkūz wʻwāẓ*	Shadow play
13.	*Khāns*	Caravanserais
14.	*Kishks*	The cantilevered with transformable shutters with hygroscopic performance
15.	*Kitbiyya*	Wooden cabinet
16.	*Mashrabiya*	A carved wooden lattice screen or balcony window—used in Arab and Middle Eastern homes.
17.	*Madrasat*	Islamic school
18.	*Masjid*	Mosque
19.	*Masjid al-kabīr*	Great mosque
20.	*Miḥrāb*	A niche in the wall of a mosque, at the point nearest to Mecca, toward which the congregation faces to pray
21.	*Muqarnas*	A three-dimensional ornamental architectural element in Islamic design
22.	*Na'ib*	Deputy' or 'Representative of Authority.
23.	*Qa'a*	A roofed reception room found in the domestic architecture of affluent residences of the Islamic world.

24.	*Qubba*	A domed structure in Islamic architecture.
25.	*Sarāy*	Palace
26.	*Sūqs*	Market
27.	*Sybāṭ*	Architectural element
28.	*Ṭabq*	Wooden boards covering the ceiling Wooden logs
29.	*Taḥt al-Qal'a*	Area under the citadel
30.	*Takiyya*	Travelers' lodge - public kitchen primarily used to feed travelers
31.	*Tannūr*	Clay oven used for baking or cooking food
32.	*Ṭazar*	High platform in the reception room
33.	*Wālī*	Governor
34.	*Zuqāq*	Alley

Author's Declaration

This thesis is solely my original work and has not been submitted previously at the University. It is the result of my own efforts, except were indicated as referenced work. Additionally, this thesis has not been submitted to any other academic or non-academic institution for any degree or qualification.

I acknowledge that I have received the Academic Rules and Regulations for Postgraduate studies at Pázmány Péter Catholic University, which govern my study and research conduct.

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Date March 21, 2026

Acknowledgements

First, I would like to express my gratitude to my supervisor, Associate Professor Zsolt Vasáros, for his invaluable assistance during the preparation of this thesis. His guidance and support were crucial throughout the writing process, and his insights opened my eyes to many unexplored research possibilities.

I also extend my thanks to Professor *Balázs Major*, Director of the Archaeology Institute, for his ongoing support over the years, and to Professor *Takács Miklós*, Dr. *Habil Bartók István*, Dr. *Papp Adrienn* for their valuable contributions and critiques of my work.

Thanks to the *Stipendium Hungaricum scholarship*, I was able to fully engage in my graduate studies, which allowed me to travel to *Budapest* and immerse myself in five years of research.

During the thesis preparation, my archival research greatly benefited from the support of the staff at the Directorate General of Antiquities and Museums (DGAM), who granted me access to their resources and facilitated interviews with experts in Damascus and Aleppo. I am particularly grateful to *Dr. Anas Haj Zeidan*, Former Director General of Antiquities and Museums; Eng. *Ayman Hamouk*, Former Director of the Restoration Department at DGAM; Archeologist *Munir Qastat*, Director of Aleppo Antiquities and Museums; Eng. *Sherin Nabu*; Eng. *Hala Sabagh* from Aleppo Antiquities; and Arch. *Helen Kilo*, Former Director of Aleppo Antiquities, for generously sharing their expertise and insights.

On a personal note, this thesis would not have been possible without the support and encouragement of my family and friends. I dedicate this work to the memory of my late father, my beloved mother, and my sisters for their unwavering support throughout my studies.

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CHAPTER 1:

UNDERSTANDING THE CONTEXT AND ISSUE

SECTION 1-:

1-1- Research Introduction & Methodology

1.1.1 Introduction: The Problem — Heritage as a Victim of War

"*I have been screaming but no one can hear me*
All the people who can hear me have died
The country I am living in I thought was a garden
But it turned out to be a forest full of snakes"
From "*The Quiet Scream*"[1]

The brief lines of the poem above, penned shortly before his death by a victim of the recent *Afghan* Civil War[2], capture the frustration, contempt, and confusion of an individual grappling with the violent destruction of his traditional environment. It does not merely lament personal suffering or political turmoil; it evokes the systematic silencing of memory, identity, and place that occurs when war ravages a land. The poem thus introduces this thesis's central concern: in conflict situations, heritage is not merely collateral damage but often a target. The "garden" becomes a "forest full of snakes" precisely when symbols of heritage are attacked, confiscated, or left to decay—transformations that separate communities from their historical anchors at the very moment they are most needed.

War is the greatest disaster for nations, not only because it disrupts life across all spheres but also because its effects extend from the past into the present, profoundly influencing the future. When cultural heritage is attacked—whether through the destruction of archaeological sites, the bombing of historic cities, or the looting of museums—it is an assault on people's memory and identity alongside acts of murder, starvation, and devastation. *The human suffering caused by this situation is already extreme*," said UNESCO former Director-General *Irina Bokova*,[3] in a statement regarding the damage to the Syrian Cultural Heritage.

Even worse, war often fosters a corrupt and ineffective administrative reality, undermining the care and protection of archaeological sites, historic cities, museums, antique stores, and manuscript libraries. This regression results in damage and the illicit trafficking of cultural heritage assets.

1The poem has been recorded by Christina Lamb, who is a foreign correspondent, who began to report on Afghanistan since the Soviet occupation. Lamb, 2004: 267.

[2] The Afghan Civil War, spanning from the 1970s to the early 1990s

[3] UN News, 2012

During wartime, the historical fabric of a city often takes a backseat to the immediate needs of its inhabitants, making the focus on buildings seem cold and unrealistic in the face of human suffering. However, these remnants of the past are vital, as they embody traces of human history and provide a foundation for future generations. The loss of cultural heritage significantly impacts societies and cultures, and this issue has gained importance worldwide.

Once the end of war is recognized, those committed to architectural heritage often turn to the challenges of rebuilding, reconstructing, and memorializing the spaces that have suffered under the weight of human conflict.

Even after the war has ended, time is limited for collecting and safeguarding these remains. People naturally wish to restore their daily lives, which can lead to the removal and destruction of their cultural heritage. Politicians must act swiftly to restore normality for citizens, but this urgency may result in the removal of all destroyed remains, deemed irreparable. For archaeologists, however, this is not true destruction; the scattered pieces still exist, offering opportunities for collection and meaningful reconstruction.

"*People can inadvertently destroy cultural heritage for a second time when cleaning up conflict sites after a war ends*"[4], according to archaeologist *Dr. Margarete van Ess*.[5]

1.1.1.1 The Syrian Context: Heritage Under Fire

Cultural heritage sites in Syria have been prominent victims of the war between (2011-2025). Since 2013, six World Heritage Sites have been listed as endangered by UNESCO, all reported damaged, marking a significant loss of the region's rich history. Ancient archaeological sites, including the Nabatean capital of *Bosra*, the Assyrian site of *Tell Sheikh Hamad*, and Bronze Age cities like *Ebla* and *Mari*, as well as *Dura-Europos*, home to the world's best-preserved ancient synagogue, and the medieval *Crac des Chevaliers*, have also suffered damage and looting during the conflict. *Aleppo Ancient City* shares the tragic fate of these destroyed historical

[4] Irwin, 2018

5 Dr Margarete van Ess is a director of the Orient Department at the German Archaeological Institute and member of UNESCO's international coordination committee for the safeguarding of the cultural heritage of Iraq.

cities, exemplifying how war endangers both people and cultural treasures. Inscribed on the World Heritage List in 1986, in 2006, the ancient city won the title of the 'Islamic Capital of Culture 2006' and witnessed a wave of successful restorations of its historic landmarks.

Aleppo's Ancient City was one of the world's most complete and authentic historic urban fabrics. The city's transformation from a living, thriving historic center to a battlefield—first controlled by rebels in 2012, contested until December 2016—has left wounds that are simultaneously physical, social, and psychological. UNESCO's count, 30 percent of the historic Ancient City has been destroyed[6]. "*The destruction of one of the greatest and more ancient cities in the world is a tragedy for all Syrians and all humanity"*[7]

Yet war is not the only threat to cultural heritage. At a roundtable titled "*Destroying History: Threats to Cultural Heritage around the Globe*" at the 2017 American Historical Association Annual Meeting in Denver, *Katherine French*[8] noted that *"War and politics are not the only enemies of the past . . . economic development, poverty, lack of training, and lack of resources also threaten to destroy historical artifacts*[9]*."* In Syria's case, these threats are compounded by a ineffective administrative reality that undermines the care and protection of cultural heritage, and by economic sanctions that limit international assistance. Urban growth and modernization projects—housing, infrastructure, commerce—pose additional dangers, less dramatic than bombing but potentially as destructive over time.

1.1.1.2 The Research Problem and Thesis Purpose

This thesis confronts the pressing question of how cultural heritage can be ethically reclaimed, restored, and reanimated in post-war contexts? Using *Aleppo Ancient City* as its primary case study, this thesis tries to understand in what ways heritage architecture could document, stabilize, and reconstruct in manners that are:

[6] UNESCO, 2017
[7] UNESCO, 2017
[8] Katherine French: Professor of Medieval English History, University of Michigan since 2011
[9] Gillet, 2017

- Ethical with regard to authenticity — respecting the material and historical truth of what was destroyed
- Participatory of communities — ensuring that those who lived with this heritage have a voice in its recovery
- Contributory to post-conflict healing — supporting psychological and social recovery without erasing the scars of history

The thesis does not presume to offer universal solutions. Rather, it aims to develop a context-sensitive framework for post-war heritage rehabilitation, grounded in international conservation principles but responsive to local realities. In doing so, it seeks to contribute both to scholarly discourse on heritage in conflict and to the practical effort—still ongoing, still fragile—to restore meaning and life to the wounded fabric of *Aleppo*.

1.1.1.3 The Researcher: Position and Perspective

I have been working in DGAM for 35 years and hold a Bachelor of Architecture from Damascus University. In June 2007, I took the responsibility of the Syrian World Heritage Sites Directorate at DGAM. I applied for my Ph.D. after the crisis in *Syria* that started in 2011. As a student in the Research Ph.D. (Stipendium Hungary Scholarship) program, my scholarly concerns were mostly focused on rebuilding world heritage sites postwar " *Ancient City of Aleppo* as a case study". I have always had an interest in projects that deal with rehabilitating and site management of the built heritage. I have translated into Arabic ICCROM book on *Risk Preparedness: A Management Manual for World Cultural Heritage*,[10] but I have also presented at conferences on Syrian World Heritage sites and post-war rehabilitation. Before beginning my job at DGAM, I finished a bachelor's degree in architecture from Damascus University.

My acquaintance with *Aleppo Ancient City* began in 2007 when I had the opportunity to take responsibility for the WHS Directorate in DGAM. I was without technical

[10] Kutiefan, L. (Trans.), 2007/1998

knowledge of the city's architecture at the time and was captivated by the distinct and inspiring form of the city.

From 2009-2011, I was involved with the technical professional's team to prepare the file to add the Ancient Villages in North of Syria to the UNESCO WHL, as part of the villages exist in *Aleppo* countryside, this helped me to visit the Ancient City several times during the work and to know the city's attractions well.

Between 2012 and 2016 the Ancient City became a battlefield, and I had to watch and listen from afar as the devastating situation in the *Aleppo* worsens. Rebels first invaded the city in 2012, and battles continued there until December 22, 2016. During the Syrian Revolution period, I took the responsibility to assess the damage in the World Heritage Sites including *Aleppo Ancient City*.

Through this thesis, I hope to begin to give back to this Ancient City by recommending preserving its importance, put at risk, built environment.

1.1.2 Methodology

This thesis adopts a qualitative, case-study-based approach to investigate the challenges and strategies of post-war architectural heritage rehabilitation, using the *Ancient City of Aleppo* as the primary case. The methodology integrates multiple data sources and analytical perspectives to ensure a comprehensive understanding of the physical, social, and procedural dimensions of post-conflict recovery.

1.1.2.1 Thesis Approach

The study is carried out on four interconnected modes of inquiry:

A. Theoretical study: It depends on gathering information from books, journals and papers, and obtaining documents, necessary plans from its official sources, such as the Islamic Waqfs, the Directorate of Antiquities and Museums, and the Directorate of Ancient City and others. All the gathered documents relevant to heritage in conflict and post-disaster reconstruction, with a focus on principles of authenticity, community participation, and ethical intervention.

B. Field Study: Conducting targeted site visits to the *Ancient City of Aleppo* to assess war-related damage, document current conditions, and engage with affected communities through surveys and interviews, ensuring recovery proposals are grounded in local experience.

C. An analytical study: Systematically diagnosing the physical, socio-economic, and governance-related challenges facing the Ancient City after conflict, identifying vulnerabilities and prioritizing interventions based on cultural significance and urgency.

D. Conclusion study: Synthesizing findings to propose a phased, context-sensitive recovery framework for *Aleppo*, offering actionable recommendations for stabilization, reconstruction, and long-term stewardship of war-affected heritage.

1.1.2.2 Data Collection Sources

1.1.2.2.1 First Chapter

An investigation into possible regeneration approaches was carried out. This began with an overview of the most recent documents discussing the international philosophy of preservation of the built architecture. The purpose of this overview has been to introduce an international theoretical perspective to serve as a forward of further recommendations. Consideration was given to the issues that surrounded the preservation of postwar rehabilitation within historic locations, and which came to light throughout the study. In this part, I analysed several post-disaster case studies from different parts of the world going through main focuses such as psychology, Identity, culture, and memory.

1.1.2.2.2 Second Chapter

Data collected for purposes of this part particularly related to a public and private authorization archive, from government statistics, published research reports from different organizations, international agencies, and documents and studies that already exist. Use a wide range of sources (archival research, databases, personal data collection, etc.) to understand the projects, transformations, and evolution of space. Analyse, represent, and communicate the values of the architectural works within specific historical and urban contexts, detailed bibliography including books, periodicals, and documents. The contextual study assesses the development of an urban layout, functions, and likely constraints of current conservation-led rehabilitation, as rooted in the city planning and reconstruction policy.

Subsequently, the current situation was discussed. By mapping the urban and functional status of the citadel, areas in particular need of rehabilitation can be

identified. Furthermore, a revitalization proposal for *Bayt Ajqbāsh* was reviewed of conservation guidelines for the building. This section is guided by qualitative research, a study of illustrative materials, such as historical maps and photographic surveys. The DGAM database was used to locate information about the ancient city. It includes over 1,000 files of content from the following sources: reports, inventories, books, journal articles, old photos, and major works—interventions that bring together the seminal articles about that particular methodology.

In the part which deals with guidance on writing conservation plans of the *Bayt Ajqbāsh.* The part described the historic development of the building, identifies the existing historic assets, and defines their historic significance and contribution to the overall historic character of the area. The research was undertaken from the archives and libraries to find: original historic drawings that provide a unique record of the design and development of the historic building, historic photos, historic survey maps of the building were used to understand the sequential development of the building, on-site assessment and structural review of the building and its condition was an ongoing part of the project, publications, and web-based information were consulted as part of the historic research.

1.1.2.3 Field Trips :

Field trips were organized to demonstrate the post-war rehabilitating works that were undertaken in the ancient city such as *Sūq al-Saqatiyya* and *al-Masjid al-kabīr*. The trips were a chance to collect data ensuring that different expertise and perspectives can be utilized. Four field trips were organized the first was on Feb 2, 2017, the 2nd on Jan 24, 2019, and the 3rd was on Dec 12, 2019. and the 4th was in March 2023 after the February 4th earthquake They were useful to understand the feelings, impressions, circumstances, and experiences of the stockholders, their ideas, and viewpoints on specific topics .

1.1.2.4 International Meetings discussions:

Three international meetings for the recovery plan of the ancient city were organized by UNESCO, DGAM and AKTC.

The first meeting was held in the UNESCO office in Beirut on March 2-3, 2017, it was attended by representatives from national authorities and NGOs. This meeting addressed the situation and recommended the first set of urgent actions aimed at stabilizing and safeguarding the damaged monuments, preparing the restoration activities, and reorganizing the local capacities.

UNESCO World Heritage Committee from 2017 recommended the implementation of the technical meeting's decisions and called the local authority to urgently prepare a strategic plan to monitor the recovery process. An overall strategy was prepared and issued as "*The Reconstruction and Recovery of the World Heritage City of Aleppo: Vision and Planning Framework*"[11] in October 2018. This strategy was represented in the second meeting in *Aleppo*, representatives from local government and NGOs participated .

The third meeting was organized by the 43rd session of the World Heritage Committee (2019, Baku) the side event was on "*Planning the Reconstruction and Recovery of World Heritage: the case of Aleppo Ancient City in Syria*[12]". The side event aimed at presenting the state of the work initiated since early 2017 for the reconstruction and recovery of *Aleppo Ancient City*, through a round table of experts. The joint UNESCO-UNITAR publication Five years of conflict, the State of cultural heritage in *Aleppo Ancient City* was presented, as well as the Syrian strategy for the recovery of the city which was presented by me. UNESCO and ICOMOS experts also presented the ongoing works in the field of recovery and reconstruction.

These three meetings helped to bring the experts together, follow the condition of the Ancient City, and prompt emergencies. I participated in 3 meetings that mobilize research issues. At the national level, I am involved in actions urging the modifying of the ancient city building code.

1.1.2.5 Comparative Case Study Analysis :

I looked to before and after WWII, where numerous examples displaying the range of ways in which heritage is wagered during the war this is because the scale and scope

[11] DGAM, 2018
[12] UNESCO, 2019

of mass destruction that occurred during the war or neglect brought about a change in paradigm that continues to influence the preservation practice until the present, albeit applied largely in “Western” countries. A substantial portion of my thesis focused on defining the various methods that were used after the war through consulting various secondary sources from wartime cities around the world. By looking at various case studies where architectural heritage was destroyed, the problems and solutions that arose from each and addressing several attempts to gain more in-depth knowledge about the implementation and success of the interventions, I was able to assemble these approaches according to the lessons each case study provided.

Following these overarching issues, I looked to case studies in Syria for reconstruction that refers to assigned scenarios as a tool for analysis and discussion. With reconstruction plans crippled by an all-round shortage of funds, equipment, and skilled labor, only a handful of Syria’s heritage rehabilitation projects have gone forward. Two cases were presented the first is the "*Crac des Chevaliers Rehabilitation Project"* [13] and the second deal with *" The Triumphal Arch, Palmyra"*[14].

When applying the various approaches to Ancient City, I consulted with professionals who have lived, or worked, there. Interviews were conducted with architects during the campaign that restored the Ancient City, government workers for the DGAM, and the Directorate of the Ancient City.

While this thesis generally surveys approach to preserving cities experiencing war and neglect, it specifically considers this topic within the context of *Aleppo Ancient City.* Studying the history of conservation work in *Aleppo Ancient City*, and the various issues that the city experienced, contributed to framing this context, along with the assessment of these issues in conjuncture with hypothesizing any future risks to the area which helped form my suggestions. This method aims to find whether other successful approaches could work in the Ancient City and highlights the complexities of the Ancient City that have not yet been considered in place of recent events. It also intends to bring attention to the obstacles that are confronted when planning for war and the harsh realities of applying methods to overcome them.

[13] DGAM, 2021: 29-32
[14] DGAM, 2021

1.1.2.6 Case Study Selection: *Bayt Ajqbāsh*

The detailed case study of *Bayt Ajqbāsh* was selected based on:

- Representativeness: Exemplifies ʿOttomān -period domestic architecture in *Aleppo*
- Documentation: Existing pre-war archival records exist[15] .
- Damage severity: Severely damaged in 2015, requiring comprehensive intervention
- Recovery completed: Restoration campaign (2019–2024) allows full-cycle analysis
- Accessibility: I had direct access to documentation and restoration team.

This thesis employs a structured methodology based on two complementary scales of analysis. Each scale addresses specific research questions and utilizes distinct methods and data sources, as outlined in the table below.

1.1.3 Thesis Structure

This thesis is organized into three main chapters, each addressing a different dimension of the research problem:

- Chapter 1: Understanding the Context and Issues establishes the theoretical and contextual foundation.

  Section 1.1.2 examines international conventions on authenticity and historical reconstruction, tracing the evolution of conservation doctrine from the Athens and Venice Charters to the Nara Document and Riga Charter, and exploring how these principles are tested in post-war environments.

  Section 1.1.3 analyzes global scenarios for built heritage reconstruction, grouping cases by strategic approach—faithful reconstruction, modernist replacement, ruin preservation, memorialization, and abusive replication—and extracting principles relevant to *Aleppo*.

[15] David 1988

- Chapter 2: *Aleppo* Ancient City — Case Study presents the original research.

  Section 2.1.1 provides the essential contextual framework: *Aleppo's* layered history of destruction and renewal, the ʿOttomān -period architectural baseline, and the evolution of conservation philosophy that led to World Heritage inscription.

  Section 2.1.2 presents the case study properly, organized around two action areas. The first examines the *Taht al-Qal'a* urban ensemble, documenting damage to four significant monuments and considering opportunities for urban recovery. The second offers a detailed analysis of *Bayt Ajqbāsh*, an eighteenth-century house severely damaged in 2015, structured in three parts: systematic damage assessment, the ethical principles guiding intervention, and the practical restoration campaign (2019–2024), concluding with a proposal for adaptive reuse.

- Chapter 3: Conclusions and Recommendations return to the three research questions posed in this introduction, synthesizing findings into a phased, context-sensitive recovery framework for *Aleppo*, and reflecting on the thesis's contributions to knowledge and directions for future research.

1.1.4 Thesis Questions:

This study seeks to build a theory in answer to the following questions, focused specifically on post-war heritage rehabilitation:

- **RQ1:** What kind of challenges can be associated with the preservation of postwar architecture within historically sensitive locations considering factors such as urgent reconstruction needs, loss of documentation, community trauma, and political pressures?
- **RQ2:** What are the subsequent possible solutions in its rehabilitation balancing international conservation principles with local socio-cultural and technical realities?
- **RQ3**: How critical is pre- and post-conflict architectural documentation to the rehabilitation process, and what role digital technologies can play in post-war recovery?

1.1.5 Literature Review

1.1.5.1 Scholarship on *Aleppo's* Architecture and Urban History

The study and preservation of the *Ancient City of Aleppo* have been addressed in both pre-war and post-war contexts, with recent scholarship increasingly focusing on heritage in conflict and post-conflict recovery. The foundational work of *Jean Sauvaget*[16] remains essential for understanding the city's historical and architectural evolution, providing a critical baseline against which war-related damage can be assessed. In his books he detailed the city's development and the documentation of the architectural monuments, the various architectural styles and spaces that can be found within the city.

Complementary historical-geographical studies, such as those by *Gaube* and *Wirth*[17] further illuminate the urban fabric and socio-economic dynamics of *Aleppo*.

For the Citadel and its immediate surroundings, the archaeological and architectural investigations by *Kohlmeyer*[18] offer indispensable stratigraphic and typological data.

In the early 2000s, conservation efforts shifted toward urban regeneration and community engagement. This approach is documented in the AKTC publication on their experience working in the socio-economic project in the Citadel perimeter[19]. The project aimed to enhance the historic urban fabric and create an attractive pole, realizing the potential for this project to become a significant contribution to the economic development of the Ancient City.

Subsequent planning frameworks, such as the joint vision by the Directorate-General of Antiquities and Museums DGAM-AKTC[20] as well as the UNESCO-DGAM Table of Action[21], formalized the post-conflict recovery strategy for the World Heritage site.

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[16] Sauvaget,1941

[17] Gaube & Wirth, 1984

[18] Kohlmeyer, 2009

[19] Aga Khan Trust for Culture, Historic Cities Programme: Strategies for Urban Regeneration (Geneva: Aga Khan Trust for Culture, n.d.). The project focused on the socio-economic regeneration of the citadel parameter.

[20] DGAM & AKTC, 2018

[21] UNESCO & DGAM, 2017

For most of its history, *Aleppo's Ancient City* remained relatively unchanged by Western concepts of modern architecture. The city retained much of its architectural authenticity by using traditional methods to maintain its historic structures. Traditional materials, such as the yellow stone and limestone mortar used to construct buildings, continue to be in use in the Ancient City. Until 1930, local craftsmen performed virtually all architectural maintenance and construction, and the city remained confined within its medieval boundaries, limited by its walls and early suburbs, which were surrounded by pistachio, fig, and olive groves. The social and spatial history of this period is further explored by *David*[22] and *David & Heretani*[23], while the wider cultural context of ʿOttomān *Aleppo* is analyzed by *Watenpaugh*[24] and *Kujjah*[25] .

The Corpus Levant project provides comprehensive documentation of *Aleppo's* traditional architecture (CORPUS Levant & DGAM[26]). The publication covers the typologies of traditional buildings in the Ancient City and the associated building arts. It extensively explores the architectural authenticity of *Aleppo*, preserved through traditional methods and materials, capturing both the tangible and intangible heritage of the city. The book covers the typologies of traditional buildings in *Aleppo's* Ancient City and the building arts. The architectural authenticity of *Aleppo*, preserved through traditional building methods and materials, is extensively covered in the topics discussed throughout its pages, which capture the architectural and intangible heritage found in the city. It explores *Aleppo's* architectural heritage and includes varied architectural styles. The publication also highlights the legislative framework, the diagnosis as a preliminary stage to any restoration or maintenance operation, and the regular needed maintenance.

In parallel, documentation and archival initiatives such as those by *Al-Afandi*[27] and the "*Aleppo Archive in Exile*[28]" have become critical tools for post-conflict recovery.

[22] David, 2002
[23] David & Heretani,2011
[24] Watenpaugh,2004
[25] Kujjah, 2022
[26]CORPUS Levant & DGAM, 2004
[27] Al-Afandi, 2019
[28] Wessling & Zarrin Ghalam, 2020

For the specific case of *Bayt Ajqbāsh*, the detailed study by *Jean-Claude David*[29] is indispensable. His work provides a full description and architectural documentation of the building, establishing its importance within the domestic architecture of ʿOttomān -period *Aleppo*. The rehabilitation of courtyard buildings in *Aleppo* has since been addressed in broader studies, such as the Aleyyon project[30], which offers a values-based and participatory model directly applicable to *Bayt Ajqbāsh*. Theoretical frameworks for post-trauma reconstruction, including those discussed by ICOMOS-Finland[31]and *Wong*[32], further inform the ethical and methodological choices required for the building's adaptive reuse.

1.1.5.2 Post-Conflict Reconstruction Theory

It is critically examined in works such as *Diefendorf, Jeffry M*. who wrote research[33] which details the exploration of Europe's urban reconstruction after World War II. The book highlights the unusual characteristic of rebuilding in several case studies. which provides comparative insights into large-scale urban recovery after catastrophic destruction—a relevant parallel to the Syrian context.

1.1.5.3 International Conservation Doctrine

The evolution of international conservation doctrine—from the Venice Charter[34] to the Nara Document[35]—is traced in *Jokilehto J.* In his book[36] where the writer investigates the history and development of major national European philosophies concerning historic buildings, monuments and sites, the cross-fertilization of these ideas and principals, and their contribution towards an international approach in the treatment of historic structures. The period of study has been defined as beginning with the Italian Renaissance, through the French Revolution at the end of the eighteenth century, to the international policy guidelines after WWII.

[29] Jean-Claude David,1988
[30] UN-Habitat & UNESCO, 2019
[31] ICOMOS-Finland,2017
[32] Wong, 2017
[33] Diefendorf, 2014
[34] ICOMOS, 1964
[35] ICOMOS, 1994
[36] Jokilehto, 1986

These principles are now being tested and reinterpreted in war zones, where questions of authenticity, reconstruction, and memory take on urgent, practical dimensions.

Many publications address the topic of architecture and war and focus on subjects including the deliberate targeting of architecture during the war, the evolution of international policies that cover the destruction of heritage[37].

The seminar *"Post-Trauma Reconstruction*," held by ICOMOS[38], brought together scholars examining reconstruction and crises from diverse perspectives, offering detailed information about individual cases and theoretical approaches to the field. The articles bring out useful different perspectives that will inspire new thoughts in the mind of the reader. For example, *Minna Silver*[39] describes in her article recent events in Syria, one consequence of which has been the destruction of the wealth of our shared cultural heritage. She highlights the role of digital documentation (3D scanning, GIS) in safeguarding endangered heritage, a methodology directly applicable to *Aleppo's* current needs. Various other sources are also addressed in these pages which converge around methods with which heritage is preserved before, during, and after the war.

1.1.5.4 Synthesis: Situating This Thesis

This review thus situates *Aleppo's* heritage within two interconnected discourses: Historical and architectural scholarship on the city's-built fabric. Contemporary theory and practice on post-war heritage recovery, documentation, and ethical reconstruction. Together, these bodies of work provide the foundation for this thesis' applied research on *Aleppo's* post-war rehabilitation.

[37] See, for example, the range of case studies and theoretical discussions in the ICOMOS Finland publication discussed below.

[38] ICOMOS-Finland held a seminar in November 2016 titled "After the Crisis. Reconstruction?", the presentations at which formed the basis for an independent publication. The published volume includes articles addressing the subject from multiple viewpoints, exploring themes such as reconstruction as a point of discussion in ICOMOS, research overviews on post-crisis heritage reconstruction, case studies of specific reconstruction projects (including St. Olaf's Church in Tyrvää), and digital documentation as a response to the destruction of memory in Syria. See ICOMOS-Finland, *Kriisin jälkeen - rekonstruktio? Post-trauma reconstruction*, ed. Aura Kivilaakso, Maire Mattinen, and Laura Berger (Helsinki: ICOMOS-Finland, 2017).

[39] Minna Silver: Artuklu University, Archaeology, Faculty Member University of Oulu, Archaeology, Adjunct.

SECTION 1.2:

1.2 International Conventions Related to Authenticity and Historical Reconstruction in Relationship to Cultural Heritage

1.2.1 Restore Built Heritage Damage

Given the total or partial destruction of countless buildings with artistic and cultural value, how should their restoration be approached when traditional conservation principles, such as minimal intervention, are inadequate? In this case, it wouldn't be possible to minimize the interventions like the *Athens* Charter defended. The governments had several options, much of the effort consisted of reproducing as accurately as possible what had disappeared. The need for reference points to restore normality has probably determined this. However, some of the monuments were kept as ruins often associated with new constructions as memorials of a period that one does not wish to repeat. International doctrinal texts have evolved to address these tensions, though their application in war contexts remains contested[40].

Over time multidisciplinary discussions in international congresses have established rules imposed through documents such as the Hague charter[41], —the first international treaty focused exclusively on protecting cultural heritage during armed conflict— established that heritage is not a legitimate military target. Its protocols underscore the wartime responsibility to safeguard monuments, a principle brutally tested in recent conflicts in Syria, Iraq, and Ukraine.

In peacetime conservation, the declaration of Amsterdam[42], the Krakow charter [43]…. and many of international conventions dealing with Authenticity and Historical Reconstruction in Relationship to Cultural Heritage, the Venice Charter[44] strongly discouraged reconstruction, stating it should be "ruled out a priori," permitting only anastylosis—the reassembly of original fragments: *"All reconstruction work should, however, be ruled out a priori. Only anastylosis, that is to say, the reassembling of existing but dismembered parts can be permitted*[45]*"*. However, in post-war environments, where cultural erasure is used as a weapon, communities and

[40] First International Congress of Architects and Technicians of Historic Monuments, 1931
[41] ICOMOS, 1954
[42] Council of Europe, 1975
[43] Conference on Conservation, 2000
[44] ICOMOS,1964
[45] ICOMOS,1964

governments often view reconstruction as an act of resistance and identity reassertion. This tension is evident in the careful framing of later documents.

In contrast, the Athens Charter mentions the method of anastylosis, a special form of reconstruction: *"In the case of ruins...steps should be taken to reinstate any original fragment that may be recovered (anastylosis) wherever this is possible*[46]*"*. The skepticism regarding any form of reconstruction is based first of all on the knowledge that history is not reversible: in certain circumstances, a fragmentary state offers the only valid, un-falsified artistic statement. Indeed even a destroyed monuments evidence of history, evidence that would be lost in a "reconstruction". Furthermore, the monument that could be restored or renovated, or perhaps stabilized and repaired, must not be demolished and recreated as a reconstruction "more beautiful than before." A reconstruction that does not replace a lost monument but rather justifies and facilitates the demolition of an existing monument is a deadly danger for our stock of historic buildings.

In 1983, the Operational Guidelines for the Implementation of the World Heritage Convention took a slightly broader view, stipulating that any reconstruction should be undertaken only if certain requirements were met, i.e.: cultural properties should '*meet the test of authenticity in design, materials, workmanship or setting (the Committee stressed that reconstruction is only acceptable if it is carried out based on complete and detailed documentation on the original and to no extent on conjecture)*'.[47] The guidelines mentioned also that: *About authenticity, the reconstruction of archaeological remains or historic buildings or districts is justifiable only in exceptional circumstances. Reconstruction is acceptable only based on complete and detailed documentation and to no extent on conjecture.*[48] The comments in article 9 of the Venice Charter are in a sense also valid for reconstruction: *"The process of restoration is a highly specialized operation. It is based on respect for original material and authentic documents. It must stop at the point where conjecture begins."*[49] In war-torn settings, this places immense importance on pre-conflict documentation and post-damage recording—resources often scarce or destroyed in conflict.

[46] ICOMOS, 1931: See Athens Charter, VI, Technique of conservation
[47] UNESCO, 2016: World Heritage Convention: Item 82
[48] UNESCO, 2016: World Heritage Convention: Item 86
[49] Petzet, 2004: See Venice Charter: Article 9

Other 1COMOS doctrinal texts including the Burra Charter[50], the Declaration of Dresden[51], the Lausanne Charter[52] and the Nara Document[53], as well as, the UNESCO Convention Concerning the Protection of the World Cultural and Natural Heritage[54] and the UNESCO Nairobi Recommendation[55] concerning the Safeguarding and Contemporary Role of Historic Areas noted that: '*throughout the world, under the pretext of expansion or modernization, demolition ignorant of what it is demolishing and irrational and inappropriate reconstruction work is causing serious damage to this historic heritage*'. They all define critical advancement for post-war recovery, where the "spirit of place" and community memory are as vital as physical fabric.

In the immediate aftermath of the Second World War, heritage values were mainly referred to as 'monuments and archaeological sites', as well as important collections of historic and artistic objects. However, the destruction of historic urban areas made the population bitterly aware of their losses and particularly the feeling of cultural identity associated with familiar surroundings.

The question of reconstruction of monuments as part of the historic area destroyed by war was discussed in an ICOMOS Symposium in Dresden in November 1982[56] . In the 1960s and especially from the 1970s, increasing attention was given to the conservation of larger ensembles, such as historic urban areas. In the 1990s, this was further extended to cultural landscapes and vernacular built heritage. The evolution of heritage concepts was reflected in conservation and reconstruction policies. It is also obvious that in such cases, reconstruction would not be limited to buildings and infrastructures, but would also refer to the social-economic condition of the place. This is something that takes the question to the 'heritage community' who should recognize the values of such heritage and take responsibility for the care.

According to ICOMOS "Riga Charter[57]": *"in exceptional circumstances, reconstruction of cultural heritage, lost through disaster, whether of natural or human*

[50] ICOMOS, 1979
[51] ICOMOS, 1982
[52] ICOMOS, 1990
[53] ICOMOS, 1994
[54] UNESCO, 1972
[55] UNESCO, 1976
[56] ICOMOS, 1982: See the Declaration of Dresden
[57] ICOMOS, 2000

origin, may be acceptable, when the monument concerned has outstanding artistic, symbolic or environmental (whether urban or rural) significance for regional history and cultures, *when the appropriate survey and historical documentation is available (including iconographic, archival or material evidence), the reconstruction does not falsify the overall urban or landscape context, and existing significant historic fabric will not be damaged; and providing always that the need for reconstruction has been established through full and open consultations among national and local authorities and the community concerned"*[58]. These evolving guidelines reflect a gradual recognition that heritage in war zones cannot be treated through peacetime conservation paradigms alone. The need for psychological recovery, social cohesion, and identity restoration often justifies interventions that would be rejected in stable contexts. This charter provides a practical ethical framework for postwar projects in cities like *Aleppo* and *Mosul*.

1.2.2 The concept of authenticity

Authenticity, a cornerstone of modern conservation theory, becomes profoundly complicated in post-war scenarios. The concept of authenticity, as defined in international circles between the 1960s and the 1994 Nara Conference on Heritage, has been one of the main instruments used to define policies aiming at heritage protection during the last few decades[59]. The principle that gains urgency when communities seek to reconstruct symbols of identity deliberately targeted in war.

The participants adopted the *Nara Document on Authenticity*, stressed the issue of cultural diversity as an *"irreplaceable source of spiritual and intellectual richness for all humankind* [60]*."* While underlying the UNESCO principle that *"the cultural heritage of each is the cultural heritage of all', it was stressed that "All cultures and societies are rooted in the particular forms and means of tangible and intangible expression which constitute their heritage, and these should be respected* [61]*".* The Nara Document emphasized that the references for evaluating authenticity, i.e. truthfulness and credibility of the sources of information, could vary from case to case. It would therefore not be possible to have fixed criteria for truth: *"All judgments about values*

[58] ICOMOS, 2000: See Riga Charter
[59] Randolph, 2002: 1-16; Cameron 2008: 19-24.
[60] ICOMOS, 1994: See Nara document: Cultural Diversity & Heritage Diversity
[61] ICOMOS, 1994: See Nara document: Cultural Diversity & Heritage Diversity

attributed to cultural properties as well as the credibility of related information sources may differ from culture to culture, and even within the same culture. It is thus not possible to base judgments of values and authenticity within fixed criteria. On the contrary, the respect due to all cultures requires that heritage properties must be considered and judged within the cultural contexts to which they belong[62]*."*

This concept is illustrated by the two examples below: *Bagrati Cathedral* in *Georgia* and *Bamiyan Valley* in *Afghanistan*.

- **Bagrati Cathedral, Georgia**

One of the more spectacular recent cases was the monumental reconstruction of the half-ruined Bagrati Cathedral in Kutaisi, Georgia. UNESCO placed the property on the List of World Heritage in Danger in 2010 when the plans were announced but work was completed in 2012 nonetheless, according to the World Heritage Committee, "*the Bagrati Cathedral has been altered to such an extent that its authenticity has been irreversibly compromised*[63]." Contrary to ICOMOS's advice, remaining original stone blocks were not re-used, and new building parts of reinforced concrete were implanted irreversibly into the historic fabric[64]. The cathedral was later delisted from the World Heritage List. This case starkly illustrates the consequence of prioritizing a complete, monumental form over the preservation of the original, surviving material. The challenge here was a failure of ethical judgment, prioritizing a vision of "former glory" over the fragile evidence of history.

- **Bamiyan Valley, Afghanistan**

In 2003, the Committee inscribed the *Bamiyan Valley* on the World Heritage List, two years after the Taliban had blasted the two great stone Buddhas[65]. *Bamiyan* was a major mishap of the World Heritage machinery: nominated by *Afghanistan* in 1983, the candidate had not been accepted because of minor technical issues and

[62] A list was however prepared of possible references, which included material and immaterial aspects of heritage, as well as its relationship with the context.
[63] UNESCO, 2016
[64] UNESCO World Heritage Centre,1994
[65] Romey, 2001

never been followed up on; so that when the *Taliban* announced their plan of destruction, there was not even the symbolic weight of a World Heritage title to give them pause. With the *Buddhas* gone in 2001, the ICOMOS evaluation stressed the authenticity of the remaining parts of the valley as a cultural landscape and pre-emptively expressed its support of a possible reconstruction of the statues from the fragments by anastylosis, obviously not seeing this as a threat to the overall authenticity of the site[66]. So far—and not least because of the security situation—little actual progress has been made, but some form of reconstruction continues to be envisioned.

Conclusion

Controversial cases such as the *Bagrati Cathedral (Georgia)* and the *Buddhas of Bamiyan (Afghanistan)* illustrate the tension between material authenticity and symbolic need. In *Georgia*, the pursuit of a monumental, "former glory" through irreversible modern interventions led to the cathedral's delisting from the World Heritage List—a cautionary tale that material authenticity, once sacrificed, cannot be recovered. In *Bamiyan*, the deliberate *Taliban* destruction prompted global debate: should the *Buddhas* be rebuilt? ICOMOS supported anastylosis using original fragments, recognizing that in this context, reconstruction could serve as an act of cultural defiance and healing.

Together, the two cases underscore a critical lesson: the legitimacy of reconstruction depends not on the scale of ambition but on respect for original fabric, the use of reversible methods, and the primacy of evidence over conjecture—principles that become especially acute in post-war settings where heritage is both a victim and a symbol of resilience. The two cases demonstrate that in postwar settings, authenticity is not solely a material concern but a socio-political and psychological one. In *Syria*, the proposed reconstruction of the *Triumphal Arch of Palmyra* and *Al Masjd Al kabir* in *Aleppo* raises similar questions: when heritage is weaponized, does its symbolic recreation become a legitimate form of counter-destruction?

[66] ICOMOS, 2003

1-2-3- Renovation

In the wake of conflict, communities and authorities face a stark choice: renovate what remains, or demolish and rebuild? The Venice Charter advocates for preserving the authentic fabric, yet war often leaves structures so damaged that traditional renovation is unfeasible[67]. Renovation is a part of the Principle of Preservation; it comes along with the processes of conservation and restoration. Renovation is considered to be the final resort of the preservation process. On the other hand, demolishing is the most contradictory principle in the Preservation process; it is defined as the act of tearing down or purposely destroying a building. Demolishing aims at *"replacing the existing with a new object and use."* Several questions arise. Should all historic buildings be renovated or should these buildings be demolished and replaced with improved ones? Should some of these buildings be demolished to give way to new land use? By the process of renovation, men can protect these monuments and maintain their symbol. *"Imbued with a message of the past, the historic monuments of generations of people remain to the present day as living witnesses of their age-old traditions".* [68] People are becoming more and more conscious of the unity of human values and regard ancient monuments as a common heritage. The common responsibility to safeguard them for future generations is recognized. *"We must hand them in the full richness of their authenticity".*[69] Generally, the aim of the renovation is in fact to bring back an artifact to the former situation, eliminating unwanted effects of the event that damaged it or even cancel the event in itself.

On the second reflection, most of the history of restoration, in some ways, has been characterized by an ill-concealed desire to shift history and to bring back buildings and artifacts of the past 'to their former splendor'. In practice – options such as repairing, restoring or reconstructing, are the most instinct after a violent event, while preserving the signs of a trauma is often an unpopular measure, as communities generally prefer to eliminate tangible traces of unpleasant events, repairing damage or reconstructing a vanished artifact.[70] Demolition may seem pragmatic, but it risks erasing historical evidence of the conflict itself—evidence that future generations may need to understand

[67] ICOMOS, 1964
[68] Petzet, 2004
[69] Petzet, 2004
[70] Sulfaro, 2018

this period. Conversely, preserving ruins as memorials (as in *Oradour-sur-Glane, France*) can honor memory but freeze communities in trauma. In post-war *Aleppo*, this dilemma is acute: should heavily damaged historic houses be stabilized as ruins, reconstructed authentically, or replaced with compatible new structures? The answer must balance historical truth, community need, and technical possibility—a balance guided by, but not slavishly bound to, pre-war conservation doctrine. The thesis frames this as a choice between a "demolition trend" and renovation for sustainability[71], while post-conflict scenarios like *Aleppo* force a direct confrontation between local recovery needs and international heritage frameworks[72].

[71] Kalakoski & Sirén, 2026
[72] Al Salloum, 2025

SECTION 1.3:

1.3 Scenarios on Built Heritage

“Reconstruction": An Evolving Dialogue Between Memory, Form, and Material

1.3.1 Introduction- (Reconstruction as a Mirror of Changing Values)

This section examines historical and contemporary reconstruction scenarios from around the world, extracting principles and cautions relevant to post-conflict recovery in cities like *Aleppo Ancient City*. These cases are grouped not only by chronology, but by a dialogue between different philosophical approaches. By tracing these cases, we can observe fundamental shifts in conservation doctrine. A central thread in this evolution, and the focus of this analysis, is the changing relationship between the restorer and the material of the building's fabric.

1.3.1.1 Early Approaches to Reconstruction in the Ancient World

Across millennia, societies have grappled with the question of what to do with heritage damaged or destroyed by war, catastrophe, or time. Their choices, whether to repair, reuse, preserve ruins, or rebuild, offer enduring lessons for post-conflict recovery in cities like *Aleppo*. Post-war reconstruction is never merely technical—it is a profound social, psychological, and political act. This principle, while urgently felt in contemporary conflicts like *Syria's*, is not new.

- **Statues Ramses II, Cairo**

Some early examples of conservation efforts include the restoration of the damaged right arm of monumental *statues Ramses II* in the great temple of *Abū Sunbul* in *Egypt* in the third millennium B.C., when the arm, was given the support of simple stone blocks[73]. This case establishes a primordial principle: the drive to maintain the function of a monument can justify physical intervention, even in antiquity, serving the statue's continued role as an object of veneration.

The concept of "authenticity" as modern conservation understands it, simply did not exist. What mattered was that the statue *stood* and continued to perform its function. The new stone has no value; it is crutch. The attitude is purely utilitarian, with no concept of "authenticity" as we understand it.

[73] Jokilehto, 1999

- **Arch of Constantine, Rome**

The use of spoils from older monuments in new constructions became common during the Roman Empire, particularly in the late antique period. This method was common in ancient Egypt, often intentionally incorporating elements from previous buildings into new ones, and sometimes the building materials were reused. After *Nero's* as *Rutgers*[74] note, the *Arch of Constantine* in *Rome* (312–15 CE) is a prime example of this practice, as it was constructed using pieces taken from older monuments and buildings. This reuse of architectural elements, known as spoliation, was a way for emperors and builders to showcase their power and authority by incorporating fragments of older, prestigious structures into their own projects. It also served to connect the new construction with the grandeur of the past. This is not reconstruction but re-contextualization.

This example demonstrates an early form of valuing historic material (the marble reliefs) while subordinating its original meaning to a new political narrative (celebrating Constantine). It challenges modern notions of *integrity* and *setting*, showing how heritage can be weaponized for contemporary legitimacy. For a fourth century Roman, however, this was an act of profound legitimacy. *Constantine* was not destroying heritage; he was appropriating their authority and linking his reign to the grandeur of a golden past.

This is not reconstruction; it is re-contextualization. The historic material is valued, but its meaning is entirely subordinated to a new, contemporary political narrative. The integrity of the earlier monument is sacrificed for the symbolic power of the new one.

- **Athenians' temple**

It was the case in the fifth century BC when the Athenians decided not to build the temple destroyed by the Persians, but to keep their remains as a memorial. Even after the decision was reversed, in the time of *Pericles*, some column drums were built into the northern wall of the Acropolis as a reminder of the event [75]. Material

[74] Rutgers, 2025
[75] Directorate of Archaeological Museums et al., n.d

here serves as witness, this is an early, powerful example of preserving historic fabric for its commemorative value to tell a story of destruction. The material is valued precisely because of its traumatic history.

- **Rome**

Similarly, in *Rome*, after the fire of *Nero* in July 19, 64 AD, culturally conscious writers lamented the loss of many historic buildings and the writings of Pausanias one can hear a meticulous concern to remember the historic significance of even minor details, seen in the example of the protection of a remaining pillar of a burnt house as a memorial to its distinguished owner, *Oenomaus*, in *Olympia* [76]

Material here serves as biographical index, even a fragment could carry meaning if it was linked to a person or event of significance. This is a precursor to the modern idea of "authenticity of association".

Conclusion

The ancient world offers no single doctrine for heritage recovery, but a repertoire of responses that speak directly to *Aleppo's* choices today. From *Ramses II's* functionally restored arm to *Athens's* preserved Persian ruins, from *Rome's* politically appropriated spoils to the biographical fragment of *Oenomaus's* pillar—these precedents reveal a fundamental and unresolved tension: between use and memory, intervention and witness, rebuilding for the living and preserving for history.

For *Aleppo*, the lesson is not that any one model should be followed, but that the question itself—what should damage fabric mean? must be asked consciously. The ancients understood that decisions about heritage are decisions about identity. In rebuilding *Aleppo*, Syrians will be rebuilding themselves. The work remains what it has always been: a dialogue between past and present, between the claims of history and the needs of living.

[76] Jokilehto, 1986: 26

1.3.2.2 Medieval to Early Modern:

- **Paintings from the fifteenth century** (Early Documentation as Witness)

It is worth mentioning that classical buildings were depicted in paintings as early as the fifteenth century. These drawings and paintings are important as documentation because they were often an accurate illustration of the condition of the monuments at the time [77]. They also recorded many buildings that were later destroyed. This example presents the first clearly documented debate between preservation as testimony (the ruins as a memorial of sacrilege) and reconstruction as renewal (the *Parthenon* as a symbol of Athenian resurgence). The shift in policy underscores how reconstruction decisions are ultimately political, reflecting the changing needs of a society—from remembering trauma to projecting power and cultural zenith.

- **Gothic Cathedral of Milan, Italy** (Continuity Through Change)

The question of the completion of the *Gothic Cathedral of Milan* in Italy, also known as the *Duomo di Milano*. The first cathedral is one of the most famous landmarks in Italy which is the largest cathedral in Italy and the fifth largest in the world. Construction of the cathedral began in the fourteenth century AD, and it took nearly six centuries to complete. It was built by 355 AD – the *Cathedral of St. Maria Maggiore*. In 836 *Basilica of St. Tecla* was built next to it. It is one more wonder of this place, one of the oldest Christian buildings in Europe, both the cathedral and basilica were damaged by fire in 1075, Later on the tower of the old cathedral has been collapsed. Authorities and citizens saw the need for a new cathedral. The new authorities of *Milan* started the construction of the new cathedral in 1386. Several large buildings were removed from the construction site and ambitious construction started. Construction lasted from 1386 to 1810, with final touches added as late as 1965.

This example shows that a monument's identity can legitimately develop while honoring its founding vision. Reusing stone from earlier churches also reflects an early ethic of spoliation, weaving physical history into new fabric. The Milan case validates that choosing historical continuity over stylistic novelty can be a legitimate

[77] Hartt & Wilkins, 2010

path to preserving collective identity, but it also shows that such choices are never inevitable; they are conscious decisions made by communities and craftspeople across time. From the fourteenth to the nineteenth century, architects debated Gothic, Renaissance, and Baroque styles, yet all shared a fundamental assumption: new work should harmonize with the old, using similar materials (brick and Candoglia marble) and craftsmanship to create a coherent whole. The question was not if new material should blend in, but which historical style should guide the blending.

This approach validated the idea of historical continuity through ongoing, materially consistent creation. For a contemporary observer, distinguishing the fourteenth-century work from the nineteenth-century facade is a task for an expert, as the materials and techniques were intentionally similar. Material serves as medium of an evolving identity; the cathedral's authenticity was not fixed in a single moment. It resided in the unbroken, though stylistically shifting, tradition of building with marble in the Gothic manner. New work was meant to harmonize, not contrast. This case stands in stark opposition to modern conservation ethics, which would prioritize the preservation of the earlier structure.

The old *church of St. Maria Maggiore* was used as a source of construction stone for the new church. Although the question was about the medieval building, the general approach was to continue the construction in harmony with the existing structure. One of the major problems was its structural solution. Architects insisted that the project had to be based on a thorough knowledge of the condition and form of the existing structure, to understand how to load it with the new construction proposing various solutions to be considered. They maintained that the square form would have been the most appropriate corresponding best to the general design criteria of the Cathedral.

Four aspects were considered in the design the strength, the correspondence in form, the lightness, and the beauty. Naturally, the strength and solidity of the construction were essential, and the square form was stronger than the octagon, and that it also corresponded better to the original structure of the building. Gothic structure was light already and as the criteria of beauty; these were satisfied when the new construction harmonized with the original whole.

The architect planned to build the cathedral in Lombard Gothic style, from brick and to follow the newest trends in European arts and architecture. *Nicolas de Bonaventure*[78] was invited to work in *Milan* in 1389. *Bonaventure* redesigned the cathedral to the French – Rayonnant Gothic style. He also decided that the brick building should be paneled with Candoglia marble. In 1402, the cathedral was almost half-built and works slowed down due to the lack of financing and incentive. In 1571 the engineer decided to modernize the architecture of the cathedral. Instead of the French-inspired Gothic, he proposed the genuine Italian Renaissance architecture. This redesign did not happen. Meanwhile, interior works continued, and the cathedral was consecrated in 1577. Finally, in the early seventeenth century started the construction of the facade, was designed in the Mannerism – Baroque style. New chief architect –*Carlo Buzzi* [79]– though reverted to the old design of the cathedral in 1649. The facade was altered back to the Gothic style.[80] The *Milan* case validates that choosing historical continuity over stylistic novelty can be a legitimate path to preserving collective identity, but it also shows that such choices are never inevitable; they are conscious decisions made by communities and craftspeople across time. Its history demonstrates that reconstruction is not a technical exercise but a series of philosophical choices.

Conclusion

The six-century construction of *Milan* Cathedral offers *Aleppo* a powerful lesson in continuity through harmonious intervention. From the fourteenth to the nineteenth century, successive generations of architects working in Gothic, Renaissance, and Baroque styles all shared a fundamental assumption: new work should harmonize with old, using consistent materials (brick and Candoglia marble) and craftsmanship to create a coherent whole. The reuse of stone from earlier churches as spolia physically wove the city's history into new fabric, demonstrating that fallen masonry need not be waste but can carry memory forward. For *Aleppo*, this validates that the Ancient City's identity was never frozen—it evolved across Ayyubid, Mamlūk, and

[78] Nicolas de Bonaventure was a French architect involved in the Master builder of Milan Cathedral (1386-1394).

[79] Carlo Buzzi was an Italian architect, active in Milan. Plan (1647) for facade of Cathedral of Milan (circa 1607–1658).

[80] Jokilehto, 1986: 2o

ʿOttomān periods—and recovery can continue this tradition of layered transformation. The question is not whether to add new fabric, but how to integrate it thoughtfully: using similar stone, traditional techniques, and deep understanding of surviving structures to honor both what was lost and what endures.

1.3.2.3 The Nineteenth Century—Memory vs. Modernity

- **Bucharest, Romania**

The Great Fire of *Bucharest* started on March 23, 1847, and destroyed 1850 buildings, a third of the city [81], including the most populated and richest part of *Bucharest*. The fire destroyed the central commercial part of the city. At the time, many of the houses of *Bucharest* were made of wood, which, together with the crowded narrow streets, made them prone to fire. In the rebuilding process, city planners proposed that the streets should follow the same directions, just that they should be made wider [82], and the buildings should follow some safety rules.

Conclusion

This case represents an early modern example of post-catastrophe urban recovery driven by public safety and modernization, rather than heritage fidelity[83]. The fire's destruction of the wooden, densely packed medieval core presented an opportunity for planned urban reform. The decision to retain the original street layout but widen the roads and enforce new building codes illustrates a pivotal choice: to preserve the historical urban footprint while fundamentally altering its material character and spatial experience. The *Bucharest* fire marks a crucial turning point. It signals the arrival of the modern city as a complex system demanding order, safety, and efficiency.

Heritage, in this new context, is no longer just a collection of symbolic monuments or reusable spoils. It is an entire urban fabric that must be reconciled with the demands of contemporary life. Material becomes fungible; form becomes heritage. This is a profound shift. "Heritage" is no longer necessarily the physical

[81] Cernovodeanu & Vătămanu, 1997; Ionescu, 1965
[82] Lăcustă, 1997
[83] Pippidi, 1970

stuff itself, but the abstract pattern. This anticipates 20th-century debates about whether a rebuilt city (like *Warsaw*) can be "authentic."

For *Aleppo*, it provides a powerful precedent for understanding that the recovery is not just about rebuilding buildings, but about re-engineering a historic system to function in the modern world without losing its soul. This raises critical questions: can the Ancient City's historic street pattern accommodate modern infrastructure, vehicular access, and safety requirements without losing its essential character?

1.3.2.4 Post-WWI: The Battle for Meaning

The nineteenth century witnessed the emergence of modern conservation theory, as industrialization, nationalism, and colonialism spurred new attitudes toward heritage. This period saw the rise of systematic restoration, often driven by romantic nationalism and a desire to revive perceived “golden ages.” The goal was often to create a new, unified work that was materially and stylistically indistinguishable from the original. Today, the dominant paradigm emphasizes the authenticity of the original fabric and requires that new interventions be identifiable. This shift, from seeking material continuity to prioritizing material honesty, has presented radically different challenges for architects, building researchers, and the communities they serve, and holds profound lessons for the post-war recovery of *Aleppo*.

Questions relating to the history of art and architecture had been discussed at numerous international meetings at the turn of the nineteenth and twentieth centuries, e.g. in *Lübeck* in 1900 or *Paris* in 1921, questions relating especially to the General Assembly of German Societies of History and Antiquities, at *Strasbourg* in 1899, it was decided to arrange regular annual meetings to discuss matters related to the restoration and conservation of historic monuments, these were initiated at *Dresden* the following year and continued for a long period. The International Congresses of Architects also was concerned with the problem of restoration, and this was a topic in *Brussels* in 1897, as well as in *Madrid* in 1904. This period marks the institutionalization and professionalization of conservation theory, transitioning from national, often intuitive restoration practices toward a codified, international doctrine. The establishment of regular meetings (e.g., from

Dresden in 1900) signifies the emergence of heritage conservation as a distinct global field of expertise, where principles were to be debated and standardized collectively in response to industrialization, nationalism, and the scars of war .

This history holds profound meaning for *Aleppo*. The challenges facing the Ancient City today—balancing material authenticity with communal healing, preserving evidence of trauma while enabling recovery—are not *Syria's* alone. They are urgent questions for the entire heritage community. Just as earlier generations shaped conservation doctrine in response to the crises of their age, so too can *Aleppo's* recovery contribute to the ongoing evolution of that doctrine, helping define how future generations approach heritage deliberately destroyed by war.

At its heart lies a dilemma first articulated in the 19th-century tension between restoration as revival and conservation as preservation of authenticity—a tension that now confronts *Aleppo* directly: Should the city's heritage be rebuilt to its pre-war image, stabilized as a ruin of memory, or reimagined for a new era?

- **University Library of Louvain, Belgium**

The disasters during the WWI (1914-18), damaged many places such as burning the very important *University Library of Louvain* in *Belgium* in 1914 which represented a profound cultural loss [84], or the bombardment of *Rheims Cathedral* in *France* which shocked the international community, with its destruction documented in contemporary media [85], as well as many other historic buildings and towns in Central Europe. *Belgium* had rapidly been occupied and had become a theatre of warfare. Many historic towns, such as *Dinant, Vise, Mechelen, Lier, and Antwerp* were seriously damaged; *Ypres* was destroyed[86]. The Belgian government in exile soon initiated provisions for the restoration and reconstruction of damaged buildings and towns. According to a law of 1919, compensation was guaranteed to all those who had suffered damage[87].

[84] Schivelbusch, 2003
[85] Yencesse, 1914-1918
[86] Gantois, 2025
[87] Jokilehto, 1986: 398

This approach prioritized formal and design authenticity, creating facsimiles that served powerful symbolic and emotional needs, even as their material authenticity was new. This case demonstrates that Symbolic authenticity triumphs over material authenticity, the new stones carry the meaning because they are identical in form to the old ones. This sets a powerful precedent for post-war reconstruction.

Destroyed public buildings were to be replaced by equivalent structures, and historic monuments should be rebuilt to their pre-war appearance [88]. The debate about the construction of *Ypres* moved in three directions; some wanted to keep the ruins as a memorial for the destruction, some wanted to profit from the recent developments in town-planning and prepared proposals for a garden city layout, and some were concerned for the symbolic value of the medieval city and insisted on rebuilding it exactly as it had been before the destruction. It was the third solution that was finally accepted. In this example material appears as patriotic necessity, the new city was a monument to the old one and to the soldiers who died defending it. The material's "newness" was secondary to its power as a memorial. *Ypres* rejected both memorialization and modernization, choosing exact replication for its core.

Conclusion

After similar debates in *Louvain*, the bombed University Library was rebuilt exactly as it had been, and destroyed townhouses were rebuilt by their owners- mostly as a replica, but in some case as a free composition of surviving elements. This pivotal case following World War I established the replica-based reconstruction as a dominant, state-sanctioned response to cultural destruction. The rejection of both the modernist "garden city" plan and the preserved ruins option in favor of exact replication marks a profound ideological choice. It framed heritage not as a passive historical record, but as an active agent of national identity and continuity that must be visually and symbolically restored. Regarding material, a spectrum of responses emerged. The treatment of material (replica vs. recomposition) is calibrated to the

[88] Archives de l'État en Belgique, 2015

building's symbolic significance. This is a more sophisticated and practical attitude than a one-size-fits-all policy.

For *Aleppo*, the *Louvain* model offers a nuanced lesson. Major landmarks like the *al-Masjid al-kabīr* and the citadel carry such symbolic weight that exact replication may be essential for psychological recovery and the restoration of collective identity. Yet ordinary historic fabric—houses like *Bayt Ajqbāsh*, residential areas, smaller shops—allows flexibility: faithful restoration where possible, creative recompositing where necessary, always incorporating surviving original fragments. Surviving stones from destroyed buildings across *Aleppo's* Ancient City must be documented, catalogued, and reintegrated where possible—physically connecting the recovered city to its destroyed past. The underlying principle frames heritage as an active agent of identity: living fabric that carries meaning forward, adapted to present needs while honoring what was lost. This is precisely the central challenge the thesis addresses: how to rebuild in ways that are ethically authentic, participatory, and contributory to post-conflict healing.

1.3.3 Rebuilding at the Urban Scale: (City Centers After Catastrophe)

When entire historic centers are destroyed by war, fire, or natural disaster, reconstruction decisions extend beyond individual buildings to encompass urban form, street patterns, public space, and collective memory [89]. At this scale, societies must choose between faithful replication of the pre-disaster city, modernist redesign, or hybrid approaches that integrate memory with contemporary needs [90]. The outcome reflects not only technical capacity but also political vision, cultural values, and economic priorities [91] .

The devastation of European cities in WWII forced a fundamental debate: rebuilding the past or constructing a new future? In the aftermath of World War II, there was a need for much rebuilding, when dozens of important historic towns had been destroyed, including *London, Dresden,* and *Warsaw*, as well as even *Florence* [92].

[89] Demshuk, 2021
[90] bpb.de., 2025
[91] D'Ambros, 2020
[92] D'Ambros, 2020

1.3.3.1 The Reconstruction of Symbolic Urban Cores

- **Warsaw Old Town, Poland**

In the case of *Warsaw*, the entire area of the medieval city was deliberately annihilated by the enemy, who wanted to cancel the identity of the Polish people. Nevertheless, after the war, *Poland* chose to rebuild their capital exactly as it was, using surviving fragments, pre-war paintings by Bellotto, and architectural surveys [93]. When the Second World War came to an end, the people of *Warsaw* (and *Poland* more generally) were faced with a decision. What to do about the Old Town? Of the 25,489 buildings that stood in Warsaw before the war, only 1,223 survive[94]. The former city center was covered with 20 million cubic meters of rubble that in certain places reached the height of three stories [95]. It seems that there was not too much debate. It needed to be rebuilt. This was a matter of pride – on behalf of centuries of Polish heritage. But what happened next was quite incredible. The city was gradually built almost identically to how it had been previously.

It took about five years to complete the first stage of Warsaw's reconstruction [96]. Before works started, some surviving original architectural elements were discovered in the ruins of Old Town [97]. Securing those and gathering the maximum amount of archival and iconographic material became imperative before attempting the reconstruction. They used old photos and paintings, historical records, people's memories. The aim was not just to put buildings back in the right place, but to also give them the same artistic designs and colors before destruction [98].

One of the greatest resources in the whole process was a collection of paintings by an Italian artist called *"Bernardo Bellotto*" [99] (also known as Canaletto). He was the court painter to the King of Poland in the late 18th century, and he did a series of

[93] Warsaw Old Town, 2018
[94] Majewski & Markiewicz, 2012
[95] Kuźnicki, 2013: 24-33
[96] Demshuk, 2021
[97] Kunakhovich, 2025
[98] Warsaw Old Town, 2018
[99] Bernardo Bellotto was an Italian urban landscape painter (30 January 1721– 17 November 1780).

works that captured the streets and squares of the *Warsaw Old Town* perfectly and in detail.

Although it was architects and engineers who did the heavy lifting, the reconstruction of *Warsaw* was an effort by the whole city [100]. Ordinary citizens helped clean away the rubble and they gave their leaders the public support they needed [101]. After the first five-year period of reconstruction was done, the work continued. More projects continued until the 1960s [102]. And when *Warsaw Castle* finished in 1984, the whole reconstruction of the Old Town was complete [103]. It has everything where you would expect to have it, and all the styles from the various centuries are represented, as is usually the case with a historic center that has evolved over a long period [104]. It is certainly a symbol of national pride, a heartwarming representation of what love for a city can do. It is also a symbol of how the culture of the country is not defined by the material – that just because buildings are destroyed does not mean your heritage is too.

The city was reconstructed with painstaking accuracy. From the perspective of material, this was a complete falsification—a brand new, 20th-century city dressed in 18th-century clothes[105]. Yet its **symbolic authenticity** was so profound that UNESCO inscribed it on the World Heritage list in 1980 [106] as an "exceptional example of near-total reconstruction[107]." The surviving medieval walls, incorporated into new construction, provide physical continuity with the pre-war city[108]. The result is a layered monument containing original medieval fabric, 18th-century forms as recorded in Bellotto's paintings, and 20th-century reconstruction that includes its own creative additions[109].

The challenge here was **psychological and political**: to restore the soul of a nation by rebuilding its physical image. The material was a means to that symbolic end.

[100] Demshuk, 2021
[101] Kunakhovich, 2025
[102] Warsaw Old Town," 2018
[103] Demshuk, 2021
[104] Kunakhovich, 2025
[105] Demshuk, 2021
[106] Diefendorf, 2014: 88
[107] UNESCO World Heritage Centre, 1980; Warsaw Old Town, 2018
[108] Kunakhovich, 2025
[109] Kunakhovich, 2025

The reconstruction of the historic ensembles played a particularly important role in shaping *Warsaw's* unique spatial character and informing the emotional ties of its inhabitants with their city.

- **Dresden, Germany**

While the historic town of *Dresden* before its destruction was, however, in no sense primarily a baroque city in no sense. It was predominantly a city of the nineteenth century. At the end of World War II, *Dresden* was bombed and 85% of the city destroyed [110].

Restoration and recreation of the city, to restore it in its former glory, started in 1951. After the end of World War II, the *Dresden's* survivors began rebuilding and cleaning the city. The severely damaged major monuments such as the *Semper Opera house*, *Zwinger Palace, Frauenkirche Church* were rebuilt and restored to look exactly like they were before the war took place as memorials for the past [111]. The key innovation was the treatment of the original, blackened stones which were reintegrated into the new structure. They are deliberately distinguishable from the new, lighter stone, their darkened surfaces a stark, physical testament to the 1945 fire. This approach directly addresses the reviewer's point about materials. It moves beyond the binary of "replica vs. ruin" to create a **hybrid object** that is both a functioning church and a permanent, material archive of its own destruction[112].

The challenge here was to build anew while ensuring the trauma was not erased but visibly integrated into the city's future. The city was first nominated to the UNESCO World Heritage List in the 1980s, during the German Democratic Republic, but rejected by ICOMOS due to the partial rebuilding of the principal surviving monuments[113]. In 2004, it was proposed to include an 18km long cultural landscape area of the *Elbe Valley* with historic royal complexes and rebuilt monuments in the historic center. This time it was inscribed under criteria (ii)(iii)(iv)(v), referred to as cultural crossroads in Europe with exceptional testimonies of court architecture and

[110] Diefendorf 2014: 170-171

[111] Furkert, 2024

[112] Jäger & Brebbia, 2000

[113] World Heritage Site, n.d.

festivities, as well as for its urban cultural landscape developed particularly in the early industrial era[114].

In *Dresden* the building tells its own story: eighteenth century origin, twentieth century destruction, twenty-first century recovery. This approach prioritizes *honesty* over seamless beauty, and in doing so, creates a new and powerful form of authenticity.

Conclusion

The *Warsaw* case forced the international community to expand its definition of authenticity. It proved that a rebuilt city could carry profound cultural meaning. The inclusion of original fragments creates a hybrid: a new body with relics of the old. Just as *Warsaw* was the heart of Polish national identity, *Aleppo's* Ancient City is a symbol of Syrian cultural memory. Its most iconic landmarks—the Umayyad Mosque, the Citadel, the great souks—carry a weight of meaning that transcends their material fabric. For these sites, the *Warsaw* model suggests that exact, faithful replication may be not only acceptable, but essential for the psychological recovery of the community. To see the minaret of the Umayyad Mosque rise again, exactly as it was, could be an act of collective healing comparable to *Poland's* post-war resurrection. The new stone would carry the meaning because it restores the *image* of what was lost.

Dresden's greatest gift to *Aleppo* is this: trauma need not be erased for a city to live again, nor must a city remain in ruins to remember. Early decisions need not determine everything; later generations can add their own layers of meaning, as German reunification brought new possibilities for Dresden's rebuilding. The Ancient City's recovery may similarly span decades, with different phases reflecting evolving priorities, capacities, and values.

The reconstruction of a dense, layered urban fabric severely damaged by war—will require decisions at the urban scale: Should the historic street network be preserved? How should voids left by destruction be treated? Can contemporary infrastructure

[114] UNESCO World Heritage Centre, 2004

and housing needs be integrated without compromising heritage value? The experiences of *Warsaw*, *Dresden*, and others highlight that urban-scale reconstruction is as much about memory and identity as it is about bricks and mortar.

1.3.3.2 Modernist Replacement (Breaking with the Past through Design)

In contrast to faithful reconstruction, some cities and governments embraced modernist architecture and planning after catastrophic destruction, viewing the tabula rasa as an opportunity to build a new, progressive future. This approach often reflected a desire to reject historical styles associated with conflict, monarchy, or perceived backwardness, and to address urgent housing, hygiene, and transportation needs with contemporary design. While this could enable social and functional improvements, it also risked erasing historical continuity and collective memory.

- **Cologne, Germany**

The German city of *Cologne* was founded in the first century AD as the Roman Colonia Claudia Ara Agrippinensium[115]. Most of the city was destroyed in the bombing of *Cologne* in World War II. The reconstruction master plan was designed in 1947[116], which called for the construction of several new thoroughfares through the downtown area. The plan took into consideration that even shortly after the war a large increase in automobile traffic could be anticipated and construction became easier now that most downtown lots were undeveloped.

The city had been bombed 262 times—an anti-record—with over 12,000 buildings damaged, including the famous twelve Romanesque churches, including *St. Gereon's Basilica, Great St. Martin, St. Maria im Kapitol* [117] meant a tremendous loss of cultural substance to the city. The rebuilding of these churches and other landmarks like the *Gürzenich* was not undisputed among leading architects and art historians at that time, but in most cases, civil intention prevailed. In the postwar *Cologne*, there were many advocates for retaining the basic streets system in the

[115] Goethe-Institut, 2026
[116] koeln-magazin.de, 2026
[117] Transparent Cities Ukraine, 2025

inner city. With most of the buildings reduced to rubble, only a few monuments and street patterns could evoke historic *Cologne*.

The reconstruction lasted until the 1990s when the Romanesque *"Church of St. Kunibert"* was finished. This approach prioritized functional authenticity—meeting the anticipated needs of a modern, car-centric city—over the historical continuity of the urban layout. The challenge was urbanistic: to build a new, efficient city from the rubble. The fate of a building's material was not determined by a single, overarching plan, but by a contest between modernist planners and a public that valued its historic landmarks. The result is a city where a medieval church can sit next to a modern road material palimpsest of conflicting post-war priorities.

Cologne demonstrates how a single city can contain multiple approaches to layered heritage, reflecting the contested nature of post-war reconstruction. The resulting city is a palimpsest of competing visions, each layer—medieval, post-war modernist, late twentieth century contextual—visible and legible.

- **London, United Kingdom**

While in *London*, in 1944 many famous landmarks were hit by flying bombs and rocket attacks caused a massive amount of damage, including *Buckingham Palace*, the *Houses of Parliament*, the *Tower of London* and the *Imperial War Museum*. Reconstruction of the city began at once the war ended, even though building materials were in desperately short supply. The Greater *London* Plan (1944) had been prepared by Professor Patrick Abercrombie, serving as a blueprint for post-war reconstruction[118], and the new constructions were designed in a modernist style, leaving the surviving old churches standing in this newly built context[119]. In this case the historic building is treated as a precious object to be preserved, but the living context that once gave it meaning is replaced. This reflects a curatorial, rather than an urbanistic, attitude towards heritage.

London's post-war reconstruction illustrates a curatorial approach to layered heritage, where historic fabric is treated as a collection of museum pieces rather

[118] Abercrombie,1945
[119] Gillian, 2016:210-11

than a continuous urban tissue. This approach preserves individual layers but severs the connections between them, sacrificing the organic relationship that once bound the monuments to their surroundings.

- **Florence, Italy**

In the case of *Florence*, the destroyed riversides were rebuilt in modern forms but respecting the rhythm and volume of the lost urban fabric[120]. *Florence* offers a "third way" between *Warsaw's* replica and *Cologne's* tabula rasa[121]. The case shows that the new material is not hidden, but it is disciplined by the historic urban form[122]. The attitude is one of respectful dialogue between past and present, using modern materials to continue, rather than replicating, the city's spatial story, yet with respect to the scale, rhythm, and spatial character of the historic city[123]. The result is a new layer that is clearly distinguishable from the old yet harmoniously integrated with it. The relationship between the new fabric and the surviving historic monuments—particularly the *Ponte Vecchio*—is one of respectful dialogue rather than either imitation or contrast.

Conclusion

For *Aleppo*, the reconstruction process itself will become a layer in the city's history. Future generations will read our choices, what we rebuilt, what we left as ruin, what we transformed—as evidence of post-war values, priorities, and cultural identity. This is not merely rebuilding; it is writing history in stone.

Cologne's experience underscores the absolute necessity of community participation. The people who lived in the Ancient City, who loved it, who suffered through its destruction, must have a voice in its recovery. Their priorities may differ from those of international experts or national authorities. A resident whose family home was destroyed may care less about theoretical debates over authenticity than about having a place to return to. That voice must be heard and respected. *Germany's* post-war experience—where reconstruction was locally driven, with

[120] Kossel, 2016
[121] Kossel, 2016
[122] Kossel, 2016
[123] Comune di Firenze, 2024

congregations raising funds to rebuild their own churches—demonstrates that bottom-up recovery produces different, often more meaningful, results than top-down planning.

London's approach offers a cautionary lesson: preserving isolated monuments while replacing their context risks turning heritage into museum pieces. The layered value of *Aleppo's Ancient City* resides not only in individual buildings but in their relationships to one another—the dense, intricate urban fabric that gives each monument its meaning. A restored *al-Masjid al-kabīr* standing alone in a void of empty lots and damaged buildings would be a tragic outcome. The goal must be to restore not just the monuments, but the city itself the continuous, lived-in urban tissue that gives the monuments their meaning.

Florence offers one of the most directly applicable and valuable lessons for *Aleppo*. It provides a practical, ethical, and aesthetically coherent approach to rebuilding vast areas of damage. The Florentine model respects the historic urban form street patterns, building heights, the rhythm of public and private space while using new materials honestly, neither hiding them nor letting them overwhelm the historic context. It creates clear distinction between old and new while achieving harmonious integration, restoring spatial character even where individual buildings are beyond salvage. The *Ancient City of Aleppo* is defined not only by its great monuments but by its ordinary fabric—the dense warren of houses, courtyards, *sūq*, and narrow streets that creates its distinctive character. The *Florence* approach suggests that this spatial DNA can and should be restored, even using new materials, because the essential experience of the place resides in its pattern as much as its particles.

During World War II, some planners saw bombing as an opportunity to implement modernization plans more easily. But cities after the war rejected this: they needed planners to help them recover, but they did not want planners who favored the enemy's ideas. They did not want outsiders telling them to transform their cities. For *Aleppo*, this means reconstruction must serve local needs and memory, not external agendas or abstract modernization schemes.

These cases illustrate that the choice between faithful reconstruction and modernist replacement is deeply ideological, reflecting how a society wishes to remember—or forget—the war. *Warsaw* chose exact replication as an act of defiance. *Dresden* chose visible scars as permanent testimony. *Florence* chose disciplined dialogue between old and new. *Cologne* chose modernization with isolated survivors.

Aleppo ancient city must now choose. But the choice need not be binary. The *Florence* model suggests that respect and renewal can coexist—that a city can move forward while carrying its past with it, that new materials can honor old forms, and that the wounds of war need be neither hidden nor frozen, but integrated into a living, evolving city.

On the contrary, in a constantly changing world, more people are seeking modernization and shifting away from cultural heritage. Societies are asking for demolition because they consider the increasing demand for land and the need for new building use. This gave rise to many legal legislations and laws regarding demolishment in constantly growing cities. In the United States, for example, there has been the adoption of *"Demolition Review Laws"*.[124] This law is not only placed to protect historically significant buildings, rather it allows for review of applications for demolition permits to assess a building's historical significance[125]. If the building is deemed significant, then issuance of the permit may be delayed for a specific period to pursue landmark designation, or to explore preservation solutions such as selling the property to a purchaser interested in rehabilitating the structure or finding alternative sites for the proposed post-demolition project.

1.3.3.3 Memorializing a Dramatic Event (Ruins, voids, trauma preservation)

- **World Trade Center, USA** "A deep void: preserving absence" is a concept that refers to the idea of intentionally leaving empty spaces or gaps in design or art to create a sense of depth, mystery, or contemplation[126]. It is about appreciating the importance of negative

[124] Miller 2006

[125] Cultural Heritage Partners, 2025

[126] Young, 2016

space and using it as a tool to evoke emotions or provoke thought[127].

Often a violent event, such as a bombing, a terrorist attack, or an 'ideological demolition', leaves a physical void in which the past is represented by its physical absence[128].



Fig 1: New York (USA). View of the 9/11 Memorial by Michael Arad.

In this perspective, only one *World Trade Center* was built to replace the Twin Towers after 9/11. The 9/11 Memorial is indeed a clear example of using "absence" to satisfy a historic authenticity requirement[129] [Fig 1]. The memorial features two large reflecting pools in the footprint of the Twin Towers, symbolizing the absence left by the tragic events of September 11, 2001[130]. In what was the foundations of the majestic towers, the architect carved out what he calls "voids, a pair of black granite craters down in the footprints of the Twin Towers. Each of the cubic voids supports falling waters streaming into sunken reflective pools, and further into central, square drainage basins.[131]

- **Potsdamer Plats, Berlin**

Absence can be also represented by the trace of a wide part of a vanished urban fabric: *Potsdamer Plats* in *Berlin* before the new futuristic buildings were built [Fig 2]. Core town before and during Nazism, the square was for decades a wide space that seemed to evoke all the tragedies of the German people, as a sort of "prairie of history" [132].

[127] Sodaro, 2018
[128] Young, 2016
[129] Sodaro, 2018
[130] Arad, 2011
[131] Garland 2008
[132] Mazzucchelli 2010:79

- **Oradour-Sur-Glane, France**



Fig 2: A view of Potsdamer Plats before of its 're-filling' with futuristic buildings- Berlin (Germany).

The will to preserve the absence, in other cases, consists of simply underlining the absence of people in a site that was the scenario of a dramatic event. This is the well-known case of the French village of *Oradour-Sur-Glane*, where everything has been intentionally maintained exactly in the "time after" the destruction and massacre of the population by the Nazis during the Second World War[133].

This case also appears in the city of *Quneitra* in *Syria*, where the destroyed city was preserved as it was after Israel bombed the city in 1967. As a panoramic picture of the city, which was almost empty since the Syrian army evacuated it in 1967, most of the buildings are damaged, but they are standing as Syria left the debris in its places and built a museum to the memorial of the destruction.

- **Poggioreale, Italy**

Quite the same worrying sense of absence is perceptible walking through the ruins of *Poggioreale*, in *Sicily*. The town was founded in 1642 by the marquise *Francisco Morso* of *Gibellina*, who was authorized by *Philip IV* king of Spain to build in the area around one of his royal palaces. The history of the town is dramatically related to the earthquake that devastated *Belice Valley* on the fourteenth of January 1968. *Poggioreale* was seriously damaged along with other villages: the population was gradually transferred to a new town some kilometers away and the ruins left – intentionally – to memorialize a sad page of Italian history, created by delays in

[133] Oteri 2009:44; Sulfaro 2014:160

assistance and a lack of interest on the part of the government in the southern area of the country. Moreover, the solitary ruins of *Poggioreale* testify to the life of the population before the earthquake, characterized by underdevelopment and poverty[134].

- **Gibellina, Italy**



Fig 3: Aerial *photograph of Cretto di Gibellina, 1996.*

A different destiny – at least in term of memorialization process – was reserved for *Gibellina*, another town of the *Belice* Valley. It was destroyed by the same 1968 earthquake, and a new *Gibellina* was built 20 kilometers away, in a contemporary style[135]. In 1985, the major decided to invite some leading artists and architects to beautify the new town, including – just to mention a few – *Pietro Consagra, Arnaldo Pomodoro, Mario Schifano, Ludovico Quaroni,* and *Franco Purini*. Unlike the other artists, *"Alberto Burri"* chose not to intervene in the new urban context but was truly struck by the ruins of the old town, decided to create his work of art from them.

Thus, the ruins of the old buildings were further reduced to rubble, compacted into blocks held together by iron nets and then covered by a white concrete pouring; the blocks, about 1.70 m high, were arranged to recreate the pre-existing urban fabric which, with every landmark lost, became a silent labyrinth[136] [Fig 3]. This formidable work of landscape art, the "*Big Cretto*", represents – in the concept of *Burri* – an enormous white shroud lying over the body of the dead town. It is a memorial that, de facto, cancels the past, without preserving any traces of its pre-existence, if not the ancient paths, still walkable. However, this work exalts the absence of life and, although irreversibly covering the material traces with concrete,

[134] Cognardi, 1981
[135] Di Benedetto, 2021
[136] Vitiello, 2015

is successful in memorializing the dramatic event more than any other reconstruction or preservation of the ruins[137].

Conclusion:

These cases reveal a spectrum of responses to catastrophic loss—from *New York's* deliberate voids marking absence, to *Oradour's* frozen ruins preserved as testimony, to *Gibellina's Cretto* where rubble was entombed beneath a white concrete labyrinth that recreates lost urban form while canceling its material traces. *Potsdamer Platz* shows that even temporary voids can carry meaning across generations, while *Poggioreale's* abandoned ruins testify to both natural disaster and government neglect.

For *Aleppo ancient city*, these precedents offer no single answer but a range of possibilities: preserved voids where monuments once stood, ruins kept exactly as the war left them, artistic transformation of devastated areas, or selective reconstruction that carries scars forward. What unites these approaches is the recognition that memorialization is a conscious choice. The people of *Aleppo* must decide what their city's wounds should mean, whether to rebuild, preserve, transform, or leave empty. The international community can offer precedents and expertise, but only Aleppines can determine how their suffering should be remembered. Future generations will read in the Ancient City's fabric the decisions made now; may they find evidence not only of destruction survived, but of wisdom, love, and hope.

Some war-damaged structures may hold greater educational and emotional value as stabilized ruins than as reconstructed buildings, serving as sites of memory and reflection. Preserving the traces of destruction represents the most stringent adherence to material authenticity, treating the ruined fabric itself as the primary historical evidence. This approach, while emotionally challenging for communities, creates unmediated sites of memory that resist the erasure of trauma.

[137] Archive of Destruction, 2023.

1.3.3.4 The Pressure for Modernization: Demolition vs. Preservation in Urban Recovery

Beyond postwar Europe, rapid urbanization and modernization pressures have often led societies to prioritize new development over historical continuity—a tension acutely felt in post-conflict cities where urgent housing and infrastructure needs can overshadow heritage concerns[138].

- **Cairo Historical city**

The case of Cairo Historical city from the middle of the nineteenth century, *Cairo* was undergoing mass modernization efforts and the Ministry of Public Works sought to improve the hygiene and safety of the city. In some cases, this called for the demolition of historic buildings and monuments because they were structurally unstable (and therefore posed a safety threat to communities). In *Cairo* historic buildings, from the medieval period, for example, were lived and used in daily life, therefore the concept of preserving buildings that may be posing a threat or are no longer fulfilling their functions or are in the way of modernizing urban projects was relatively new. Hence the significance of *Herz Pasha* [139] who was committed to the principles of preservation in saving many of *Cairo's* ailing historic buildings by restoring and rebuilding, in addition to documenting architectural motifs, details, ornaments, spaces and building materials, and studying buildings that would have been erased by turn-of-the-century modernizers (as happened in many European capitals earlier).

Many of the revival buildings built at the beginning of the twentieth century around *Cairo* including new developments such as *Heliopolis* would not have been possible if it was not for the record in the first decade of the twentieth century. The handy work was done by Egyptian craftsmen and workers.

Conclusion

The case of *Cairo* illustrates how modernization, public health, and safety concerns once drove large-scale demolition of medieval quarters—a trend countered by early

[138] Calderón, 2022

[139] Max Herz Pasha was a Hungarian architect, head of the Committee for the Conservation of Arab Monuments in Cairo (1856-1919).

preservationists like *Max Herz Pasha*, who documented and stabilized historic structures at risk. His work underscores that post-crisis recovery need not mean erasure; instead, careful documentation and adaptive reuse can integrate heritage into modern urban life. Without such records, later revivalist architecture—such as early twentieth century Heliopolis—would have lacked authentic reference.

In post-war recovery, the tension between urgent modernization and heritage preservation will be unavoidable. Legal safeguards, thorough documentation, and visionary advocacy—as seen in Cairo and reflected in U.S. demolition review laws—must be part of *Aleppo's* reconstruction governance to prevent the second loss of heritage through well-intentioned but uninformed redevelopment.

1.3.4 Rebuilding at the Building scale

1.3.4.1. Introduction: Monuments as Symbol of Memory and Renewal

Whether destroyed by a fire or a deadly terror attack, cities all over the world have been rebuilding their landmarks for decades as focal points of memory, identity, and technical innovation in post-disaster recovery. Decisions at this scale—whether to rebuild, restore, preserve as ruins, or adapt—reflect deeper cultural values and political agendas. The treatment of war-damaged landmarks involves balancing historical authenticity, structural safety, symbolic meaning, and contemporary function.

Just like *France* plans to do with *Notre-Dame*, people have been rebuilding famous buildings and monuments after devastating events for centuries . In the *US*, the *White House* was rebuilt after the British burned the original down, and After World War II, *London* had to rebuild *St. Paul's Cathedral*.

In the case of reconstruction, the challenge should be to contemporarily preserve the traces of the destruction. But how?

- **Frauenkirche in Dresden, Germany**

Frauenkirche in *Dresden*, which collapsed after a fire during the World War II, was left in ruins for decades, as a pile of rubble, to remember the insanity of the Nazi era. Only after the German reunification of 1990, was the idea of reconstructing the *Frauenkirche* born. The "Appeal from Dresden", a citizens' initiative launched in February 1990 under the leadership of musician Prof. Ludwig Güttler, marked the formal beginning of the reconstruction movement [140]. It was opposed by many, including several in the German historical preservation community. Framed as a new nationalist effort for the newly united country, the idea surpassed its critics and in 2006 the new church was reopened [Fig 4]. Thanks to 3D computer simulations, eight thousand original stones, still distinguishable due to their consumption and smoke, have been replaced in their former positions. This is sufficient – at least to an expert eye – to, in some ways, evidence the past of the church[141].



Fig 4: Frauenkirche in Dresden the reconstructed facade of Frauenkirche with the burned (darkened color).

- **The Buda Castle Case:** Two Eras, Two Philosophies:

The *Palace Quarter* is also known as *Castle Hill of Buda*: The construction for this palace began around the year 1250, after the Great Mongol Invasion in 1241-42, but has gone through many upheavals, destruction, and renovations, so most of the building is from years after 1900 [142].

[140] Stiftung Frauenkirche Dresden, n.d.
[141] Garland, 2008
[142] Hungarian National Digital Archive, n.d.

The First Reconstruction (1945–1985):

In the World War II, the entire territory of Hungary was the scene of heavy fighting, and *Budapest* was in the front line from late December 1944 to mid-February 1945 [143]. Twenty-six percent of all buildings in the city and 94 percent of the industrial buildings were reduced to ruins, and all the bridges over the *Danube* were destroyed[144]. The *Castle Hill of Buda* — which preserved something of its strategic importance even in the twentieth-century warfare and thus was the Germans' final stronghold — suffered greatly during the fighting[145].

Before World War II, the civil quarter contained some two hundred buildings one or two stories high, with the exteriors dating from the eighteenth and nineteenth centuries but with medieval interiors[146]. Of these, forty-two buildings were destroyed in 1945; sixty-two required considerable inner and outer renovation; and thirty-two required fundamental repairs[147]. Fifty-two buildings suffered only slight damage; only one remained entirely undamaged, apart from broken windows[148] [Fig 5].

Both the authorities and the population agreed on the pre-eminent importance of this part of the city, and consequently, the very first measures dealing with rubble clearance and reconstruction which started immediately after the war ended, focused on Castle Hill[149]. The first actions were the removal of ruins and the securing of buildings that threatened to collapse. A special rail line facilitated the transport of the vast amount of debris to the depression of the *Vérmezò,* which was almost filled up with rubble[150]. Once these measures were taken the city had to deal with basic problems. Scientific research at excavation sites had already been started in 1945 by the Budapest History Museum, which also took care that the sites were documented by surveys and photographs.

[143] Harrach, 1990
[144] Harrach, 1990
[145] Harrach, 1990
[146] Harrach, 1990
[147] Harrach, 1990
[148] Harrach, 1990
[149] Harrach, 1990
[150] Harrach, 1990

The authorities had to determine the guiding principles for reconstruction[151]. Here the question of how to fill in now-vacant lots in the residential area was especially important. New uses had to be found for buildings that had lost their previous functions in the new postwar economic and political conditions, but which were still valuable as monuments. Most important was the fate of the *Royal Palace* but use it for other palaces of aristocrats and some ecclesiastical buildings also had to be found[152].



Fig 5: Buda Castle 1945.



Fig 6: Buda castle with the surrounding area (unknown date).

During the removal of ruins, immediate decisions had to be made about the protection of crumbling walls considered important either as monuments or as essential parts of the townscape, and about the demolition of valueless masonry[153]. The medieval archives of the capital city were lost during the war, and the only way was to collect other archives[154].

Reconstructing the Castle line with modern building requirements, the castle has a reinforced concrete load-bearing structure but is as close to the original in both materials and execution as possible [Fig 6]. The architects gathered all technical and execution documentation, drawings, schematics, and photos made during the original construction, as some of the finished details were different from the original plan. The result is that - apart from the concrete structure not being visible anywhere

[151] Harrach, 1990
[152] Harrach, 1990
[153] Harrach, 1990
[154] Harrach, 1990

- the building will look exactly as it did when it opened. The walls have thermal insulation, brick inner and outer linings and the facade have - like the original - been finished in Roman cement. The limestone for the stone elements of the building (such as floors, stairs, and other decorative inlays) came from the same quarry. Wrought iron ornamentation is also identical to the original, as is the red and green English slate roofing.[155]

What the First Reconstruction Reveals:

The post-war rebuilding of *Buda Castle* was guided by a scholarly, archaeological, and modernist ethic. It valued the revelation of older layers (medieval) over the restoration of recent ones (19th-century). It was honest about its interventions: new work was simplified, distinguishable, and often declared its modernity through material choices (concrete, simplified forms, glass). It preserved ruins as memorials. It integrated old fragments into new contexts (the Hilton Hotel). It was, in many ways, a model of the conservation principles enshrined in the Venice Charter (1964)—respect for original fabric, distinguishability of new work, and the priority of archaeological evidence.

The attitude towards empty space was equally significant. Voids were not automatically filled. The gaps around Stephen's Tower, the preserved ruins on *Szent György tér*, the open areas were destroyed buildings once stood—these were kept as spaces of memory and interpretation[156]. The empty space itself became a way of telling the story of destruction.

The Second Reconstruction (2019–2030):

The National Hauszmann Program, initiated by the Orbán government and scheduled to run from 2019 to 2030, represents a radical departure from the post-war philosophy[157]. Its stated goal is to restore the *Buda Castle* district to its "former glory" as it appeared at the turn of the twentieth century, specifically the era of *Alajos Hauszmann*.[158] The ruins of the Hauszmann-era buildings, which survived

[155] Diefendorf 2014:155-169
[156] Building Connections, 2024
[157] Bloomberg, 2025
[158] UNESCO World Heritage Centre, 2024

the war but were demolished or altered in the 1950s and 60s, are now being recreated from scratch.

The National Hauszmann Program is guided by a reconstructive and symbolic ethic. It values the completed, glorious image of the turn-of-the-century castle over the layered, scary, and honest fabric of the post-war reconstruction. The ruins of the war, carefully preserved in some places after 1945, are now being erased and replaced with replicas. The empty spaces, which for decades served as memorial voids, are being filled[159].

The National Hauszmann Program reverses this valuation, seeking to restore the turn-of-the-century appearance and erasing many post-war interventions[160]. Each generation selects a different layer as the "authentic" one and demotes others to irrelevance or obstruction. The attitude towards the post-war layer is rejection and erasure. The simplified dome, the modernist interventions, the honest concrete—all are seen as deformities to be corrected[161]. The goal is to return to a single, idealized moment in time: 1904, the apogee of Hauszmann's work.

This raises profound questions about what constitutes the "authentic" castle[162]. Is it the building as it existed in 1904? Is it the building as it evolved through destruction and reconstruction in the 20th century? Or is it the palimpsest of all these layers? The Hauszmann Program answers decisively: the 1904 version is the true one; everything after is aberration.

Comparing these two eras side-by-side illuminates a dramatic shift in conservation philosophy.

Aspect	1945–1985 Reconstruction	2019–2030 Reconstruction
Attitude towards destruction.	Destruction is an opportunity to reveal older, "truer" layers (the medieval castle).	Destruction is a tragedy to be reversed by restoring the lost "golden age" (the Hauszmann castle).

[159] Building Connections, 2024
[160] Sudár, 2025
[161] Hungarian National Digital Archive, n.d.
[162] Sudár, 2025

Attitude towards ruins	Ruins are valuable evidence. Some should be preserved as memorials; others should be excavated and interpreted.	Ruins are wounds to be healed. The goal is to complete the historical picture, not leave gaps.
Attitude towards empty space	Empty space is meaningful. It can mark absence, teach history, or provide context (e.g., the gap around Stephen's Tower).	Empty space is a void to be filled. The historical urban ensemble should be completed.
Attitude towards recent layers	The 19th-century Hauszmann layer is treated as an overlay that obscures the medieval core. It is often removed or simplified.	The 19th-century Hauszmann layer is ideal. The post-war communist layer is an aberration to be removed.
Material philosophy	Honesty and distinguishability. New work should be identifiable as new (concrete dome, simplified forms, glass walls).	Fidelity and invisibility. New work should be indistinguishable from the original, even if the structure is modern (reinforced concrete behind historicist facades).
Treatment of key monuments	The medieval parts are celebrated and reconstructed (Gothic Hall). The Hauszmann dome is demolished and replaced with a modernist version.	The Hauszmann-era buildings are rebuilt (north wing, Archduke's Palace). The medieval parts are maintained but no longer the sole focus.
The role of the public	The castle becomes a cultural quarter with museums, libraries, and public institutions—accessible and educational.	The new buildings will house state functions (Constitutional Court, government offices), raising questions about public access versus elite use.

Table 1: Comparison of conservation philosophies between the two reconstruction phases in Buda Castle

- **The *Iseum Savariense***

The *Iseum Savariense*, both a museum and an architectural reconstruction of a Roman temple, lies on top of an archaeological site not far from *Kőszeg*, *Hungary*. This site is one of the most important ancient Roman remains of *Szombathely*: originally a sanctuary of the Egyptia Budapest Museum n goddess *Isis,* later adapted by the Graeco-Roman religion.

In the autumn of 1955, during the preparations for some construction, workers found the remains of a Roman temple. The magnitude of the site became obvious after a few months of fieldwork, and a sanctuary of the goddess *Isis* was identified[163]. By 1963, the first architectural reconstruction of the *Iseum* was also finished. During the seven seasons of fieldwork, around two-thirds of the former sacred area was excavated, and, in the meantime, restoration works were started on the ruins with an exceptional job, according to the archaeological and heritage protection standards of the time. With a ground-breaking move, the Hungarian preservation paradigm was changed: they abandoned the strict rule of 'ankle-height ruins' (that the walls found during excavation were preserved at a level of a few centimeters) and for the first time the façade of an ancient building was reconstructed[164]. The plan introduced the third dimension (of height) to the visualization of the monument. Both national and international experts greeted the solution with enthusiasm, so much so that the method was referenced in the *Venice Charter* in 1964[165].

The finished reconstruction brought about major changes in the modern surroundings: the originally planned iron storage was never built, and three additional buildings were demolished to form the ruined garden. Besides the façade of the sanctuary, several rooms on the north side were reconstructed in an indicative way, made of concrete. Until 1999, a simple archaeological exhibition of a few artifacts was installed in them[166]. Around the buildings, a park and ruin garden were created. Opening the ruined garden did not mean the end of archaeological research in the area. In the coming decades, archaeologists did fieldwork south and east from the *Iseum*, on the other side of the *Amber Road*, discovering other temples of Oriental deities, such as *Iuppiter Dolichenus*. The ruined garden was also enlarged.

Unfortunately, the reconstruction was not without some major flaws: they erected a ferroconcrete replica of what they thought the façade of the temple looked like and molded the concrete around the original marble elements of the building. This made them potentially vulnerable to environmental damage, such as extreme weather

[163] Sosztarits & Mohácsi, 2018
[164] Häggström, 2018; Magyar Építőipari Minisztérium, 1965
[165] UNESCO, 1964
[166] Szombathelyi Múzeum, 1999

conditions. In the 1980s, partly due to the deficiency in maintenance work, partly due to the damage caused by acid rain and air pollution, the original marble parts began to decay[167]. It is important to acknowledge that the program was much more than a heritage protection project since it covered the following areas of interest: architectural reconstruction; long-term sustainable use; effect on tourism development and enhancing the cultural appeal of the town; stable employment program in the institution; urban planning for the immediate surroundings of the *Iseum* [168]. This teaches that all layers must be respected: the ancient fabric, the mid-century reconstruction, and even the later interventions all form part of the monument's story. Research should have revealed that the original marble required protection from direct contact with modern materials, and a reversible intervention would have preserved both layers for future generations.

The *Iseum Savariense* thus offers *Aleppo* a balanced lesson: it shows the power of reconstruction to make the past visible and experientially present, the value of indicative and distinguishable new work, the potential for heritage to serve multiple community purposes, and the importance of integrating ongoing research. But it also warns of the dangers of irreversible interventions, the need to protect original fabric from new materials, and the absolute necessity of long-term maintenance. For *Aleppo,* navigating these opportunities and risks with wisdom will be essential to rebuilding the Ancient City in a way that honors its past while securing its future.

- **The Malkocs Bey Mosque, Siklós**

The mosque was built between 1543 and 1565 by *Malkocs Bey*, an ʿOttomān general and Sanjak-bey who played a significant role in the ʿOttomān conquest of Hungarian territories. It was one of at least four mosques in *Siklós* during the ʿOttomān period. After the ʿOttomān withdrawal from Hungary in 1686, the building gradually transformed. By the 19th century, it served as a residential house. Its minaret and entrance porch were destroyed, and its original character was largely lost. In 1901, part of the dome was demolished when the building was merged with neighboring houses[169]. The mosque was virtually forgotten until 1969, when archaeologists

[167] Häggström, 2018
[168] Sosztarits; Mohácsi 2018: 155
[169] Gerő 1980

Győző Gerő and *Ferenc Mendele* initiated its systematic excavation and study[170]. What appeared to be a ruined, much-altered structure revealed, beneath the layers of later modifications, the original architectural system and rich forms of the 16th-century mosque. The restoration work continued through the early 1990s and was completed in 1994[171]. The project received the prestigious Europa Nostra Diploma in 1993, before the work was even fully finished, in recognition of its exceptional quality[172]. The restoration was preceded by fundamental, systematic research of the architectural structure and archaeological excavation[173]. Different materials were deliberately used to show the difference between old and new. The new drum was built in bricks and supported by a glulam timber construction, clearly modern yet sympathetic[174]. Damaged and destroyed parts were rebuilt based on historical evidence. The lost dome and interior elements were reconstructed using available documentation[175]. Today, the mosque functions both as a museum and, since the Bosnian War years, as a place of worship for the local Muslim community[176].

For the *Ancient City of Aleppo*, the *Malkocs Bey* Mosque offers a model of how to approach the treatment of severely damaged historic religious structures with wisdom and sensitivity. The restoration demonstrates that thorough documentation must precede any intervention, that new work should be honestly distinguishable from original fabric, and that international partnerships can enrich reconstruction with relevant expertise and cultural connections. The building's dual function as both heritage site and community space shows that reconstructed monuments can serve living communities while preserving memory. The building today contains its ʿOttomān origins, its Baroque modifications, its period of neglect, and its late twentieth century reconstruction, all visible to the informed observer. This is a model of how research can create a system for understanding layered values and guide interventions that respect the monument's entire biography. However, the decision to demolish neighboring houses to isolate the mosque offers a crucial warning: for

[170] Gerő 1980
[171] Gerő 1980
[172] European Heritage Awards Archive, 1993
[173] European Heritage Awards Archive, 1993
[174] European Heritage Awards Archive, 1993
[175] Magyar Építőipari Minisztérium, 1995
[176] Magyar Építőipari Minisztérium, 1995

Aleppo's dense historic fabric, preserving urban context matters as much as restoring individual monuments. The goal must be to rebuild not isolated landmarks but the living continuum of the Ancient City itself.

- ***Salamon Tower*, *Visegrád*: A More Complex Case**

The *Salamon Tower* in *Visegrád* represents a different and more contested restoration history. While detailed information from the search results is limited, I can provide a framework for researching this case based on what is known.

A 2022 exhibition at the Hungarian Museum of Architecture and Monument Protection Documentation Center featured the *Salamon Tower* restoration as one of its key case studies, presented through "moving posters" showing the changes in the building's condition over time[177]. This indicates that the tower's restoration history is well-documented and considered significant enough for public exhibitions.

The tower has been restored multiple times for more than a century, with different philosophies prevailing in different eras. The nineteenth-century vision of *József Viktorin*, who in 1866 proposed transforming the tower into an "antiquarian museum" as part of the National Museum, represents an early phase of museological thinking about the monument. The exhibition's aim to present "the numerous changes in preservation's guiding principles[178]" indicates that the Salamon Tower may illustrate how restoration philosophy has evolved—and how earlier interventions may now be viewed critically. Later 20th-century work by *János Schulek* (from 1934) and then by *Héjj* and others after 1948[179] added additional layers.

The scholarly literature also documents the history of *Visegrád's* monuments[180] provided a comprehensive overview of the research and restoration of *Visegrád's* castles throughout the 19th and 20th centuries, tracing the evolution of conservation approaches at the site[181] discussed the work of *Miklós Héjj*, who was involved in

[177] Magyar Építészeti Múzeum és Műemlékvédelmi Dokumentációs Központ, 2022
[178] Magyar Építészeti Múzeum és Műemlékvédelmi Dokumentációs Központ, 2022
[179] Gróf, 2020
[180] Búzás, 2011
[181] Gróf, 2020

archaeological excavations and monument protection at *Visegrád* from 1948 onward, including work on the Royal Palace, the Lower Castle, and the Citadel. *Fejérdy*[182] further explored the relationship between monument protection and national identity through the specific example of the *Visegrád* monument complex, offering critical perspective on how restoration decisions reflect broader cultural and political contexts. And recent digital documentation projects have added yet another layer of knowledge and interpretation[183]. The exhibition's theme of "speculative reconstructions" suggests that not all these layers are equally valid; some may have involved conjecture beyond what evidence supported.

The *Visegrád* monument complex warns *Aleppo* against speculative reconstruction, insisting that all interventions must be grounded in evidence rather than conjecture. It shows how restoration philosophies layer across time, each generation adding its own chapter to a building's story, for better or worse. The long museum connection suggests that damaged monuments can serve as sites of interpretation housing their own recovered fragments. Most fundamentally, *Visegrád* reminds us that heritage preservation is always entangled with politics. For *Aleppo*, navigating these complexities with transparency will be essential to rebuilding the Ancient City in a way that honors its past while serving its future. Research must evaluate all layers critically, distinguishing between interventions grounded in evidence and those driven by speculation. The monument's value lies in the entirety of its authentic layers, but inauthentic additions may need to be identified as such, perhaps through documentation rather than physical retention.

- ***Madrasa of Sultan Hasan***

The most important monument of Mamluk, and perhaps Arab-Islamic, architecture in general, the *Madrasa of Sultan Hasan* (757/1356) in Cairo. The madrasa had been in a poor state of repair for a long time and urgently needed restoration[184]. In 1902, *Herz Pasha* was able to begin the restoration project[185]. His method involved

[182] Fejérdy, 2020
[183] Magyar Építészeti Múzeum és Műemlékvédelmi Dokumentációs Központ, 2022
[184] Ormos, 2017
[185] Ormos, 2017

discovering the original form and condition of each monument and restoring only those elements on which reliable data was available[186].

In addition to works of restoration *Herz* also designed several buildings and completed the architectural design of the *Masjid al-Rifā'ī,* Cairo's royal mosque, after work had been interrupted for several decades and its original architect, *Husayn Pasha Fahmi*, had died[187]. Seeing these two mosques from a distance makes one think that they are one mosque split in two. This is because of the many similarities between the exterior designs of both mosques. *Masjid Rifā'ī* was designed so that it would not look dwarfed by the huge *Sultan Hassan Masjid*. The Mosque was built in the Bahri Mamluk style which was popular in the nineteenth and twentieth centuries. This style was like the European style of buildings at the time[188]. Most of the materials were imported from Europe.

Herz had finished the enormous task of completing work on the mosque choosing to complete the half-finished mosque in neo-Mamluk style rather than a more modern pattern. He also completed the decorations of the mosque, for which the original architect had left no plans, from models taken from the best mosques in *Cairo*. *Herz* employed the style to make the mosque appear more medieval, rejecting a modern symmetrical design[189].

Al-Rifā'ī does not reflect a lack of knowledge with *Cairo's* cumulative architectural heritage. It does not reflect an architectural identity crisis. It does not try to be something it is not or import what does not belong. Instead, the mosque reflects a thorough understanding of *Cairo's* architectural history and a serious academic engagement with that heritage in the building of a new monument[190]. The builders were not enslaved by that history, nor did they try to replicate or uncreatively reconstruct what they understood to be "authentic." On the contrary, the mosque is both innovative and contextual.

[186] Ormos, 2017
[187] Elsheshtawy, 2006
[188] Diarna, n.d.
[189] Sanders, 2008
[190] Ormos, 2017

Conclusion

These diverse cases from across Europe and the Middle East offer *Aleppo* a rich repertoire of responses to the fundamental question of how to rebuild a wounded city. What emerges most powerfully is that there is no single correct answer. The *Frauenkirche* shows that scars can be carried forward, that new stone can dialogue with old, and that destruction itself can be made visible within renewal. The two *Buda Castle* eras reveal that each generation selects its own "authentic" layer—and that today's restoration may become tomorrow's erasure. The *Iseum* demonstrates both the power of reconstruction to make the past visible and the danger of irreversible interventions that damage original fabric. The *Malkocs Bey* Mosque offers a model of honest distinguishability and sensitive adaptation to contemporary community needs. *Visegrád* warns against speculation detached from evidence. *Sultan Hasan's* neighbor, *al-Rifa'ī*, shows that new work can engage heritage creatively without being enslaved by it.

For *Aleppo* ancient city, the lesson is not to choose among these models but to learn from all of them. The Ancient City's recovery must be guided by thorough documentation, honest material choices, respect for all authentic layers, and above all, the wisdom of those who know it best. The goal is not to find the perfect precedent but to weave these lessons into a response that honors *Aleppo's* unique history, its suffering, and its hope. Future generations will read in the city's fabric the decisions made now.

There is no permanent answer. The choices made today will be judged by future generations, who may have different values, different politics, and different relationships to the past. The best we can do is to make our choices consciously, transparently, and with humility, recognizing that we are not restoring an eternal truth but building a layer that will itself become history.

The rebuilding of *Aleppo's* damaged landmarks—such as *al-Masjid al-kabīr*, the *qa'la*, and historic houses like *Bayt Ajqbāsh*—will require case-by-case strategies that respect original craftsmanship, integrate modern safety standards, and consider new cultural or community uses. The examples above illustrate

that building-scale reconstruction is not just technical; it is a narrative act that tells a story of loss, survival, and identity.

1.3.4.2 Transitional example (Between building mass/artistic object, digital era)

In contemporary post-disaster and post-conflict recovery, some interventions occupy a conceptual middle ground, where reconstruction is treated not as literal rebuilding, but as artistic interpretation, symbolic evocation, or experimental mediation between past and present. These approaches often use modern materials and forms to suggest lost volumes, highlight absence, or create new cultural dialogue without replicating historic fabric[191].

They challenge traditional notions of authenticity by prioritizing emotional resonance, spatial memory, and contemporary artistic expression over material replication. In contemporary post-disaster and post-conflict recovery, some interventions occupy a conceptual middle ground, where reconstruction is treated not as literal rebuilding, but as artistic interpretation, symbolic evocation, or experimental mediation between past and present. These approaches often use modern materials and forms to suggest lost volumes, highlight absence, or create new cultural dialogue without replicating historic fabric. They challenge traditional notions of authenticity by prioritizing emotional resonance, spatial memory, and contemporary artistic expression over material replication. This stands in contrast to contexts where rapid rebuilding and modernization pressures threaten surviving historic fabric, highlighting a spectrum of approaches to recovery[192]

- **Basilica di Siponto, Italy**

The *Basilica di Siponto* was constructed in the 12th century and now sits at the heart of an archaeological park in the *Puglia* region of southeast *Italy*. The structure was largely destroyed by earthquakes and has now been reconstructed in wire mesh by artist *Edoardo Tresoldi* [193]. The 14m tall construction recreates the volumes of the

[191] Archive of Destruction, 2023

[192] Cultural Heritage Partners, 2025

[193] Edoardo Tresoldi is an Italian artist, sculptor and set designer, known internationally for his monumental sculptures made of wire mesh.

original church using 4,500 square meters of wire mesh weighing seven tons[194]. The work of *Tresoldi* appears as a majestic architecture sculpture able to tell the volumes of the existing early Christian church and at the same time able to vivify, updating it, the relationship between the ancient and the contemporary[195]. It is breaking up the secular controversy of the primacy of the art, summarizes two complementary languages into a single, breathtaking scenery[196]." The wire mesh wields an ethereal presence that is almost invisible from a distance. In contrast to *Viollet-le-Duc's*[197] full reconstruction of Carcassonne with similarly scant remaining evidence, Tresoldi's concept and choice of materials resurrect the past lightly as a distant reinterpretation. Supported by the Minister of Culture to raise awareness of *Siponto's* significance as a Roman colony and port from 194 BC, this re-creation of the basilica has revived interest in this part of *Foggia's* history.[198]

This approach abandons material replication entirely. Instead, it creates a new, contemporary artwork that mediates between the present and the past, highlighting absence rather than filling it[199]. The challenge here was artistic and experiential: to create a new emotional and spatial connection to history without falsifying it through literal rebuilding[200].

- **Replica of a Roman triumphal arch, Palmyra**

In contrast is the "reconstruction" of A 20-foot (6.1 m) replica of a *Roman triumphal arch* from *Palmyra*, *Syria*, that was destroyed in 2015 by *ISIS* militants[201]. In the marble quarries of *Carrara*, *Italy*, a full-scale 120-ton replica is in the process of being carved out marble from a 3-D digital model generated from photos taken over the years. The model was made by the *Institute for Digital Archaeology* in Oxford, England. The replica was installed in *Trafalgar Square*, *London* on 19 April 2016. It was displayed there for three days, before

[194] Wong 2017
[195] Wong 2017
[196] Wong 2017
[197] Eugène Emmanuel Viollet-le-Duc was a French architect and author, famous for his restoration of the most prominent medieval landmarks in France (1814 –1879).
[198] Wong 2017
[199] Wong 2017
[200] Wong 2017
[201] Fixsen, 2016

being moved to several other locations, including *New York City, Florence, Geneva, Washington, D.C.*, and *Dubai*. It is to be sent to *Syria* afterwards, yet as of 2024 this has still not happened.[202]

The 2016 replica raises profound questions: Is this object authentic? It has no material connection to *Palmyra*, no history, and was carved by robots[203]. Its "authenticity" lies in its precise, digital form. The project prioritized the image of the monument over its material substance. The challenge is now ephemeral and philosophical: what is the value of a heritage object that exists only as data and a displaced replica? This represents a radical departure from both the 19th-century craft-based approach and the 20th-century reverence for *in situ* ruins[204].

Prompted by events in the world today, the questions of authenticity, and ultimate authority, once raised and responded to in the mid-to-late nineteenth century, are resurfacing in a new dialogue. We now stand at the edge of the new frontier. New steps forward are full of potential but also grave implications[205] .

Conclusion

The cases of *Siponto* and *Palmyra* represent two radically different approaches to the question of how to respond to destroyed heritage in the twenty-first century, offering *Aleppo* a glimpse of both the possibilities and perils that lie at the edge of this new frontier.

Aleppo's reconstruction could incorporate transitional or interpretive approaches for heavily damaged sites where full rebuilding is neither feasible nor desirable. A ghost structure in wire or light, a digital projection of lost interiors, or an artistic pavilion that frames ruins could serve as powerful mediators of memory, especially in places where physical reconstruction risks falsifying history or erasing trauma. Such approaches honor the complexity of post-war memory while inviting contemporary artistic and technological engagement.

[202] Wikipedia, 2025
[203] Pertile, 2025
[204] Pertile, 2025
[205] Wong 2017:239

1.3.5 Abusive reconstructions (Falsification and kitsch):

Abuses of identical reconstructions are (too) often present in the practice of the last decades. They result in mystifying history and deluding people, demonstrating a corrupt way of dealing both with material and immaterial values of the heritage. Mimetic reconstruction has become a common practice of (re)creating fake historical buildings and ensembles, manipulating the observers, and the collective memory. Such recent reconstructions are driven by political and economic reasons which often become more important than any consideration of conservation theory and heritage values. But the worse cases of abusive reconstructions are those that do not just reproduce a lost monument but justify and facilitate the demolition of existing historic buildings, to be subsequently replaced by new mimetic constructions in the old style, including some adaptations to new functional and/or aesthetic demands hidden in the overall historic appearance. An example of this kind is presented in case of a historic buildings in *Berlin* [Fig 7-8] and *Bucharest* [Fig 9-10-11-12].

There is no doubt that behind such an attitude stands the total neglect of the original material, techniques, and craftsmanship as credible sources of historic information, as well as the complete disdain of their importance for the value of the historic building. At a smaller scale, identical reconstruction of parts of lost historic constructions is sometimes integrated into new modern buildings, as theatrical props meant to visually revive a by gone past.



Fig 7: The 3D model of the reconstruction North façade of the Prussian Royal Palace (15th-18th century, demolished in the 1950s).



Fig 8: A photograph of the site where the Palace of the Republic once stood in Berlin.



Fig 9: Reconstructed on the space left after the demolition of the original building,



Fig 10: Historic building in Bucharest (the 1920s) demolished and reconstructed (2016): the new building, quasi-identical to the original





Fig 11-12: The building of Novotel Hotel in Bucharest inaugurated in 2007 including the copy of the entrance porch of the National Theatre once located on the same site (1846-1852), bombarded in August 1944, and demolished in 1947.

- **Stadtschloss, Germany**

The rebuilt *Prussian palace,* home to the *Humboldt Forum*, is a German monument built in a very un-German way. But it should be said in advance: at least from today's point of view, it is rather a demolition task than a building project. The *Stadtschloss* case refers to the historical core of *Berlin*, *Germany*, where the *Stadtschloss* (City Palace) once stood[206]. The *Stadtschloss* was a royal palace that served as the principal residence of the Margraves of Brandenburg, the Kings of Prussia, and the German Emperors. The site holds great historical and cultural significance for the city. It had a Gothic and Renaissance appearance in the seventeenth century.

[206] Berlin.de, 2026

After considerable damage in World War II, it still could have been rebuilt but the government of East Berlin decided to blow it up in 1950 for ideological reasons. This act of cultural and historical crime was followed by a huge parade ground for the authorities and in 1976, the Palace of the Republic was built on its site. Since reunification in 1990, various initiatives have been coming up for the reconstruction of the Berlin Palace. In 2002, the German parliament (*Bundestag*) decided to partly rebuild the Palace complex as the new *Humboldt-Forum*[207]. That building was leveled in 2006 though many saw it more as a deliberate political act to erase one of the most prominent symbols of the old East Germany. In 2008, the demolition of this historical hoax was finally finished[208].

Instead, the *Humboldt Forum* is taking up residence in the newly reconstructed baroque *Stadtschloss*, or city palace. Over the past years, three of the four original façades and the basic layout of the four-story palace have been rebuilt according to the original plans — including imposing portals and a dome — and using many of the old decorative features. The core is modern — concrete floors, new wiring, plumbing, and so on. The overall effect is to restore the biggest missing piece of the ensemble of neoclassical and nineteenth century state, cultural and religious buildings that comprise Berlin's Museum Island, up the road from the *Brandenburg Gate*. The story of the *Stadtschloss* encapsulates much of what has played out in *Berlin* over the past three decades — from charged debates about architectural aesthetics and practical questions about urban planning, to how a country deals with a troubled past and how it seeks to present itself to the world in the future[209].

Conclusion

In the light of the reflections and the examples presented, we can say that an approach aimed at preserving the traces of the past can be used as a tool for historiography, as this material evidence can be used as an essential source to reconstruct history, in the future. Reconstruction, although considered legitimate action, cancels part of history, and changes the course of the events, which can be very dangerous. *Aleppo ancient city* must guard against politically expedient,

[207] Westdeutscher Rundfunk, 2025
[208] Bundeszentrale für politische Bildung, 2025
[209] Parzinger, 2017

hastily built, or commercially driven reconstructions that could falsify its layered history, erase the scars of war, or reduce its heritage to a tourist commodity. Transparency, community oversight, adherence to authenticity of materials and craftsmanship, and respect for historical evidence—including the traces of conflict—are essential to avoid abusive or kitsch outcomes. Reconstruction should honor memory, not manufacture it.

1.3.6 Contemporary Post-Conflict Cases – (Iraq, Syria)

1.3.6.1 Case of Iraq (*al- Mosul*)

Mosul is a living symbol of the multifaceted identity of *Iraq*, and one of the oldest cities in the world; it is at the crossroads of the Middle East and bears witness to the wealth of civilizations that crossed the region over centuries[210]. *The archaeological site of Nimrud*, the *Museum of al- Mosul*, the *Nabi Younes Shrine,* and many other sites there have been targeted for intentional destruction[211].

The *Great Mosque of Al-Nuri* became a representative building of the Iraqi city of *Mosul*, known for its sloping minaret[212]. Its construction dates to the second half of the 12th century, and was destroyed on June 21, 2017, by the ISIS, who blew up the mosque and the minaret itself [213].

The "*Revive the Spirit of al- Mosul* "Initiative was presented on 30 June 2018 during the 42nd session of the UNESCO World Heritage Committee[214].
The primary goal of the project is to foster reconciliation and social cohesion in *Mosul* and its Old Town, through the restoration and reconstruction of *Al-Nouri Mosque* and its *al-Hadba Minaret* as iconic landmarks, as well as a Memorial[215].
The *Mosul* Initiative is conceived in partnership with the Iraqi Government to integrate the human dimension in the reconstruction and recovery of the city, particularly through culture and education, after years of painful destruction.

[210] UNESCO, 2018
[211] UNESCO, 2018
[212] UNESCO, 2021
[213] UNESCO, 2021
[214] UNESCO World Heritage Centre, 2018
[215] UNESCO, 2018

Between 2014 and 2017, historic monuments and sites were heavily damaged in a major blast by ISIS extremists[216].

The joined work includes rebuilding the iconic *Great Mosque of Al Nuri* and its leaning *Al-Hadba Minaret* which, was destroyed. The *United Arab Emirates* have committed USD 50.4 million to rebuild and restore the *Mosque of Al Nuri* over a five-year period[217].

UNESCO launched an international architectural competition for the reconstruction of *Mosque of Al Nuri*. The competition incorporated the input of the residents of *Mosul* who were invited to take part in a large-scale consultation concerning the main reconstruction options for the Minaret and the Mosque[218]. The first phase of the project, which began in early 2019 and lasted a year, consisted of clearing and demining the site, documenting, and assessing it, stabilizing parts that could be salvaged as well as overall planning[219].

Beyond the challenges of the project was balancing historic architecture with contemporary needs and integration it with the surrounding urban context.

Drawing both material inspiration and typology from the ʿOttomān -period homes in the area, the mosque complex—which encompasses a school, a museum, an art institute, and a community center—employs simple lines and a palette of local brick, alabaster, and glass[220]. Scale and solidity are broken down by using glazing and perforated brick, creating the screen-like feel of a modern take on lattice-like *mashrabiya* design.

The project is currently underway and will also include public gardens, a memorial site, and a museum[221]. Currently, the site has been cleared, and *Al-Nouri* Complex has been stabilized with the invaluable support of the Governorate of *Niniveh*, The Ministry of Culture of *Iraq*, the Sunni Endowment, and the Mayorship of *al-Mosul*[222].

[216] UNESCO, 2018
[217] UNESCO, 2018
[218] UNESCO, 2021
[219] UNESCO, 2021
[220] UNESCO, 2021
[221] UNESCO, 2021
[222] UNESCO, 2020

The reconstruction of this important landmark of the city is of utmost importance to send a strong signal of resilience and hope, as a first step towards social cohesion and reconciliation in the post-conflict *Iraq*[223].

1.3.6.2 Case of Syria

Syria, home to some of the oldest and culturally rich cities and archaeological sites in the world, each contributing in their unique ways to our understanding of the past. The country also currently has six UNESCO World Heritage sites: the *Ancient City of Damascus* (1979); *Palmyra* (1980); *Ancient City of Bosra* (1980); *Ancient City of Aleppo* (1986); *Crac des Chevaliers* and *Qal'at Salah El-Din* (2006); and the *Ancient Villages of Northern Syria* (2011). These sites alone represent an open-air museum, containing traces of at least two thousand years of history[224].

The destruction of cultural heritage has escalated in *Syria* as the war had spread to Heritage Sites. War damage to the sites takes multiple forms: as well as direct shelling damage from the conflict, some sites are simply suffering collateral damage[225]. Other sites are hit by gunfire, or blown up of the monuments, or their infrastructure damaged because of being caught in the middle of hostilities[226]. Moreover, ancient citadels were taken over by military factions and further damage constantly[227].

In addition to the direct damage, the breakdown in security has led to increased looting[228]. The war has left sites unguarded, providing easy access to the thefts who are organized. Further side effects of the conflict include the increase of domestic threats, such as illegal developments onto archaeological sites[229].

In this situation, the risk is represented by the limited nature of the documentation of these sites[230]. More broadly, attempts to protect and recover cultural heritage were

[223] UNESCO, 2021
[224] UNESCO, 2013
[225] UNITAR & UNESCO, 2018
[226] UNITAR & UNESCO, 2018
[227] UNESCO World Heritage Centre, 2015
[228] UNESCO World Heritage Centre, 2015
[229] UNITAR & UNESCO, 2018
[230] UNITAR & UNESCO, 2018

rendered significantly harder, leaving cultural heritage neglected with minimal resources allocated to it[231].

Such deliberate destruction of cultural heritage is so damaging to civilizations that the world recognizes it as a war crime[232]. But the power of cultural heritage, so targeted in war, also can provide instruments to build peace[233]. As a result of this condition the six sites in Syria are registered on UNESCO's World Heritage List, all these sites were officially listed as being in danger of damage or destruction in June 2013 [234].

Within *Syria* the DGAM is state-run, with all that implies for limited funds[235]. While some of its employees left the country as refugees, other well-qualified and committed individuals remain, doing their best in difficult circumstances[236]. Some have even lost their lives for their passion.

Most severely damaged towns or cities in WWII were left to slowly be rebuilt when there were enough resources available [237]. But for Syria, resources such as money, construction material, construction tools, construction vehicles, construction workers were all in scarce supply during the war as the government's foremost job was to repel the enemy before rebuilding.

There are serious deficiencies we faced in practices for post-war recovery, ranging from the lack of institutional and human capacity, and local participation, to the issues that are directly connected to what should be recovered and how, the pace of recovery, codes and legislations, and different technical approaches for conservation or replacement of destroyed historic city centers[238].

Postwar sanctions prohibited *Syria* from receiving international assistance, leaving the country's cultural patrimony in the hands of a severely depleted antiquities staff hampered by inadequate funding. The participation of the international organizations focuses mainly on humanitarian relief and much less on engagement that requires medium- to long-term commitment[239].

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[231] Blue Shield International, 2025
[232] UNESCO, 2013
[233] UNESCO, 2018
[234] UNESCO World Heritage Centre, 2013
[235] Blue Shield International, 2025
[236] Blue Shield International, 2025
[237] Diefendorf, 1990
[238] UNESCO, 2018
[239] ALIPH, 2025

Wherefore work is stumbling to repair the damaged homes and communities left shattered by years of occupation and fighting[240]. The government's priority was to host schools, hospitals and water and electrical facilities across the country. However, many other buildings, including education and health facilities, are still not fully functioning however, leaving many of the region's people unable to access the services others take for granted. Other repairs are being funded directly by NGOs, with the renovation of churches and mosques[241]. So far UNESCO has only held a series of technical meetings and minor contributions[242].

Financial challenges are the most pressing issue. Another challenge is the urgent need to facilitate the return of displaced people to their cities and to restore their communities. Their return requires, in addition to rebuilding homes, the rehabilitation of their cities; restoration of basic services; removal of unexploded ordnance; and restoration of communal trust[243].

To establish solutions, proposals and resources needed for developing a roadway towards recovering Syria's outstanding World Heritage. A reconstruction conference was held in *Dubai* in 19-20 March 2022 under the title: "*Restoring Syrian heritage and reviving local communities",* the aim of the conference organized by the STD, in cooperation with the *Syria* Pavilion at EXPO 2020 *Dubai,* was to drawing international archaeologists, potential donors and investors to discuss efforts to rebuild Syria's World Heritage Sites and infrastructure as it emerged from a devastating war. Despite the attendance of key international archaeologists and corporations, no amount was received as the Syria's had hoped for [244]. Among the destroyed sites were *Palmyra*, *Crac des Chevaliers* and *Aleppo Ancient City*.

The *Triumphal Arch*, *Palmyra*:

ISIS exploded several key monuments during their occupation to *Palmyra* in 2015, including the *Triumphal Arch* which was erected in the third century by the Roman

[240] World Bank, 2025
[241] ALIPH, 2025
[242] Hermitage Museum, 2022
[243] World Bank, 2025
[244] Syria Trust for Development & Syria Pavilion at Expo 2020 Dubai, 2022

Emperor Septimius Severus[245]. The DGAM together with the Rescue Archaeology Department of the Institute of History of Material Culture of the Russian Academy of Sciences started in 2021 the restoration of the Arch[246]. The project is financed by STD and DGAM[247]. In this framework, the DGAM requested the support of UNESCO for the creation of a scientific committee to review and provide input on project proposals and implementation[248].

According to UNESCO rules, if a World Heritage Site has suffered from an explosion, earthquake or for any other reason it is necessary to take a set of measures to preserve it[249]. The sequence of these measures is fundamental, and it is necessary to start with documenting the current state of the monument[250].

After the explosion, only the outside pillars of the side passages remained from the arch. The main arch collapsed; the central passage was destroyed. The stone blocks were seriously damaged; some elements were irretrievably lost. However, most of the masonry has been preserved[251]. The project for the complete restoration of the arch has been designed for five years [252].

The first stage of restoration took place in the winter of 2021/22. Russian specialists assessed the condition of the structure and created two detailed 3D models – before and after the explosion[253]. Blockages of blocks formed because of damage are reflected in them. Scientists have collected samples of the original stone from which all the architectural objects of *Palmyra* are built, as well as materials that were used for the restoration of the structure in the middle of the last century[254].

[245] UNESCO World Heritage Centre, 2022
[246] Institute of History of Material Culture, 2022
[247] DGAM, 2023
[248] UNESCO World Heritage Centre, 2023
[249] UNESCO World Heritage Centre, 2022
[250] UNESCO World Heritage Centre, 2022
[251] Institute of History of Material Culture, 2022
[252] DGAM, 2023
[253] Institute of History of Material Culture, 2022
[254] Institute of History of Material Culture, 2022

The original samples will be compared with samples of marmorized limestone from a modern quarry. This will allow us to accurately select the material for the manufacture of the lost elements[255].

The scientific report on the results of the work in *Palmyra* and the proposals of specialists on the restoration methodology form the basis of the project, which will be sent to UNESCO[256]. Each stage of the work was coordinated with the International Scientific Committee on *Palmyra*[257]. Two conferences were planned for a detailed discussion of the project in *St. Petersburg* and *Damascus*, where experts discussed various approaches to the restoration of the arch[258]. The 2nd conference that was held in *Damascus* on May 25-26, 2023, resulted in a resolution that guide the reconstruction project[259].

The workshop resolution emphasizes the significance of restoring the "*Triumphal Arch*" not only as a physical structure but also as a symbol representing values and meanings[260]. The restoration process is seen to engage the Syrian society and local community, fostering a peace mentality, and acting as a vehicle for societal recovery. The project, proposed by a Syrian Russian specialized team, was evaluated, and scientifically approved by experts during the workshop, aligning with international restoration standards, UNESCO protocols, and Syrian laws[261]. The resolution also outlines the need for continuous monitoring during project execution, maintaining aesthetic balance, using compatible and durable materials for restoration, and building capacity among universities and the local community for future restoration projects[262]. The resolution also emphasizes the importance of transparent communication to the public through various accessible means such as three-dimensional models, exhibitions, and websites[263].

[255] Institute of History of Material Culture, 2022
[256] UNESCO World Heritage Centre, 2023
[257] UNESCO World Heritage Centre, 2023
[258] DGAM, 2023
[259] DGAM, 2023
[260] DGAM, 2023
[261] DGAM, 2023
[262] DGAM, 2023
[263] DGAM, 2023

The restoration project is planned to commence in September 2023, subject to agreement and joint work with the communities involved[264].

- ***Crac des Chevaliers***

Crac des Chevaliers, which possibly dates back to the eleventh century, and was built in its present form after the earthquake of 1170s by the Knights Hospitaller, the castle was subjected to mortar shells exploding during the clashes that took place on the middle of Syria (2012 till 2014)[265]. They left scars in the monument and caused minor to severe damage to its buildings, including the *Chapel (Mamluk and ʿOttomān period mosque)* in the centre of the castle, which still retained traces of original murals[266].

Apparently only the roof and the coping of the walls was affected. The *South-West tower (Tower – 135- of Zahir Babars)* took a direct hit, and the part of the vault of the *Southeastern* tower n (49) collapsed[267]. Clashing have also hit the uppermost parts of the defence's towers and left damage in the interior facade of the *Knight's tower* overlooking to the courtyard of the castle. As for the surrounding area, the housing below area in the buffer zone had been affected by clashes also. This area had been cleared of all the population and abandoned, and other buildings were damaged by mortars.

In the framework of the UNESCO's International Assistance Request No 3042 entitled *"First Phase of the Master Plan of Crac des Chevaliers* [268]*"*, the DGAM had finished the topographic network of survey points on the entire site and its surroundings; Identify critical stability cases and other restoration needs at the site, set priorities of interventions and elaborate detailed restoration proposals aligned with the recommendations of the UNESCO technical assistance workshop[269] (*Beirut*, 2016) and the stone deterioration diagnosis.

[264] DGAM, 2023
[265] UNESCO World Heritage Centre, 2014
[266] UNESCO World Heritage Centre, 2014
[267] UNESCO World Heritage Centre, 2014
[268] UNESCO, 2019
[269] UNESCO World Heritage Centre, 2017

The DGAM was cooperated with the Hungarian partner, to obtain international assistance, through which these goals can be achieved, and the comprehensive Management Plan will be completed[270]. As part of the Memorandum of Understanding signed in 2021 between the DGAM, the *St. Ephrem Patriarchal* Development Committee, the Syriac Orthodox Patriarchate of Antioch and All East and the *Pázmány Péter Catholic University* in *Budapest*[271], work had finished the restoration of the façade of the corridor in the inner castle yard, the entrance to the *Knight's Tower,* and multiple staircases, and the creation of new insulation and rainwater drainage systems. This memorandum of understanding includes three phases[272].

The first phase related to the restoration of the facade of the *Al-Zahir Baybars Tower*, the restoration of the vault of the tower and its surroundings, the door leading to *Sultan Qalawun Tower*, the staircase adjacent to the facade of *Al-Zahir Baybars Tower*, and the two arches in the western outer wall near the tower[273]. The second and third phases include the installation of wooden doors and windows for the Chapel, the restoration of the northern curtain near the tower of the so-called *daughter of the king*, and the strengthening of the northern wall of the second stable overlooking the moat of the castle[274].

Syrian and Hungarian archeologists' architects and professionals, students and experts documented and collected the data of documenting and systematizing the remnants of ancient stone decorations, presumably to allow for future restoration work, including plans to strengthen the northern wall of *the southern Stable* building overlooking the moat[275]. The third phase of a Memorandum of Understanding was finished with the complete restoration of one of the major historical monuments within the castle which has received resources and support for restoration work[276].

[270] Pázmány Péter Katolikus Egyetem, 2026
[271] St. Ephrem Patriarchal Development Committee, n.d.
[272] St. Ephrem Patriarchal Development Committee, n.d.
[273] St. Ephrem Patriarchal Development Committee, n.d
[274] St. Ephrem Patriarchal Development Committee, n.d
[275] St. Ephrem Patriarchal Development Committee, 2024
[276] St. Ephrem Patriarchal Development Committee, 2024

Comparative Analysis of Syrian Case Studies: Crac des Chevaliers and the Triumphal Arch of Palmyra

The rehabilitation of *Crac des Chevaliers* and the *Triumphal Arch of Palmyra* represents two contrasting approaches to post-conflict heritage intervention in Syria. While both sites share the context of war damage and the symbolic weight of World Heritage designation, their trajectories, partnership models, and current status diverge significantly. This comparative analysis examines them across five key criteria to extract transferable lessons for *Aleppo's* broader recovery.

Comparison Criteria	**Crac des Chevaliers**	**Triumphal Arch of Palmyra**	**Analytical Insight**
Typology of Damage	Shelling and airstrikes during military occupation[277] (2012–2014); severe damage to Gothic Hall, chapel, and towers[278] later exacerbated by 2023 earthquake[279].	Deliberate dynamite by *ISIS* in 2015 as cultural cleansing[280]; the Arch collapsed, with many stone blocks damaged or scattered, though some remained recoverable[281].	Nature of damage differs fundamentally: *Crac* suffered collateral military damage; *Palmyra's* Arch experienced targeted iconoclasm, raising different ethical questions about reconstruction as defiance.
Intervention Approach	Minimal intervention focused on stabilization, stone consolidation, and phased restoration. Work has proceeded incrementally since 2019, with priority given to structural safety and reversible repairs[282]	Full reconstruction proposed using anastylosis where possible, combined with new stone for lost elements. Project began with Syrian-Russian cooperation[283] but was halted in 2024 pending UNESCO review and new international partnerships[284].	*Crac* demonstrates that gradual, minimal intervention is possible even under difficult conditions. *Palmyra's* Arch raises the question of whether total reconstruction of a symbolically targeted monument requires different ethical justification.
International Involvement	Multi-partner cooperation: Syrian Orthodox Church, Hungary Helps Agency, and ALIPH working alongside DGAM[285]. Structured	Initially Syria-Russia bilateral cooperation (2021–2024), with Russian archaeological institute providing expertise [286]. Project halted pending UNESCO review of detailed restoration plan. 2025	*Crac* demonstrates successful multi-lateral cooperation with diverse actors. *Palmyra's* Arch highlights risk of bilateral projects proceeding without

[277] Kennedy 1994
[278] ICCROM 2023
[279] ICCROM 2023
[280] UNESCO 2025
[281] Al-Maqdissi 2018
[282] DGAM 2021
[283] Abdulkarim 2021
[284] UNESCO 2025
[285] UNESCO 2024
[286] Abdulkarim 2016

	agreements within UNESCO framework.	World Heritage Committee requested alternative partnerships and funding[287].	full UNESCO oversight, and the challenges of restarting halted initiatives.
Documentation Basis	Laser scanning, 3D modeling, and detailed damage assessment before intervention[288]. Pre-war surveys and material analysis informed all decisions[289].	3D digital models created from historic photographs and surviving fragments[290]; stone samples collected and analyzed for material matching. Documentation phase completed 2021–2022[291].	Both cases confirm RQ3: documentation is foundational. Palmyra's digital archive demonstrates how pre-war photography enables reconstruction even after destruction.
Community and Symbolic Engagement	Syrian Orthodox Church's involvement framed as assertion of Christian presence in Syria's future[292] . Project demonstrates inter-communal cooperation and national identity[293].	The Arch carries immense symbolic weight as Palmyra's iconic monument[294]. Its proposed reconstruction is seen as act of cultural defiance against *ISIS* erasure but raises authenticity debates[295] .	*Crac* shows how heritage can unite communities across sectarian lines. Palmyra's Arch illustrates the tension between symbolic need and conservation orthodoxy.

Table 2: Comparison of conservation criteria between *Crac des Chevaliers* and the *Triumphal Arch of Palmyra*

Conclusion

The experiences of *Crac des Chevaliers*, the *Triumphal Arch of Palmyra*, and *the Great Mosque of al-Nuri* in *Mosul* together offer *Aleppo* a rich and nuanced set of lessons for post-conflict recovery. *Crac* demonstrates that a gradual, minimally invasive approach—grounded in multi-partner cooperation, reversible repairs, and rigorous documentation—can succeed even under constrained circumstances, prioritising structural safety and stabilisation over symbolic immediacy.

Palmyra's Arch embodies the powerful symbolic dimension of reconstruction: a monument deliberately targeted as cultural cleansing may demand a more assertive act of rebuilding to reaffirm identity and defy erasure, yet its stalled progress warns that bilateral projects without sustained international oversight risk legitimacy crises.

[287] UNESCO 2025
[288] DGAM 2021
[289] Biller 2006
[290] UNOSAT 2022
[291] Abdulkarim 2021
[292] ICCROM 2023
[293] UNESCO 2024
[294] Burns 2009
[295] ICOMOS 2022

Mosul provides a compelling third model: a UNESCO-led international architectural competition that placed community consultation at its Centre, balancing historic authenticity with contemporary needs through an integrated complex that includes a museum, school, and public gardens. Its emphasis on transparent process, local ownership, and the reconciliation of heritage with social function offers a replicable framework for *Aleppo's* own iconic landmarks.

Together, these cases confirm that documentation is irreplaceable, that local ownership is essential, and that reconstruction must serve not only the urgent need for normalisation but also the long-term responsibility to preserve the city's complex, wounded, yet enduring identity for future generations.

CHAPTER 2:

2- *THE ANCIENT CITY OF ALEPPO:* CONTEXT, DAMAGE, AND RECOVERY

SECTION 2-1:

2-1- *Contextual framework: the historical and urban layers of Aleppo*

This historical overview, while detailed, is not intended as an exhaustive historiography. It is specifically curated to highlight the recurring cycles of destruction and renewal in Aleppo, and to establish the ʿOttomān period as the key architectural layer under consideration for the post-war rehabilitation proposals in this thesis.

2.1.1 Introduction: A City Forged by Resilience

This thesis addresses an alternative study period focusing on the *ʿOttomān* era, when *Aleppo* was part of the *ʿOttomān* Empire from 1516 to 1918.

During this time, architects and artisan integrated their own techniques with *ʿOttomān* cultural heritage and architecture design creating a unique hybrid style. The historical overview does not aim to be a comprehensive chronicle of *Aleppo*. Instead, it is structured to serve two specific purposes for this thesis. First, it will trace the city's long history of seismic and man-made destructions, demonstrating that reconstruction and adaptation are not new phenomena for *Aleppo* but are woven into its urban DNA.

Second, it will focus on the architectural and urban transformations of the *ʿOttomān* era (1516-1918), as the monuments most severely damaged in the recent conflict—and those which form the core of this thesis's case studies—date from or were heavily remodeled during this period.

The buildings in *Aleppo Ancient City* reflect multiple layers of its rich history. It is also believed that the ancient city is constructed over extensive archaeological deposits.[1] The emergence of the *ʿOttomān* Empire[2] heralded a new era of prosperity and expansion for *Aleppo*. By the sixteenth and seventeenth centuries, *Aleppo* became the third largest city in the *ʿOttomān* Empire [Fig 13]. Due to population growth, the *ʿOttomāns* worked on expanding the city, providing necessary facilities, and

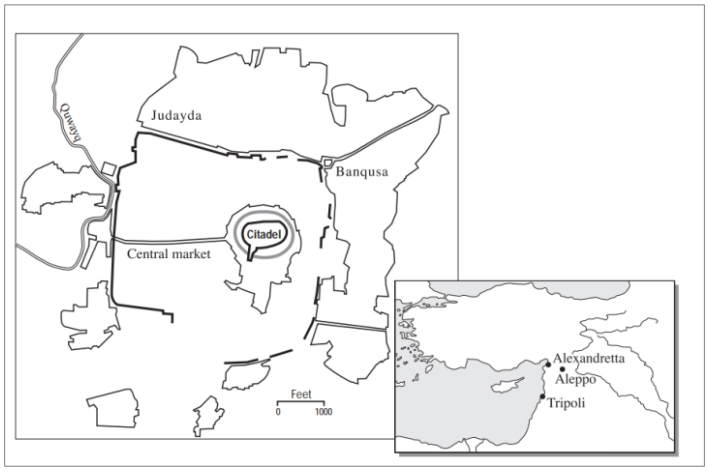


Fig 13: Map of Aleppo during the ʿOttomān *Empire*

[1] Burns, 2017
[2] Masters, 1988

establishing new neighborhoods outside the walls[3]. Most of these neighborhoods, such as *Al-Jdeïdé* district, were reserved for the wealthy and featured magnificent decorative elements and materials. The houses of the *Al-Jdeïdé* district date back to the sixteenth and seventeenth centuries and represent the homes of the bourgeoisie of *Aleppo*, distinguished by their creative designs and embellishments[4].

Understanding this specific layer is crucial for assessing damage and proposing authentic rehabilitation strategies. "This thesis highlights the historical and descriptive approach to explore the history, design, and decoration of the damaged monuments during the *ʿOttomān* period by the war in the Ancient City located *Taḥt al-Qal'a* (below the citadel). It will also highlight one house in the *Al-Jdeïdé* district known as the (*Bayt Ajqbāsh*), which contains unique examples of architectural design.

2.1.2 The Enduring Legacy of Place: Geography and Name

Geographical Location

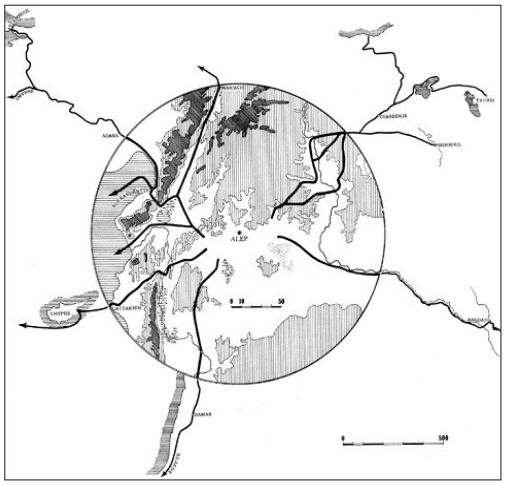


Fig 14: The roads knot (within a radius of 100 km around Aleppo.

Aleppo rightfully occupies its place among the great cities of the world, renowned for its astonishing architecture, magnificent fortifications, vibrant population, and bustling trade and construction activities [Fig 14]. The city is situated at a latitude of 36.12 degrees north of the equator and a longitude of 37.10 degrees east of Greenwich,[5] standing at an elevation of 370 to 440 meters above sea level.[6] Located on a plateau in the northwestern *Syria,* approximately 100 km from both the *Mediterranean Sea* to the west and the *Euphrates River* to the east*,* the city lies on the alluvial

[3] Watenpaugh, 2004
[4] Burns, 2017
5 Mostras 2002: 251
[6] Al-Naʿsān: 1-11

plain of the small *Quieq river* [7] at 379m above sea level. This river, which descends from the last foothills of *Taurus* Mountains, provides a constant water supply. In addition to the *Quieq river*, groundwater resources are also crucial for the region's water supply. The overall suitability for agricultural production can be assessed based on climate, topography, groundwater resources, and soil types.

Aleppo is neither a river city like *Cairo* nor an oasis city like *Damascus*. Instead, it has always been a multifaceted city, its success built on a combination of topography, agriculture, trade, and above all, its industrious inhabitants[8].

The central location of the city is further underscored by the fact that the worship center of the storm god *"Ḥadd"* was situated here [9]. The need for adequate rainfall for rain-fed agriculture in an area characterized by substantial annual rainfall variation formed the foundation for this cult[10].

Regarding the subsistence-based economy throughout the interior regions of *Aleppo*, the storm god's sanctuary played a vital role for survival; people relied on faith[11]. Consequently, *Aleppo* provided a central role in worship due to its location among various groups of hills in the subsistence-based regions. Additionally, administrative functions appear to have been significant since the Bronze Age[12].

Historically, *Aleppo*, served as a major stop for caravans traveling from cities like *Damascus, Bosra, Esfahan and Istanbul. Aleppo* is recognized as one of the mother cities of the *Levant* and one of the original urban centers in *Central Asia*, located in a province covering the largest area in *Syria*. In ancient times, this region was known as *Aleppo*, referred to as *Syria Kwmjān* meaning *"Syria of the plateaus [13]"*.

The development of extensive trade networks highlighted the role of *Aleppo* as a *"land bridge"* the city could easily source resources from the surrounding highlands of *Anatolia* and other places,

[7] Ruppin 1920: 7-8
[8] Burns, 2017
[9] Klengel 1956: 92
[10] Burns, 2017
[11] Burns, 2017
[12] Burns, 2017
[13] Al-Ghazzī 1952: 24

then redistribute them[14]. *Aleppo* benefits from this strategic location on cultural borders. Cotton, wheat, almonds, melons, figs, and wine are cultivated to the north and west of the city, while wheat, barley, and millet are grown to the south and east[15].

Aleppo has expanded significantly, stretching out toward the *Euphrates*. It is considered the most important market for trading goods from these various agricultural regions [16]. Facilitates easy access to raw materials, particularly metals, silver, and gold from southeastern *Anatolia,* copper from *Alashiya* (modern-day Cyprus), timber, especially the famous cedar from *Lebanon*[17].

Aleppo, from the outset, is a multifaceted city, with its success to have been a combination of topography, agriculture, trade, and above all, industrious inhabitants. In fact, this diverse composition may contribute to its continuous civil life over millennia of habitation. The size and number of *Khāns* in the city reflect the city's scope, importance, and role as a commercial center. Among the *ʿOttomāns* era cities, the largest and most elaborately decorated *Khāns* are found in *Aleppo*[18].

Name of the City:

Aleppo (Ḥalab) has been referenced in historical records and archaeological inscriptions for over forty-five centuries. In the Akkadian era, it was referred to as *Yarmouth* and *Arman*. During the period of the Kingdom of *Ebla,* it was called "*Armi*" and "*Khalma*" and the name of "*Khalab*" appeared in the Babylonian *Mari* texts dating from the Amorite era and Kingdom of *Ymkhāḍ*). The ancient district of "*Kallasa*" in *Aleppo* was noted as "*Kalasso*" in a"*Mari*" tablet from around 2850 BC. The name "*Aleppo*" which has persisted through the ages, has been recorded in various forms, including (*Khalobo*), (*Ḥalabko*), (*Ḥalba*), (*Ḥalbas*), (*Ḥalbo*), (*Ḥalab*), and (*Khalappa*). There are different schools of thought regarding this name[19]. The origins of this name are subject to various interpretations, with the most persuasive stemming from the renowned *Aleppo* scholar, *Khayr al-*

[14] Burns, 2017
[15] Burns, 2017
[16] Wirth 1971: 389
[17] Burns, 2017
[18] Raymond 2008: 738
[19] This research was drawn - in several of its paragraphs - from a collection of articles and scattered lectures by the researcher "*Muḥammad Qajjah*" who specializes in the heritage of *Aleppo,* he was the chairman of the board of *al-ʿĀdiyāt* Antiquities Association.

Dīn al-Asadī, in his book "*Aleppo: The Linguistic Side of the Word*". He posits that *Aleppo* "*Ḥalab*" is derived from two components, "*Ḥal*" and "*Lab*," together meaning "the place of gathering," a concept that is over forty-five centuries old [20].

Ibn al-Khaṭīb's historical records of *Aleppo* intriguing insights into the city's roots and the numerous names it has held over time. He emphasizes the diverse cultural influences that have shaped *Aleppo*, noting its names in Greek (*Barua* or *Bayru*), Mandaean (*Maboug*), and Arabic (*Aleppo*)[21].

The etymology of *Aleppo "Ḥalab"* offers further interest, with *Al-Ghazzī,* suggesting it may be named after its founder, *Ḥalab ibn al-Muhrī ibn almknnaf ibn al-jānn*.[22] He recounts a popular tradition that *Aleppo* and *Homs,* both sons of *Mahri*, founded their respective cities, thereby connecting the cities' names directly to their founders.

Ibn al-Khaṭīb also delves into the historical significance of the region, discussing the territorial divisions among kings and the importance of cities like *Qansserin* illustrating how names and identities can evolve with changing political and cultural landscapes. Furthermore, he highlights geographical features such as *Jabal Nebo*, and their association with local deities, reflecting the intricate relationship between geography, mythology, and urban development in *Aleppo's* history. This comprehensive perspective emphasizes the city's rich cultural heritage and the complexity of its identity throughout the ages [23].

The distinctive color of *Aleppo's* soil and stones has led to the city and its *qal'a* being referred to as "*al-Shahbā'*." Many structures in *Aleppo* are constructed from white stone. Additionally, local tradition holds that the Arabic name "*Ḥalab*" originates from an account of the Prophet *Ibrāhīm* stopping at the site to milk (*Ḥalaba*) his goat [24].

[20] Al-Asadī 1972
[21] Burns, 2017
[22] Al-Ghazzī 1952: 21
[23] Ibn Khaṭīb 2018
[24] The earliest text recording the founding of *Ḥalab* by *Ibrāhīm* is, *al-Ḥamawī* 1906-1907

2.1.3 Historical background: A Chronology of Destruction and Renewal

Aleppo is one of the oldest continuously inhabited cities in the world; it has been inhabited since perhaps as early as the 6th millennium B.C. The Ḫittites, Āṯūr, Akkadians, Greeks, Romans, Umayyad, Ayyubid, Mamlūk, and ʿOttomāns left their marks on the city's architecture. Chronological classification of the eras witnessed by *Aleppo* According to the stages of government and countries[25].

2.1.3.1 The Ancient period (3500 B.C. – 312 B.C.): Foundations and the First Cycles

It is difficult to determine the precise age of the first settlements in *Aleppo* because ancient traces of the city have been obliterated by modern buildings, thus limiting archaeological research[26]. If *Aleppo* is not the oldest city in the world, it is certainly one of the oldest cities in the world. It was one of the most ancient and prosperous cities, or the pinnacle of excellent civilization between the East and the West[27].

On this, historians, famous researchers, and scholars agreed, and many others mentioned that the name *Aleppo* began during the third millennium BC. Excavations at *Tall al-Sawdā* and *Tall al-Anṣārī*, just south of the *Ancient City of Aleppo* show that the area was occupied by at least the latter part of the 3rd millennium B.C.

However, some recent archaeological evidence indicates that *Aleppo's* original inhabitants dwelt in caves located south of the town, adjacent to the southwestern corner of the *Aleppo* in what is now known as the *al-Magayir quarter*. When caves were replaced by man-made dwellings, the ancient Aleppiens established their first community in *Tall al-Sawdā*, near the western side of the caves. At a later stage, the village moved to what is now known as the *al-'Aqabé* quarter at *Tall Ḥalab*[28].

[25] Kujjah 2022: 6
[26] Burns, 2017
[27] Burns, 2017
[28] Burns, 2017

Cuneiform tablets unearthed in *Ebla* and *Mesopotamia* noted *Aleppo's* commercial and military proficiency, due to its strategic trading point midway between the Mediterranean Sea and Mesopotamia.

The Early Bronze Age saw the flourishing of *Ebla* concerning the commercial network surrounding it, as evidenced by the palace archives of the city where trade is certainly the best documented and developed sector of *Eblaite* economy, concerning mainly textiles and metals[29]. *Aleppo* and its contemporary neighbor *Ebla* enjoyed immense military, political, and economic power, which enabled both to build large and sophisticated metropolises.

During the first half of the second millennium BC, political power moved to the north and *Yamḥāḍ* became the mightiest kingdom in *Syria*, as we know from documents discovered in the middle *Euphrates* city of *Mārī*.

The story dating back to 1765 BC, read on a clay tablet, recounting the long journey of *Zimri-Lim*, king of *Mari*[30], towards the Mediterranean, is significant[31]: *Aleppo* or *Yamḥāḍ* was an important stop on the *Zimri-Lim* route, firstly because of its location between the bend of the *Euphrates* and the *Mediterranean*[32].

As such, alliances with the Aleppine power were essential for the king of *Mari*[33]. From *Aleppo*, he was accompanied by his son-in-law, King *Yarim-Lim* of *Aleppo*, his wife and son, and several members of the court to *Ugarit*, whose king was one of *Yarim-Lim's* followers[34]. They stayed in *Ugarit* for a month, where they met merchants from *Crete* and *Cyprus*, who were carrying on important trade with the Middle East[35]. At one time, this territory extended from northern Mesopotamia to the Mediterranean, but the large empire was short-lived, and *Aleppo* was soon dominated by the *Mittani* and, later, from the middle of the fourteenth century BC,

[29] Archi 2010: 3-17

[30] Klengel, 1992

[31] Charpin in HAL

[32] Charpin in HAL

[33] Sasson, 1969

[34] Arkhipov, 2022

[35] Klengel, 1992

the *Hittites*[36]. As a result, the city lost significance and became a center of only regional importance.

By the end of the second millennium BC, when immigrant *Semitic Arameans* and Indo-European Luwians shaped the history of Central and Northern *Syria*[37], *Aleppo* continued to be famous as the spiritual home of the storm god *"Aleppo"* situated on the Acropolis of the city[38]. This Acropolis, which became a *qal'a* organized over the centuries, had a defensive value, but this hill was above all a religious site, the site of the temple of the great god of the air, called by various names: *Ḥadd*, *Ḥaddu*, *Ada, Ba'l*, *Tesshop* (Hittite), or also the "*God of Ḥalab* ", important for all the peoples of the Middle East, and a place of pilgrimage. Signs of a third-millennium temple have been identified[39]. Excavations, which resumed in 1996, have freed basalt relief panels from the stone wall block, some dating back to the 14th century BC, as well as older foundations[40]. The remains of an extraordinary monumental temple with rich decorative reliefs devoted to this deity have recently been excavated on the *qal'a* hill by a joint Syrian German team[41]. This is one of the most important recent archaeological discoveries in *Syria* because for the first time it documents *Aleppo's* history for the entire period between the early Syrian and the *Aramean* period[42]. Visits to the temple gradually declined during the Greek and Roman periods, in parallel with the decline of the city[43].

Aleppo, like many other ancients Near Eastern cities, has undergone a continuous cycle of destruction and renewal, largely due to its strategic location and significant influence in the region[44]. Each time it faced devastation, *Aleppo* managed to rise from the ashes, demonstrating remarkable resilience. Only a handful of ancient Near Eastern cities, such as *Aleppo* and *Damascus*, have withstood this relentless pattern of destruction and regeneration[45].

[36] Bryce, 2009
[37] Kohlmeyer, 2009
[38] Kohlmeyer, & Gonnella, 1998–2005.
[39] Kohlmeyer, & Gonnella, 1998–2005.
[40] L.I.S.A. Wissenschaftsportal Gerda Henkel Stiftung, 2020
[41] L.I.S.A. Wissenschaftsportal Gerda Henkel Stiftung, 2020
[42] Al-Sayyid 2015: 21
[43] Kohlmeyer, & Gonnella, 1998–2005.
[44] Blanke, 2018
[45] Blanke, 2018

2.1.3.2 Hellenistic-Roman Time (312 B.C. – 325 A.D.): The Birth of *Beroea*

Almost none of the new cities built by the Greeks and Romans have survived to the present day; most of them were abandoned after the collapse of the Roman Empire or during the Byzantine occupation of the Middle East[46]. The Battle of *Issos,* fought in 333 BC on the Gulf of Alexandretta, northwest of *Aleppo*, marked a pivotal moment in the history of the ancient Arab East[47]. It resulted in a decisive victory for Alexander the Great over the Persian forces and signaled the onset of a new epoch in the history of *Syria* and *Aleppo* —the Hellenistic era[48]. This period was characterized by the significant interaction, exchange, and mutual influence between the newly introduced Greek civilization and the ancient civilizations of the East.

The first significant phase of urban organization in *Aleppo* occurred during the Hellenistic period, when *Seleucus I* established the settlement of *Beroea* (the Greek name for *Aleppo*) near *Tall al-'Akabé* between 301 and 281 BC. *Sauvaget* identified this location as the site of the prehistoric settlement of *Aleppo* [49].

Beroea became a key center of the Seleucid Empire, which extended from the *Mediterranean* in the west to *India* in the east[50]. One of *Seleucus I's* notable achievements was the founding of several new cities in *Syria,* designed in the Greek architectural style[51]. Among these were the four sister cities: *Seleucia, Antioch, Latakia, and Apamea,* all named in honor of members of the *Seleucid* royal family. Strategically located along the trade routes connecting the coast to the *Euphrates*, *Beroea* controlled significant traffic and commerce. The city featured a fortified *qal'a* on its outskirts, integrated with the surrounding walls.

The initial development of *Beroea* included the strigatio, or drainage, of the valley along the *Queiq* river[52]. This initiative served two vital purposes: it drained the surrounding areas and allowed for the division of urban space into well-defined blocks[53]. The layout of these blocks

[46] Burns, 2017
[47] History Hit,2018
[48] Burns, 2017
[49] Sauvaget, 1939: 59- 63
[50] Sauvaget, 1939
[51] Sauvaget, 1939
[52] Sauvaget, 1939
[53] Sauvaget, 1939

remains visible today, despite extensive renovations during the ʿOttomān period, particularly in the urban area of *al-Madīnat* and around the central *sūqs* near *al-Masjid al-kabīr*[54].

The architectural design of *Beroea* markedly differed from that of ancient Syrian Aramaic cities, resembling instead the layout of Greek cities[55]. This characteristic design can be observed in all Hellenistic cities established by the Seleucids in Syria, with the key features in *Aleppo* outlined as follows:

- A wall surrounding the city, extending to the four geographical directions with precision, i.e. to the north, south, east, and west, and is penetrated by gates on its four sides, centered in the middle of each side of the wall[56].

- A high city, or "acropolis", is at the same time a *qal'a* to protect the residential city, a center for the colony's armies, and a temple for the gods[57].

- A wide main street, which penetrates the city from west to east, with a width of about 25 meters, starting at the entrance to the *Bāb Anṭākiyah* with an arch with three arches, and ending at the *qal'a*. This wide street, which is the city's largest artery, is paved with large stones or marble, and on both sides are two rows of tall columns, behind the columns, on each side, is a covered portico, and behind each of the porticoes are shops for trade[58].

- Streets and alleys intersect in a complete quadrangle, from east to west, and from north to south. The rectangular streets extending from east to west and parallel to the wide street are about 124 meters long and 5 meters wide. As for the opposing streets, extending from north to south, they are 48 meters long and 3 meters wide.

[54] Sauvaget, 1939
[55] Sauvaget, 1939
[56] Sauvaget, 1939
[57] Sauvaget, 1939
[58] Sauvaget, 1939

- To the north of the wide street, and almost in its middle, appears the city square, or "agora", where the people gather, who, according to the custom of Greek cities, constituted the supreme authority in the city[59].

Major civil and military celebrations take place there, and around it is the government and judicial departments. The water canal that the Seleucids sought to develop by extending from *Ḥaylān* to *Aleppo* led to it, replacing the polluted waters of the *Queiq* river[60]. As for the wide street that used to cross the city from the *Bāb Anṭākiyah* to the *qal'a*, it was gradually demolished along with its columns, arcades, and shops, and in its place, a group of rectangular *sūqs* arose, and if we were to dig into them today, we would find between their walls traces of Byzantine columns, arcades, and shops[61].

During the Roman period, the population in northern *Syria* grew significantly, a trend that continued under Byzantine rule well into the 5th century. By late antiquity, *Beroea* had become the second-largest city in *Syria*, following *Antioch*, which was the capital and the third-largest city in the Roman Empire.

Archaeological findings reveal a high population density in settlements between *Antioch* and *Beroea* that persisted until the 6th century CE[62]. This agrarian landscape now features the remnants of large estate houses and significant churches, including the Church of *Saint Simeon* Stylites[63]. Additionally, *Saint Maron*, a prominent figure in the Maronite Church, is believed to have been born in this region, with his tomb located in *Brad*, west of *Aleppo*[64].

Due to its advantageous geographical location, *Beroea* has served as a vital transportation hub since ancient times[65]. Its significance grew during classical antiquity when the Seleucids established numerous cities in northern *Syria*, making *Beroea* a key part of their empire[66]. The Romans later recognized *Syria's* strategic importance, transforming it into the center of their

[59] Sauvaget, 1939
[60] Sauvaget, 1939
[61] Sauvaget, 1939
[62] Burns, 2017
[63] Loosley Leeming & Tchalenko, 2019
[64] Burns, 2017
[65] Burns, 2017
[66] Sauvaget, 1941

road network in the East. As a result, *Beroea* became a crucial military and commercial crossing point for routes to *Mesopotamia*, *Anatolia*, *Egypt*, and the *Arabian Peninsula*[67].

Today, remnants of this ancient infrastructure can still be observed, such as a section of the main road connecting *Antioch* with *Beroea* and *Qansserin*. This stretch, located near the village of *Kafr Karmin* in the southwest of *Beroea*, measures 1,200 meters long and 5.6 meters wide[68]. It exemplifies a well-constructed road, built on a solid foundation and entirely paved with cut stones[69]. The upper surface was intentionally scratched to prevent horses from slipping. This ancient road forms the basis of the current route linking the two cities[70]. Additionally, a distance stone discovered along this road indicates that it was restored during the reign of Emperor *Marcus Aurelius* (161-180 AD). The Peutinger Table highlights another significant route, the main northeastern road connecting *Beroea*, to the *Euphrates* via *Manbij* (Hierapolis) and *Jarablus* (the ancient Carchemish and Seleucid-Roman Zeugma). This road was heavily utilized by Roman armies in their campaigns against the Parthians. *Emperor Septimius* Severus also took measures to enhance this road, adding distance stones, some of which have been found in the northeast of *Beroea* (*Sheikh Najjar*) and at the site of *Arimah*, located between the cities of *Al-Bāb* and *Manbij*.

2.1.3.3 Byzantine Period (395 A.D. – 634 A.D.): Monasticism and Decline

In 395 ADS, the Roman Empire was divided, and *Syria* came under Byzantine control. Under Emperor *Justinian*, the eastern provinces faced frequent attacks in the sixth century from the Sassanids, whose aggressive king *Khosrow I* briefly rejuvenated *Persia* to its former glory[71].

In 540, *Khosrow* invaded Syria, setting fire to *Aleppo*; however, he could not capture its fortress (*qal'a*)[72]. In response, *Justinian* reconstructed the city's defenses, yet its prosperity continued to suffer due to the persistent threat of Persian incursions[73].

[67] Burns, 2017
[68] Monuments of Syria, 2013
[69] Monuments of Syria, 2013
[70] Monuments of Syria, 2013
[71] Hitti, 1951
[72] Hitti, 1951
[73] Burns, 2017

During the Byzantine era, religious life profoundly influenced people's daily activities, leading to the widespread construction of churches and monasteries throughout the region[74]. Pilgrimages to sacred sites became increasingly popular, and the phenomenon of monasticism flourished in northern *Syria*[75]. One of the key figures in this movement was *Mar Ephrem*, who died around 373 AD and is regarded as one of the founders of monasticism in the area.

Saint Simeon the Stylite emerged around 386-459 AD and is renowned for his ascetic lifestyle and dedication to worship. He spent approximately fifty years praying, worshiping, and preaching from his famous column along the road between *Aleppo* and *Antioch*, which became a significant pilgrimage site for worshippers from diverse regions[76].

The ruins of abandoned cities, often referred to as "dead cities," in the Mount Simeon area to the west and southwest of *Aleppo* serve as enduring evidence of the proliferation of monastic life and Syrian Christian architecture during this period. Notable examples include the churches of *Al-Bara, Brad, Qalb Lawzah*, and *Serjilla*, as well as sites in eastern *Aleppo*, such as *Al-Andarin* and *Khnāṣr*[77]. These structures illustrate the prosperity and cultural richness of the region during the Byzantine era. The remnants of Byzantine *Aleppo Ancient City* are limited, with a notable fragment being a sixth-century cathedral that has now become part of the "*Madrasat al-Ḥalawyeh*[78]*."*

2.1.3.4 Islamic Times (636 A.D. – 1516 A.D.): A New Urban Order

The civilization of the *Levant* since the Islamic conquest was characterized primarily as an urban and commercial civilization. It did not witness large-scale agricultural activities like those that took place in *Mesopotamia* or the *Nile* Valley. This means that agriculture was not the foundation of the political entities that emerged on its land; rather, it coincided with other active economic activities in the *Levant*. Nonetheless, agriculture in the western parts of the region, particularly in the *al-Biqā'* Valley*, Palestine, Homs and Hamah*, became a significant financial

[74] Burns, 2017
[75] Tchalenko, 1953-1958
[76] Tchalenko, 1953-1958
[77] Ring, Waston, Schellinger, 2014: 46
[78] Ring, Waston, Schellinger, 2014: 46

source for those in power and influence residing in cities such as *Damascus* and *Aleppo,* among other urban centers[79] .

Aleppo was captured during the caliphate of *'Umar Ibn al-khiṭāb* in the year 15 of the Hijra, which corresponds to the autumn of 633 AD. The conquest was led by *Khālid ibn al-Walīd* and *Abū 'Ubaydah*. The city was taken peacefully, while its *qal'a* was seized by force[80].

Muslims entered *Aleppo* through *Bāb Anṭākiyah* and established a mosque at that location known as the *al Ghḍā'ry masjid*, often referred to as the *Shu'ayb masjid*. This *masjid* holds historical significance as one of the early places of worship built by Muslims in *Aleppo* following their conquest of the city.[81]

In the year (578 AH/1182-1183 AD), *Aleppo* came under the control of the Ayyubid[82]. In (657 AH/1258-1259 AD), it was captured by the *Tatars*, who were linked to *Genghis Khān*, but they withdrew shortly after[83]. They returned in (658 AH/1259-1260 AD) but left again[84]. Following this period, the city fell into the hands of the *Turkish*, specifically the Mamlūks of the Ayyubid state. In (892AH/1486-1487 AD), *Aleppo* was taken over by the *Circassian* Mamlūks, part of the Turkish state, who retained control until (922 AH/1516-1517 AD) when it became part of the ʿOttomān Empire, which emerged from one of the branches of the Seljuk state[85].

The history of *Aleppo* from the Islamic conquest to the present day indeed spans more than fourteen centuries, and as highlighted by historian *Sauvaget*, it can be divided into key eras [86]:

[79] Saleh 1974: 218-236.
[80] Al-Ghazzī 1952: 1006
[81] Ibn al-ʿAdīm 1951: 28
[82] Tabbaa, 1997
[83] Burns, 2017
[84] Burns, 2017
[85] Burns, 2017
[86] Sauvaget 1939

A. The Caliphate Era (16-222 AH / 636-836 AD):

During this period, *Aleppo* did not play a prominent role in the grand *al-Khulafā' al-Rāshidūn* (narrative of the *Rashidun*), Umayyad, and 'Abbasid's Caliphates during their golden ages[87].

During the Umayyad era, *Aleppo* emerged as a focal point of the urban transformation occurring throughout the *Levant*, particularly around the revered *al-Masjid al-Aqṣá*. Caliph *'Abd al-Malik Ibn Marwān*, renowned for his exquisite architectural contributions to *al-Aqṣá*, established it as a site of administration and as the headquarters of the emirate, alongside the construction of his palace and the *al-Masjid al-kabīr*[88].

Historian *Ibn al-'Adīm* notes that Caliph *Sulaymān Ibn 'Abd al-Malik* (96-99 AH / 714-717 AD) constructed the first congregational *masjid* in *Aleppo*, which rivaled the grandeur of the *Damascus's masjid* in its decorations.[89] *Sulaymān* endeavored to ensure that the *Aleppo's masjid* construction matched the level of craftsmanship exhibited in his brother's work on the *al-Masjid al-Umawīy* in *Damascus*[90].

With the transfer of power to the *al-'Abbasids in* (132 AH/ 749-750 AD), *Iraq* became the epicenter of the Caliphate, resulting in *Damascus* losing its status as the capital of the Arab Islamic state and experiencing economic decline. In contrast, *Aleppo* began to rise in significance[91].

In the second half of the third century AH (mid-800s AD), *Aḥmad Ibn Ṭūlūn* set his sights on the *Levant* after being appointed governor of *Egypt* in (257 AH/870-871 AD). Favorable circumstances allowed him to expand his role into the region[92]. However, by (284 AH/897-898 AD), *Aleppo* once again came under the authority of the Caliph. In 325 AH / 936 AD, the Levant, including *Aleppo*, was incorporated into the realm governed by *Muḥammad ibn Tghj al'khshyd*, the governor of *Egypt*.

[87] Burns, 2017
[88] Hitti, 1951
[89] Ibn al-ʿAdīm 1951
[90] Knost, 2009
[91] Burns, 2017
[92] Hitti, 1951

Toward the end of the *Abbasid's* era, *Aleppo* experienced a notable period of cultural, intellectual, and civilizational flourishing. The residents of *Aleppo* excelled in various fields, particularly in the clothing industry and the construction of large homes and renowned mosques, signaling a vibrant urban life and artistic expression[93].

B. The Post-Caliphate Era (223-532 AH / 837-1128 AD):

B-1. Aleppo in the time of the Umayyad and *Abbasid's*

Aleppo was under the rule of the *Damascus* Umayyad caliphs from (40-133 AH /661-750 AD). The Muslims built the monumental "*al-Masjid al-kabīr"* on the site of the ancient agora, which is still the city's most important place of worship[94]. This first *masjid* was built in (96-97 AH/715 AD) on a public street at the old west gate of the city by walling in its arches and part of the colonnaded street[95].

During most of *Abbasid's* caliphate, from (132–656 AH/750 to 1258 AD), *Aleppo* was little more than a provincial hinterland. In 994 the city fell into the hands of *Sayf al-Dawlah al-Ḥamdānī*, who built a palace on the *qa'lat*, and his court became known as a center of literary activity, but this did not save the city from siege, capture, and destruction by the Byzantine general *Nicephorus Phocas* in 358-359 AH/ 969 AD)[96].

B-2.Aleppo in the time of the *al-Ḥamdānīyīn*

During his protracted conflict with *Sayf al-Dawlah al-Ḥamdānī*, *Nicephorus* set fire to *Aleppo* in (351-352 AH/ 962 AD), resulting in the destruction of the city and its *al-Masjid al-kabīr*. Many residents sought refuge among the ruins of the *qa'lat*. Additionally, he damaged significant parts of the city walls, allowing them to fall into disrepair[97].

[93] Al-Ghazzī 1952
[94] Ring, Waston, Schellinger 2014: 46
[95]Ring, Waston, Schellinger 2014: 46
[96] Ring, Waston, Schellinger 2014: 46
[97] Ring, Waston, Schellinger 2014: 46

Sayf al-Dawlah al-Ḥamdānī established a court that sought to emulate the grandeur of the court in *Baghdad* and other major centers of the Islamic world[98]. He gathered a distinguished assembly of poets and scholars, including notable figures like *al-Mutanabbī*, *Abū Firās al-Ḥamdānī*,-*al-Fārābī*, *Ibn Jinnī* and others[99]. He played a crucial role in restoring *Aleppo's* former glory and making it the capital of a flourishing state distinguished by its contributions to art, literature, and scholarship[100]. During his reign, the city experienced a golden age, becoming a crucial front in the defense of the Islamic world against Byzantine incursions[101]. *Sayf al-Dawlah* dedicated much of his time to combatting the Byzantine Empire, which was enjoying a period of prosperity and strength, with several formidable leaders and emperors at the helm[102].

In (351 AH / 962 AD), *Nikephoros*, the supreme commander of the eastern front, successfully captured the city of *Aleppo*, although the *qal'a* remained intact[103]. The Byzantines looted the city, massacred its inhabitants, burned mosques, seized significant spoils, and took many prisoners[104]. *Nikephoros* later retreated after the death of the king's nephew and returned to his territory.

In (405 AH/1014 AD), *ʿAlī Bāshā aljānbwlād* revolted against the ʿOttomān authority and seized *Aleppo* along with other regions for two years, after which the state subdued him and regained control of the territories he had occupied, including *Aleppo*.

B-3-Aleppo in the time of the Seljuk | 1020-1127

Sauvaget notes that around 1085 AD, a noble from *Aleppo* constructed *qa'lat* on a hill outside the old city walls and named it *Qal'at al-Sharīf*.

Ibn al-ʿAdīm recorded that in 1085, *al-Sharīf Abu ʿAlī al-Ḥasan ibn Hibat Allāh alḥtyty al-Hāshimī* built a *qal'a* attributed to him, encircled by a circular wall. He also erected a barrier to

[98] Stetkevych, 2022
[99] Stetkevych, 2022
[100] Ḥusayn, 1986
[101] Bianquis, 1997
[102] Bianquis, 1997
[103] Sullivan, 2018
[104] Garrood, 2008

separate his residence from the city, driven by fears of hostility from the people of *Aleppo*, who resented his rule. However, this wall was destroyed and the *qal'a* was dismantled in 1121 AD.[105], subsequently reintegrating into the city [106].

Sauvaget believes that the period of insecurity following the destruction of *Nicephorus* compelled residents to transform neighborhoods into closed settlements, featuring local *sūqs* to ensure temporary self-sufficiency. These neighborhoods had a large gate that provided security when closed. Additionally, each cluster of houses had an alley leading to it, which featured a small gate at the entrance to enhance security when shut.[107]

Again, the resurgent Byzantine Empire sacked *Aleppo* in 962 AD and occupied it for more than 10 years (974-987 AD). During the Crusades, the city was besieged twice by the Crusaders (1098 and 1124) but not conquered.[108]

B-4.Aleppo in the time of the Zengid/ Ayyubid

As the Crusader siege of *Aleppo* began in (518-519 AH /1124 AD), the judge of *Aleppo*, *Ibn al-Khashshab*, responded to the Crusaders' desecration of graves by declaring the conversion of the Great Cathedral of Aleppo into a mosque named *Madrasa al-Halawiyya*. With the rise of the Seljuk Turks, *Al'tābk 'Imād al-Dīn al-Zinkī* arrived in *Aleppo*, establishing it as his base of power[109].

His son, *Nūr al-Dīn al-Zinkī*, undertook significant renovations, rebuilding the *al-Masjid al-kabīr* and constructing an elaborate minaret. *Nūr al-Dīn* also repaired the city walls, restored the *qal'at*, and revitalized the area by founding large schools with endowments to ensure their financial sustainability. He established a progressive hospital known as the *Bimaristan al-Nūri* and restored the water canal, expanding it to serve the new neighborhoods[110].

[105] Al-Ghazzī 1952: 85
[106] Ibn al-ʿAdīm 1951
[107] Sauvaget 1948
[108] Sauvaget 1971
[109] Nabhān 1964
[110] Nabhān 1964

After *Nūr al-Dīn's* death, *Ṣalāḥ al-Dīn al-Ayyūbī* assumed control and appointed his son *al-Ghāzī* as ruler of *Aleppo*. *Al-Ghāzī* continued the work by restoring the canal and enhancing it with stone coverings, leading to an increase in the number of public baths, which rose to 194 [111].

Al-Ẓāhir Ghāzī fortified the ʿOttomān expansion into the Arab provinces and significantly influenced the social and economic landscape of cities like *Aleppo*, particularly through the interplay of trade, urbanization, and administrative practices[112].

As global trade patterns shifted from overland to maritime routes, the importance of pilgrimage and associated commercial activities grew, providing vital economic stimulation to the region[113].

During this era, the introduction of the *madrasa* took place; it was a *madrasa* within the *masjid* established by a civil or political leader to promote Islamic interpretation or jurisprudence. The *madrasa* was funded through endowment properties, and the income typically came from a piece of land, garden, *sūq,* or a *ḥammām*. (The equivalent institution for Sufis was the *Khānqāh*, of which very little remains in modern Syria). During this period, 82 *madrasas* were constructed in *Damascus* and 47 in *Aleppo*; however, the earliest example of a *madrasa* was found in the annexes of the *masjid Mbrak al-nāqah* in *Bosra*[114].

B-5. *Aleppo* in the time of the Ottomān Opulence[115]

At the beginning of the 16th century, the gaze of Muslims turned towards the rising Islamic power in *Āsiyā Minor* and *Anatolia,* represented by the ʿOttomān Empire, which was at the height of its reputation at that time. Consequently, admiration for the ʿOttomāns increased in both the East and the West, especially among the exploited popular classes, who viewed the

[111] Nabhān 1964
[112] Nabhān 1964
[113] Nabhān 1964
[114] Nabhān 1964
[115] Ḥijāzī 2000

ʿOttomāns as supporters of the truth and protectors of *al-Sharīʿah,* believing that Allah was granting them victory over their enemies[116].

Their conquest of Constantinople in 1453 and subsequent victories were interpreted as divine triumphs. The vast majority of Muslims longed to be "under ʿOttomān rule," except for the feudal classes, the ruling elites, and the Bedouins who regarded the ʿOttomāns with eyes full of hatred and contempt[117].

In the East, Muslims saw the anticipated arrival of the ʿOttomāns as an end to all the evils troubling society, and their love spread widely, to the extent that it stirred jealousy and envy among the Mamlūk sulṭāns of *Egypt* and the *Levant*, where rumors circulated that the ʿOttomāns were of Arab origin, from a *al-Ḥijāz* tribe that inhabited the *Wādī al-Ṣafrā*[118].

When *Sülṭān Selim I* (918-927 AH/1512-1520 AD) ascended the ʿOttomān throne, the ʿOttomān Empire had reached a crossroads. Would it remain in this status and with this degree of expansion as a *Balkan Anatolian* state? Or would it continue its territorial expansion in Europe? Or would it head towards the Islamic East? *Beirut in 1536 Selim I* brought about a revolution in the ʿOttomān military strategy. During his reign, the ʿOttomān advance toward the West stopped or almost stopped, and the ʿOttomān Empire headed the Europe West or almost stopped, and the ʿOttomān Empire headed eastward in the heart of the Arab East[119].

One of the manifestations of the widespread love for the ʿOttomāns was that the peasants in the *Levant* hurried to declare their loyalty to them, and the scholars prayed for them during the Friday sermon, even before the battles broke out between them and the Mamlūks at *Marj Dābiq* in (921-922 AH/1516 AD). In August (921-922 AH/1516 AD), the princes submitted a report to the Mamlūk *Sülṭān Qānṣūh al-Ghūrī*, stating: "O *Sülṭān*, the land of *Aleppo* has slipped from our hands and has fallen into the hands of the son of ʿOttomān, for his name is mentioned there in the Friday sermon and is engraved on the coins[120]."

[116] Ḥijāzī 2000
[117] Ḥijāzī 2000
[118] Ḥijāzī 2000
[119] Ḥijāzī 2000
[120] Ḥijāzī 2000

On the eve of the decisive Battle of *Marj Dābiq*, the Syrian peasants helped the ʿOttomāns in pulling artillery and transporting ammunition. They also sought to obstruct the Mamlūks' mobilization efforts and engaged in hostile actions against them, causing entire regions to rebel against their rule, while resentment awaited them in every village and city[121].

The news of the Mamlūks' defeat at *Marj Dābiq* was a signal for an uprising in *Aleppo*, *Kafr ṭāb, Ṭarābulus, Ṣafad*, and other places, where citizens attacked the Mamlūk garrisons and eliminated them. Thus, uprisings spread throughout the country, leading to the seizure of fortresses and the overthrow of Mamlūk authorities, while a genuine hunt for the Mamlūks began in the rural areas[122].

This recurring pattern of devastation and rebuilding, from the Persian sack of 540 to the Mongol invasions, establishes a critical precedent for understanding Aleppo's resilience and the layered nature of its built heritage, a concept central to the post-war debates on authenticity and reconstruction.

2.1.4 The ʿOttomān Baseline (922-1337 AH/ 1516-1918 AD): The Architectural Layer of the Case Study:

This thesis focuses on the ʿOttomān era (922-1337 AH/ 1516-1918 AD) as it represents the most significant and visible architectural layer of the case study area, *Taḥt al-Qal'a*, and the building, *Bayt Ajqbāsh*. The urban form and key monuments that form the subject of this thesis' rehabilitation proposals were either built or profoundly transformed during this period**.**

2.1.4.1 Political Integration and Urban Expansion:

The ʿOttomān expansion into the Arab provinces significantly influenced the social and economic landscape of cities like *Aleppo*, particularly through the interplay of trade, urbanization, and administrative practices. As global trade patterns shifted from overland to

[121] Ḥijāzī 2000
[122] Ḥijāzī 2000

maritime routes, the importance of pilgrimage and associated commercial activities grew, providing vital economic stimulation to the region.

2.1.4.2 The ʿOttomān Expansion and Urban Development: A Hybrid Identity

- The Period of Foundation and Conquests (922–1009 AH/1516 -1600 AD)

The Mamlūk ruled Egypt, the *Levant*, and *al-Ḥijāz*, and effectively controlled the Caliph of the Muslims in *Baghdad* for over 250 years after they took power in Egypt from *Ṣalāḥ al-Dīn al-Ayyūbī's* dynasty in (647-648 AH/1250 AD). However, by the early sixteenth century, their rule began to decline gradually, particularly due to escalating internal conflicts among army leaders and princes[123].

The relationship between the ʿOttomān and Mamlūk states initially thrived on friendship and alliance, exemplified by the joint efforts of their fleets in the war against the Portuguese. However, tensions eventually arose, culminating in war[124].

The ʿOttomāns, led by *Sülṭān Selim I*, faced off against the Mamlūks under *Qānṣūh al-Ghūrī*. The Mamlūk army was severely weakened by internal treachery, the absence of ʿOttomān artillery—which the Mamlūks failed to incorporate into their forces—and the numerical superiority of the ʿOttomān forces. As the relationship between the two powers soured, *al-Ghūrī's* attempts to negotiate peace with *Sülṭān Selim I* and establish a treaty proved unsuccessful. Ultimately, they resorted to conflict, meeting at *Marj Dābiq* near *Aleppo*[125].

In (922 AH/ 1516 AD), *Sülṭān al-Ghūrī* died in the decisive battle of *Marj Dābiq.* The ʿOttomān victory in this battle paved the way for *Selim I* to easily enter *Damascus*. This battle, which changed the course of the history of the entire region, achieved three important results:

1. Raising the military and psychological morale of the ʿOttomāns to continue their campaign to eliminate the Mamlūk state.

[123] Davis 2010
[124] Davis 2010
[125] Davis 2010

2. Securing control over the Levant and opening the road to *Egypt* and the *al-Ḥijāz* to the ʿOttomāns at the same time.
3. It was a factor in completing the unity of *Anatolia*.

On 29 Rajab 922 AH/28 August 1516 AD, *Selim I* marched to *Aleppo*, where he was welcomed by the people gathered in the *Blue Square*, and the governors of the city's *qal'a* presented him with its keys[126].

In the city's *al-Jāmiʿ al-kabīr*, *Selim I* performed Friday prayers, during which the preacher referred to him as the "Custodian of the Two Holy Mosques," a title previously held by the Mamlūk sülṭāns, known as the "Protector of the Two Holy Mosques." *Selim I* also seized the treasuries of *Sülṭān Qānṣūh al-Ghūrī*, which contained vast amounts of money, gold, silver, and other precious materials[127].

Caliph al-Mutawakkil and the three chief judges were received by *Selim I,* who seated the Caliph beside him but later took precautions to prevent his escape. *Selim I* organized the administration of *Aleppo,* notable for its strategic location and commercial significance. He appointed his commander*, Qarah jah Aḥmad Bāshā,* as governor, making *Aleppo* the first Arab ʿOttomān province, and named *Sülṭān Kamāl Jalabī* as its judge[128].

Following this, he began making preparations to conquer *Egypt* and dismantle the Mamlūk state after having established control over the *Levant*. In turn, The Aleppenians welcomed the ʿOttomān conquest, as the city could benefit from the vast trade network of the great empire that stretched from the *Mediterranean* to the *Euphrates*[129]. The *Sülṭān Selim I* entered *Aleppo* in Rajab of the year 922 H and received its *qal'a* safely. *Sülṭān Selim* spent twentieth days in *Aleppo* during which he appointed *Aḥmad ibn jʿafar*, commonly known as *Qrājā Pāshā*, as the governor. Additionally, he appointed *Kamāl al-Dīn Ibn al-Ḥājj Ilyās al-Rūmī al-Ḥanafī*, known as *Ibn al-Jkmkjy*, as the judge.[130] The city was now in the heart of the empire and the threat

[126] Davis 2010
[127] Davis 2010
[128] Davis 2010
[129] Davis 2010
[130] Al-Ghazzī 1952: 1190

from external enemies subsided. Architecture thrived during this period, marked by the construction of numerous madrasas and mosques[131].

- Peak Period (1009–1112 AH/1600 – 1700 AD)

During the three centuries following its incorporation into the ʿOttomān Empire, the city experienced significant developments and transformations, becoming a vital center of ʿOttomān economic activity alongside *Istanbul* and *Cairo*[132].

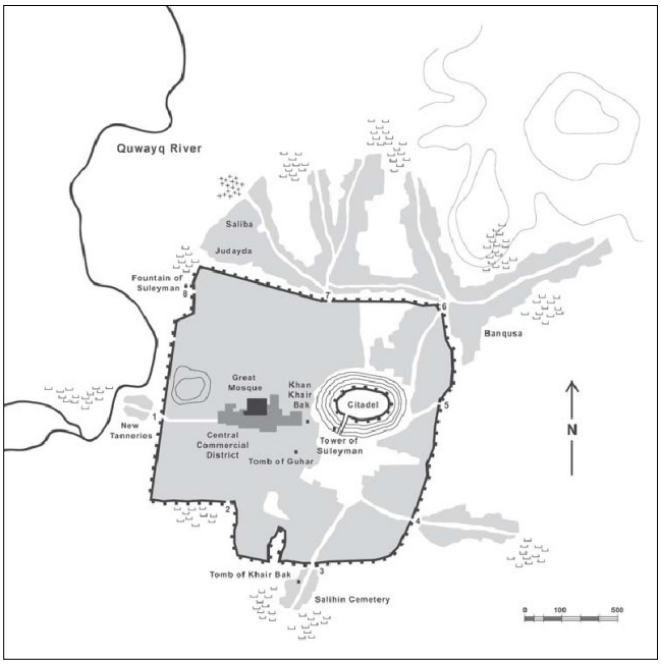


Fig 15: Map of Aleppo in the Sixteenth Century. Indicate the important City gates: 1. Bāb Anṭākiyah, 2. Bāb Qinnesrin, 3. Bāb al-Maqām, 4. Bāb al-Nayrab, 5. Bāb al-Aḥmar, 6. Bāb al-Ḥadīd, 7. Bāb al-Naṣr, 8. Bāb al-Faraj, 9. Bāb al-Jinān

In the sixteenth century (905-1009 AH / 1500-1600 AD), often regarded as the zenith of the ʿOttomān Empire, the city's economy thrived on several key sources of income[133].

The booming minting houses produced gold, silver, and copper coins, contributing substantially to the economic landscape. Additionally, trade in sheep, silk, and slaves was pivotal. Notably, the silk tax emerged as the state's most significant revenue source during the reign of *Sülṭān Selim II*[134].

[131] Al-Ghazzī 1952: 1190
[132] Metropolitan Museum of Art, 2002
[133] Metropolitan Museum of Art, 2002
[134] Rotrou 1930

In (4 AH / 1702 AD), *ʻAlī Bāshā jnbulād* declared his independence in *Aleppo*, a situation that continued for over two years until he ultimately agreed to return to the ʿOttomān fold under the control of the *Sülṭān*. In (1234-1235 AH/1819 AD), *Aleppo* experienced a revolution that lasted several months. Then, in 1822, a devastating earthquake struck the city, causing significant damage, particularly to the *qal'a*, which suffered the destruction of parts of its walls and the loss of many homes. As a result, residents of the *qal'a* abandoned plans to rebuild and relocated to the city[135].

Later, the Egyptian armies, commanded by *Ibrāhīm Pāshā*, captured *Aleppo* from the ʿOttomāns and held the city until (840 AH /1436-1437 AD). The Egyptian occupation was notable for the construction of large barracks, often mistakenly referred to as "Turkish," located to the northeast of the city[136].

The construction of these barracks involved stripping the citadel of its stone materials. Finally, in (1351-1352 AH /1933 AD), *Aleppo* was again struck by an earthquake.[137]

In (850 AH /1446 AD), a revolt against the ʿOttomān occupation of *Aleppo* occurred but lasted only a few days. In (1233-1234 AH / 1818 AD), English forces occupied the city of *Aleppo* in October, marking a significant moment in the region's history.

Furthermore, the city rose to prominence as a major market for "Indian" goods, including textiles, spices, and dyes, reflecting its strategic position in global trade networks during this prosperous era. During this period, *Aleppo* continued to thrive as a vibrant meeting point for diverse cultures and intellectual movements. The craft and commercial economy saw significant growth, and the city's *sūqs* became renowned for its wide variety of goods[138].

Due to the significant economic and political importance of the city, Venice relocated its consulate in (951-952 AH / 1545 AD) from *Damascus* to *Tribulus* and subsequently moved it

[135] Rotrou 1930
[136] Rotrou 1930
[137] Rotrou 1930
[138] Rotrou 1930

to *Aleppo* in (954-955 AH / 1548 AD). This shift underscored *Aleppo's* rising prominence as a commercial hub in the region[139].

Additionally, *Aleppo* attracted consular representations from other European powers, further highlighting its strategic importance. The French established a consulate in (969-970 AH /1562 AD), followed by the English in (990-991 AH / 1583 AD) and the Dutch in (1021-1022 AH / 1613 AD). These nations also set up commercial offices in the city, facilitating trade and diplomatic relations. The presence of these consulates contributed to *Aleppo* status as a crucial center for international trade and diplomacy during this period[140].

- The Period of Relative Stability (1113-1214 AH / 1700-1800 AD)

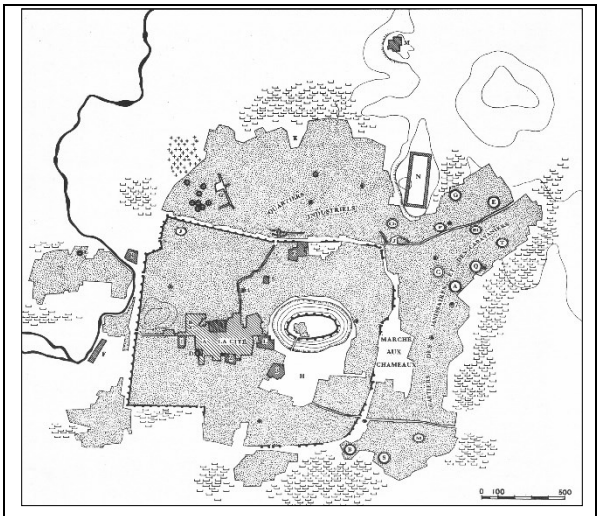


Fig 16: The city in the middle of XIX century.

This era was marked by a relative calm in the political landscape, although pressure from European powers began to mount[141]. Education and culture flourished, with the establishment of madrasas and libraries throughout the city. The French traveler, orientalist, and politician, *Volney*,[142] Described the city during his visit in (1199-1200 AH / 1785 AD) as "one of the most beautiful cities in *Syria*, and perhaps the cleanest and most well-built city in the entire empire. When we reach it from any direction, we find a crowd of minarets and white domes that delight the tired eye from the dark and boring plain." His observations highlight not only the aesthetic

[139] Rotrou 1930
[140] Al-Sayyid 2015
[141] Al-Sayyid 2015
[142] Constantin François de Chassebœuf, comte de Volney (3 February 1757 – 25 April 1820) was a French philosopher, abolitionist, writer, orientalist, and politician who was made Commander of the Legion of honor in 1804, Count of the empire in 1808, and a Peer of France by Louis XVIII.

appeal and architectural qualities of the city but also its prominence within the broader context of the region and the empire at that time[143].

Starting from the sixteenth and seventeenth centuries, continuing into the early eighteenth century, the city experienced eastward expansion as local Janissaries (*al Ānkshāryyn*) from Arab, Kurdish, and Turkmen tribes settled in newly established neighborhoods in *Banqusā, al-Qrlq*, and the area in front of *Bāb al-Nayrab*[144].

Pistachio vineyards extended to the east of the city, whereas orchards flourished to the west along the banks of *Queiq* river. This distribution occurred because vineyards require less water, while orchard vines need more irrigation[145].

Tribes settled to the west of the city walls, establishing a neighborhood known as *al-Mashāriqah*. Additionally, they inhabited the southeastern area, which became known as the *al-Klāsah* neighborhood.[146] In the seventeenth and eighteenth centuries, many unofficial measures were taken, including local building procedures that led to the introduction of new building techniques and typologies[147].

- Decline Period (1214-1317 AH / 1800-1900 AD)

This period marked the beginning of the decline, driven by external pressures and internal crises that adversely affected both the economy and social dynamics. *Aleppo* experienced a "contraction" in its role as a commercial center, resulting in a significant loss of its former importance. Additionally, the rise of nationalist movements began to influence the city's social structure, contributing further to its challenges during this time[148].

During this era, the city of *Aleppo* saw significant urban development, including the establishment of numerous avenues and streets that played a crucial role in the city's layout and economy such as establishing the Internal and external transportation roads *Jisr al- Nā'wrh, al-*

[143] Al-Sayyid 2015
[144] Al-Sayyid 2015
[145] Al-Sayyid 2015
[146] Al-Sayyid 2015
[147] Al-Sayyid 2015
[148] Al-Sayyid 2015

Bārūn, al- Khāndaq, al-Sā'ah. These avenues were flattened and paved with stones, transforming them into roads suitable for carriages, along with designated permanent parking spaces for them[149].

The ʿOttomān government not only focused on opening and paving the streets within the city to facilitate transportation but also aimed to connect *Aleppo* to other cities and neighboring regions through a network of railway lines. This effort was driven by the significant economic importance of *Aleppo*. Among these railway lines were: The *Damascus* Railway, *Sham* Station, *Baghdad Railway, and al-Ḥijāz Railway*[150].

In 1846, *al- Sülṭān 'Abd al-Majīd* enacted the Education Reform Law, which mandated that the government oversee education. As a result, the *Diwan* of Education was established to implement this oversight[151].

The northern part of the ʿOttomān Empire was struck by a major earthquake on 16 August (1237-1238 AH / 1822 AD). It had an estimated magnitude of 7.0 Ms. Estimates of the number of victims in *Aleppo* range from 15,000, according to local historian *al-Ghazzī*[152], This represents approximately 15 percent of an estimated population of around 100,000. The earthquake caused extensive destruction in the city center, particularly in the neighborhoods of *Baḥsītā* and *al-ʿAqaba* to the west and northwest of the central *sūqs* as well as in the *sūqs* area itself and around the *citadel* [153].

Citadel t Aleppo suffered significant damage and was not subsequently inhabited. Court records suggest that other areas of the city, including the northern quarters within the walls and the northern suburbs, also experienced destruction. The earthquake struck on a hot summer evening when many people were on their roofs or in their courtyards, allowing a considerable number

[149] Al-Sayyid 2015
[150] Al-Sayyid 2015
[151] Al-Sayyid 2015
[152] Al-Ghazzī 1952
[153] Al-Ghazzī 1952

to avoid being buried under debris; had it occurred at a different time, the casualty figures could have been much higher[154].

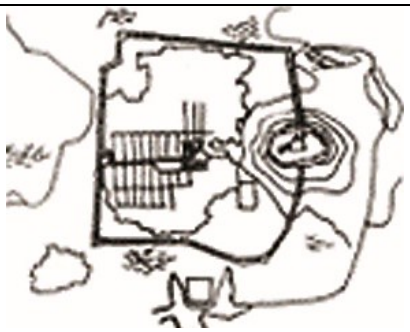
The construction phenomenon gradually returned after this disaster. During this period, *Madrasat al-Sulṭānīyah* was restored following its destruction in the earthquake. Additionally, in (1248-1249 AH / 1833 AD), a decision was made to construct the *al-Ḥamīdīyah Hospital* on the vacant land in front of the castle, where the Palace of Justice once stood, as the earthquake had devastated the area, leaving it in ruins[155].

The locals utilized the square for the *Sūq al-Jum'ah* area, which remained in operation until the (1358-1370 AH /1940s AD). At that time, the *sūqs* was relocated to the area near the *al-Sākhour* roundabout following the opening of the *New Sarāy*[156].

When *Ibrāhīm Pasha,* son of *Muḥammad ʻAlī Pasha*, entered *Aleppo* in (1247-1248 AH / 1832 AD), he controlled the city until the ʿOttomān Empire was able to reclaim the city again in (1255-1256 AH / 1840 AD). This period included extensive reforms in the state, such as recruitment into the new army, and a new tax system[157].

	
Roman Hellenistic period 64 Bc-395 AD	Byzantine period 395-635AD

[154] Al-Ghazzī 1952
[155] Al-Ghazzī 1952
[156] Al-Ghazzī 1952
[157] Al-Ghazzī 1952

	
End of the eleventh century	Middle of the thirteenth century (Ayyubid Dynasty)
Fig 17: Urban Evolution - Aleppo Ancient City	

With the announcement of the decree of the regulations in 1255 AH / 1839 AD, the ʿOttomān Empire moved to a new phase in its history in which the state's policies changed in many ways, including its direct intervention in organizing education and health and the participation of ministers and statesmen with the *Sülṭān* in drawing up the policies of governance to a greater extent, which was reflected in the expansion of the urban movement and the construction of buildings for various purposes in the states and cities of the state, including *Aleppo*[158].

- Historical framework and Economic development

The city witnessed major developments and transformations during the three centuries following its inclusion under the ʿOttomān banner, in which economic developments were balanced alongside urban developments in a way that made it a center of ʿOttomān economic gravity at its peak, alongside *Istanbul* and *Cairo*[159].

The city's economic developments in the sixteenth century (905-1009 AH / 1500-1600 AD), the greatest century of the ʿOttomān Empire, were based on the main sources of income represented by the large volume of activity of the minting houses of gold, silver, and copper, in addition to the trade in sheep, silk, and slaves. The silk tax exceeded all sources of income in the state in the sixteenth century (905-1009 AH / 1500-1600 AD) during the reign of *al-Sülṭān*

[158] Al-Ghazzī 1952
[159] Burns, 2017

Selim II. Aleppo, alongside *Istanbul* and *Bursate*, was one of the main centers of Iranian silk, and the largest centers in the country exporting to Europe. The city also emerged in the same century as a huge market for "Indian" goods such as textiles, spices, and dyes[160].

During that period, Syria was divided into three pashalik provinces: *Damascus*, *Tripoli*, and *Aleppo*. The borders of the *Aleppo* province extended from the *Gulf of Alexandretta* to the *Mediterranean* Sea, reaching up to 62 kilometers south of *Suwaydiyah* to the west, and included the *Euphrates River* from *Bir* to *Qal'at J'abar* to the east, forming a northern promontory toward the *Taurus* Mountains. The *Aleppo* province encompassed significant areas, including Antep (*Ghāzī 'Antāb*), stretched to the outskirts of *Pazarjik*, descended to the center, entered the desert to the south toward *Mount Osheron*[161], and ascended to *Marash*, crossing the *Tigris* to the *Jisr al-Shughur* eventually leading to the sea[162].

The province of *Aleppo* was a significant administrative and economic center, second only to *Istanbul* in importance. By (1314-1315 AH / 1897 AD), *Aleppo* was strategically situated, bordered by several key regions: to the south lay the province of *Syria*, centered in *Damascus*; the *Mediterranean Sea* was to the west; the provinces of *Adana*, *Ankara*, and *Sivas* were to the north; and to the east, it was bordered by the provinces of *Zur*, *Euphrates river*, *Diyarbakir*, and *Maamoura Elazığ*[163].

According to *al-Ghazzī*, the province of *Aleppo* spans approximately eighty-five hours from east to west and ninety hours from south to north. The governance structure included a governor who oversaw the region, supported by two subordinate governors and thirteen local representatives known as *Qā'im Maqām*, who were responsible for executing the governor's orders[164].

The city experienced substantial expansion beyond its historical walls during this period. This growth led to the development of several neighborhoods that became vital to the city's

[160] Burns, 2017
[161] Ocheron of Isauria, an ancient Roman name for a region northeast of Mount Taurus.
[162] David 2019
[163] Al-Ghazzī 1952, 26
[164] Al-Ghazzī 1952, 26

commercial, economic, and administrative activities. Notable neighborhoods that emerged include:

Al-ʿAzīzīyah (1284-1285 AH / 1868 AD),[165] *Al-Nial* (1295-1296 AH / 1878 AD),[166] *Al-Ṣalībah al-ṣughrá* and *Al-Tlal* (1299-1300 AH / 1882 AD),[167] *Al-Jamaliyah* (1303-1304 AH / 1886 AD),[168] *Al-Ḥamīdīyah* (1306-1307 AH / 1889 AD),[169] *Al-Sulaymānīyah* (1312-1313 AH / 1895 AD),[170] *Al-Shaykh Abū Bakr* (1314-1315 AH / 1897 AD), *Al-Ismāʿīlīyah*,[171] and *Baghdad* Station. The city witnessed the emergence of a new architectural style for residential buildings, which was influenced by the design of *Istanbul* structures[172]. This style marked a significant departure from the traditional Arab houses found in the *Aleppo Ancient City* within the walls, as well as from the neighborhoods that developed outside the walls during the Mamlūk era, such as *al-Jdeïdé* and *Bānqusā*[173].

These neighborhoods contributed to the urban fabric of *Aleppo*, enhancing its role as a bustling center of trade and administration. The expansion reflected the broader trends of urbanization and modernization occurring throughout the ʿOttomān Empire during the late 19th century, as cities adapted to the changing economic and social landscape.

From the sixteenth century onwards, the administration introduced a range of political, bureaucratic, and economic systems that facilitated urban development in *Aleppo*[174]. Despite being geographically distant from the imperial center, *Aleppo* emerged as a key city within the ʿOttomān Empire, showcasing the empire's power through various urbanization projects[175].

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[165] It is believed that *Al-ʿAzīzīyah* was named in honor of *al-Sülṭān ʿAbd al-Ḥamīd Ibn Maḥmūd II*, who ruled from (1861–1876 AD /1277–1293 AH).

[166] It is attributed to *Muḥammad Ibn al-Sayyid ʿUmar*, known as Al-Nabbal, one of the employees in *Aleppo* government during the Ottoman Empire. There was a small orchard in that area on his property.

[167] Its location was hills known as the *Mnāshr al-Zbl*, and it was the endowment of *al-Madrasat al-Ḥalāwīyah*. The madrasa's endowment recipients sold it to restore it.

[168] Relative to *Jamīl Pāshā*, the governor of *Aleppo* (1297-1304 AH / 1879-1887 AD), whose palace was the first building in it.

[169] Relative to al-*Sülṭān ʿAbd al-Ḥamīd Khān II* (1876–1908 AD /1293–1326 AH).

[170] Known as *Sulaymān al-Jalabī*, he owned an orchard in the area.

[171] It was named after *Ismāʿīl Pāshā,* who moved to live in his palace near *Beza* Square. It is known that *Ismāʿīl Pāshā* built a mosque in his palace in (1893 AD/1311 AH).

[172] Watenpaugh, 2004

[173] Watenpaugh, 2004

[174] Ferguene & Banat, 2009

[175] Watenpaugh, 2004

These included military installations, ceremonial gates, and public institutions, collectively transforming the city's skyline and urban fabric, reflecting distinct ʿOttomān architectural styles[176].

Several factors contributed to *Aleppo's* prominence as a major urban center. Its transition from a border city under the Mamlūks to a central city within a vast empire allowed it to tap into a large internal market, connecting regions such as *Iraq, Anatolia*, and the *Levant*. Additionally, *Aleppo's* strategic location as a junction for international trade routes enhanced its significance[177]. It served as a critical node for land routes connecting the East (*India* and *Persia*) to the *Mediterranean*, particularly as maritime routes became increasingly hazardous due to piracy.

Overall, the combination of strategic location, administrative support, and the flourishing of trade and pilgrimage activities played a crucial role in transforming *Aleppo* into a prominent urban center within the ʿOttomān Empire, allowing it to thrive for nearly four centuries[178].

2.1.4.3 The ʿOttomān Urban &Architectural Style in *Aleppo*:

A notable characteristic of *Aleppo's* political landscape during the Ottoman period was its administrative separation from its historically dominant rival, *Damascus*. Although the exact timing of this separation is somewhat unclear, it became a political reality when *Sülṭān Süleymān* visited the city in (937-938 AH / 1531 AD). This decision to remove northern Syria from its political dependency on *Damascus* allowed the residents of *Aleppo* the freedom to develop their power dynamics with the imperial center, free from influences stemming from the south. While *Aleppo* maintained cultural connections with *Damascus*, *Cairo*, and the Holy Cities of *al-Ḥijāz*, it established significant economic relationships with southern *Anatolia* that surpassed those with southern *Syria*. This formation of the *Aleppo* State was a significant historical development that occurred during a period of political and social change in the region[179]. This move marked also a significant administrative change, as a governor was

[176] Ferguene & Banat, 2009
[177] Ferguene & Banat, 2009
[178] Watenpaugh, 2004
[179] Masters, 1991

appointed to oversee the newly formed province, allowing for more localized governance and management of the region's affairs[180].

Urban development in *Aleppo* was significant, with the city's urban area more than doubling. At the time of the conquest, the area was estimated to be around 238 hectares; however, by the early nineteenth century, it had expanded to approximately 367 hectares.

The ʿOttomān administration carried out a process of development and modernization of the state to a great extent, especially after the end of Egyptian control over it. New neighborhoods appeared in the city and were followed by the construction of a network of straight and perpendicular streets such as "*al- Khāndaq* Street" as well as "*Bāb al-Faraj* Street" and neighborhoods such as "*al-ʿAzīzīyah* District" and "*Al-Jamiliyeh* District". Trees were also planted on the edges of the most important and widest streets.

All evidence suggests that *Aleppo* was not merely the third largest city in the ʿOttomān Empire during the sixteenth and seventeenth centuries; rather, it surpassed *Istanbul* and *Cairo*. In trade exchange among the empire's commercial centers. European travelers who visited *Aleppo* during this time noted the city's elaborate residential architecture, the majority of its central sūqs protected by stone vaults from the weather, and nearly all streets paved with stones, allowing for easy passage even in the rain, complete with sidewalks and pedestrian walkways. This reflects not only the pride of the Aleppine people in their city but also the general prosperity that enabled such urban developments.

This expansion is largely attributed to several key construction initiatives led by various governors of *Aleppo*, which facilitated the urban growth of the city. Notably, four endowment complexes were established in the west of the city, contributing greatly to its expansion.

The governors "*Khusrū Pāshā*" (1544), "*Muḥammad Pāshā De kājyny"* (1555), "*Muhammad Pāshā*" (1574), "*Burhām Pāshā*" (1583) built hundreds of shops, inns, and *qaysariyya*, some of which are still standing and famous to this day, such as *Khān al-Shūnah*, *Khān al-Jumruk*, and *Khān al-Wazīr* [in the seventeenth century].

[180] Masters, 1991

As a result, the area of the governorate center grew from five hectares at the beginning of the Sixteenth century to over ten hectares within less than fifty years due to this impressive construction movement. The covered *sūqs* that emerged during this period became some of the largest and most important *sūqs* in the entire country, highlighting *Aleppo's* status as a vibrant commercial hub in the region.

In the Sixteenth century, ʿOttomān officials endowed large mosques modeled on those in *Istanbul*, as well as commercial buildings along the central *sūqs*. These interventions represented an effective ʿOttomānization of *Aleppo*, transforming the city into an ʿOttomān city along the lines of other provincial cities in the empire[181].

By the middle of the Sixteenth century, *Aleppo* had supplanted *Damascus* as the most important market for goods coming into the *Mediterranean* from the East. The *sūq of Aleppo* became the economic core of the city, where commercial and public life dominated the *sūqs*. The main buildings such as the *al-Masjid al-kabīr*, *madrasas, khāns, ḥmmāms, hospitals, sūqs*, houses, gates, and walls. are all scattered in the corridors of the *sūqs*. In addition to the "main" *sūqs* in the city, there were often smaller *sūqs* in the residential neighborhoods where residents met their needs. The city was expanded both inside and outside the walls, due to the flourishing economy and population growth[182].

ʿOttomān monuments were rapidly erected throughout the country. At this time the whole city was transformed by a huge reconstruction: The streets became wider, and some new districts were created. The creativity of ʿOttomān architecture spread throughout the city. As part of this empire, local *Aleppo* architects and craftsmen combined their techniques and cultural heritage with ʿOttomān's architecture and design. The urban development of ʿOttomān *Aleppo* indeed reflects a carefully orchestrated transformation rather than a haphazard evolution. This process involved an array of building projects contributed by various patrons, each of whom

[181] Watenpaugh 2004
[182] Watenpaugh 2004

had their own vision and objectives. These projects, spanning multiple generations, collectively shaped the city's architectural landscape, infrastructure, and urban fabric[183].

The patronage of the ʿOttomān in *Aleppo* was not limited to mosques and other religious buildings, but also aimed at providing the city with the facilities it needed due to its commercial importance; several large *khāns* were built for the caravans; they specialized in trade or belonged to the various European or Christian communities that dominated trade in the ʿOttomān Empire[184].

At that time the city had fifty thousand inhabitants. These innovations included the widening of the streets and the creation of the *al-Jdeïdé district* in the northern area outside the city walls. The city was spurred by vigorous commercial development: Caravans found all the crops of the East in *Aleppo*, and the industrial sector flourished, becoming a center for raw materials and a market for European products[185].

The excerpt offers an insightful overview of the architectural development in *Aleppo* during the ʿOttomān era, emphasizing key factors that contributed to the city's embrace of ʿOttomān architectural styles[186].

Aleppo underwent a remarkable architectural renaissance, characterized by the construction of structures that exemplified the emerging ʿOttomān style. The city's prosperity, stemming from its significance as a trade center, played a crucial role in enabling investment in architectural projects. Although cities like *Damascus* and *Cairo* hold historical significance, *Aleppo's* assimilation of the ʿOttomān style was particularly pronounced due to several distinctive factors:

- In *Damascus*, instances of ʿOttomān architecture were relatively sparse and often regarded as inferior, with a few exceptions like the *al-Tikīyah al-Sulaymānīyah*[187].

[183] Watenpaugh 2004

[184] Watenpaugh 2004
[185] Watenpaugh 2004
[186] Watenpaugh 2004
[187] Wolsinger, Watsinger 1984

- In *Cairo*, the prevailing local architectural style, deeply entrenched in Egyptian tradition, struggled to integrate ʿOttomān influences seamlessly[188].

The city's economic vitality during the Sixteenth century was significant, with trade wealth facilitating the financing of impressive architectural projects, which solidified its status as a prominent city within the empire[189].

The prosperity of *Aleppo* in the sixteenth, seventeenth, and eighteenth centuries stemmed largely from its significance in economic relations within the *ʿOttomān* Empire, as it was the foremost craft and commercial center in the Asian regions of the empire. Although the buildings constructed in the seventeenth century were noticeably less grand than those from the sixteenth and eighteenth centuries, the infrastructure established in the sixteenth century continued to face ongoing pressure[190].

Aleppo's Bazar was extended in the Sixteenth century under *ʿOttomān* rulers," which also supports the claim about new facilities being opened.[191].

This conquest made the imperial court, on the one hand of *Constantinople* an excellent market for luxury goods from the *Persian* Gulf and *India*: between *al-Basra, Baghdad* and *Istanbul*, *Aleppo* stood out as an unavoidable stop. *Aleppo* remained, until the end of the seventeenth century and the beginning of the following century, one of the most prolific markets in *Central Asia*[192].

The pilgrimage to *Mecca* significantly influenced the fate of the city, with *Aleppo* serving as a mandatory stop for pilgrims traveling from the east and northeast. This influx of pilgrims contributed to the development of the civil center in the city[193].

During this period, civil defenses, specifically the city wall, were neglected, and residential expansion rendered these defenses ineffective against fire. Houses encroached upon the wall,

[188] Al-Haddad 1998
[189] David & Heretani, 2011
[190] Gaube & Wirth, 1984: 615
[191] UNESCO, n.d
[192] Gaube & Wirth, 1984
[193] Gaube & Wirth, 1984

and the trench became unusable, eventually being buried. The fortified gates continued to serve as necessary passage points. With the removal of the city wall, the most significant physical barrier dividing the old quarters from the newly constructed buildings demolished[194].

As for the citadel, it began to slowly collapse since it lost its military function, now being situated in the middle of the city. A devastating earthquake opened wide gaps in it, stripping the citadel of any remaining military significance. This transformation altered the landscape of the empty land within the citadel, leading to the emergence of houses that brought a bit of life back to the area[195].

The establishment of endowment buildings emerged as an unexpected consequence of the political system of the pashas, who were often fearful of assassination or having their wealth confiscated. They discovered that creating an endowment was a legitimate means to safeguard their assets from usurpation. The construction of religious buildings provided credible justification for establishing such endowments, with expenses covered by properties dedicated to their support. Consequently, it became common during this period to establish buildings designated as endowments. Economic activity was substantial, with everything built for industrial or commercial purposes regarded as a capital investment. As a result, large buildings were constructed in *Aleppo*, covering extensive areas at once[196].

The *sūqs* became the focal point for the population and underwent several changes driven by individual initiatives rather than official intervention. These changes were a response to the need to adapt to the demands of modern large-scale trade. The *sūqs* were rebuilt in a manner that posed a threat to the distinctive architectural style of the Mamlūk era. The new *sūqs* featured stone domes, which were safer against fires, more resilient to dampness, and better maintained than the old wooden structures[197].

New *Khāns* were constructed in neighborhoods adjacent to the *sūqs*, maintaining the organizational layout of those from the Mamlūk period but differing in size to reflect the

[194] Gaube & Wirth, 1984
[195] Gaube & Wirth, 1984
[196] Gaube & Wirth, 1984
[197] Gaube & Wirth, 1984

increased volume of trade and the city's commercial activity. Surrounding these *Khāns*, buildings were designed to allow shops dedicated to the *sūq* to open on their outer facades, with the rent from these shops providing additional income for the *Khāns*. The large dome and imposing portico are typical of ʿOttomān architecture in notable monuments include "*madrasat al-Aḥmadīyah*, *al-'Ādilīyah masjid*, *al-'Uthmānīyah masjid*", and "*khān al-Jumruk"*[198].

These Khāns were among the most beautiful structures in *Aleppo*. A notable example is the complex built in 1574 by *Ibrāhīm Khān Zādah Muḥammad Pāshā,* known as *khān al-Jumruk*. This impressive structure includes 52 warehouses, 77 rooms, and two markets featuring carved stone illuminated by domes. It accommodates 344 shops, two water fountains, a mosque, and a grand entrance, covering an area of no less than 8,000m² [199].

The presence of European merchants in the city's *Khāns* significantly influenced the character and layout of the central markets, with these influences still evident today. As the *sūqs* expanded, they also became more specialized. Fabrics, which were the primary trade item with Europe and the foundation of the city's economic activity, saw a growing number of shops in adjacent markets dedicated to the Frankish agencies that monopolized fabric import and export. This development reflected the city's adaptation to European trade requirements, resulting in a narrow and precise specialization that became one of its distinctive features. The city was adorned with buildings that had a unique and luxurious appearance, setting it apart in the Islamic world. The grandeur of the *sūqs* and large *Khāns*, the extensive area dedicated to trade, and the cohesive aesthetic of the various buildings in the area all combine to create a striking impression on visitors[200].

Industrial activity reached a high level of sophistication, resulting in the proliferation of numerous buildings designated for industrial use, including large soap factories and tanneries focused on leather production. The *qaysariya* emerged, characterized by rooms arranged around central space, with doors opening onto this area, which could be utilized for housing or workshops. These spaces served as a refuge for poor travelers and a workplace for small crafts.

[198] Gaube & Wirth, 1984
[199] Gaube & Wirth, 1984
[200] Watenpaugh, 2004

Additionally, industrial districts were established outside the city walls, in the outskirts of the city, where factories for weavers and goldsmiths were located, clustering around which the homes of craftsmen were built[201].

The Pāshās used to come to pray in the *al-Masjid al-kabīr*, which was the subject of maintenance and restoration works, including the paving of it with black and rose stones. The construction of the large mosques in the new districts and the city continued. This led to the decline of the *al-Masjid al-kabīr* from being the meeting point of the Muslim community. These mosques were distinguished by the *Istanbul* style, their large hemispherical domes covered with lead and their high cylindrical minarets crowned with tin, which completely changed the appearance of the city. The corners maintained their modest form and the graves, which were numerous, were crowded to benefit from the proximity of the governor. The most important buildings are the lodge built over the grave of *al-Shaykh Abī Bakr aldfā'y* and the *al-Mawlawīyah* lodge, shaded by cypress and vine trees and roofed with numerous domes.

By this period, the population of the city increased by leaps and bounds, and *Aleppo* eventually became the second-largest city after Constantinople in terms of wealth, size, and importance. Many monumental buildings were erected in the city by its governors at the beginning of the Sixteenth century, this century was accompanied by the construction of three famous ʿOttomān complexes, the first being the "*Khusrawiyya masjid"*, built by *Khusrū Pāshā*[202]*,* the construction of this complex marked the beginning of the construction activity that lasted until the Sixteenth century. [203] The second major mosque built in the same century was the "*al-'Ādilīyah masjid"* built by *Muḥammad Bāshā Dqāqyn*[204]. The third mosque built in *Aleppo* in the sixteenth century was the "*al-Bahramiyya masjid"*[205].

The ʿOttomāns also added their characteristic tall and slender pencil minarets to the magnificent mosques built near the *citadel* . This style is composed of a ribbed shaft ended by a projecting balcony depending on stone stalactites; a smaller shaft surmounts this balcony with the same

[201] Gaube & Wirth, 1984
[202] Íadjar, 2007
[203] Kafescioğlu, 1999
[204] Íeretany, 2006
[205] Íeretany, 2006

shape ended with a conical cap covered with lead tiles. This composition reflects the shape of the ʿOttomān minaret in *Istanbul* and other provinces of the ʿOttomān state[206].

Among the examples of this minaret in the buildings of the ʿOttomān plan, the minaret of *al-Khusrawiyya* complex 951 A.H/ 1544 A.D, which considered the first example that was constructed on this style, the minaret of *al-'Ādilīyah masjid* 963 A.H/ 1555 A.D, the minaret of al *Bahramiyyah masjid* 991 A.H/ 1583 A.D, the minaret of *al-'Uthmānīyah masjid* 1141 A.H/ 1730 A.D, and the minaret of *Zaki Pāshā masjid* 1316 A.H/ 1898 A.D. It also appeared in *masjid* of *al-Kizwani* 1237 A.H/ 1821 A.D, which characterizes by the cylindrical shape instead of the octagonal shape[207].

Although the preceding, this is not mean that the local styles that spread in architecture in *Aleppo* before the ʿOttomān period disappeared, but it continued and strongly affected the architecture of this period. This is what is accustomed in the provinces that fell under the ʿOttomān control so that some buildings were built according to the new ʿOttomān style while the majority of them are a reflection and a continuation of the inherited local styles[208].

Among the most significant examples of buildings constructed in the foreign ʿOttomān style in *Aleppo* is the *Al-Khusrawiyya* complex, built in 951 A.H/1544 A.D. This structure, designed by the renowned architect *Sinan*[209]*,* marked a pivotal moment in the evolution of architectural activity in *Aleppo*. The complex features a square sanctuary topped by a large dome, with a horizontal aisle adorned with shallow domes that extend in front of the sanctuary. The aisle also houses an ʿOttomān-style minaret on its right side, while the entrance to the sanctuary is centrally located on the southern wall, consistent with the design of ʿOttomān mosques[210].

Another notable building in the ʿOttomān style is the mosque of *al-ʿAdiliyyah*, completed in 963 A.H/1555 A.D. This *masjid* serves as a replicated version of the *Al-Khusrawiyya* complex,

[206] David & Heretani 2011
[207] David & Heretani 2011
[208] David & Heretani 2011
[209] David & Heretani 2011
[210] David & Heretani 2011

encompassing a square sanctuary with a prominent dome, an aisle leading to the sanctuary, and an ʿOttomān minaret[211].

Additionally, the *masjid* of *Bahrām Pāshā*, constructed in 991 A.H/1583 A.D, stands out as one of the most significant examples of ʿOttomān-style architecture in *Aleppo*. Its layout closely resembles that of the *al-Khusrawiyya* and *al-ʿAdiliyyah*, though it features a dome that rests on four pillars rather than the sidewalls, as seen in the previous examples. Furthermore, the architect designed a separate *īwān* for the *miḥrāb*, further distinguishing this structure within the ʿOttomān architectural tradition[212].

Aleppo expanded during this period, and its area at the end of the Mamlūk era was estimated at five hectares according to maps that can be drawn based on *Sauvaget's* work. This area increased at the beginning of the nineteenth century to 106 hectares, meaning it expanded by more than 100%. This remarkable growth highlights *Aleppo's* development and significance within the ʿOttomān Empire, marking its evolution into a prominent urban center[213].

The Christian communities enhanced their churches and constructed more luxurious and lavish houses than found elsewhere, along with impressive baths and large *qaysariyas*. Additionally, the defensive gates at the entrances to streets became more robust during this period. The *sūq* developed significantly, serving as the central wholesale market for the northern districts and for the European population within the city. Furthermore, guest houses and shelters were established to accommodate travelers[214].

New styles of decoration appeared in the houses, including covering with tiles, covering with wooden panels painted with mortar and gilded oil colors (*al-ʿAjamī*), in addition to the decorations previously known in the Mamlūk era, such as buttons, the *ablaq* system, *muqarnas*, geometric, star-shaped and plant-shaped decorations[215].

[211] Raymond 2008
[212] Raymond 2008
[213] Raymond 2008
[214] Raymond 2008
[215] Raymond 2008

A modern-style houses appeared, they were dominated by developed plant and geometric decorations, and luxurious double stairs and oil paintings appeared in the form of panels on the ceilings[216].

The facades were influenced by Renaissance and Baroque architecture in Europe. This Western influence was not limited to modern houses opening onto the street, but also extended to traditional houses with a courtyard, where luxurious stairs appeared within the courtyard equipped with fences decorated with plant and geometric shapes... and others[217].

A new style of construction appeared, such as reinforced concrete roofs and girders, and iron rods were used after the railway line was extended to *Istanbul*, and importing and transporting these rods to *Aleppo* via the railway became possible. With the continuation of roofing in the usual ways, such as the flat wooden roof extended over tree trunks, and the various types of elongated and intersecting vaults and domes[218].

During this time, the citadel underwent ʿOttomānization, becoming the personal domain of the *sülṭān* and thus extraterritorial, beyond the provincial governor's authority. It served as the military garrison and housed a mint that produced coins featuring the *sülṭān* 's name and that of the city. A significant architectural element introduced was a tower inscribed with a sülṭānic message, built by *Sülṭān Süleymān* to the west of the portal, possibly accompanied by other renovations[219].

An Arabic inscription dated December (1521 AD/ 926-927 AH) was prominently displayed on this tower, signaling a new social order through its semantic content and visual style. This sign coexisted with those of previous rulers without overshadowing them, subtly conveying the transition of power[220].

The second earliest ʿOttomān architectural intervention in *Aleppo*, commissioned by *Sülṭān Suleymān*, is a modest public fountain called *Qasṭal al- Sülṭān*. This fountain is strategically

[216] Moritz, 1928
[217] Moritz, 1928
[218] Moritz, 1928
[219] Moritz, 1928
[220] Moritz, 1928

situated just outside the northwestern gate, *Bāb al-Faraj*. Constructed from stone and topped with a domed portico, it likely dates back to the mid-1530s and includes an inscription—though undated—that lists *Suleymān's* titles. The fountain was part of a charitable endowment (waqf), with its upkeep funded by the revenue generated from a nearby orchard and several shops. Ultimately, the fountain was demolished to make room for the *Burj al-Sā'ah* (Clock Tower), which was built by *Sülṭān 'Abd al-Ḥamīd II* in (1316-1317 AH / 1898-1899 AD)[221].

Burj al-Sā'ah has since become one of the city's most prominent landmarks, located in *Bāb al-Faraj* Square in front of the National Library. During this period, the *sūq* area expanded to twice its previous size, and many of the inns and *qayṣarīyat* that still stand in *Aleppo* today were established during the Ottoman era. *Aleppo* was an important commercial hub within the ʿOttomān Empire; in (1302-1303 AH / 1885 AD), it became home to the second Chamber of Commerce, following the establishment of the first in *Istanbul* in 1883. Additionally, the first branch of the ʿOttomān Bank, known as the Bank al- *Sülṭān al-ʿOttomānī* (ʿOttomān Sülṭānte Bank), was founded there as well[222].

The first master plan for the city was prepared on the instructions of Governor *Ra'īf Pāshā* in (1307-1308 AH / 1890 AD). The plan promoted the expansion of the city to the west.

In the nineteenth century, the city developed greatly, new streets were laid out, the moat was filled in and became a street, two and three-story buildings were built and dominated the architecture of the time, introducing a new architectural style, the traditional Arab courtyard house, squares, and public gardens were laid out, railroad lines and two stations were established, new neighborhoods were planned and new directions of expansion were established, which were connected to the ancient city[223].

The ʿOttomān buildings of *Aleppo* were not copies of those of Constantinople; "*Khān al-Wazīr"* has the structure of a traditional *ʿOttomān khān*, but its decoration reflects patterns that prevailed before the ʿOttomān conquest. In the late eighteenth century, the *khāns* lost their function as caravan stations and were transformed into warehouses and stores, becoming an

[221] Al-Ghazzī 1952, II
[222] Al-Ghazzī 1952, II: 164.
[223] Al-Ghazzī 1952, II

extension of the souks, the city's *sūqs* that specialized in trade; the main sūqs of *Aleppo* crosses the ancient city from "*Bāb Anṭākiyah"*, its western gate, to the *citadel* ; it is a narrow-covered street that receives light through openings in the domed ceilings[224].

In the sixteenth century, Christian communities built large new churches, some of which were modeled after Western churches, while others followed local tradition. The boundary of the site follows the line of the ancient city walls and three extra-muros areas: North, Northeast, and East Suburbs[225].

Signs and symptoms of modernity have been brought into the city over the past long time of the 19th century and inside the early twentieth century: new squares, tramways, new infrastructural networks for public offerings, and new streets. The medieval city began to be seen as a fixed part of the urban landscape at this point. The local notables' refusal to pay for the renovation of the Roman aqueducts through the old regime's municipal budget sparked the (1234-1235 AH / 1819 AD) revolt, which also brought about a significant change. During the suppression of the revolt, bombing destroyed more than 1,000 historic homes[226]. The (1237-1238 AH / 1822 AD) earthquake also severely damaged *Aleppo*. The protection of monuments that later served as the foundation for what was to be perceived as the historical dimension of authenticity was included in the program of "ʿOttomān modernization" as well as the process of post-revolt and post-earthquake reconstruction. Streets were expanded, new squares were created, existing squares were expanded, and new public buildings were constructed during the "ʿOttomān modernization" period, which lasted from about (1850 to 1918 AD /1266–1337 AH)[227]. Following the (1301-1302 AH / 1884 AD) law on heritage protection and the work of ʿOttomān *Ḥamdī Bik*, founder of the *Istanbul* Archaeological Museum, the primary imperial decrees on the protection of the built heritage were published in (1306-1307 AH / 1889 AD) and (1324 AH / 1906 AD), respectively. In the ʿOttomān Empire, the protection of historical traces became a distinct administrative and legal category as a result of these decrees[228].

[224] Lafi 2014
[225] Lafi 2014
[226] Lafi 2014: 58-75.
[227] David 2002: 235-244.
[228] David 2002: 235-244

The legacy of the ʿOttomān era in *Aleppo* is visible in its architectural landmarks, its rich cultural traditions, and its historical role as a center of commerce and trade. The period of ʿOttomān rule left an indelible mark on the city's identity, weaving a tapestry of influences that continue to define *Aleppo's* character. Despite the challenges and changes that have occurred in the centuries since, the impact of the ʿOttomān era on *Aleppo's* development and prosperity remains a testament to a pivotal period in the city's long and storied history[229].

The imperial ownership of historical monuments, the possibility of allocating land for archaeological research, and the protection of monuments considered part of the city's heritage were the most important factors. At this stage, a distinct hierarchy emerged between the various types of construction. Modern notions and perceptions of historical authenticity often derive from such initial decisions. In *Aleppo*, beyond the walled city, new neighborhoods, like *al-Jdeïdé*, were built during the late ʿOttomān period. They embodied imperial modernity. Engineers and planners, including foreign experts, were asked to connect this new city to the old one, in a logic that was more one of integration than of juxtaposition. The heritage dimension was thus given a new role, between conservation and scenography. Elements of ʿOttomān architectural orientalism were included in this vision, as in the case of new public buildings and new mosques[230].

Aleppo economic growth, coupled with its thriving trade relations with Europe, positioned it as a key market in the Levant. Permanent consulates and trade agencies were established by various European powers: the Venetians in (954-955 AH / 1548 AD), the French in (971-972 AH /1564 AD), the British in (991 AH / 1583 AD), and the Dutch in (1021-1022 AH / 1613 AD). *Al-Jdeïdé* district became home to many Christian merchants and craftsmen[231]. Its swift renaissance and growing demands are reflected in significant endowments, including:

- (991 AH / 1583 AD): Part of *Burhām Pāshā's* endowment, which featured a public bath and a qaysariya.

[229] David 2002: 235-244
[230] David 2002: 235-244
[231] David 2002: 235-244

- 1063 AH / 1653 AD: *Bashīr Pāshā's* endowments, comprising a *Khān*, three *qaysariyas*, a tannery, a fountain, shops, and an entire *sūq*.

The district also saw the emergence of churches, lavish residences, well-maintained public roads, and beautiful infrastructure, all of which attest to the prosperity of its inhabitants [232].

The city remained ʿOttomān until the empire's collapse. Still, it was occasionally hit by some disasters, such as the great earthquake of (1237-1238 AH / 1822 AD), the cholera attacks of (1238-1239 AH / 1823 AD), and the plague that killed about 20-25 percent of the population in (1242-1243 AH / 1827 AD)[233].

However, the ʿOttomān Empire was able to reclaim control of *Aleppo* in 1840, as part of a broader effort to restore its territories in the *Levant* following the disruptions caused by *Ibrāhīm Pāshā's* campaign. This period of ʿOttomān resurgence was characterized by extensive reforms across the state, often called the *Tanzimat* period, which aimed to modernize the empire's administrative and social structures in response to internal challenges and external pressures[234].

These reforms included various initiatives to strengthen the central government, improve infrastructure, and promote economic development, reflecting the empire's efforts to adapt to changing political and social realities. The return of ʿOttomān control over *Aleppo* not only reinstated governmental authority but also facilitated the implementation of these progressive reforms in the city and the surrounding regions[235].

After the Egyptian occupation (1831 to 1840 AD /1246–1256 AH), a new centralized administration *"al-Sarāy"* was created, and in (1284-1285 AH / 1868 AD) the city received a Western-style municipal administration[236].

[232] Raymond 2008: 82
[233] Raymond 2008
[234] Raymond 2008
[235] Raymond 2008
[236] Raymond 2008

At the fall of the ʿOttomān Empire after World War I, *Aleppo* ceded its northern hinterland to modern Turkey, as well as the important railway connecting it to *al-Mawṣil* in *ʿIrāq*[237].

The quick development of the city continued up to French occupation in 1920, the city's urban planning was then set by French planners *Dange* and *Ecochar*. Then, in the 1940s, it lost its main access to the sea, *Antioch*, and *Alexandretta*, as well as to *Turkey*[238].

2.1.4.4 Building Construction & Materials

The exterior appearance of a building plays a crucial role in construction, helping to preserve the city's cultural heritage. Elevations serve various functions, such as resisting heat transfer through external walls and reflecting sunlight to lower indoor air temperatures. Most traditional buildings in *Aleppo* are constructed with very thick walls and minimal external openings to keep heat from entering the interior spaces. These structures are made from stone, which has a high capacity for storing heat, allowing the stones to absorb energy during the day and release it at night[239].

Nowadays, various studies on the thermal performance of buildings have been conducted, proving that using an insulation layer on the exterior envelope prevents heat from being stored in the thermal mass and allows it to be quickly conducted outside[240].

Many houses, mosques, churches, and *sūqs* of the city were built of local ashlar and cut limestone. The stones were shaped into a standard rectangular form and laid in a mortar of clay and straw. The walls are built on a stone foundation.[241] In some houses, *kishks* (wooden kiosks) were used in traditional architecture and are considered an architectural feature of the ʿOttomāns. *Kishks* were simply decorated; special attention was paid to the corners and cornices. The exterior walls are usually decorated with fine woodwork. The ceiling is made of wooden boards supported by wooden beams and covered with decorated wooden panels.

[237] Raymond 2008
[238] Raymond 2008
[239] CORPUS Levant & DGAM 2004:19
[240] CORPUS Levant & DGAM 2004:19
[241] CORPUS Levant & DGAM 2004:19

Vaulted roofs are observed in traditional *sūqs*. Clay or lime mortar is used to join the stones and give stability to the whole structure[242].

The main streets and the residences of the well-to-do families were paved, appearing as large, connected, carved and polished blocks with a central drain to drain rainwater into the river[243].

2.1.5 The Evolution of Conservation and the Path to World Heritage Status

The preceding sections have detailed the architectural layers of *Aleppo*, with particular focus on the *ʿOttomān* period fabric that forms the physical baseline for this thesis. However, a building's significance is not solely determined by its age or style; it is also defined by how it has been valued, protected, and interpreted by successive generations. The story of how a living, evolving city came to be understood as a "heritage site" is therefore an essential prelude to understanding what was lost in the recent conflict and what must now be recovered.

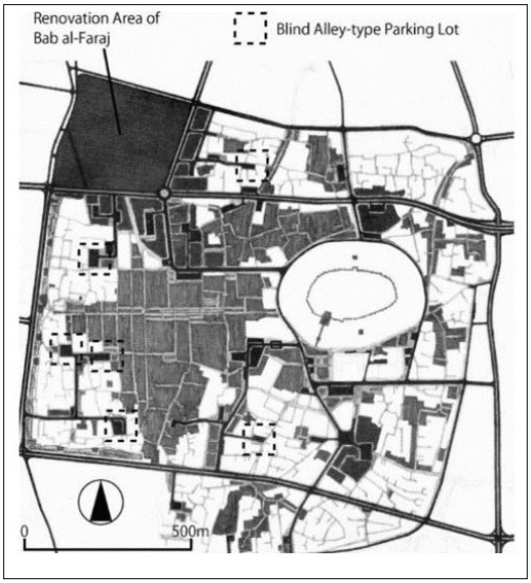


Fig 18: Banshoya's Master Plan for Aleppo Ancient City

This section traces the evolution of conservation philosophy and practice in *Aleppo*, from the late *ʿOttomān* period through French Mandate rule to the post-independence period and ultimately to the city's inscription as a UNESCO World Heritage Site in 1986. It is not intended as a comprehensive history of preservation, but rather as a focused examination of the key moments, actors, and ideological shifts that shaped the conceptual framework of "heritage" in *Aleppo*.

[242] CORPUS Levant & DGAM 2004:19
[243] CORPUS Levant & DGAM 2004:19

2.1.5.1 From French Mandate to National Protection (1920-1986 AD):

The imperial ownership of historical monuments, the possibility of allocating land for archaeological research and the protection of monuments considered part of the city's heritage were the most important factors[244]. At this stage, a distinct hierarchy emerged between the various types of construction. Modern notions and perceptions of historical authenticity often derive from such initial decisions. In *Aleppo*, beyond the walled city, new neighborhoods, like *al-Jdeïdé*, were built during the late *ʿOttomān* period[245]. They embodied imperial modernity. Engineers and planners, including foreign experts, were asked to connect this new city to the old one, in a logic that was more one of integration than of juxtaposition. The heritage dimension was thus given a new role, between conservation and scenography. Elements of *ʿOttomān* architectural orientalism were included in this vision, as in the case of new public buildings and new mosques[246].

The way the built heritage was conceptualized was greatly impacted by the French's very colonial interpretation of the mandate over *Syria*. At least until (1927), the newly established Syrian territory was conquered. Instead of the urban substance, their posture's first effect was the reinforcement of protection based on specific monuments.

(1920) saw the introduction of *Syria's* first colonial regulatory framework. The colonial logic in *Aleppo* concentrated on the Roman and Hellenistic periods, and the conservation decisions made during that time were anything but neutral. Instead of urban substance, this posture's first effect was the reinforcement of protection based on specific monuments. However, it was not until (1933) that *Aleppo* acknowledged the importance of institutions for safeguarding the built heritage. Concepts of heritage authenticity and protection were updated during this time considering new planning strategies. However, primarily at the expense of " ʿOttomān forms," the preeminence of the Hellenistic and Roman urban traces was confirmed.[247] It was acknowledged that medieval Islamic monuments were significant. The expansion of protection to entire areas around the most significant medieval artifacts was what preserved some

[244] Pagnier, 2017
[245] Pagnier, 2017
[246] Pagnier, 2017
[247] Watenpaugh 2004

ʿOttomān monuments. Protecting the historic city required defining its physical boundaries and organizing their vision of modernity around it, according to the firm's planners[248]. A modern outside city and a protected inner city were found to be incompatible. As a result, the Ancient City, where new populations moved from rural areas, became impoverished. This favored the transfer of many of the local élites. After gaining independence, this movement grew even more significantly altered the inner city's appearance and perception of its social value. It also deeply affected perceptions of what authenticity is: the inner city became increasingly identified with a space occupied by populations unaware of its aesthetic values, to which only external expertise could bring salvation[249].

Outside of the Ancient City, Syrian élites kept moving to the newly developed neighborhoods. This phenomenon presented a new challenge to the private built heritage: when families of notables moved to new neighborhoods and tended to rent out old private houses to populations of rural or nomadic origins who had other lodging needs and who did not necessarily share the cultural and sociological representations associated with the houses, these families started to neglect them[250]. After (1970), this mindset was strengthened. Colonization had weakened the relationship between the private built heritage and the historically and sociologically rooted sphere of its governance, which tended to deteriorate even more. Numerous apartments were created in historical homes, new floors were added, and many buildings' very designs were changed[251]. Thus, after (1948 AD), geopolitical developments and Syrian ideological shifts had a significant impact on the city's building. Since the (1930s), French colonial planners' concepts and paradigms have dominated the field of urban planning. For instance, *André Gutton's* [252]master plan from (2004 to 2002)[253].

In (1954) French urban planner *André Gutton* created urban projects that were initially started under the Mandate, but because of the extensive expropriations and severely destructive

[248] Watenpaugh 2004
[249] Watenpaugh 2004
[250] David 1975
[251] David 1975
[252] André Gutton was a French architect. Gutton employed by the French government in 1927 as a town planner (8 January 1904 – 10 November 2002).
[253] David 1975

demolitions in several historic neighborhoods, including *Bāb al-Faraj, al-Jdeïdé*, and the areas west of *Bāb al-Jinān*, tens of hectares were destroyed[254].

But in the (1960s and 1970s), Syrian authorities adopted a vision of heritage that included entire neighborhoods surrounding the monuments thanks to the Laws of (1963, 1969, and 1977). Concepts of heritage were significantly impacted by the intricate ideological developments of this time. The DGAM expanded the protected zone's boundaries to include some pre-nineteenth-century extramural neighborhoods in (1978), protecting the entire historic city. A set of general guidelines and the Ancient City protection plan were created between (1968 and 1974) under the direction of *Gyoji Banshoya*.[255] *Banshoya* proposed restricting routes and canceling municipal projects to widen lanes and create cul-de-sacs. Dead-end streets and the definition of two levels to categorize the ancient urban fabric— a protected center and a zone where changes were permitted, following certain rules and after inspection by the authorities— were among his alternative proposals. Law No. 1 was passed in (1976) to designate the intramural Ancient City as a national historic site. A Conservation Committee was established to oversee the implementation of the Syrian Antiquities Law No. 222 of 1963, which was implemented to direct and control interventions within the Ancient City[256].

2.1.5.2 World Heritage Inscription and Modern Conservation Efforts (1986-2011):

Syria, as a state party of UNESCO, approved the 1972 UNESCO Convention Concerning the Protection of the World Cultural and Natural Heritage[257] and its relative Operation Guidelines updated regularly. In addition to recognizing other key documents such as the Hague Convention with its two protocols 1954/1999[258], accordingly, a wide range of activities including awareness raising, workshops, training courses, exhibitions, and other attempts have been in progress for safeguarding the heritage of Syria by international and national bodies[259].

[254] David 1975
[255] Gyoji Banshoya was a Japanese urban planner whose lifework was urban planning in the Middle East and North Africa (1930–1998).
[256] UN-Habitat & UNESCO, 2019
[257] UNESCO Web Archive, 2019
[258] UNESCO Web Archive, 2019
[259] UNESCO, 2014

The Conservation Committee of *Aleppo* asked UNESCO for assistance in suggesting measures to protect its historic fabric in 1979. In 1983, a global symposium was held to encourage Ancient City preservation. The Ancient City (OUV) was recognized in 1986 as a UNESCO World Heritage site, and successive rulers' cohesive and distinctive urban structures support this claim. The restoration of monuments then became the main issue. The citadel, the *al-Masjid al-kabīr*, and numerous other historic structures all underwent restoration work because of the DGAM's collaboration with the municipality. Other conservation initiatives have been underway in the city since then.

In other words, despite aggressive development, *Aleppo* has a history of safeguarding archaeology and conservation. The (GTZ) was approached by the DGAM and the municipality in 1992 on the Friends of Aleppo Ancient City initiative to support urban conservation[260]. Several national institutions were founded, inventories were conducted, and a comprehensive conservation plan was developed between 1992 and 1994 thanks to the initiative[261].

Although it was not given independent status until 2000, the Directorate of *Aleppo Ancient City* was established in the same year under the municipality's supervision. The Project for the Rehabilitation of *Aleppo Ancient City* was created in early 1993, and one of its first responsibilities was to establish *Aleppo Ancient City* Preservation Committee[262].

The scraping of new construction and demolition plans were notable actions taken in 2000 when a plan for the *Ancient City* was approved[263]. The water supply and sewage systems were upgraded, street paving was improved by 80%, interest-free loans were made available to homeowners who wanted to rebuild their homes, and neighborhood social infrastructure and school facilities were finished or upgraded. To ensure citizen involvement, a 15-year rehabilitation strategy and development plan that includes physical infrastructure, economic

[260] Vincent, 2004
[261] Vincent, 2004
[262] Spiekermann, 2004
[263] Aga Khan Trust for Culture, 2022

and social development, and planning workshops was developed[264]. A survey of the city's issues and the creation of a development plan for the entire city were the first actions (1993– 1997)[265].

Three action areas tested a plan for improving infrastructure and renovating 200 buildings, with loans given to 170 residents to help them rebuild their homes[266]. The entirety of the *Ancient City* has been included in these activities as of phase 2, which was finished in 2000, and phase 3, which came after. Residents' increased involvement in decision-making has been a defining feature of these phases[267].

Each area's purpose was specified by Zoning. Around the citadel and in *al-Jdeïdé* district. tourist facilities were combined[268]. Encouragement of residents and their activities to stay on was the goal in the residential neighborhoods[269].

The AKTC, in partnership with the DGAM, initiated a project in 1999 for the conservation of citadels in *Syria*, which included *Aleppo*[270].

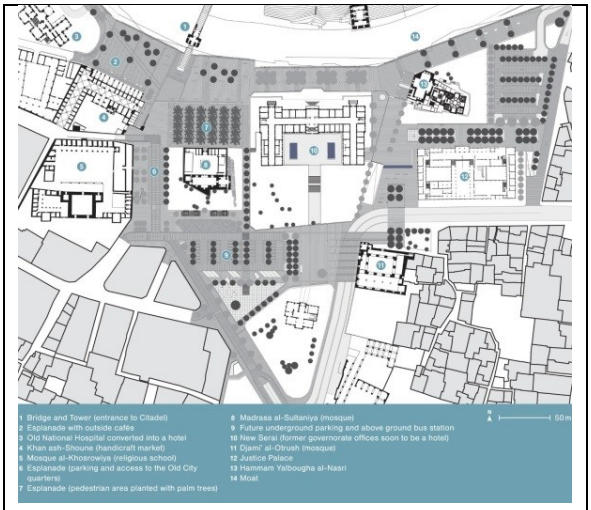


Fig 19: The citadel Perimeter Project implemented from 2005 to 2008 by AKTC

It financed conservation projects and several archaeological excavations within the citadel with the participation of the WMF. The AKHCP, in partnership with the DGAM and GTZ, reviewed and carried out the citadel Perimeter project between 2004 and 2010[271] [Fig 19].

[264] Totah, 2007
[265] Spiekermann, 2004
[266] Spiekermann, 2004
[267] Spiekermann, 2004
[268] Aga Khan Trust for Culture, 2022
[269] Spiekermann, 2004
[270] Aga Khan Trust for Culture, 2022
[271] Aga Khan Trust for Culture, 2022

By early 2011, the results were impressive. *Aleppo Ancient City* was once more prosperous and undergoing modernization. The authorities connected city businesses' interests with their own, and tourism investment was expanding quickly[272].

Major religious and secular monuments, as well as inhabited residential and commercial areas, can be found in the city's nearly intact historical fabric[273]. It also has features that are typical of Middle Eastern cities constructed in the Islamic tradition, such as its organic form, minimal public open space, segregated residential quarters to distinguish between various tribes and clans, and circulation hierarchies made up of a maze of curving streets and cul-de-sacs[274].

In *Aleppo Ancient City*, the residential area typically consists of a main street from which smaller streets branch off and lead to the more peaceful and private residential cul-de-sacs. The *sūq*, where shops were grouped according to crafts or goods, was once the center of all economic activity[275].

One of the main objectives of the citadel Perimeter project carried out from 2005 to 2008[276], was to plan and control the spread of commercial functions that could otherwise threaten the comfort, economy, and environment of the adjacent residential areas. It was also important to open new cultural development opportunities through the reuse of existing historic buildings and to direct tourist and commercial functions in a direction that would be beneficial to the affected areas and the ancient city in general[277].

[272] Spiekermann, 2004
[273] Wessling & Ghalam, 2020
[274] Wessling & Ghalam, 2020
[275] Aga Khan Trust for Culture, 2022
[276] Aga Khan Trust for Culture, 2022
[277] Aga Khan Trust for Culture, 2022

2- Aleppo Ancient City Case Study

SECTION 2.1:

2.1 Assessing War Damage and Proposing Recovery Strategies for Aleppo's Heritage

2.2.1 Introduction to the Case Study

This section presents the original research and analysis conducted by me. It begins with the war's impact, details the damage to key sites, and culminates in a detailed rehabilitation proposal for a significant war-damaged building. My direct involvement with the DGAM forms the basis of this empirical work. The presented case studies were organized around two complementary scales of analysis, each chosen to illuminate different dimensions of the post-war heritage challenge.

- **Action Area I: The *Taḥt al-qa'la* Urban Ensemble** examines the area south of the citadel t, a multi-layered with four significant monuments suffered catastrophic damage during the conflict.
- **Action Area II: *Bayt Ajqbāsh*** offers a detailed, building-scale investigation of a single 18th-century house in the *al-Jdeïdé* district.

Together, these two action areas address the core research questions of this thesis. The following pages do not offer easy answers or universal formulas. They present a grounded, evidence-based analysis of one city's devastation and its tentative steps toward recovery. In doing so, they aim to contribute not only to the scholarly discourse on post-war heritage rehabilitation but also to the practical effort—still ongoing, still fragile—to restore meaning and life to the wounded fabric of the *Ancient City of Aleppo.*

2.2.2 The War and its Impact on Aleppo's Built Heritage (2012-2016)

In July 2012, *Aleppo* fell to war. *Aleppo's* architectural heritage, an essential part of the city's identity, was severely affected. Initially, the war focused on the citadel in the center of the historic city and then spread to the commercial zone and surrounding residential neighborhoods.

Numerous monuments have been severely damaged or destroyed by shelling, underground bombs, shelling, fires, and street fighting. The extensive clashes of *Ancient City of Aleppo* have left part of the ancient city in ruins and caused massive destruction. A string of explosions struck *Ancient City of Aleppo*, bombs detonated in tunnels below the old town.[278]

[278] DGAM 2017: 22

2.2.3 Phase 1: Documentation – The Post-Liberation Emergency Assessment (2017)

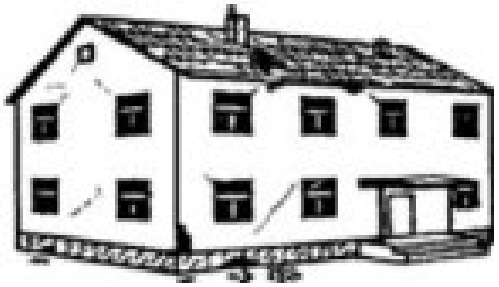
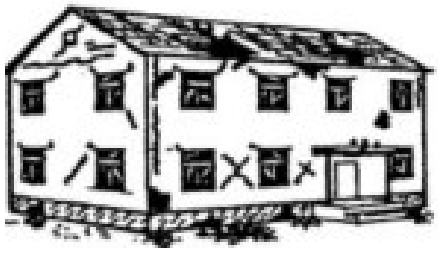
This section presents the findings of the assessment phase. It describes WHAT happened to the monuments. The question of WHAT TO DO ABOUT IT is reserved for the next section.

Aleppo entered a war in July 2012[279]. A significant part of *Aleppo's* identity, its built heritage, was severely impacted.[280] After the city's liberation in 2016[281], international bodies began to organize a response, and the recovery phase began with the gathering of knowledge and documentation databases for most of the sites, historic city center, and historic structures[282].

In January 2017, after the Syrian government forces took over the city, DGAM carried out an emergency assessment of the extent of damage to *Aleppo's* cultural heritage, *"field investigations, including site visits and collection of photographs and other documents from published sources, architectural plans and other data were selected by the team. Although the investigation covers important public monuments, there were some monuments which could not be visited due to poor road conditions, or time constraints*. [283]

The damage scale used by the Directorate General of Antiquities and Museums (DGAM) is a five-level classification system designed to assess structural and non-structural damage to buildings, particularly heritage structures. The levels are according to the Table below 4-:

[279] Asslan, 2023
[280] Asslan, 2023
[281] DGAM, 2017b
[282] UNESCO, n.d
[283] DGAM 2017: 1

Very Slight Damage • No damage to the structural system. • Slight damage to the building (thin cracks in some walls, collapse of plaster, falling stones from the tops of walls).	
Slight Damage • Slight damage to the structural system (cracks in many walls, significant collapse of plaster, falling stones from the tops of walls).	
Significant to Severe Damage • Moderate damage to the structural system. • Significant non-structural damage (wide cracks in most walls, collapse of ceiling supports, falling of some non-structural elements such as partition walls).	

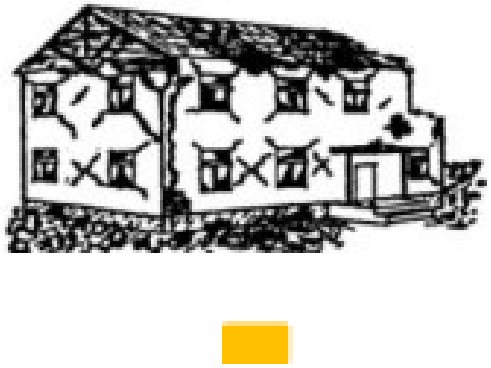
Very Severe Damage • Severe damage to the structural system. • Severe damage to non-structural elements. • Significant collapse of walls or partial collapse of the ceiling and floors.	
Collapse • Complete collapse of the structural system.	

Table 3: The damage scale used by the Directorate General of Antiquities and Museums (DGAM)

	Damage Type A: (In good condition)	Damage Type B: Lightly damaged	Damage Type C: Heavily damaged	Damage Type D: Almost destroyed	Damage Type E: Completely destroyed	Total number of buildings documented
Number of building documented	10	45	59	41	15	**170**
The ratio	5.9%	26.5%	34.7%	24.1%	8.8%	**100%**

Fig 20: A table shows the number and ratio of the damaged monuments in Aleppo Ancient City according to the 5 points scale of damage accredited by DGAM

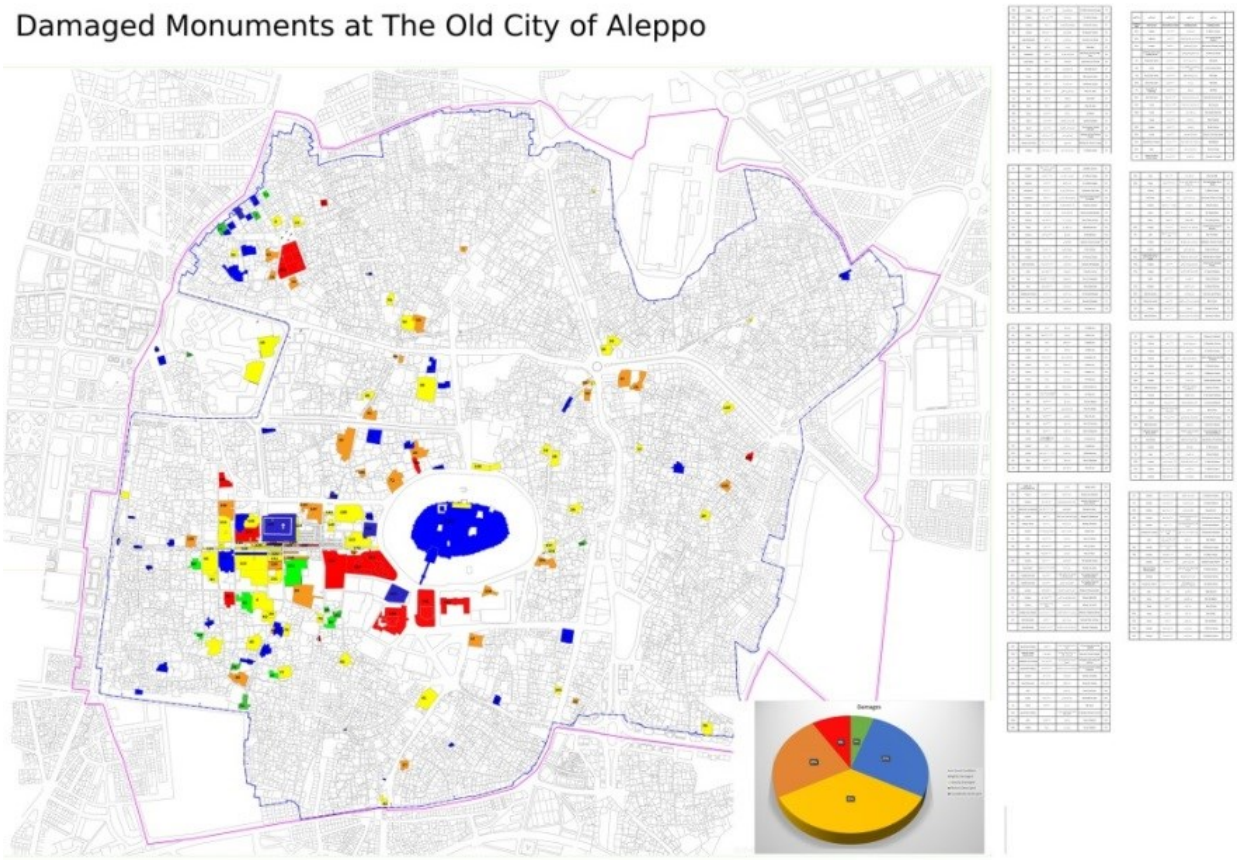


Fig 21: Damage Assessment map at Ancient City of Aleppo.

2.2.4 The International Response and the Framework for Recovery:

This assessment was followed by an international coordination meeting convened by UNESCO in Beirut and involving representatives of the DGAM, the Aleppo City Council, the Ministry of Tourism, the Directorate of Aleppo Awqaf (Ministry of religious endowments), NGOs and universities to discuss safeguarding and first-aid measures for Aleppo's cultural heritage; the Director of the UNESCO Regional Office in Beirut, Hamed Al Hammami, stressed that *"Syria's national and local stakeholders have successfully started working in a tremendously difficult context, and future recovery and rehabilitation efforts must advance in order, with extreme care and precision"* [284].

[284] UNESCO, 2017

The recovery plans that are currently being developed pose the greatest threat to *Aleppo's* heritage. Among the main outcomes of the decisions adopted at the 41st session of the World Heritage Committee WHC in July 2017, held in *Karkow*, was the decision to urge Syria "to allow sufficient time for the development of integrated strategic plans for the rehabilitation and revitalization of the property in its broader urban context, in line with the Recommendation on the Historic Urban Landscape and in this read, underlines the need for UNESCO to ensure its coordinating role".[285] Moreover, the committee underlined the importance of following the *Table of Actions for the Recovery of Ancient City of Aleppo* which was agreed upon in March 2017[286], in a meeting hosted by UNESCO, and was held in *Beirut*, *Lebanon*. Also, one of the key outcomes was the establishment of a specific UNESCO unit in *Aleppo* to assist and consult the ongoing safeguarding process.

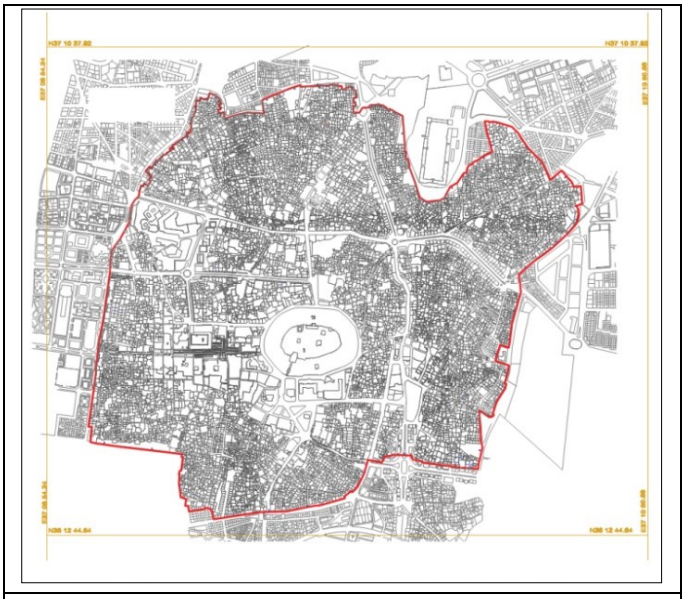


Fig 22 Map of the inscribed Ancient City of Aleppo boundaries.

The joint UNESCO Beirut office "emergency safeguarding to the Syrian Cultural Heritage project" and the DGAM Team, undertook an emergency mission, to the *World Heritage City of Aleppo* from 16 to 19 January 2017, to undertake a preliminary assessment of the extent of damages at the World Heritage site. Discussed Emergency measures during several working meetings with the DGAM and NGOs, to identify adequate proposals and coordinate action for the recovery phase[287].

The UNESCO team reported extensive damage at the Great Umayyad Mosque, the citadel, mosques, churches, *sūq, Khāns, madrasa, hammams,* museums and other significant historic

[285] UNESCO 2017:60
[286] UNESCO & DGAM 2017
[287] DGAM 2018: 15-16

buildings in *Aleppo*. According to a preliminary assessment, some 60% of the old city of *Aleppo* have been severely damaged, with 30% destroyed. The mission noted the incredible resilience of the people of *Aleppo,* and the efforts led by heritage professionals to undertake mitigation actions during the conflict, as well as emergency measures for the recovery phase (damage assessment, debris management...). Emergency measures were discussed during several working meetings with the Aleppo City Council, the DGAM and NGOs, to identify adequate proposals and coordinate action. During these consultations, it was proposed to declare the *Ancient City of Aleppo* an "emergency zone[288]".

2.2.5 A Note on the Multi-Layered History of the Site

It is critical to recognize that the *Taḥt al qal'a* area has been destroyed and rebuilt multiple times throughout its history. As the visual timeline in Fig. 19 demonstrates, the space has served as:

- At the time of *al-Ẓāhir Ghāzī* (582-613 AH / 1186-1216 AD), the entire fortification *Taḥt al qal'a* was built, the most important architectural promoter in the medieval history of the city[289]. Another part of the *citadel 's* context lay outside its boundaries in the region commonly known as *Taḥt al qal'a*. Under *al-Ẓāhir Ghāzī*, a systematic attempt was made to transform this area into an extension of the citadel or, better, into a zone of official exchange between the al-Ayyubid and the city[290]. Two important institutions contributed to the official image of this region, which is currently located in the palace. These are the intramural burial of *al-Ẓāhir (madrasat al-Sulṭānīyah),* and the *Dār al-'Adl*[291] , which has disappeared almost without a trace. Where the *Dār al-'Adl* was in *Ancient City of Aleppo* is the subject of some debate[292].
- According to *Sauvaget*, *Dār al-'Adl* served as a crucial hub in the Ayyubid period, designated for the governor or deputy of the *Sülṭān* to conduct official meetings[293]. This palace symbolized governmental authority and was rebuilt after the original structure was destroyed later by the Mongols and *Tamerlane.* The *Dār al-'Adl* featured two entrances: a

[288] UNESCO, 2017
[289] Tabbaa, 2021
[290] Tabbaa, 2021
[291] Rabbat, 1995
[292] Tabbaa, 2021
[293] Al-Ghazzī 1952: 496

smaller door located on the southern side, known as the *al-Bāb al-Ṣaghīr* "small door," and a larger door on the eastern side, which was adjacent to the Roman trench and kept closed.[294]

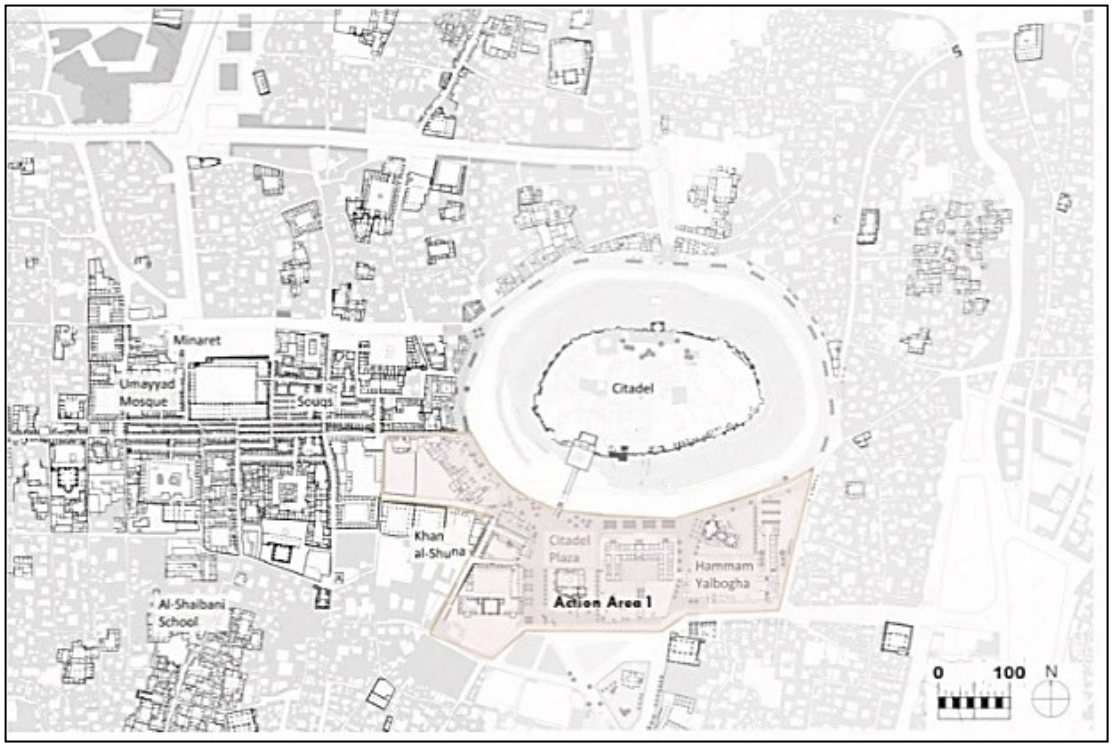


Fig 23: Map of Action area 1 in Ancient City of Aleppo

The governor convened meetings biweekly, allowing the city's garrison to showcase its military strength in front of the *citadel* , which represented the Sülṭān's presence[295]. Additionally, a square was established beneath the *citadel* to serve as a gathering point for soldiers, highlighting the significance of military power within the society of that era. It was built next to the *citadel* , which constituted the government center and the royal residence[296].

The *Dar al-'Adl* was enlarged in the Mamlūk period to include the residence of the *na'ib* of *Aleppo* and ultimately acquired the name *Dar al- Sa'ada* as well[297].

[294] Al-Ghazzī 1952: 496
[295] Sauvaget 1941: 196
[296] Sauvaget 1941: 196
[297] Sauvaget 1941: 196

It was used for various court ceremonials, among which the weekly *mazalim* ceremony remained prominent. Architecturally, the palace featured notable elements such as *al-Masjid al-kabīr* and the governor's residence, contributing to its cultural and religious significance. Thus, the palace transcended its role as merely an administrative building, becoming the epicenter of political and military life in the city, where civil and military activities were closely intertwined, it was located to the west of the entrance block of the *citadel* [298] And others to the east of it. [299] Suffice it to say here that both the archaeological evidence and several statements by *Ibn Shaddād* leave no doubt that it was located to the east of the entrance block, below the present *Sarāy* building, between the old and new eastern walls of the city.[300]

During the Ayyubid period, part of the context of the citadel lay outside its boundaries in the region commonly known as *Taḥt al-qal'a*. The large open space at the foot of the citadel gate, the *Taḥt al-qal'a*, was a center for commercial and ceremonial activities. The Mamlūk troops paraded there weekly, and a horse *sūq* was held.[301] Moreover, the inscription was intentionally placed on the outer wall of the citadel to make it as visible as possible to the inhabitants of the city[302].

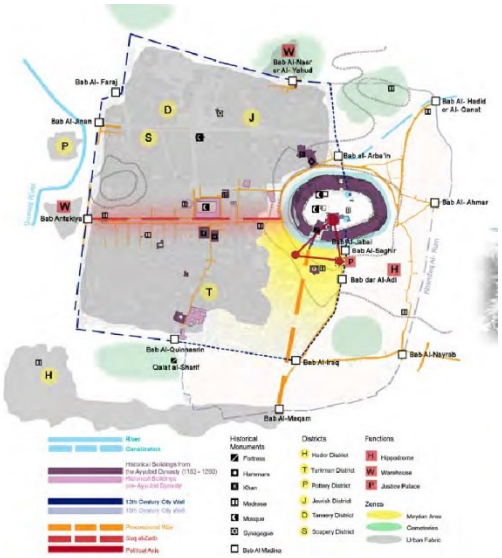
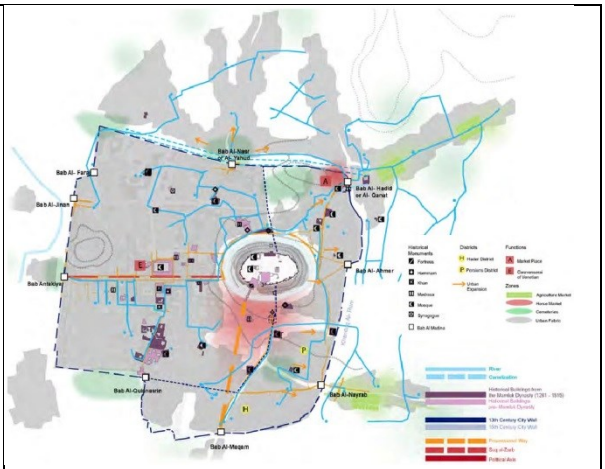
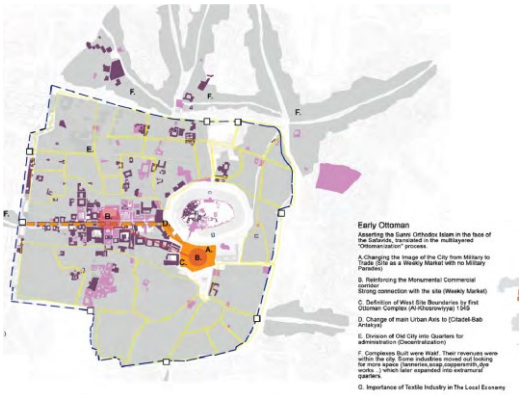
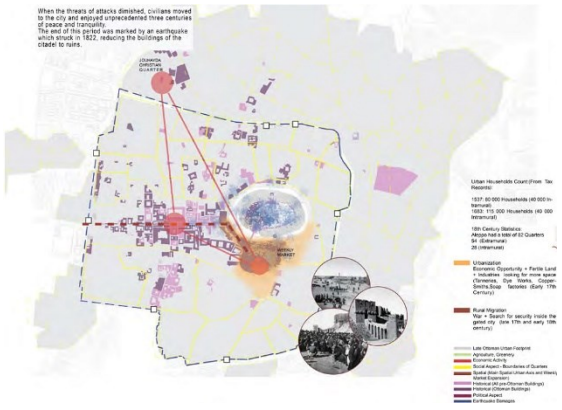
This section of the wall overlooked one of the largest open areas of the city, which was also one of the busiest: a temporary *sūq* square that served as the Mamlūk *Sūq al-Khayl* (Horse market*)* and later as the *Sūq al-Jum'ah* (Friday market). This inscription remained the only official ʿOttomān stamp on the *citadel t* until the nineteenth century[303]. *Sūq al-Khayl* was, serving as a replacement for the old *sūq* that had been destroyed by the Mongols[304]. This *sūq* was crucial for meeting the needs of an army primarily composed of knights, focusing on the trade of hay and saddlery. Adjacent to *Sūq al-Khayl* was a former *sūq* overseen by notaries, which later transformed into a hub for bow and arrow *sūq*. This development was complemented by the establishment of a shooting range to enhance military training[305].

[298] Ṭabbākh 1988, 3:13-14.
[299] Herzfeld 1954, 1:15-16.
[300] Ibn Shaddad 1688
[301] Sauvaget, (1941), 169. Rabbat, (1995): 3-28
[302] Sauvaget, (1941), 169. Rabbat, (1995): 3-28
[303] Sauvaget 1941: 169.
[304] Sauvaget 1941: 169
[305] Sauvaget 1941

The expansion of the city along the Persian caravan route featured a remarkable topographical extension, driven by the increasing significance and number of caravans arriving from the northeast. The specialization of the *Bānqusā sūq* was closely tied to caravan movements and evolved alongside the growth in trade volume. Meanwhile, the *Sūq al-Khayl* lost its prominence in city life following the destruction of its shops by fires during the Mamlūk period, leading many of its merchants and professionals to relocate to the *Bānqusā Sūq*. The Mamlūk *Qaṣr al-'Adl* continued to house the Pāshās and their meeting, but intermittently, and for security reasons they use another place outside the residential complex (*Tekkiyeh al-Darāwīsh*) built on the tomb of *al-Shaykh Abī Bakr aldfā'y*[306].

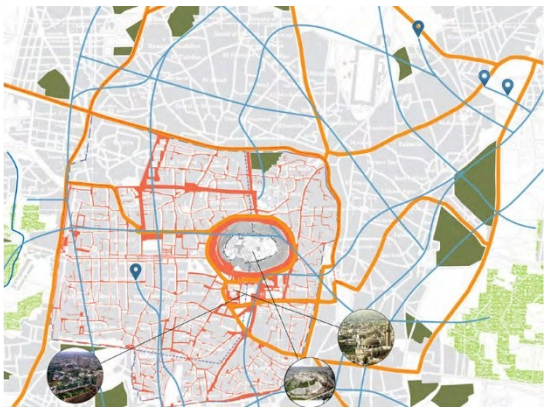
The Mamlūk *Qaṣr al-'Adl* lost its role, and the buildings designated for government use, which were located next to it, became temporary structures that burned down with it during the (1233 AH - 1234 AH/ 1818 AD) uprising and were not rebuilt. In the same square, a weekly *sūq* was created for soldiers, frequented by mercenaries, junk sellers, and small craftsmen, with their goods displayed in a manner resembling a permanent *sūq*[307]. On the periphery of this *sūq*, small shops and restaurants emerged, along with entertainment venues that were essential to the daily life of the Mamlūks. This dynamic reflected the interaction of the military community with the economic and cultural aspects of the era. Ultimately, the *sūq* served as a center for trade and social activities, contributing to the enrichment of civil life amidst military dominance[308]. The citadel perimeter recently lined by several historical buildings dating from the late 19th century transformed into institutional services, the large number of coffees and restaurants made it a lively urban area for Aleppines. It was one of the most active zones, not only for tourists but also for the inhabitants of the city. The area was a theatre for many carnivals and cultural activities, cafés and restaurants, and cultural and entertainment centers[309].

[306] Sauvaget 1941
[307] Sauvaget 1941
[308] Sauvaget 1941
[309] Sauvaget 1941

	
✓ *The Taḥt al-qal'a area during the Ayyubid period (579–658 AH/1183–1260 AD) was a military and commercial of Space of Parades.* ✓ *(619-620 AH /1223 AD): The Madrasat al-Sulṭānīyah was the first building within the citadel plaza.*	✓ *The Taḥt al-qal'a area during the Mamlūk period (1215–1261 AH / 1800–1845AD) was a place for exchange and a sūq place.*
	
✓ *The Taḥt al-qal'a area during the Early ʿOttomān (923–993 AH/ 1517-1585 AD) turned into sūq place* ✓ *(940s AH / 1530s AD): The construction of the Khusrawiyya Complex*	✓ *The Taḥt al-qal'a area during the Late ʿOttomān (1214–1330 AH/1800-1912AD) turned into a week sūq place* ✓ *(1284-1285 AH / 1868 AD): the Sarāy was started to construct.* ✓ *(1317-1318 AH / 1900 AD): the National al-Ḥumaydī hospital was constructed.*



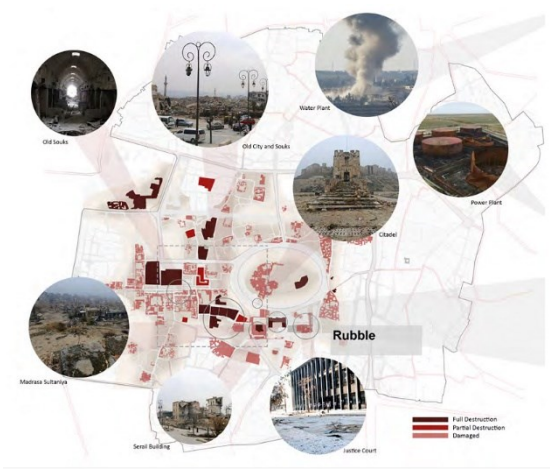
✓ *The Taḥt al-qal'a area during the French Mandate (1336–1362 AH/ 1918-1943AD) turned into military space of Barracks*



✓ *The Taḥt al-qal'a area during the post-Independence:(1369–1410 AH /1950–1990 AD). A Transportation Hub.*



The Taḥt al-qal'a area during the Pre-War (1423–1431 AH /2003-2010 AD) turned into a Cultural Hub and Promenade



The Taḥt al-qal'a area current situation (1437-1438 AH / 2016 AD)

Fig 24: Multi layered narrative to the Taḥt al-qal'a area.

2.2.5.1 Action Area I: The *Taḥt al-qal'a* Urban Ensemble – Documentation of Damage and Opportunity for Urban Recovery

Several steps were taken towards reconstruction; the rubble and debris were started to be removed from *Aleppo*[310]. Buildings with their façade overlooking the citadel, being in the frontline are fully reduced to rubble: the new *Sarāy*; *madrasat al-Sulṭānīyah*, *madrasat Khosrowiyya* and the national *al-Ḥumaydī* hospital (Carlton Hotel). This area south of the citadel represents an opportunity to consider and integrate the architectural layers in the working plan, and the use of public open space/s to recreate the urban social life. Public open space was only partially damaged and since then, it has been repaired. On the other hand, such as and a large majority of the buildings in the Northwest quadrant are fully or partially destroyed[311].

In view of the destruction, *Ancient City of Aleppo* prevails as home to remaining monuments, such as the citadel and *al-Masjid al-kabīr*. The citadel layers are still recognizable, though the war has left its mark as well. Interestingly, recent documents, namely, the *ICOMOS Guidance of 2011*[312], combined *exceptional* intangible heritage traditions and skills, comprising "beliefs, stories, festivals, and rituals," with tangible predefined ones[313]. The OUV *of Ancient City of Aleppo* has partially survived in its tangible forms, and its intangible dimensions would reform *Ancient City* reconciliations[314]. The reconstruction works have been operated in the *al-Masjid al-kabīr* as a sociocultural symbolic structure in *Aleppo*. This strategy of starting post-conflict recovery process by rebuilding iconic monuments, which have cultural, social, identity, and religious values to the Syrians, has been recently implemented in several Syrian cities by the local authorities[315].

The restoration project of a mosque, focusing on the debate surrounding whether the mosque should be restored to its pre-war state or be redesigned with contemporary interventions. The government planned to only restore what was damaged, as no redesign proposals have been

[310] DGAM, 2017b
[311] DGAM, 2017b
[312] ICOMOS, 2011
[313] UNESCO World Heritage Centre, n.d
[314] Roders; Bandarin 2019: 66
[315] DGAM, 2018

received. The project, initiated in 2017, has received over $6 million in funding from philanthropists in the Chechen Republic.

The remaining stones are being numbered and laid in the *masjid's* courtyard, while the grand marble sundial, used for prayer times, has been neglected and enclosed with breeze-block walls during the war.

The restoration work at the *al-Masjid al-kabīr* has involved extensive efforts to reconstruct and repair various sections of the mosque. The northwestern side saw the rebuilding of the east and west walls of the main gate, using old stones where possible, as well as the restoration of the north facade and gallery. Approximately half of the minaret was reconstructed using undamaged old stones and replacing the damaged ones, with inscriptions and motifs carefully numbered and repositioned. The southern side, or *Qibla*, underwent repairs, including the blocking of holes in the *miḥrābs* and the restoration of stone floors and wood frames in the doors. Furthermore, the mosque's wall overlooking *Sūq Al-Habal* was also restored. These restoration efforts aimed to preserve the historical and architectural integrity of the *al-Masjid al-kabīr*, employing compatible materials and meticulous attention to detail throughout the process[316].

Another example can be found in *Homs* city, where two important religious buildings are reconstructed, *St Mary's Church of Holy Belt* and *Khālid ibn al-Walīd Masjid*. This step encouraged a large part of the local communities in *Ḥomṣ* to go back and rebuild their homes[317].

The decision to first rebuild iconic structures like the *al-Masjid al-kabīr* in *Aleppo* and *St Mary's Church of Holy Belt* and *Khālid ibn al-Walīd Masjid* in Homs is a powerful statement. It signals the government's intention to restore not just the physical fabric of the city, but also its spiritual and communal heart. This step encouraged residents to return and rebuild their homes. The funding of the *al-Masjid al-kabīr* restoration by foreign philanthropists (from Chechen Republic) and the execution of the project by the local authorities illustrate the complex interplay of local, national, and international actors in the recovery process. The government's choice of which buildings to

[316] UNESCO World Heritage Centre, n.d.
[317] Alsalloum & Jackson, 2017

rebuild first, and in what style, is a form of "state-crafting" it projects an image of the nation's past and future that serves the current political order.

Like in Mostar, Bosnia and Herzegovina, the reconstruction of the Stari Most (Old Bridge), a symbol of the city's multi-ethnic identity, is a classic case. Rebuilt in 2004 with international funding, it was a UNESCO-led project aimed at reconciliation. Comparing this internationally driven, multi-ethnic symbol with the state-led, predominantly Islamic symbol of *al-Masjid al-kabīr* could reveal different philosophies of post-conflict recovery[318].

Comparing these two cases reveals divergent philosophies of post-conflict recovery. Four key dimensions illustrate this divergence:

1. Political Framework and Stakeholders

Mostar's reconstruction was externally mediated, involving UNESCO, international donors, and local authorities in a negotiated process[319]. *Aleppo's* reconstruction is internally controlled, with the Syrian state as the sole decision-maker, supported by foreign philanthropy rather than multilateral institutions.

2. Symbolic Orientation

The *Stari Most* functions as a "bridge" in both literal and metaphorical senses—its symbolism is inherently connective, designed to link the city's ethnic communities[320]. *al-Masjid al-kabīr*, as a congregational mosque and former site of Friday prayers, embodies Islamic authority and Syrian national identity. Its reconstruction reinforces a specific religious and political continuity.

3. Reconstruction Philosophy

Mostar's project was framed around reconciliation and the restoration of multi-ethnic coexistence. *Aleppo's* project, by contrast, emphasizes authenticity of fabric and historical

[318] UNESCO World Heritage Centre, n.d
[319] Grodach, 2024
[320] UNESCO World Heritage Centre, n.d

fidelity, with no articulated social agenda beyond the physical act of rebuilding. This reflects what one scholar terms "restorative nostalgia" as a desire to return to an imagined pre-conflict state without addressing the conflict's underlying divisions[321].

4. Social Outcomes

While *Stari Most's* reconstruction is credited with facilitating some return of displaced populations and symbolizing peace, its impact on genuine inter-ethnic reconciliation remains debated[322]. In *Aleppo*, the mosque's restoration coincided with a broader government campaign to encourage residents to return, suggesting that the project was intended as a visible signal of restored normalcy and state control.

This comparison reveals that post-conflict heritage reconstruction is not a neutral technical exercise but a deeply political act. The *Mostar* model, driven by international actors, prioritized reconciliation and multi-ethnic symbolism. The *Aleppo* model, driven by the *Syrian* state, prioritizes the restoration of national-religious heritage and the reassertion of state authority. These contrasting approaches raise important questions for future research: To what extent can state-led reconstruction of religious monuments foster social recovery in deeply divided societies? How do different funding models—international versus philanthropic—shape the autonomy and accountability of reconstruction projects? And what are the long-term social consequences of choosing "restorative nostalgia" over transformative reconciliation?

In *Aleppo* additional steps have commenced, for example, official communities are nominated to supervise the rehabilitation process. Activities for raising awareness among local communities in relation to safeguarding their heritage in order to prevent harmful interventions have also been in process. Moreover, cleaning and clearing the ruins and recycling building materials have started in several areas.[323]

Since its recovery is crucial for the urban and economic life of *Aleppo*, the center was envisioned by the strategic framework as a priority area to reconstruct and *Sūq al-Saqatiyya* was chosen as a

[321] Asslan, 2023
[322] Kassouha & Walasek, 2024
[323] UNESCO, 2017

pilot project to set a model for the reconstruction of the other sections of the commercial center. The project was funded by AKTC, supervised by DGAM, and implemented by local staff and craftsmen. The rehabilitation project preceded by the removal of debris, the goal is to maintain the original construction plans, using as many original materials as possible[324].

2.2.5.1.1 The Four Monuments: Pre-War Significance and Documented Damage:

- The *madrasat al-Sulṭānīyah*

The *madrasat al-Sulṭānīyah* was built facing the southern gate of the citadel and was founded by *al-Malik al-Ẓāhir*, who passed away in (613 AH/1186-1216 AD)[325]. After his death, the construction remained incomplete until *Shihāb al-Dīn ṭghryl Bik*, the Atabeg of *al-Malik al-'Azīz* and son of *al-Malik al-Ẓāhir*, took it upon himself to renovate and finish the building, completing it in (620 AH / 1223-1224 AD)[326]. The *Sulṭānīyah* attracted many distinguished scholars and gained significant prominence from the seventh century through the tenth century. However, its condition began to decline afterward, and many of its endowments, primarily consisting of tithe lands, were lost[327].

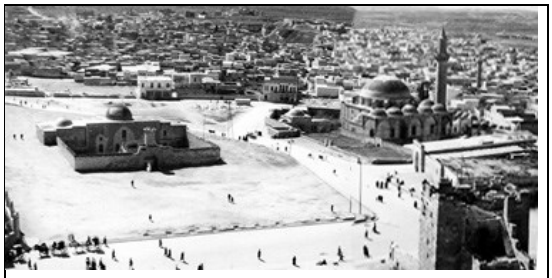


Fig 25: The Madrasat al-Sulṭānīyah & Khusrawiyya Complex seen from the citadel.

As the *madrasat* fell into neglect and abandonment, time took its toll, leading to the collapse of many of its rooms and walls, both inside and out, reducing it almost to rubble. In response, some charitable individuals undertook the task of restoring parts of its walls, spending around twenty thousand piasters from government funds to do so[328].

[324] AKTC, 2017
[325] Burns, 2017
[326] Burns, 2017
[327] Mahamid, 2013
[328] Al-Ghazzī 1952: 578

Ibn al-ʿAdīm noted that the building was made of tightly packed Herculaneum stones, with its *miḥrāb* being considered one of the wonders of the world for its beauty and perfection. *Taymūr* once expressed interest in taking the *miḥrāb* but was advised against removing it in its original state, which led him to leave it in place. The *Sulṭānīyah* also features numerous cells for jurists and has a pond accessible by stairs. It is noteworthy for its abundant endowments[329].

Inscribed on its door is the following: "In the name of Allah, the Most Gracious, the Most Merciful, and with Him we seek help. This *madrasa* was commissioned during the reign of *al-Sülṭān al-Malik al-ʿAzīz*, the Ghiyath of the world and religion, *Muḥammad ibn al- Sülṭān al-Malik al-Muẓaffar Ghāzī ibn al- Sülṭān al-Malik al-Nāṣir*, the Salvation of the world and religion, the Protector of the Holy House of Allah from the hands of the infidels. May Allah grant him a place of His pleasure and the spaciousness of His Paradise, and may He bless the rule of *al-Malik al-ʿAzīz* with determination, justice, and fairness. He established it as a hospice and a shrine for his guardian and the guarantor of his state, the one who upholds the laws. He was preserved by the servant who is poor in need of the mercy of his great Lord, *Shihāb al-Dīn Abū Saʿīd ṭghryl ibn ʿAbd Allāh al-Malakī al-Ẓāhirī*, may God forgive him, and made it a *madrasa* for both groups and a headquarters for those engaged in the sciences of al-Sharīʿah from the al-Shāfiʿīyah and al-Ḥanifīyah sects and the al-mujtahidīn[330].

- The National *al-Ḥumaydī* Hospital (*Mshfá al-Ghurabā'* – Carlton hotel)

The National *al-Ḥumaydī* Hospital (*Mshfá al-Ghurabā'* – Carlton hotel) was begun at the end of the ʿOttomān period in (1308-1309 AH/1891 AD) and completed in (1314-1315 AH / 1897 AD). It was used as the National Hospital in *Aleppo* until the end of the 20th century when it became the Intermediate Health Institute and conversion to the Carlton Hotel began in early 2007. The hospital was built by donors for poor people during the *Jamīl Bāshā* period until he was dismissed in (1303-1304 AH /1886 AD)[331], It was completed in the time of the state of *Ra'īf Pshā* as *al-Ghāzī* indicated[332]. The hospital included rooms for men, women, nurses, and doctors, and rooms for dissections, surgical procedures, couches, and so on. It consisted of 32 rooms, 2 large houses,

[329] Al-Ghazzī 1952: 578
[330] Al-Ghazzī 1952: 578
[331] Ṭabbākh, 3:376
[332] Al-Ghāzzī 1952

2 long salons, a house for washing the dead, 2 baths in each of them, 8 bathtubs, 2 rooms with a curtain for clothes, a room for the examination of patients, 2 rooms for the examination of eyes and normal operations and 2 large gardens with a length of 84 m and a width of 20 m from the side of the hospital and from both ends, provided with columns and fenced with walls with corridor and 2 rooms for the porter. The area was 20,000m^2.

- The new *Sarāy*

It is important to note that the beginnings of the new city of *Aleppo* date back to (1284-1285 AH /1868 AD) when ʿOttomān established a Western-style city administration in the newly constructed ″Sarāy″ building below the citadel [333]. In 1914, the government decided to construct a new Sarāy building in front of the citadel, and the buildings in this area were destroyed and the ruins caused by the (1237-1238 AH /1822 AD) earthquake were removed[334]. The architectural plans for the new Sarāy were finished and the foundations of the building were being excavated when construction stopped. In 1927, construction work was resumed[335].

The history of *Ibrāhīm Pāshā al-Miṣrī* in *Aleppo* reflects significant changes in the political and administrative landscape of the city during the early nineteenth century. After he arrived in *Aleppo* in (1247-1248 AH /1832 AD), *Ibrāhīm Pāshā* purchased a house from the *Banu Al-Jalabi* in the *Mustadamiya* neighborhood, establishing it as his residence. His presence in the city marked a period of military and administrative control[336].

When *Ibrāhīm Pāshā* left *Aleppo* in (1260-1261 AH /1844 AD), the houses he occupied transitioned into residences for ʿOttomān governors, highlighting the ongoing administrative importance of the location. Eventually, the governing officials relocated to a newly constructed house in the *Al-Jamiliyah* neighborhood, which is now recognized as *Muʿāwiyah secondary madrasa*[337].

[333] Bianca 2000:304
[334] Bianca 2000:304
[335] Bianca 2000:304
[336] Bianca 2000:304
[337] Bianca 2000:304

Subsequently, the properties previously held by *Ibrāhīm Pāshā* and the *Banu Al-Jalabi* evolved into a government house referred to as the "old palace." This complex comprised interlinked houses that were restructured into a cohesive governmental space, featuring various sections such as royal, judicial, police, and prisoner facilities[338]. The transformation of these residences into a government house underscores the blend of private and public functions that characterized Ottoman governance in *Aleppo* during this era. The layout and purpose of the old palace mirrored the administrative needs of the time, resembling a small neighborhood in its size and functionality[339].

The transition to a new government building in *Aleppo* reflects the evolving administrative needs and architectural ambitions during the early twentieth century. Recognizing that the existing old palace complex was no longer suitable for the growing demands of government departments, the decision was made to construct a new government house on the southern side of the *citadel* .

In (1335 AH /1916 CE), preliminary work began on this ambitious project opposite the *citadel* gate. The location was strategically chosen for its prominence and prestige, as the main facade of the planned building would face the *citadel* and its entrance would align with the entrance to this historic site. This thoughtful positioning underscored the significance of the government's presence in the *citadel* , a symbol of *citadel 's* historical importance[340].

The original plan involved the complete demolition of the *madrasa al-Ghawthīyah*, which was situated on the site, erasing its historical footprint to make way for the new building. Excavation for the foundations commenced, but the progress was abruptly halted when *Aleppo* was seized, resulting in substantial expenditure on a project that remained incomplete[341].

Following the French takeover of *Aleppo* in 1920, work on the Saray building, as it came to be known, was resumed. The construction was eventually inaugurated in 1930 by Syrian Prime Minister *Tāj al-Dīn al-Ḥusaynī* [342]. Despite the change in governance, it is believed that the French

[338] Al-Ghazzī 1952: 309
[339] Al-Ghazzī 1952
[340] Al-Ghazzī 1952: 475
[341] Al-Ghazzī 1952: 475
[342] Al- Ḥalak 1983: 120

engineers did not significantly alter the horizontal layout established during the Ottoman period, instead relying on the original plans[343].

- *Al-Khusrawiyya* complex

Khusrū ibn Sinān Pāshā, the patron of *Aleppo's* first Ottoman-style *külliye* (a complex of buildings serving the social and religious needs of the community), hailed from *Bosnia* and was recruited through the devşirme system, which conscripted young boys from Christian families in the *Balkans* and *Anatolia* into the Ottoman army and civil service. He served as the *Wālī* of *Aleppo* during the latter half of the (930s AH / first half of the 1530s AD) and returned to the city in the winter of (941 AH / 1534–35 AD) as part of the campaign against *Safavid Iran*[344].

His architectural complex comprised a Friday Mosque, a *madrasat*, and a *takiyya* with an *imaret*, strategically located in front of the citadel, symbolically placing it next to the former Mamlūk center of power. The complex was completed in (953 AH / 1546–47 AD)[345].

The construction of the *al-Khusrawiyya* complex took place in the (936–947 AH /1530s-40s AD). *Khusrū ibn Sinān Pāshā* permanently changed the urban space with the construction of his mosque to the southeast of the Mamlūk-period citadel and city. *al-Khusrawiyya* was supported by the construction of a large series of commercial buildings built on an area of 4 to 5 hectares, including the *qaysariyya* with 50 stores, *khān* with 95 stores, *sūq* and other boutiques built around or near the mosque, the rent from which served to finance *al-Khusrawiyya*. These buildings, both the mosque and the commercial infrastructure that supported it, fundamentally changed the face of the city and took the urban surface far beyond the earlier Mamlūk boundaries. The building synergy continued with the next group of ʿOttomān governors and was notable in *Aleppo*, whose waqfs also contributed greatly to profoundly changing the cityscape of *Aleppo* through the construction of religious and commercial complexes that were almost empty land in the late Mamlūk period [346]. The area south of the entrance to the citadel, historically a former horse-racing track from the

[343] Al- Ḥalak 1983: 120
[344] Knost 2009: 180–83.
[345] Knost 2017: 304
[346] Jayyssi 2008: 935

Mamlūk period, was until the (1317–1319 AH /1900s AD) almost an open space bounded by a traditional urban fabric of social and commercial activities[347].

This impressive structure encompasses a grand mosque, a school, a hospice, and a kitchen. It is located to the west of *Madrasat al-Sulṭānīyah* and the south and east of *Sarāy Manqar*, in an area known historically as the *al-Bahā'ī* neighborhood. *Khusrū Pāshā* recommended its construction to his master, *Farrūkh ibn 'Abd al-Mannān al-Rūmī*. Numerous endowments, schools, and mosques contributed to its establishment, as documented in the biographies of those involved. Construction of this significant building was completed in the year (951 AH/ 1544-1545 AD)[348].

It stands as the first mosque, school, and hospice built in *Aleppo* during the ʿOttomān Empire, reflecting the Roman architectural style [349].

Just across the street stood a commercial structure (*qaysariyya*) housing over 50 shops: the now partly destroyed *Khān al-Shūnah*, one of several similar buildings designed to generate income for the endowment[350].

These and other Ottoman endowments from the (Tenth century AH / Sixteenth century AD) equipped *Aleppo* with the necessary infrastructure to thrive as a significant hub for long-distance trade[351].

The residence of the *Ṣalāḥ al-Dīn al-Ayyūbī* was situated in the *Sahat Bazza* area, near the *Madrasat al-Sulṭānīyah*. The homes of *Bani al-Shahna* were located under the citadel, close to the *Madrasat al-Sulṭānīyah*. In this vicinity stood a *Khānqāh* known as the *al-Shamsīyah Khānqāh*, positioned at the beginning of a path called the *Darb al-Bāzyār*. This *Khānqāh* was established by *Shams al-Dīn Abū Bakr Aḥmad*, around the year 621. The area also housed several other *khānqāhs* and *madrasa*, though their specific locations are unknown, and no traces remain. One such institution was the *Khānqāh Jamāl al-dawah Iqbāl al-Ẓāhirī*, located at the end of the path opposite

[347] Jayyssi 2008: 935
[348] Al-Ghazzī 1952, 2:116
[349] Al-Ghazī 1952, 2:116
[350] Al-Ghazī 1952
[351] Al-Ghazī 1952

the tomb of *al-Ẓāhir* in *al-Sulṭānīyah*. Among its endowments was the old bathhouse quarter in *Bānqusā*.[352]

The four key monuments were documented, according to DGAM report on 2015:

- *Madrasat al-Sulṭānīyah*: Built circa (619-620 AH /1223 AD) during the Ayyubid period, this *madrasa* containing the tomb of *al-Malik al-Ẓāhir* was almost destroyed. Only the minaret (which contains the tomb of *al- Sülṭān al-Malik al-Ẓāhir* the son of *Ṣalāḥ al-Dīn*) remained partially standing. The *miḥrāb*, described by *Ibn al-ʿAdīm* as "one of the wonders of the world," was completely lost [353].

- *Al-Khusrawiyya Complex*: Sinan's first ʿOttomān -style mosque in Aleppo (951-954 AH /1544-47 AD) was severely damaged. The complex, including the mosque, madrasa, and associated commercial structures (*Khān al-Shūnah*), was hit by shelling and tunnel bombs. The pencil minaret, a landmark of ʿOttomān architecture in the city, collapsed[354].

- *The National al-Ḥumaydī Hospital (Carlton Hotel):* Originally built in the late Ottoman period (1308–1315 AH /1891-1897 AD) and later converted into the Carlton Hotel, this building was destroyed by a tunnel bomb. The DGAM report (2015) noted that less than 20% of its primary structural elements were preserved [355].

- *The New Sarāy*: The ʿOttomān -period government building, constructed in the early twentieth century, was also hit by a tunnel explosion. Less than 10% of its structure remained standing. [356]

2.2.5.1.2 The *Taḥt al-qal'a* as an Opportunity for Urban Recovery:

Today is unfortunately not the first time that *Aleppo* is the theatre of large-scale urban destruction and traumatizing acts of war for the population. From the rebellion of (1234-1235 AH /1819 AD) to the resistance against the French mandate in the 1920s, shelling and repression caused great

[352] Al-Ghāzī 1952, 579
[353] DGAM 2015: 13- 21-22
[354] DGAM 2015: 13- 21-22
[355] DGAM 2015: 13- 21-22
[356] DGAM 2015: 13- 21-22

damage several times. The (1237–1238 AH / 1822 AD) earthquake also caused serious destruction and is among the sad and murderous events in the city's history. Knowledge of this chain of events must be part of all reflections on the nature of historical authenticity in *Aleppo,* including some of its most revered monuments, labeled medieval, have been partially destroyed and rebuilt several times. In *Aleppo*, as in many cities, authenticity cannot simply be a matter of instant chronological staties. At various times, the city was rebuilt according to specific practical and ideological choices. After the (532-533 AH /1138 AD) earthquake, one of the deadliest in the history of mankind[357], during which many ancient buildings were destroyed, the reconstruction programs enacted by the Zengid and then Ayyubid and Mamlūk periods used the ruins of the ancient city as a reservoir of building materials for the reconstruction. This is when most of the most famous medieval Islamic buildings of the city were built, like the *Bīmāristān Araghūn al-Kāmilī*, the *Ḥammām al-Jawharī*, *Khān al-Qāḍī*, and the *al- Ṭwāshy* mosque[358].That's why authenticity was truly done as a patchwork. Authenticity in *Aleppo*, as it was constructed in the context of perceptions elaborated in the nineteenth and twentieth centuries, was indeed at first the result of traumatic destruction and reuse practices. was indeed at first the result of traumatic destruction and reuse practices[359].

From (921-922 AH /1516 AD), with the integration of *Aleppo* into the Empire ʿOttomān, new commercial spaces and in general several buildings expressing the symbolism of the power of the Empire were built[360]. Among the new sūq, *al-Khusrawiyya* and *ʻal-Adiliyya* are the most famous.

Present-day conceptions of authenticity must consider this size and keep away from static visions. Signs and symptoms of modernity have been brought in the city over the past, a long time of the nineteenth century and inside the early twentieth century: new squares, tramways, new infrastructural networks for offering public, new streets. The medieval city began to be seen as a fixed part of the urban landscape at this point. The local notables' refusal to pay for the renovation of the Roman aqueducts through the old regime's municipal budget sparked the (1234–1235 AH / 1819 AD) revolt, which also brought about a significant change. During the suppression of the

[357] Guidoboni 2004; Wade 2010; Sbeinati 2005.

[358] Hadjar, 2005: 206.

[359] Hadjar, 2005: 206

[360] Watenpaugh, 2004.

revolt, bombing destroyed more than 1,000 historic homes[361]. The (1237–1238 AH /1822 AD) earthquake also severely damaged *Aleppo*.

The protection of monuments that later served as the foundation for what was to be perceived as the historical dimension of authenticity was included in the program of " ʿOttomān modernization" as well as the process of post-revolt and post-earthquake reconstruction. Streets were expanded, new squares were created, existing squares were expanded, and new public buildings were constructed during the "ʿOttomān modernization" period, which lasted from about (1266–1337 AH/1850 to 1918 AD)[362].

Following the 1884 law on heritage protection and the work of ʿOttomān *Ḥamdī Bik*, founder of the *Istanbūl* archaeological museum, the primary imperial decrees on the protection of the built heritage were published in 1889 and 1906, respectively. In the ʿOttomān Empire, the protection of historical traces became a distinct administrative and legal category because of these decrees[363].

As mentioned before, *Ancient City of Aleppo* grew in circles with the citadel in its center, and the districts were basically defined by their historic importance, use, and functions. The area that forms the direct enclosure of the citadel used to be devoted to tourism activities with various traditional cafes and restaurants facing the main entrance of the citadel. These are neighbored by the traditional handicrafts *Sūq* as part of *Khān al-Shūnah* and by a small residential area to the northeast of the citadel. This zone embraces cultural, social, and historical values in respect to its use and functional activities and the historical layers embodied in it. It is also home to significant monuments including mosques, *madrasat, khāns and hmmāms*[364].

The economic value of this area comes from its touristic attractions and activities. According to the DGAM report[365], moderate to huge – scale destructions are identified. For example, *Masjid al-Sulṭānīyah* was built around 800 years ago during the Ayyubid period, beside its historical, cultural, and religious values, this mosque is an example of Arabic Islamic architectural structures

[361] Lafi, 2014: 58-75.
[362] David, 2002: 235-244.
[363] David, 2002: 235-244
[364] David, 2002: 235-244
[365] DGAM 2017a

with its open courtyard, prayer hall and tomb were destroyed in 2014[366]. The question of architectural intervention in a single structure is debated issue. But partial reconstruction might be a solution, as advocated in *Guidance on Past Trauma Recovery*[367].

Contemporary architecture intervention, however, could be a solution for rebuilding *Madrasat al-Ẓāhirīyah*, which would be employed as a handicraft workshop for small traditional objects, laurel soap, and copper crafts to open work opportunities for local skilled workers and to reinforce the economic value[368].

[366] DGAM 2017a
[367] ICOMOS 2017
[368] ICOMOS 2017

2.2.5.2 Action Area 2: BAYT AJQBĀSH AN IMPORTANT WAR REMNANT

2.2.5.2.1 Introduction:

Among the many treasures of Aleppo's domestic architecture, few could match the refinement and historical resonance of *Bayt Ajqbāsh*. Located in the heart of the *al-Jdeïdé* district—the extra-mural quarter that flourished from the sixteenth century onward as a center of commerce and cultural exchange [Fig 26]—this eighteenth-century house represented, until 2015, one of the most intact and exquisite examples of the ʿOttomān -period courtyard dwelling in Syria. Its significance was not merely architectural; it was a palimpsest of Aleppo's layered history, a repository of intangible heritage, and, from 1975 until the war, a cherished public museum dedicated to the city's folk traditions.

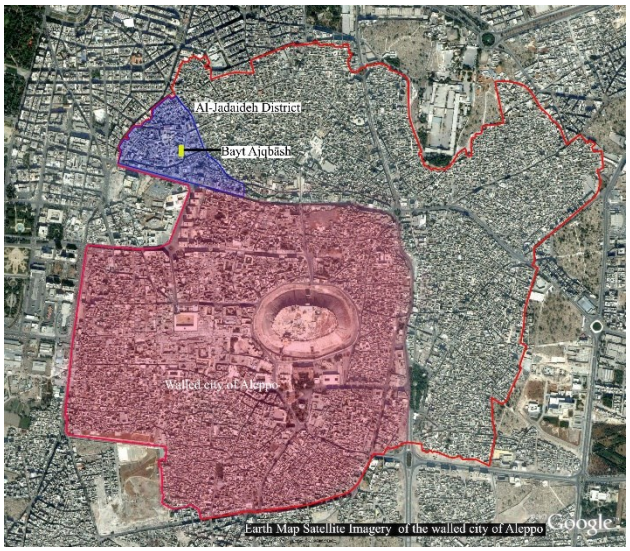


Fig 26: Earth Map Satellite Imagery of Aleppo Ancient City marked with red color, al-Jdeïdé district marked in blue.

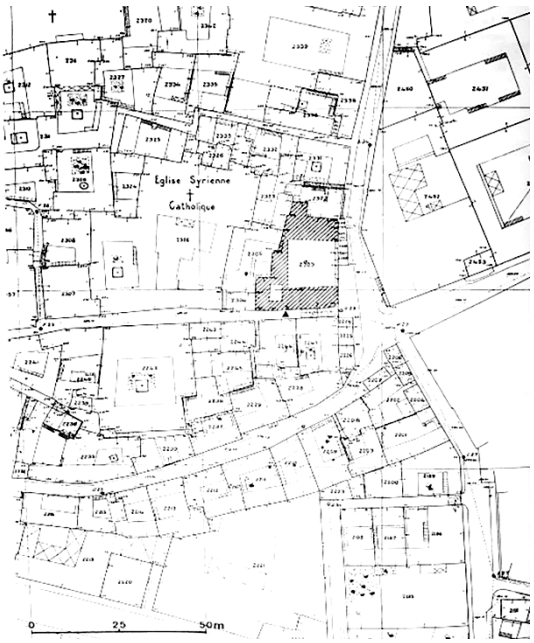


Fig 27: Cadastral plots plan of northern quarters of ancient city al-Jdeïdé showing the location of Bayt *Ajqbāsh.*

2.2.5.5.2 Site and Urban Network

Beyond the walled city, extra-urban neighborhoods had grown since the medieval period [Fig 27], localized around an entrance to a commercial or ceremonial artery. They included *al-Jdeïdé* district (literally, “the little new one”) to the northwest and

near the cemeteries and storage areas that housed the communal institutions of local Christians [Fig 16].

By the end of the nineteenth century, the city experienced further expansion, particularly to the north and northwest, giving rise to the modern neighborhoods of *al-ʻAzīzīyah* and *al-Jamiliyah*, the latter located on the western bank of the *Queiq* river. Additionally, the southeastern and eastern Islamic neighborhoods also saw significant growth[1].

The history of this neighborhood dates back to the invasion of *Aleppo* by "*Taymūr*" in 1400 AD[2], during which the city was burned, causing Christians to flee. They later returned, having previously lived within the city walls. As they had lost most of their homes inside the walls, they established a new area in front of the northwestern corner of the city, known as *al-Jdeïdé*, where they built their places of worship. The area known as " *al-Ṣalībīyah*" is considered the "old new" neighborhood[3].

Once the residents of this area found new homes, they began to focus on their livelihoods. Alongside their residences, places of worship proliferated, characterized by their religious harmony, with mosques and churches standing side by side.

Regarding the urban development of this neighborhood, *Dr. Maḥmūd Ḥarītānī* in his book "*Aḥyā' Aleppo Ancient City*": "This suburb was established and began its expansion during the Mamlūk period following the second Mongol invasion of *Aleppo* led by *Taymūr*. In the following centuries, it expanded further, with Muslims and Christians living alongside each other, their places of worship and residences located in close proximity [4]"

During the ʿOttomān era, from the early sixteenth century onward, the neighborhood continued to grow. It is noted that *"Sülṭān Selim"* settled 40 families known for their

[1] David, 1988
[2] Burns, 2017
[3] Burns, 2017
[4] Ḥarītānī, 2005

trading activities, composed of both Muslims and Christians[5]. The alley they inhabited became known as *Zuqāq al-Arba'īn* (the Alley of the Forty)[6].

In "*al-Jdeïdé*," there are many mosques and churches, alongside houses that have become architectural heritage landmarks. This neighborhood is characterized by all the elements of self-sufficiency akin to an independent city. It was enclosed by gates and had its own defensive system, as well as a bustling economy consisting of fabric, novelty items, and wool vendors, along with sellers of poultry, vegetables, fruits, and fish. Additionally, there are vendors of sweets, dairy products, nuts, pottery, and antiques[7].

At the end of the Mamlūk period, *al-Jdeïdé* was a small suburb benefiting from a few shops located outside of the city's northern walls. The development of the city along the roads connecting the *Bāb an-Naṣr* with neighboring villages to the North and Northeast progressively integrated *al-Jdeïdé* into *Ancient City of Aleppo*[8].

When *Sülṭān Selim* entered the city in 1516, he turned the city over to the ʿOttomāns Empire.[9] In this era, large construction projects transformed between the walls and beyond the walls, and the administrative system was changed. These innovations included a widening of the streets and the creation of the *al-Jdeïdé* neighborhood in the northern area beyond the city ramparts. This era also established new *madrasas*, new mosques, *khāns*, and *sūq*[10].

The city was boosted by energetic commercial development: caravans could find all the crops of the east in *Aleppo*, and the industrial sector flourished, becoming a center for raw materials and market for European products.

The Armenians, who specialized in trade with *Persia* and *India*, were the predominant inhabitants of *al-Jdeïdé*. During the sixteenth and seventeenth centuries, following the ʿOttomān conquest, the neighborhood was subdivided into rectangular land parcels[11].

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[5] Burns, 2017
[6] Burns, 2017
[7] Burns, 2017
[8] Burns, 2017
[9] For compilation of local sources on the battle of *Marj Dàbiq* and *Selîm's* entry into *Aleppo* see Ṭabbākh 1988.
[10] Burns, 2017
[11] David, 1982

Two large Muslim waqfs (religious trusts), founded in 1583–90 and 1653, have been in the heart of the area for centuries[12]. The architecture reflected a more heterogeneous range of styles than the relatively restrained examples of Muslim houses[13].

In *Ancient City of Aleppo*, Arab houses were the norm, representing a model of a community harmonious with its surroundings[14]. These houses were so intertwined that it was hard to tell them apart, designed to avoid the harsh sunlight and protect from high temperatures, sand, and storms. The *(īwān)* was a key element in the design of these homes, with hallways and rooms arranged around it[15]. The old houses in *Ancient City of Aleppo* mainly consisted of three parts: one for storing food throughout the year, another for living spaces, guest areas, and the kitchen, and a third part for bedrooms and balconies [16].

Bayt Ajqbāsh was built in the *al-Jdeïdé* district. The structure occupies a prominent site forming an irregular rectangle connected to the urban fabric from the North and West sides and bounded by straight or regular routes from the other sides.

2.2.5.5.3 Original Layout

Apart from today's buildings, the only source available to learn about the original layout is the estate document. According to this, the eastern part of the house was demolished to widen the street that connects *'Awjah al-Kayyālī* and *Sāḥat al-Ḥaṭab* [Fig 27]. The house originally occupied a space of (492 m^2), its area and function changed over time.

2.2.5.5.4 Historical Analysis

The originality of the house style is difficult to date. The inscriptions which decorate certain woodwork give us precious indications: the western room, dated 1859, is late to that of the *(qa'a)* dated 1209 / 1794-5 or 1219 / 1804-5. The date of the *(īwān's)* ceiling is the earliest, 1171/1758; however, this ceiling seems well designed for this location and not brought from an older building as it sometimes happens. According

[12] David, 2015
[13] Burns, 2017
[14] Salkini, Greco, Lucente 2017
[15] Ajaj, Pugnaloni 2014
[16] Salkini, Greco, Lucente 2017

to researchers, the house was probably built shortly before 1171/1758 and the *(qa'a)* was also refurbished fifty years later with the construction of its current ceiling. The other elements of the *(qa'a)*, with the decor of the *(ataba)*, paneling, leaves of the openings, cornice, seem to belong to the original layout [fig 28].



Fig 28: Inscription date at the southern īwān 1171 /1757

2.2.5.5.5 Available Documents, Plans, Photos

The architectural survey depends on representing the existing architectural element with drawings, explaining its composition, dimensions, proportions and geometrical shapes, its construction mode, its historical development, and its aesthetic and functional value. It depends on a series of investigations, from the reading of the original concept of the construction to studying all the maintenance or restoration works and then interpreting its current formal and spatial aspects. Unfortunately, the drawing in the antiquities authority did not show the information as best as possible: clearly, precisely, with a key, explanations, and possibly even footnotes. This survey depended on published books that include plans, cross-sections, vertical sections.

The Historical and Documentary Study was so brief such as old photographs of the inside or outside of the house help check the state of the house at that time. Drawings (sketches, watercolors, pencil drawings, etc.), old aerial photographs of the area in which the house could appear. The research cannot lead to the identification of the original house, its transformation, and evolution: factors that define its architectural environment today.

2.2.5.5.6 **Building of Outstanding Value**

Constructed in 1757 AD /1171 AH by the grandfather of *Yūsuf Karaly*, a Christian merchant with connections to Western missionary circles, the house later gave its name to the *Ajqbāsh* family, a Christian lineage still known in Aleppo today. This provenance alone speaks to the cosmopolitan character of *Al-Jdeïdé*, where Muslims and Christians lived and traded side by side, their architectural patronage reflecting both local tradition and external influence. The house changed hands over the centuries—passing to the Syriac Catholic Church, which used it as a hostel for the poor, before being converted into the Traditional Folk Museum of *Aleppo* in 1975. Each phase of ownership left its mark, yet the core of the building remained remarkably true to its original conception.



Fig 29: Ceiling in the (qa'a) decorated with polychrome wooden decorations ('ajami), that add (5) snakes to the place in the middle of the ceiling, and it was believed that they were useful for expelling evil eyes. Snakes coiled around each other, and wonderful graffiti surrounded the ceiling.

Architecturally, *Bayt Ajqbāsh* exemplified the mature ʿOttomān domestic style of Aleppo, while also bearing witness to the empire's growing fascination with European Baroque aesthetics[17]. Its plan followed the classic Syrian courtyard model: a rectangular central space (176 m², representing 34.4% of the ground floor area) containing a pool and garden, around which the principal living quarters were organized. To the south, a soaring two-story *īwān* opened onto the courtyard, its pointed arch executed in the *ablaq* technique of alternating yellow and black limestone. To the north, the winter reception hall (*qa'a*) featured a ceiling of breathtaking polychrome wooden decoration (*'ajami*), its intricate geometric and floral motifs culminating in a central medallion of

17

coiled serpents—a traditional motif believed to ward off the evil eye [Fig 29]. The four courtyard facades were adorned with carved stone decoration of extraordinary refinement, blending local stone-carving traditions with rococo-inspired motifs imported from Istanbul [Fig 30]. Below ground, a sophisticated system of cellars and cisterns, ventilated by ducts (*malkaf*), demonstrated the ingenuity of traditional environmental control.



Fig 30: The windows are framed with carved stone of baroque and rococo styles

In 1986, when the Ancient City of Aleppo was inscribed on the UNESCO World Heritage List, Outside the walls, *Al-Jdeïdé* area to the north, contain important religious buildings and residences[18]. *Bayt Ajqbāsh* was implicitly recognized as part of the city's Outstanding Universal Value—a testament to the "coherent and unique urban fabric" and the "exceptional architectural ensemble" that justified the inscription.

2.2.5.5.7 Architectural Descriptive:

Bayt Ajqbāsh was greatly influenced by the building ʿOttomāns taste for European Baroque decoration. The house was a triumph of the Baroque style with windows on the courtyard richly decorated with swirling stone tracery. Its plan reflected Syrian domestic architecture with its central courtyard and pond, its northern winter *(qaʿa)*, and a deep southern *(īwān)* facing north[19]. This house typology is characterized by a

[18] UNESCO, n.d
[19] Burns, 2017

small number of relatively small openings in the external façade, and many openings that open onto the inner courtyard[20].

The house is known to be welcoming environments and is friendly in both its design and structure. For example, courtyard is equipped with many elements that help humidify the air (trees and fountain); it also uses the (*īwān)* as an open summer sitting room facing north[21]. The thick walls and roofs are good insulators and help stabilize room temperature, while the variable roof heights and protruding elements in the facade provide shade[22]. Because of the hot and dry climate in the region, the house was designed around an inner courtyard to prevent extreme heat in the summer season. Another benefit of the courtyard design was to protect privacy. The house plan includes five levels: The ground, mezzanine, an upper floor, the underground floor, and the cave with cistern[23].

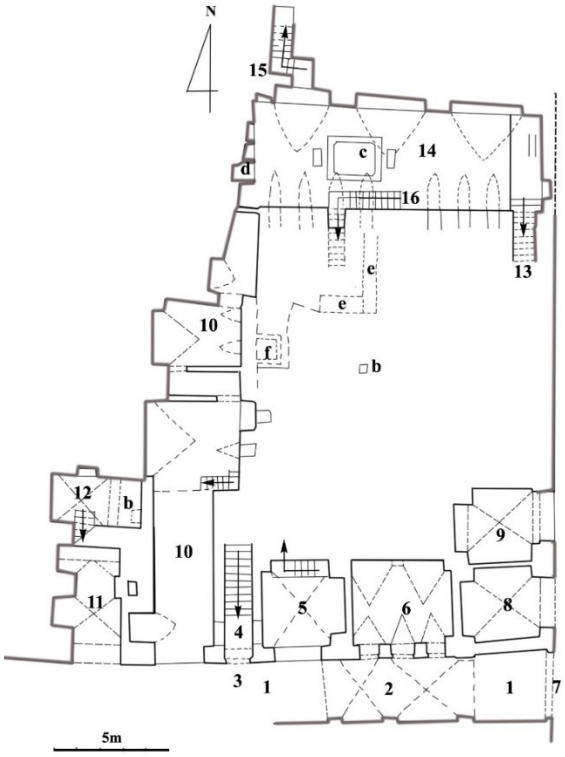
F-1- The underground floor:

The courtyard is accessed by a corridor running north-south starting at the house's front door, a design which ensures privacy and security. You can enter the house from the northern street, via an arched doorway (3). This gives access to a high narrow passageway step and opening to the courtyard via a door on the west façade of the house. Austere façades are presented to the outside world. Both the south and east facades consist of 6 shops (5-6-8-9-10-11) opened to the street [Fig 31].

A cellar (14) presented at the northern side under the *(qa'a)*, fitted out for the summer stay as the living room, which is a large room of (13.5m x 4.70m) accessible by a staircase (13) located in the north-east corner of the courtyard, and from the interior small room (15) northwest of the *(qa'a)*.Another cellar (10), located under the kitchen's courtyard and the western room, could serve as a reserve for the food provisions to be kept cool. The vast basements (10), currently annexed by a shop (10), are probably intended for the same function and accessible from the small cellar (12). Under the main courtyard are several hollow spaces in the underlying rock including a cistern for rainwater and a cellar accessible by a staircase of 23 steps from the basement of the

[20] Burns, 2017
[21] Burns, 2017
[22] Burns, 2017
[23] Burns, 2017

(qa'a).[24]. The importance of the underground floor which has the cellar and cave with cistern lies through the technical value, that is illustrated by a model of ventilation known in the Arab buildings *(Al-malkaf)*. Its value lies in adapting the elements of nature in the service of architecture. Also, there is a pool of water in the middle of the cellar, so that the air coming from the wrapper passes through it, which doubles the cold. It descends from the basement to the cave, and these tunnels are generally found in most Arab houses in *Aleppo*[25] [Fig 31].

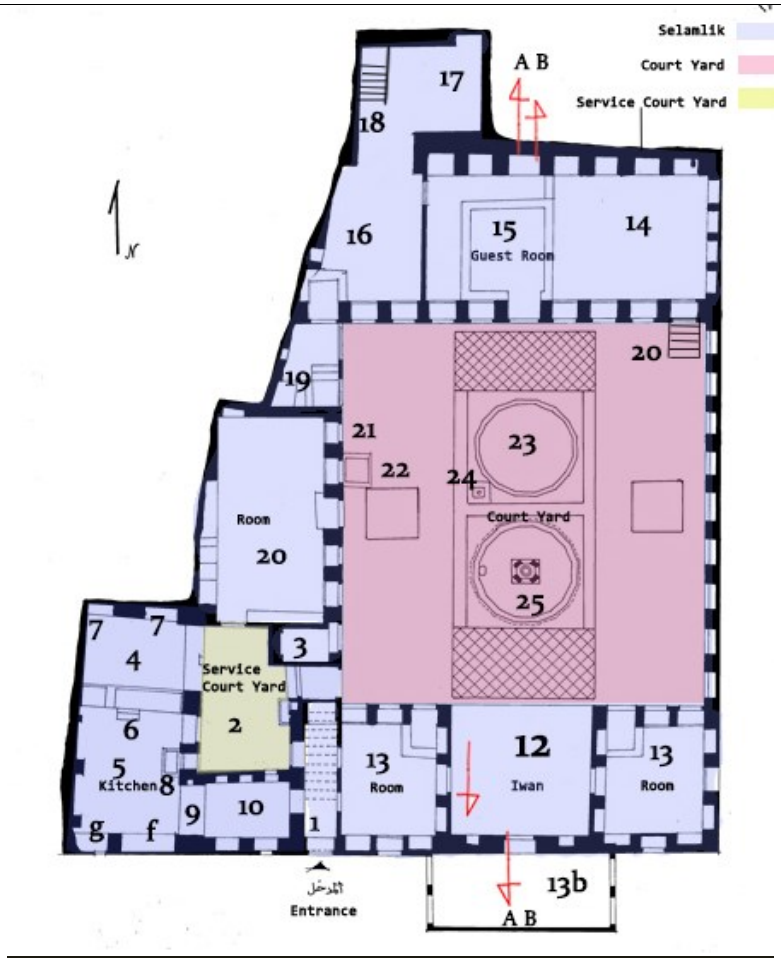


1. Street
2. Sybāṭ
3. Entrance
4. Stair entrance
5. Room overlooks the street recently shop with stairs going down to the cave's cellar under the courtyard
6. Room overlooks to the street recently shop
7. Arch door to Bawwābat al-Yāsamīn
8. Shop
9. Shop
10. Room overlooks both the street and cellar currently shop and warehouse, a staircase descends to the cellar hollowed in the rock under the room, on the street side a door connected with the entrance level.
11. Room overlooks to the street recently shop, it is probably a service room for the house cellars stable, warehouse, etc.
12. Small cellar accessible from the kitchen. b. Pipe for drawing the hollowed-out tank in the rock under the courtyard.
13. Stair led to the cave under the *qa'a*
14. Cellar under the *qa'a* for summer stay. c. Basin. d. Air duct
15. Stairs led to the first floor.
16. Stairs descend to the cellar dug in the rock under the courtyard. e. Beach. f. ventilation duck

Fig 31: Underground floor plan of Bayt Ajqbāsh.

[24] David, 1988
[25] David, 1988

F-2- The Ground Floor:



1. Entrance
2. Service room
3. latrines
4. Room
5. Kitchen. g. latrines. f. *tannūr*
6. Stair led to the cave
7. Fireplace
8. Well
9. Wood platform
10. Ḥmmām
11. Basin
12. Īwān
13. Qubba – 13 b- Room
14. ‘Ataba
15. Lower rooms.
16. Lower rooms
17. Stairs
18. Stairs to the terrace
19. Western room
20. Stairs from the *qa’a*
21. Stone grid for ventilation of the basement
22. Tank
23. Garden
24. Pool

Fig 32: Plan of the ground floor of Bayt Ajqbāsh

F-3- The courtyard:

The center courtyard is accessed by a door on the western façade; the courtyard contains a pool and a water well in the center. It is rectangular, measured (13.8m x 12.77m), occupies 176m^2 from the total area of the ground floor which is (512.72m^2), this represents 34.4% from the house total area. The total area of the living space on the ground floor, including the *(ḥmmām)* and latrines, (but not counting the staircase with access to the terraces), the kitchen, its courtyard, and its

service area, cover (179.6 m^2). The courtyard is surrounded by an (*īwān)* with four rooms for selamlik, which also hold the kitchen and facilities[26] [Fig 32].

The floor in the courtyard was divided symmetrically and paved with gray limestone. In its middle part, opposite the *(īwān)*, an elongated rectangular space, delimited by a black marble frame occupies almost the entire length, which is (13.34m x 5m wide). In front of the *(īwān)* it contains as main decorative elements first a polychrome marble pavement, then polygonal pool pavement (23) with 16 sides and (3.70m) in diameter decorated with a rococo style water jet with several overlapping basins. Then a garden space (24) with 16 sides and the same diameter as that of the pool. In front of the reception hall *(qa'a)* at the northern end, is paving with square tiles in white and pink marble of equal dimensions[27].



Fig 33: The Southern façade īwān

On the perpendicular axis, polychrome geometric pavements inscribed in a square of (1.85 m) sides decorate the ground in front of the door of the west room and the false door in the east wall. The four facades form a whole underlined by the continuity of the decor and the levels. Each one is however composed around an important central motif, the *(īwān)*, and the 3 axial doors, underlined by the decorative elements of the courtyard[28].

F-4- The *Īwān* (12):

The most important feature of the courtyard is the *(īwān*) (12), a room with an open wall facing the courtyard on the southern side with a high as two stories. The floor of the *(īwān*) is about 40 cm above the level of the courtyard and at the front of the *(īwān)*, we find a decorated frame and door leading to a back room added in a later

[26] David, 1988
[27] David, 1988
[28] David, 1988

(13b). The transition from the courtyard to the *(īwān)* space is marked by a multicolored marble patterned floor, which resembles an oriental carpet[29] [Fig 33].

F-5- The *Qubba* room (13):

The (*īwān*) comprises two symmetrical rooms (13) (*qubba*) facing each other and has an ornamental front stone arch facing the courtyard. The (*qubba*) has two entrances, one through the (*īwān*) and one directly from the courtyard. Each of them measures (3.40 m width x 3.90m long x 4.70 m high)[30]. After passing the door there is the *(ʻataba*), that is often decorated with colored marbles delimited by a step of 30 cm width and 40 cm high which gives access to the level and the space of the room. The level floor of the (*qubba*) rises about 75 cm from the courtyard level. In the two *(qubba)*, the *(ataba)* is small, (0.90m x 1.40m), and a slab of yellow limestone; the difference in level between the threshold and the floor of the room does not exceed 30 cm[31]. The (*qubba*) has a door and two windows open into the courtyard, the first is a window located between two cupboards on the east side open to the street, and the second is a window and two closets on the south side open to the street. There is a door with two closets that opens into the *(īwān)* at the west side[32]. All these openings can be closed by wooden doors assembled in geometric patterns, except for one of the cupboards near the *(ʻataba)* with shelves, which remains open and takes the name of *(kitbiyya)*. Lately, the windows have been fitted with window frames in a western style which improved the comfort of the rooms and allowed the windows to be closed without completely obscuring the room[33]. The ceiling is formed by a wooden panel decorated with a seedling of flowers modeled in mask and painted on a blue background. This panel is framed by a large, chamfered cornice which bears a decor of baroque inscription painted on an ivory background. The western *(qubba)* differs from the other in a few details: it is longer and narrower and measures approximately (3.35m width x 4.10m long); the inscription of the cornice of the ceiling is preserved; the west wall pierced with two doors giving access to the vestibule of the *(ḥmmām)*[34].

[29] David, 1988
[30] David, 1988
[31] David, 1988
[32] David, 1988
[33] David, 1988
[34] David, 1988

F-6-The reception hall (*qa'a*) (14):

Facing the *īwān* is the main guest reception hall (*qa'a*), with two stories high, occupies the northern side of the house [Fig 34]. The *qa'a* is the largest and most richly decorated room in the house (14). Two levels of the upper and lower windows exist in the south wall of the (*qa'a*), which is open to the courtyard, as a method of ventilation that aims to renew the air continuously. The ceiling is decorated with polychrome wooden decorations (*'ajami*). The (*'ajami*) includes several geometric designs, floral motifs, and inscriptions, it was very carefully carved through its walls up to (2.80m) above the ground, the walls are dressed in wood paneling and then decorated with a wooden ledge with slats lined and maroon fabric. The top of this ledge is (3.10m). It is decorated with Quranic inscriptions and wall cabinets. The motifs have rich symbolic backgrounds, originating from house owners, artists, their native culture, the environment, and religion[35]. The *(qa'a)* consists of one *(ṭazar) (14)* the-raised seating area of a room*)* and one *(ataba)* (15) the low entry rectangular space of a room measures (2.60m x 3m), paved with marble star shapes surrounded with strips and other geometric shapes. The surroundings of the courtyard are ground floor rooms. All the 4 rooms open onto the courtyard with large windows. The entrance door is not in axis with the room; indeed, two of the windows in the western part of the facade light up the small anteroom (16) and only two windows exist in the *(ataba)* and four windows in the *(qa'a).* In front of each opening of the facade a firm cupboard of wooden leaves and a niche furnished with shelving, called *(kitbiyya)*, in front of the door; one of these cupboards is opening of an air duct[36].

The small irregular shape anteroom (16) measures (3m x 4.3m), the entrance of the room through the access stairs from the staircase of the terrace in the northwest corner of the room, it has a small *(ataba)*. The walls are paneled with wood up to three meters and the ceiling (which in the *(qa'a)* exceeds (6m) is here divided into two parts to provide a second small room in the mezzanine[37]. The north wall of the room is opened by a wide passage led to another small room measures (3m x 4.30m), with a low ceiling and three cupboards in the north wall (17). It is a room from the house to the north, annexed to the house in circumstances about which we do not

[35] David, 1988
[36] David, 1988
[37] David, 1988

know. Some of the cupboards were old windows that were changed during the transformation. A staircase (18) located near the west wall, descends into the room in the basement of the *(qa'a)*.[38]



Fig 34: Walls in the (qa'a) decorated with polychrome wooden decorations ('ajami).

F-7- Room (13b):

The room (13b) behind the *(īwān)* built on a vault spanning the street *(sybāṭ)* was added around the middle of the XIX century; it is elevated by about forty centimeters from the ground of the *(īwān)* and measures (6.30m x 2.65m); it is open to the street through two large windows to the east and two to the west; with none decorated wooden ceiling supported by pine joists[39].

F-8-The *Ḥmmām* (10):

The private *(ḥmmām)* is only occupied by a small room (10). Its hallway, which measures (4.20m width x 1.15m long), is located above the entrance stairs of the house, between the living and service areas; it is accessible from the west *(qubba)* and the service courtyard, it is lit by a window open on the street, above the house entrance. The *(ḥmmām)* is the only room on the ground floor with the latrines that measures (2m x 3m); on the south side two recesses are in the wall, a cupboard, and a small window; on the north side, there are three small niches, one of which can open into the service courtyard with a wooden shutter. The west wall has a wooden platform *(maṣṭaba)* measure (1.80m width x 0.80m long x 1.00m high) above the ground floor of the room (9). The water heating system must be in the kitchen. We

[38] David, 1988
[39] David, 1988

find there, in the southern foyer, the vestiges of a small clay boiler, which could be used for this purpose[40].

F-9- The Service Area:

The house also includes on its western side a kitchen, service rooms, a toilet, a bathroom, and a cellar to preserve food. The service courtyard (2) measures (3.75m x 3.5m) an additional (16 m^2) if we add the space located behind the latrines, under the staircase leading to the terraces, which measures (1.35m x 2.30m). The south wall is pierced only by a small window that lights up the *(ḥmmām)* (10). The north wall, under the arch of the staircase, is pierced by a door giving access to the living room (20)[41]. The west wall is pierced with several openings:

- To the north, a wide, lowered arch divided in two by a thin pillar, opens to a rectangular room (4) of (3.55m x 2.45m), with two large closets in its north wall; the ceiling height does not exceed (3m)[42].
- To the south, the kitchen door (5) and the access to the well (6). which is installed in the thickness of the wall and accessible both from the interior courtyard of the kitchen through high openings. Above the well, a duct was used to draw water from the terrace and to supply a reservoir of the water jet in the courtyard by pressurized water. The height of the wooden ceiling is just over 5m. In the south wall is the hood of a hearth with the remains of a *(tannūr)* (f) for a clay boiler; the south-west corner is currently occupied by latrines (g) with a small window open on the outside[43].

The house is built of white limestone. The most obvious feature of the living quarters is the windowless and undecorated appearance of the house's outer façade.

[40] David, 1988
[41] David, 1988
[42] David, 1988
[43] David, 1988

F-10-The mezzanine:

On the mezzanine floor there are two rooms at the north and the west corner, these rooms serve as storerooms. It consists also a latrine at the southern side of the building [Fig 35].

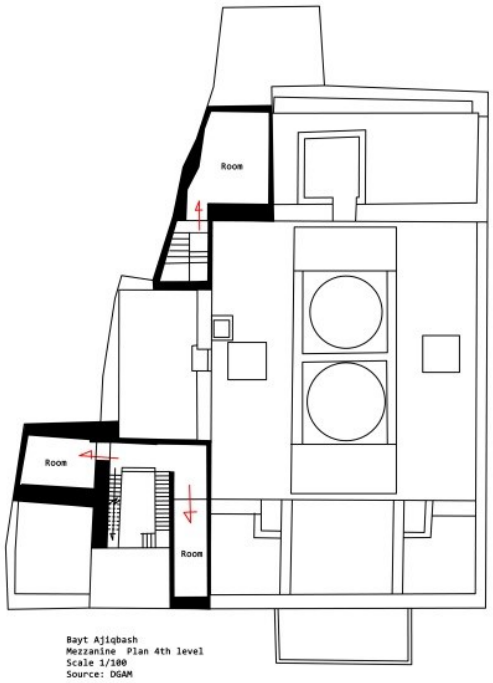
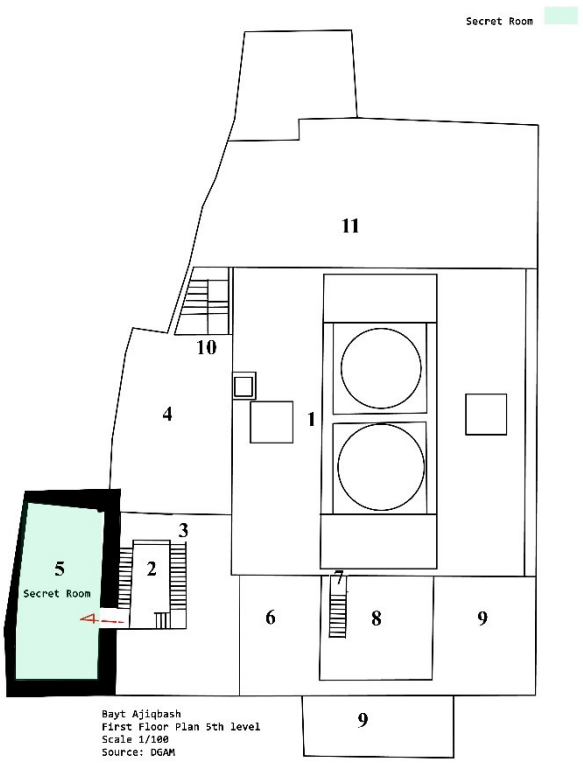


Fig 35: Plan of the Mezzanine floor of Bayt Ajqbāsh

F-11- The upper floor:

The first-floor plan contains only one living room above the kitchen, it seems to have been added in the middle of the XIX century. It can be accessed by the stairs from the service courtyard or by the terrace. It has a door in the eastern façade, the room measures (3.5m x 7.8m x 4m high), it is simple and without decor, its windows open to the northeast and west. The building's terraces consist of flat surfaces situated on different levels. The highest part is the roof of the (īwān), measure (4.5m x 4.9m) It is accessible by a staircase and surrounded by a low wall 1.35m high. The terrace above the (qa'a) is surrounded by narrow stone bench seats without any other layout[44] [Fig 36].

[44] David 1988



1. Open space overlooking the main courtyard.
2. Service courtyard
3. Stairs from the main courtyard to the terrace.
4. West terrace.
5. Living room
6. Terrace
7. Stairs to the upper terrace of the *(īwān*)
8. Upper terrace
9. Terrace not accessible
10. Stairs to the north terrace
11. North terrace

Fig 36: Plan of the First floor of Bayt Ajqbāsh

F-12- Facades overlooking to the courtyard:

Al the interior facades present a regular and symmetrical order, composed around the axial door and the openings**.** The four facades, open to the courtyard, are built with white limestone and end with cornices**.** The doors overlooking the courtyard are characterized by a unique architectural style, including arches where the black basalt stones enter with the yellow to form a chessboard.[45]

F-12-1 The Southern *(īwān)* façade:

The outer facade of the southern courtyard is the highest one and dominates the space of the courtyard. The outer façade consists of a central pointed arch built with black and yellow limestone and surrounded by a decorative frame. The pointed *(īwān)* arch is based on small *(muqarnas)*. Its wooden ceiling is decorated with *('ajami)* and surrounded by writings representing daily rule. It also features a wooden canopy

[45] David 1988

with geometric decorations. The façade presents a regular and symmetrical order, composed around the central arch[46].

The facade of the two *(qubba)*, asymmetrical on both sides of *(īwān)* are identical to some details of the decor. For one of the *(qubba)* we have, bottom to up, 2 basement air vents, open at the level of the courtyard pavement, which measure (0.55m x 0.75m). In the first level, the six main openings are distributed on both sides of the central arch. From west to east, these openings are: two windows (0.88m width x 2.25m height) on either side of the arch, the *(qubba)* door (0.82m width x 1.68m high), the central arch, this arrangement is repeated on the second end of the central arch. The entrance from the courtyard high about (48cm) divided by a (24cm) high stone step[47].

The first set of decors above the lintels is molding in the form of a rope that splits above each opening, forming an approximately semi-circular frame. In the 2nd level three opening (0.55m width x 0.85m high) on either side of the arch, the 2nd level of décor is above the axial window is a series of rococo patterns. On the 3rd level, there is one window flanked on each side of the central arch. Above the lintel of these openings in each level, is a series of rococo patterns[48]. The inner façade of the (īwān) consists of a central double-shutter door led to the background room. The central door flanked by two niches above the niches is a series of rococo patterns. The side's framed by (ablaq) alternating yellow and black stones, the relieving arch above the central door formed of a series of wedge-shaped blocks using an ordinary type of stone and cover it with a thin layer of marble, to be visible to people and reveal a rich look of the façade. Above there is a decorative frame with floral reliefs. Both sides (*qubba*) facades overlooking at the (*īwān)* consist of one window and door opened into the (*īwān*), above is a decorative frame with floral reliefs[49].

F-12-2- The eastern façade:

The eastern façade measures (13.86m width x 7,9m height). From bottom to top we have the 8 basement air vents, open at the level of the courtyard pavement, which measures (0.55m x 0.75m). The eight main openings distributed on both sides of the

[46] David, 1988
[47] David, 1988
[48] David, 1988
[49] David, 1988

closed monumental door which wide by (0,85m) and separated by pier stones of (0.60m). The openings are blocked because the rooms on its eastern side were eliminated to make way for the street that now runs in front of the property. The first and 2nd levels of décor, above the lintel of these openings, is a series of rococo patterns inscribed in semicircles bounded by a molding role cordage[50] [Fig 37].



Fig 37: The eastern façade

It is almost identical to the west facade with the same dimensions and the same number of fictitious openings distributed around the axial. The only notable differences are the elevation of the wall height (1.25m) bringing its top to the level of that of the north facade and the doubling of the decorative frieze which marks the top of the façade. There are only four types of drawing reproduced symmetrically on either side of the axial door[51].

F-12-3- The Northern *(qa'a)* façade:

This facade is higher than that of the eastern and western facades. It measures (12.77m width x 7.85m height). It is bordered by a frieze of rococo-inspired plant motifs descending to the right and to the left to continue at the top of the east and west facades. It is punctuated by the openings and the decor that highlights them. Starting from the ground level of the courtyard, we first have the seven basement air vents, which measure about (0.55m x 0.75m); the eighth one at the eastern end of the facade, wider than the others, is the access door to the basement[52]. The lintels of

[50] David, 1988
[51] David, 1988
[52] David, 1988

these openings merge with the support of the eight main windows, (1.05m) above the level of the courtyard [Fig 38].



Fig 38: The Qa'a façade overlooking the courtyard

These windows measure approximately (0.85m width x 1.65m height) are separated by a stone of (0.55m) in average width; they are distributed to the right and to the left of the axial door which gives access to the *(qa'a)*. The first level of decoration reigns above the lintel of these windows, is very similar to that already described for the south facade. This decor occupies the height of the gray limestone lintel; above, in the axis of the nine main openings, nine small windows are drilled (0.60m x 0.85m); the middle window, above the slightly wider door, measures (0.70m). Each of these openings is surmounted by a rococo decor carved in stone over a height of three blocks, as in the south facade. Above these decorations are pierced with four opening circles of diameter varying from (0.35m to 0.40m) surrounded by a circular decor of a little less than (1m) in diameter; this decor forms a crown of finely interlaced florets, takes its elements from the traditional *Aleppo* repertoire; however, their layout is specific to the *Bayt Ajqbāsh* and a few other buildings in the same

street. Halfway above these circular decorations at the frieze that ends the facade, there is small circular decoration with a diameter of (20cm) decorated with geometric polygonal patterns. On the same level but the axes between the opening circles, are arranged two draining stones, built for the evacuation of rainwater from the terrace. The frieze of the cornice ending the facade is identical to that of the southern facade[53].

F-12-4- The Western façade:



Fig 39: The Western façade

Measures (13.86m width x 6,65m height). It is like the North and east facades with deference in long and high. From bottom to top we have the 5 basement air vents, open at the level of the courtyard pavement, which measures (0.55m x 0.75m). The eight main openings distributed on both sides and the monumental door, wide by (0,85m) and separated by pier stones of (0.60m). From south to north, these openings are the entrance door to the courtyard, the latrines door, two windows on either side of the monumental door, the monumental door, three windows, and the staircase access door from the terrace. The first level of décor, above the lintel of these openings, is a series of rococo patterns inscribed in semicircles bounded by a molding role cordage[54] [Fig 39].

2.2.5.5.8 Constructional and Structural Details

The main building material used in the construction is limestone. Around the village of *Ba'adin*, to the north of *Aleppo*, there are several quarries famous to produce yellow limestone which contains both calcium and magnesium carbonates. This stone is soft, dense, easily cut tough, and dressed and has good durability. Basalt is generally transported from the central (around *Homs*) and southern (*Horan*) regions of Syria.[55] The conversion of rough quarry blocks into regular building blocks was

[53] David, 1988
[54] David, 1988
[55] Rifai 1996:190

done entirely by hand. Squared but undressed blocks were used to build the surfaces which were to be plastered. Yellow limestone was also used in decorative features because of its ability to be finely cut. Lime based mortars were used as the main binding material.

The basic formula for mortars consisted of slaked lime, fine sand, and crushed limestone powder.[56] Lime-based plaster was used to cover the surfaces of walls in interior spaces.

The decor of the facade uses the sculpture, but also the color and the difference in grain of the stone, to emphasize the important elements, in general of the openings, the wooden decor inside the rooms is also concentrated at the level of the openings and sometimes of the ceilings; it is formed either of planks on which the decorative reliefs are obtained with small nailed wooden elements or modeled putty has been painted or of assemblies of small molded pieces which overlap one another to form more or less complex geometric patterns[57].

In the house, the types of surfaces are decorated with colored marbles used in the courtyard, in the riser of the *(īwān)* and in the *(‘ataba)* of the *(qa'a)*, the execution of the small panels of the riser of the *(‘ataba)* is exceptionally fine[58].

A- Structural Elements

The structural system of the building consists of continuous masonry walls (only interrupted by openings) which support ceilings and transfer the loads to foundations. Different types of roofing systems including flat slabs, domes, barrel, and cross vaults have been used.

B- Walls

The walls are built with yellow limestone except for some parts which are built with the *(ablaq)* system. The walls consist of two exterior faces of stone, the space between which is filled with rubble set in a mass of lime-based mortar. The exterior faces of walls (which are not plastered) are built with dressed stones (ashlars). The thickness of the walls varies according to the height of the rooms and the density of the openings; the front wall of *(qa'a)* thickest (0.85m) while the west

[56] Rifai 1996 : 211
[57] David, 1988
[58] David, 1988

and south facades, like most of the other walls, do not exceed (0.70m) thick; some walls are even thinner, like the east and west walls of *(īwān)* and those of the *(ḥmmām)* which do not exceed (0.50m)[59].

C- Arches

They are found in the lintel of the entrance's doors and passages of this house and used also in the *(īwān)*. A pointed arch made of yellow and black limestone was used as structural elements in the *(īwān)* in the southern facade overlooking the central courtyard[60].

D- Ceilings

Barrel vaults were used to cover the cistern and crossed vaults were used to cover the 6 shops in the underground floor. The vaults are built with limestone and covered by plaster. They cover spaces with rectangular plans with approximate dimensions of (250cm x 350cm). Flat roofs were used to cover the rest of the house. Wood has been used in roofing ground and upper floors; logs have been used in roofing. The diameter of the logs used is about (15cm): they extend to cover the width of the room and are supported on either end by the walls of the room. In important halls and prestigious houses, the wooden logs are covered with wooden boards called *(Ṭabq)* of (20cm x 120cm) and (2cm) thick, which are ornamented with colored or gold decorations[61].

E- Openings

Openings are divided into two groups: the borders of the openings are either one-piece straight lintel or curved. In general, the stone lintel is used on the external façade for all types of openings. On the inside, a wooden lintel put (5cm) higher: it consists of wooden logs arranged over the width of the opening, covered underneath with a thin wooden panel called *(ṭwān)*[62].

The comfort elements aim more at protection against the heat of the summer than against the cold of the winter. There is no special room in the house equipped with

[59] David, 1988
[60] David, 1988
[61] David, 1988
[62] David, 1988

a fireplace as found in some houses, especially in the same neighborhood; there are on the other hand three ventilation ducts which lead in rooms the fresh air captured on the terraces by niches open towards the west of the *(īwān)*. The courtyard basin with its jet of water, the basement room with its basin, participates in the same search for freshness[63].

2.2.5.5.9 The Museum's exhibition:

This museum showcases the traditions of the local people include Syrian clothing dating from the 19th century to mid-20th century. Much of the museum is made of mannequins in various local dresses, musical instruments, painted and inlaid boxes, traditional furniture and cooking molds, coffee pots. The museum is also interested in presenting folklore to the world. The museum contains 766 artifacts spread in six exhibition halls[64].

- The first hall (room 13 at the right side of the *īwān*) is dedicated to the traditional living and daily life of the Aleapean which contains: Traditional furniture; Walnut painted and inlaid box; Gramophone; Brass with tray; Cleopatra portrait embroidered by hand; Locally made and imported glassware and dishes; Quran cover embroidered with small beads and two types of traditional cloths and prayer rug made of white wool embroidered with gold and silver threads[65].

- In the second hall (room n 13 at the left side of the *īwān*), traditional models of weapons that were manufactured in *Aleppo* were displayed, including those that were imported, the most important of which are: Inlaid sword with ornaments; Stuffed guns; Mirror with wooden frame and camouflaged with gold; Wooden chest -for storing clothes (2)- inlaid with mother-of-pearl; Clamshell clogs for weddings and others for daily use; Mirror with two small cabinets at its base decorated with silver camouflaged shell; Two panels of religious themes and writings; Two painted panels contain popular themes from the stories circulated among the public; Glass lanterns coated with gold water; Vases coated with gold water; Bottles for dispersing rose water; Jugs of pottery and alabaster;

[63] David, 1988
[64] Ḥarītānī, 1987
[65] Ḥarītānī, 1987

Glass shapes made locally by blowing; A number of glassware used as a base for the hookah; A fez of a small boy embroidered in silver- the child wears it when he completes the teaching of reading the Qur'an with a great celebration; A decorated prayer rug made of camel hair; Glasses; Various glass and copper tools[66].

- The third hall (16) displayed: A collection of copper vessels of various shapes and sizes- some of them locally made and others from Central Asia, they were used in the city of *Aleppo* and were imported by pilgrims returning from Makkah and Madinah; Copper utensils inscribed with Quranic verses that were used for drinking; Hookahs made of copper; Decorated coconut shells; Incense burners and saddles; Kitchen mortar for crushing spices; Kitchen utensils[67].

- In the fourth hall (17): Group of tools for traditional industry were displayed such as: Hand loom; Knife sharpening tool; Ironing press; Complete tools for gold and silver thread production[68].

- The fifth hall (20) displayed: A complete set of Arabic coffee preparation tools**;** A complete set of food utensils, Horse equipment; Sofas and seating cushions[69].

- The sixth hall is the basement that displayed various large-sized copper utensils such as: Cauldrons, locally made scales; A grate for heating; A water-pot for washing, and a kerosene lamp[70].

- There is also a room for the barber, which includes a barber's chair and his table with shaving tools. And the room of the world's box includes the world's box, a valuable cinematic projection machine, a camera, and a scene of "Karkūz w'wāẓ"[71].

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[66] Ḥarītānī, 1987
[67] Ḥarītānī, 1987
[68] Ḥarītānī, 1987
[69] Ḥarītānī, 1987
[70] Ḥarītānī, 1987
[71] Ḥarītānī, 1987

2.2.5.5.10 Methodologies for Documenting War Damage

The documentation of war damage to cultural heritage is not a neutral, purely technical act. It is a critical intervention that serves multiple purposes: creating an evidence base for future conservation, preserving data that might otherwise be lost during debris clearance, enabling remote research when sites are inaccessible, and—in some contexts—supporting judicial processes for the prosecution of cultural property crimes. For *Bayt Ajqbāsh*, the documentation strategy was shaped by several constraints: the ongoing insecurity in parts of the city, the urgent need to stabilize the structure before winter rains caused further deterioration, and the desire to capture as much information as possible before debris removal inevitably altered the site. The approach adopted was multi-layered, combining satellite remote sensing, terrestrial laser scanning, UAV-based photogrammetry, and traditional on-site survey methods.

- Satellite-Based Damage Assessment

The initial overview of destruction in the *al-Jdeïdé* district was obtained through satellite imagery analysis, conducted by the United Nations Institute for Training and Research (UNITAR) through its operational satellite applications program (UNOSAT)[72]. This method offers the advantage of rapid, wide-area assessment without the need for physical access, particularly valuable in the immediate



Fig 40: Photograph was taken during damage assessment survey of Bayt Ajqbāsh

[72] UNOSAT,2022

aftermath of conflict when security concerns may prevent on-the-ground investigation[73].

For *Bayt Ajqbāsh*, satellite imagery captured in 2018 provided clear evidence of the extent of destruction. As the UNOSAT analysis noted, "There was clear evidence of debris around the walls, the roof of the building is heavily damaged, and a small section of it to the southeast appears to have collapsed[74]". The imagery also revealed "possibly a hole in the southwest corner of the roof[75]". While satellite imagery cannot capture the condition of interior spaces or provide the millimeter-level precision required for conservation planning, it serves an essential function: establishing a baseline of damage at a specific moment in time, before any clearance or intervention begins.

Recent advances in satellite-based damage detection have expanded the possibilities for heritage documentation. Interferometric Synthetic Aperture Radar (InSAR) techniques, using freely available Sentinel-1 SAR data[76], can now detect structural changes in buildings by measuring coherence drops in radar signals—a sudden loss of coherence often indicates damage or destruction[77]. Such methods have been successfully applied to map war-damaged buildings in Mosul, Iraq[78], and to monitor destruction in Ukrainian cities including Mariupol and Kharkiv[79]. While these techniques were not employed for *Bayt Ajqbāsh*—the conflict predated their widespread application—they represent an important evolution in the field and may prove valuable for future post-conflict documentation efforts elsewhere in Syria.

- **On-Site Physical Survey**

The core of the documentation effort for *Bayt Ajqbāsh* was a comprehensive on-site physical survey conducted in November 2017 by a joint team from the Directorate General of Antiquities and Museums (DGAM) and UNESCO[80]. This survey was built

[73] UNOSAT,2022
[74] UNOSAT, 2022
[75] UNOSAT, 2022
[76] NASA Earthdata, 2024
[77] Journal of the Remote Sensing Society of Japan, 2024
[78] ISPRS International Journal of Geo-Information, 2024
[79] ISPRS International Journal of Geo-Information, 2024
[80] UNESCO & DGAM, 2017

on an earlier emergency assessment mission carried out in January 2017, which had provided a preliminary overview of damage across the World Heritage site[81].

The methodology for the physical survey followed established protocols for post-conflict damage assessment. The team systematically documented the condition of every space within the house, recording:

- **Structural damage**: Cracks in load-bearing walls, collapse of wall sections, condition of lintels and arches, stability of remaining structures.

- **Architectural finishes**: Condition of stone carvings on courtyard facades, loss of decorative elements, shrapnel damage to surfaces.

- **Wooden elements**: Condition of the *'ajami* ceilings in the *qa'a* and *īwān*, damage to window frames and doors, structural integrity of wooden roof beams [Fig 40].

- **Service areas**: Condition of the kitchen, *ḥmmām*, and underground cellars, including the ventilation system (*malkaf*).

Each damaged area was photographed, measured, and assigned a preliminary damage category. The findings were compiled into floor plans colour-coded to indicate the extent of destruction, following a five-point scale of damage accredited by the DGAM [Table 3 p.144]. This visual documentation remains an essential reference for all subsequent restoration decisions.

- **Three-Dimensional Laser Scanning**

Recognizing the limitations of traditional two-dimensional documentation for complex architectural spaces, the documentation team employed terrestrial laser scanning to capture precise three-dimensional data of key areas within the house[82]. This technology, which has become increasingly accessible for heritage applications, uses LiDAR (Light Detection and Ranging) to generate dense point clouds that can be

[81] UNESCO & DGAM, 2017
[82] UNESCO, 2018

processed into accurate 3D models[83]. For *Bayt Ajqbāsh*, laser scanning was used to document:

- **The entrance façade**: Capturing the geometry of the damaged stonework to guide reconstruction.

- **The northern *qa'a* façade**: Recording the partially collapsed upper wall section, including the precise position of each stone before dismantling (see Fig 56).

A work of scientific collaboration with UNESCO, DGAM and Art Graphique & Patrimoine for the safeguarding, study, and emergency consolidation of the threatened remains, undertook a damage assessment survey for the damaged building in September 2017. They were able to document the destruction at this time, before the cleaning, before the restoration of the monument to understand how this building was destroyed and give policy experts about cultural heritage an idea of what is remaining on the building.

The laser scanning offered several advantages over traditional hand-measurement. It captured complex geometries with millimetre precision, it operated rapidly—minimizing the time survey teams needed to spend in potentially unstable structures—and it produced data that could be used for multiple purposes: structural analysis, reconstruction planning, and, if necessary, forensic investigation[84]. The importance of such three-dimensional documentation in conflict zones has been demonstrated in numerous recent projects. In Ukraine, UNESCO, ICOMOS, and ICCROM have employed Leica BLK360 laser scanners to document cultural heritage sites at risk, with the dual purpose of preservation and supporting emergency response planning[85]. The compact size and speed of modern scanners make them particularly suitable for deployment in challenging conditions, where equipment must be transported easily and surveys completed quickly[86].

[83] UNESCO, 2018
[84] UNESCO, 2018
[85] Leica Geosystems, 2025
[86] Santana Quintero, 2025

- **Collaboration with Iconem and Digital Documentation**

In addition to the DGAM-UNESCO survey, the documentation of *Bayt Ajqbāsh* was supported by a collaboration with Iconem, a French company specializing in the 3D digitization of cultural heritage sites at risk. Working in cooperation with the DGAM, Iconem deployed advanced photogrammetric techniques to capture high-resolution imagery of the damaged house, employing algorithms and forms of AI modelling to reconstruct what the museum would have looked like in 3D[87].

The results of this collaboration serve multiple purposes. They provide a permanent digital record of the building in its damaged state record that may prove invaluable for future researchers seeking to understand the impact of the conflict. They also provide reference material for the ongoing restoration, allowing craftsmen to consult detailed visual documentation of original features. Perhaps most importantly, they ensure that even if the physical fabric were to be irretrievably lost, a faithful digital surrogate would remain—a consideration of profound importance in a context where security remains fragile.

- **Archival Research and Historical Documentation**

The documentation of damage is not complete without an understanding of what existed before the destruction. For *Bayt Ajqbāsh*, this understanding was derived from multiple archival sources:

- **Published architectural studies**: Notably the detailed documentation by Jean-Claude David, whose 1988 study *Deux maisons à Alep* provided measured drawings, photographs, and historical analysis of the house.

- **Historic photographs**: Images from the pre-war period documenting the courtyard facades, interior decorations, and the museum's exhibition spaces.

- **Estate documents**: The original waqf document describing the house's layout and dimensions, including evidence of the eastern rooms being demolished to widen the adjacent street.

[87] Iconem, n.d

- **DGAM records**: Internal documentation from the 1975 conversion of the house into a museum, including plans and photographs of the building at that time.

This archival material served multiple functions in the documentation process. It established the baseline against which damage could be assessed—determining, for example, whether a collapsed wall was original fabric or a later addition. It guided the search for displaced elements, indicating what features should exist and where they might be found in the rubble. And it provided the evidence base for reconstruction decisions, ensuring that interventions could be grounded in documented precedent rather than conjecture.

- **Synthesis: A Multi-Layered Documentary Record**

The documentation of *Bayt Ajqbāsh* did not rely on any single method but rather integrated multiple approaches into a coherent documentary record. Satellite imagery provided an overview[88]. On-site survey supplied detailed condition assessment[89]. Laser scanning[90] and photogrammetry captured precise three-dimensional geometry[91]. Archival research established the historical baseline. Together, these sources constitute what might be termed as a "forensic heritage approach" a set of standard methods for handling the diverse forms of cultural heritage implicated in conflict-related destruction.

This multi-layered record serves several essential functions for the restoration project. It enables conservators to plan interventions with confidence, knowing what lies beneath the rubble and what features must be preserved. It provides the evidentiary basis for decisions about anastylosis and reconstruction, ensuring that new work is grounded in documented precedent. It creates a permanent archive that will outlast the current restoration, available to future generations of researchers. And it establishes, should it ever be required, a detailed record that could support judicial processes—documenting not only what was destroyed, but the precise nature and extent of that destruction.

[88]UNOSAT, 2022
[89] DGAM, 2017
[90] Leica Geosystems, 2025
[91] Iconem, n.d

- **The Used Restoration Methodology**

The restoration methodology used by DGAM depended on the following items:

a) Select an appropriate and sustainable use:

The DGAM had determined that continued use of the building by traditional folk museum which was the most appropriate in the context of *al-Jdeïdé* neighborhood. With this use the physical requirements of the historic building would remain fundamentally un-changed even though substantial upgrades would be needed to meet current building codes, provide better energy efficiency, and meet tenant requirements.

b) Identify project requirements

The rehabilitation goals were to ensure the integrity of the building envelope, although structurally sound overall, the rehabilitation was comprehensive in scope and included replacement of the destroyed roof membrane; masonry repairs; removal, cleaning; and restoration of the missing materials based on historic photographs[92].

c) The restoration process:

The purpose of the restoration of the *Bayt Ajqbāsh* was to keep all undamaged parts, remove the demolished ones and to rebuild the damaged walls using the authentic material, using the natural stone as authentic material. During the restoration, the old lime mortar was replaced with a new binding agent, lime mortar. All the construction measures were realized in accordance with the conservation requirements; the stone façade walls, roof structure, roof covering, and the authentic appearance of the building were not to be changed.

Applications started with removing featureless additions and the entire poor-quality walls, except for the good original masonry walls[93]. Moreover, the decorations elements were sorted, the site was cleaned, and the damaged stones of

[92] DGAM, 2019
[93] DGAM, 2019

poor quality, wooden beams, metal works were removed to the storage area[94]. Scaffold was installed with aim of minimizing any added load onto a historic structure or fixings into historic fabric. Considered the use of ‘free-standing scaffold to prevent damage to adjacent stone arises.

Wooden logs have been used in roofing clad with wooden board called "*al-Ṭabaq* " then a layer of nylon flex, above it a layer of sand was applied before casting the final traditional lime rendering that consist from /1/ lime /1/ white cement /2/ lime sand /4/ river sand /2/ river pebbles /4/ pumice stone /0.5/ coal ash /1/ crushed pottery /1/ water that allowing the structure to breathe and for the humidity to migrate out from it. Six mm smooth steel reinforcements net were installed to strengthen the traditional lime rendering layer[95].

This operation was carried out using the same stones, previously numbered, or when not able to be used, with similar stones from the region. The replacement of the backfill was done resorting to successive layers of soil and gravel watered with a lime-based mortar[96]. A mortar analysis was performed to determine the appropriate type of replacement mortar. The new mortar matches adjacent mortar in terms of color, texture, and tooling. Design of replacement elements based on historic photographs, physical evidence at the building[97].

- In the *īwān* (room n 12):

The completion of archaeological buildings in its missing parts is one of the most important processes in the field of restoration. It is one of the tools of reconstruction therefore returning all element details means to have a clear picture of its original state by respecting the original components and materials, because of the achievements of these operations to obtain the continuity of archaeological building, its construction, architectural and decorative details[98] [Fig 41-42].

[94] DGAM, 2019
[95] Directorate of Antiquities and Museums of Aleppo, 2022
[96] Directorate of Antiquities and Museums of Aleppo, 2022
[97] Directorate of Antiquities and Museums of Aleppo, 2022
[98] Directorate of Antiquities and Museums of Aleppo, 2022



Fig 41: The īwān before restoration



Fig 42: The īwān after restoration.

The original geometric structure of the arch of the *(īwān)* was estimated, the characteristics of the destroyed part was determined very well, the new stones above the arch were made in accordance with the original and projected because of the analyzes[99].



Fig 43: The Western before and after restoration

The completion of the *(īwān)* in its missing parts is one of the most important processes. Therefore, return all element details (rebuilding of the most deteriorated parts of foundations, piers, arches, cutwaters, spandrel walls and parapets) means to have a clear picture of its original state by the respect the original components and materials, because of the

[99] Directorate of Antiquities and Museums of Aleppo, 2022

achievements of these operations to obtain the continuity of ancient building, with its construction, architectural and decorative details[100]. Additionally, all masonry joints that show degradation were carefully cleaned and repointed using a suitable lime-based mortar. The repair measures proposed to restore safety of the *(īwān)* also included the strengthening of the arch, to assure the transversal stability of the structural elements[101] [Fig 42].

-The Western room (room n 20)

The extensive interior work consisted of the complete of the façade's stones overlooking at the courtyard. The stones that were in the center of the explosion are completely missing and replaced by new stones [Fig 43].

Undamaged facade materials, such as stone window lintels and sills, were reused to the greatest extent feasible.

Substitute decorative materials were used to recreate historic details when they meet the requirements for replacement of deteriorated architectural features.

The wooden logs were replaced and the process of applying the layers of roof coating, according to what is mentioned above.[102]

- The Northern *qa'a* (room n 14-15):

The laser scanning technique was used to document the interior facades including the north one. Presenting the 3D modelling of the facades in their actual state of conservation with all the irregular shapes and the geometry's deformations. This technique was used also in the entrance façade [Fig 44-45] and the damaged wooden ceilings [Fig 46] in the rooms of the museum before they evacuated and kept in *Aleppo* Museum [Fig 47]. The survey and the subsequent 3D modelling allow an easy comprehension of the wooden elements of this complex constructive system and they are the basis for the creation of a database where it is possible to georeferenced the information about the wooden structure. Every single element can be catalogue[103].

[100] Directorate of Antiquities and Museums of Aleppo, 2022
[101] Directorate of Antiquities and Museums of Aleppo, 2022
[102] DGAM 2022
[103] DGAM 2022



Fig 44: Documentation of the entrance façade using Agi soft software



Fig 45: Documentation of the Northern façade using Agi soft software

Fig 46: Documentation of the ceiling of the northern qa'a and the ceiling of room n 13 by using Agi soft software



Fig 47: The undamaged decorative parts of the wooden roof was evacuated and transferred to the temporary storage area at the museum-





The wooden logs were dismantling to be replaced. New logs were installed in the rooms of the museum after they were laboratory tested[104] [Fig 48].





Fig 48: New wooden logs have been used in roofing clad with wooden board called "Ṭabq"

[104] Directorate of Antiquities and Museums of Aleppo, 2022

The most striking feature of this façade is the partial collapse of the upper west part. The conservation process was then started by numbering each stone and components was numbered and detailed drawings / photographs were prepared, showing the numbered stones[105]. This documentation was carried out before the dismantling work, to restore back all the original stone members in their original location maintaining their authenticity. The stone members from the façade were then dismantled and they were thoroughly cleaned to remove dirt, dust, algae, and mortar remains. The missing stones were replaced by new ones that match the original stone[106] [Fig 49].



Fig 49: The northern façade of the qa'a before and after the restoration

- The entrance façade:

The entrance façade was in a perilous condition, at risk of collapse. Sorting out the stones from the collapsed wall were done, dismantling the old stone, are fully numbering each stone, and noting its place in the wall. Then, use traditional mortar to rebuild it[107].

[105] Directorate of Antiquities and Museums of Aleppo, 2022
[106] Directorate of Antiquities and Museums of Aleppo, 2022
[107] Directorate of Antiquities and Museums of Aleppo, 2022

- The *Sybāṭ* (room n 13b)

This architectural element is not only aesthetically significant but can be functional as well, recreation of missing *sybāṭ*, provided features are returned to their original or historic appearance and meet the following criteria: Design of replacement element was based on historic photographs, physical evidence at the building. Materials for recreating and restoring missing *sybāṭ* features match original or historic materials in-kind[108] [Fig 50].



Fig 50: The sybāṭ before and after restoration conservation

- The SW room at the upper floor





Fig 51: The SW room before and after restoration

The SW room suffered from structural issues due the clashes. It requires reconstruction to prevent it falling by replacing deteriorated material with new material that duplicates the old as closely as possible. Protecting architectural details and features that contribute to the character of the room. Retaining distinctive features such as the size, scale, mass, color, and materials of buildings, including roofs, porches and stairways that

[108] Directorate of Antiquities and Museums of Aleppo, 2022

give a building its distinguishing character[109]. The restoration works are still continuous according hoping to open the building at the end of this year 2024 [Fig 51].

2.2.5.5.11 From Documentation to Recovery: Principal Decisions for *Bayt Ajqbāsh*

Consolidation work on the structure began in 2019. As of August 23, 2021, restoration and construction work took place in the courtyard, including sculptural work, restoration of facades using original elements such as old chasuble stones. The second phase of the restoration was completed on September 2, 2021.

A memorial of understanding was signed on 29 of September 2020, between Oman and the Syrian ministry of Culture to help Syria preserve its heritage, estimating $500 million to support the cause for the first phase of the rehabilitation at *Bayt Ajqbāsh*. The restoration process started on 2020 included some areas of the collapsed interior parts as well as the exterior facades of *Bayt Ajqbāsh*

The reason to restore *Bayt Ajqbāsh* fall into five main categories:

Value – The household intrinsic value not only in the history of the building, how it was used, but also how it was built. The house was built with higher quality materials and built under different standards than modern buildings.

Architectural Design - *Bayt Ajqbāsh* have personalities, specific architectural elements that make the house unique and more valuable. Saving these unique traits within the original building are ideal.

Sustainability - *Bayt Ajqbāsh* store a lot of embodied energy. Hence, it is better to preserve or re-use them rather than demolition. The house built to better standards and as mentioned above has unique architectural elements that can increase business.

Cultural significance - One of the most important reasons that *Bayt Ajqbāsh* is restored is because of its cultural significance. It is tied to a nation's identity

[109] Directorate of Antiquities and Museums of Aleppo, 2022

making the house more valuable for what it provides for the culture than if it were demolished. Between these truths lies the central question of this thesis: What is the appropriate response?

The answer cannot be found in technical manuals alone. It requires a series of principal decisions, philosophical and strategic choices that will guide every subsequent architectural intervention. These decisions are presented below, organized by the core dilemmas they address.

Principal Decision 1: The Philosophy of Intervention

The Dilemma	Should the house be restored to its exact pre-war condition, or should the war damage be left visible as a memorial?
The Decision	Adopt a "critical restoration" approach that respects both the pre-war significance and the trauma of war.
The Rationale	Complete restoration to an idealized pre-war state would erase the building's recent history and the suffering it witnessed. Leaving all damage visible would prevent the building from regaining its social function and accelerate its decay. A critical approach—where damaged fabric is conserved, lost elements are replaced only where necessary for structural stability or legibility, and new interventions are clearly identifiable—allows the building to carry its multiple histories forward. This approach aligns with the ICOMOS Guidance on Post-Trauma Recovery (2017) and the Venice Charter's principle of "honesty" in restoration.
Principal Decision 2: The Treatment of Lost Decorative Elements	

The Dilemma	The *'Ajamī* painted panels—among the house's most significant features—are partially destroyed. Should they be recreated, or should their loss be accepted?
The Decision	Conserve all surviving 'Ajamī fragments in-situ; do not reconstruct lost panels.
The Rationale	The *'Ajamī* panels are unique artistic creations. Any attempt to recreate them would be conjecture, not authenticity. Leaving the lost areas blank—or infilled with a neutral, reversible material—makes the extent of loss legible to future visitors while preserving the authenticity of the surviving fragments. This decision prioritizes the truth of the object over a false sense of completeness. It also creates an opportunity for interpretation: the missing panels become a testament to the war's destruction.
Principal Decision 3: Structural Intervention	
The Dilemma	Significant structural elements have collapsed. How should they be treated?
The Decision	Reconstruct collapsed structural elements using traditional materials and techniques, guided by surviving evidence.
The Rationale	Unlike decorative art, structural elements are primarily functional. The building cannot survive or be used without them. Where sufficient evidence exists (from pre-war plans, photographs, or surviving fragments), reconstruction is justified. However, this reconstruction must be clearly legible as new work (e.g., through

	subtle differentiation of materials or a dated inscription) to avoid falsifying the historical record.
Principal Decision 4: The Future Function of the Building	
The Dilemma	Should the house be returned to its pre-war use as a museum, or should it be given a new function?
The Decision	Adapt the house for a new use that is compatible with its spatial character and serves the community's post-war needs.
The Rationale	A building without a function cannot be sustained. The pre-war museum use was successful but may not be the most urgent need in post-war Aleppo. A new function—such as a center for traditional crafts—could provide economic opportunity, interpret the building's own architectural heritage, and complement the broader recovery of al-Jdeïdé. The principle of "adaptive reuse" is well-established in heritage conservation, provided the new use does not compromise the building's significant fabric.
Principal Decision 5: The Role of the Courtyard	
The Dilemma	The courtyard is the spatial heart of the house but was damaged and overgrown. Should it be restored as a private space or opened for public use?
The Decision	Rehabilitate the courtyard as a semi-public amenity that supports the building's new function.
The Rationale	In traditional Aleppine houses, the courtyard was a private, domestic space. However, if the building's new

	function is public-oriented (e.g., a craft center), the courtyard must accommodate visitors. This tension can be resolved through careful design: the courtyard can serve as a gathering space during open hours while retaining its character as a sheltered, garden-like oasis. The key is to ensure that any new interventions (seating, shading, lighting) are reversible and respectful of the historic fabric.
Principal Decision 6: Authenticity in the Post-War Context	
The Dilemma	After such profound loss, what does "authenticity" mean for *Bayt Ajqbāsh*?
The Decision	Define authenticity as the building's ability to truthfully convey its multiple histories—its original construction, its life as a home and museum, its destruction in war, and its recovery.
The Rationale	Authenticity is not a fixed state frozen in time. It is the quality of truthfulness. *Bayt Ajqbāsh* that conceals its damage and pretends the war never happened would be inauthentic. *Bayt Ajqbāsh* that preserves its ruins without allowing new life would also be inauthentic to its history as a living place. The authentic building is one that tells its whole story, including the painful chapters—while continuing to serve its community. This understanding of authenticity is central to the Nara Document on Authenticity (1994) and its emphasis on cultural context and the layering of history.

Table 4 : The Philosophy of Intervention in Bayt Ajqbāsh

2.2.5.5.12 Adaptive Reuse

The lack of financial resources and the constraints about interventions are threatening the heritage built and the multiple benefits it can provide. In time, the role of building conservation has changed from preservation to being part of a sustainable strategy where adaptive reuse may allow to protect built heritage, while promoting it as a resource.



Fig 53: Creates a kinetic roof to the courtyard of Bayt Ajqbāsh.

The problem of adaptive reuse of the historic building has a multi-dimensional nature and presents a high complexity due to the intertwining of the aspects to be tackled.

Indeed, the aspects involved span from the need to respect architectural and artistic value of the building to the symbolic values it has for the local community up to the use as a resource for economic development and to the environmental implication of its restoration.

- **Evaluating the Present Functional Properties**

Bayt Ajqbāsh was hosted the Traditional Folk Museum of *Aleppo*, belonging to the DGAM and under the responsibility of the Aleppo Antiquities Directorate, the house is neither currently able to raise funds to cover annual costs of ordinary maintenance, nor the cost of extraordinary interventions needed to solve the problems of

architectural and structural deterioration.

Aleppo has a rich material heritage. Despite the war, many materials heritage survives in artistic, architectural and craft. This tangible heritage is mirrored in its richness by the intangible heritage of the country, represented in large part by the traditional craft knowledge and skills passed down from generation to generation

within artisan families and through the guild system. Aspects of these traditions have been documented over the last century in scattered, but nevertheless informative, surveys.

Museums are more than places where objects are exhibited and conserved. It is an important factor in the preservation of cultural identity, for us and for future generations, as a part of human cultural heritage.

After analyzing the building, I tried to evaluate the existing situation of the building to understand the complications related to the activities and functions that take place in it. Main problems related to present functional of the building were defined as follows:

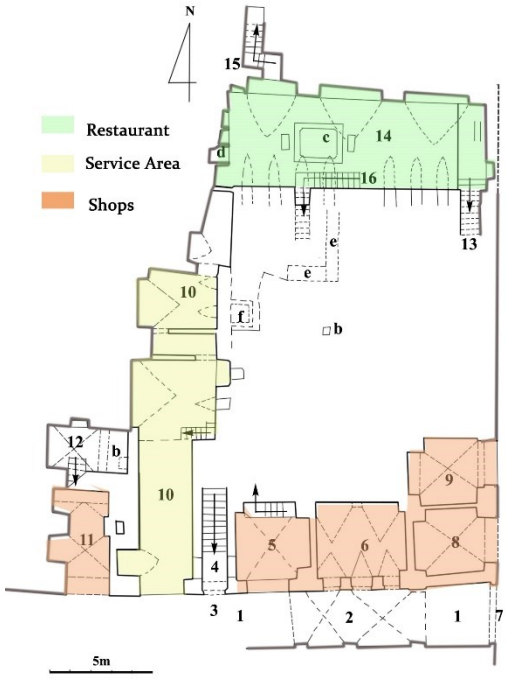

Fig 54: Adaptive reuse plan of the underground floor of Bayt Ajqbāsh.



Fig 55: The underground restaurant

The museum's display was suffering from many obstacles starting from: There is no presentation plan, poor display methods (Showcases, Posters, Labeling Artefacts), not using devices to control humidity and temperature inside halls display, display problems related to the lighting systems, including displaying antiquities with display showcase that are not equipped with a good lighting system, lack of storage, not using modern technology in presentation, in addition to the lack of the visitor's

main services such as visitor center, cafeteria, film viewing room, art gallery/flexible space for community use and library, etc.…

- **Requisites and Characteristics Need in The Adaptive Reuse of The House**

The following requisites and characteristics need in the adaptive reuse of the house: (1) To improve the exist function in currently reused spaces, (2) To ensure economic sustainability by producing financial flows able to cover maintenance costs, (3) To ensure that development functions are compatible with the heritage value of the house and

with its already existing functions, (4) To promote a synergy between public and private bodies/entities, (5) To include a proper evaluation of economic and financial feasibility, (6) To include other relevant attributes in order to take into account cultural and societal aspects and (7) To involve professionals and stakeholders both in their definition and in the evaluation phases.

- **New Function:**

The new proposed function will create a center for the exhibition, degustation, and sale of various traditional *Aleppo* products through events such as festivals and thematic gatherings. The project allows the building to continue serving its function as a symbol of the city's cultural life while considering today's technologies and progress.

The proposed adaptive reuse of *Bayt Ajqbāsh* as a Center for Traditional Crafts and Architectural Heritage are a direct response to Principal Decisions 4 and 5. This program:

- Aligns with the building's residential scale and spatial character.
- Provides economic opportunity for local artisans in the post-war context.
- Interprets the building's own architectural value through education and demonstration.
- Makes the courtyard a semi-public amenity (consistent with Principal Decision 5).

Spatial Allocation Derived from Principal Decisions

The table below summarizes the conservation approach adopted for each spatial zone within the *Bayt Ajqbāsh*. For every area, the assessment findings are matched with a principal decision (drawn from a predefined set of conservation strategies), a proposed new function, and the underlying rationale that balances heritage significance with adaptive reuse requirements. The decisions reflect principles of reversibility, legibility of interventions, and the selective use of reconstruction and in-situ conservation.

Space	Assessment Finding	Principal Decision Applied	Proposed Function	Intervention Rationale
Ground Floor Reception Rooms	Significant structural damage: some *'Ajamī* panels lost	**Decision2** (Conserve surviving *'Ajamī*; do not reconstruct lost panels). **Decision3** (reconstruct structure)	Demonstration workshops for copper, soap, and textile crafts	Lost *'Ajamī* areas left as neutral infill, making loss legible. Reconstructed structure uses traditional materials but is subtly datable. New workshop fittings are reversible.
First Floor Living Quarters	Partial collapse; mix of damaged and surviving *'Ajamī* panels	**Decision 1** (critical restoration); **Decision 2** (conserve 'Ajamī in-situ)	Exhibition galleries on the history of *al-Jdeïdé* and the house itself	Surviving *'Ajamī* panels conserved *in-situ*. Damaged areas stabilized. New display elements are freestanding, not attached to historic fabric.
Courtyard	Overgrown; paving damaged	**Decision 5** (semi-public amenity)	Central gathering space for events, cafe seating	Historic paving repaired where possible. New seating and shading are designed to be reversible. Planting respects traditional courtyard species.
Service Wings	No significant historic fabric	**Decision 4** (adaptive reuse)	Cafe kitchen, restrooms, staff offices	Complete refurbishment in contemporary style, clearly differentiated from historic fabric.

Table 5: Conservation Decisions and Intervention Rationale by Space for adaptive reuse of *Bayt Ajqbāsh*

- **Treatment of the *'Ajamī* Panels: A Visual Strategy**

Consistent with Principal Decision 2, the surviving *'Ajamī* panels will be conserved by specialist conservators. Where panels are completely lost, the wall surface will be prepared with a neutral lime plaster finish, slightly recessed to indicate the original location of the panel. A discreet interpretive label will explain what was lost. This approach:

- Protects the authenticity of the surviving fragments.
- Makes the extent of loss legible to visitors.
- Avoids the ethical problems of conjectural reconstruction.
- Creates a powerful memorial to the destruction.

The underground level is thematic shops selling local food products, herbal medicines, and a restaurant with its service area. The restaurant should use local products and offer meals at a medium-high price level [Fig 54-55].

The ground floor consists in a ticket office, a bookshop together with souvenirs related to the building, a cloakroom, and mixture of ateliers and sales units practically in relation to each other, workshop spaces and cafeteria [Fig 56-57].

Utilize the courtyard as a place for cultural interaction and enhance its innate role as the central component of spatial organization. This can be achieved by using the courtyard for traditional and contemporary shadow art shows and temporary exhibitions to illustrate projects and offer services [Fig 56].

This is best characterized by the courtyard, where a kinetic roof creates a multitude of spatial experiences [Fig 53]. Lightweight and foldable, it opens and closes easily like origami, transforming this long-neglected courtyard into a social space adaptable to various climatic conditions and functions. The feature will cover a rectangular-shaped plaza in the center of the building.



Fig 56: Creates a kinetic roof to the courtyard of Bayt Ajqbāsh.

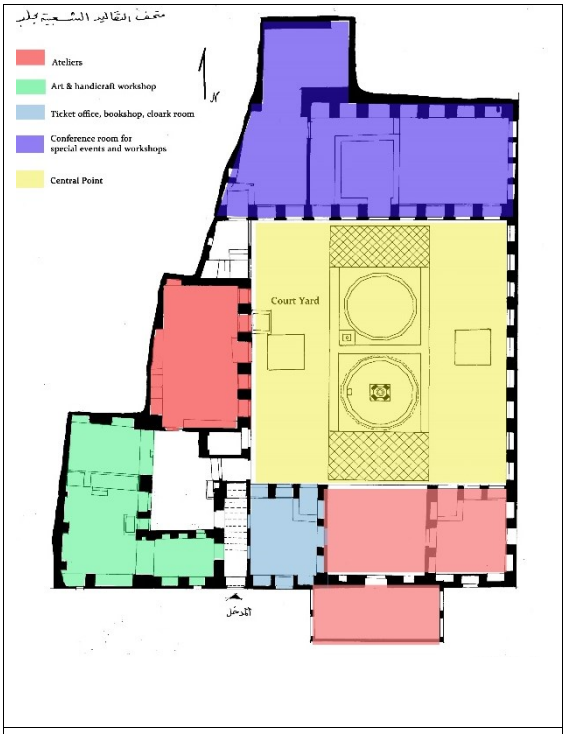

Fig 57; Adaptive reuse plan of the Ground floor of Bayt Ajqbāsh

Additional Atliers will be at the Mezzanine. The first-floor room is the library hall and cafeteria on the roof. The building program will be developed to create a center to exhibit, design, produce and interpret ʿOttomāns patterns on different platforms and products. The interiors were also embellished by surfaces and products produced in the ateliers [Fig 58].

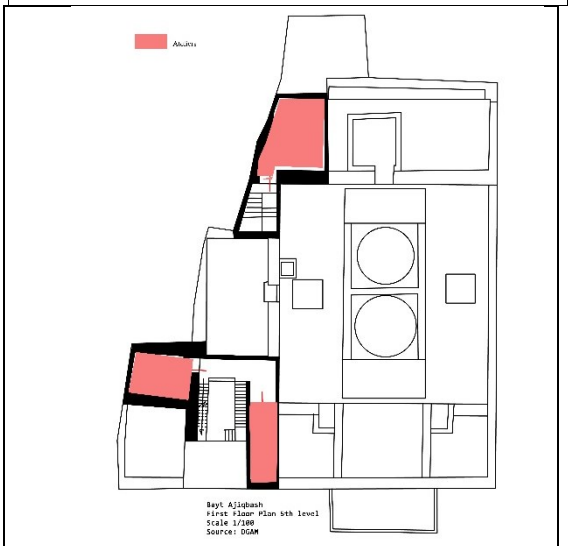

Fig 58: Adaptive reuse plan for the Mezzanine of Bayt Ajqbāsh.

The first floor will contain a library, and the rooftop terrace may transform into a garden where one can enjoy a bird's eye view of *Aleppo*'s old house roofs, church's domes, and mosque's minarets [Fig 59].

The restoration plan also aims to create flexibility so that the structure can easily adapt to changing future configurations. Photovoltaic panels will also be installed on the new structure to harvest solar energy to help power the complex.

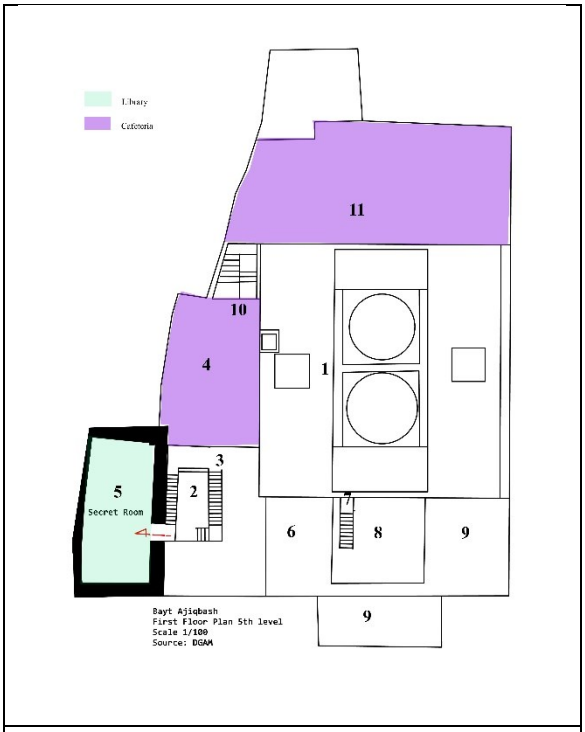

Fig 59: Adaptive reuse plan for the First floor of Bayt Ajqbāsh

- **Overall Conceptual Organization**

The function will be developed by organizing spaces and activities within a holistic conceptual approach. This conceptual organization will use a tool to maintain functional continuity. The aim is to create a center within which disciplines such as traditional crafts, architecture, performance, and music could work together to enhance activities related to experimental studies about intangible heritage.

- **Relationships of Activities**

The proposed new function use of both levels for exhibition. While commercial activity was concentrated around the courtyard on the ground floor, experimental studies were organized on the first floor. Exhibition spaces were distributed to the whole building creating spatial continuity and increasing the attraction of the first floor. Ataliers may have multiple positive impacts, since it could attract private investors and enhance the experience of visitors, who may be induced to spend more time inside the house.

Service area that to be introduced consists in a ticket office, a bookshop and anther shops selling typical products of *Aleppo*, together with a souvenir related to the museum, and a cloakroom.

External areas could be used for temporary exhibitions, to illustrate projects and offer services.

- **Spatial Allocation**

This table outlines the adaptive reuse strategy for the *Bayt Ajqbāsh*, matching each original space with a proposed new function. It specifies the required interventions and the conservation approach adopted to balance heritage significance with operational needs. The approaches emphasize the retention of historic fabric where it survives, reversibility of new additions, and clear differentiation of contemporary interventions.

Original Space	Proposed New Function	Intervention Required	Conservation Approach
Ground Floor Reception Rooms	Demonstration workshops for copper, soap, and textile crafts	Minimal: install work surfaces and storage	Retain all surviving decorations; protect during works
First Floor Living Quarters	Exhibition galleries on the history of *al-Jdeïdé* and the house itself	Structural repair; new lighting and climate control	Conserve *'Ajamī* panels in-situ; new interventions clearly differentiated
Courtyard	Central gathering space for events, cafe seating	Rehabilitation of paving and planting; new shading devices	Retain historic paving where possible; new elements designed to be reversible
Service Wings	Cafe kitchen, restrooms, staff offices	Complete refurbishment	No significant historic fabric remains; new design can be contemporary

Table 6: Proposed Functions and Conservation Strategies by Original Space of *Bayt Ajqbāsh*

The table below presents the conservation strategy developed for each space, linking assessment findings to the principal decision applied, the proposed new function, and the underlying intervention rationale. Decisions are drawn from a defined set of approaches that priorities the retention of significant historic fabric, reversibility of new interventions, and legibility of loss where original elements cannot be reconstructed.

Space	Assessment Finding	Principal Decision Applied	Proposed Function	Intervention Rationale
Ground Floor Reception Rooms	Significant structural damage: some *'Ajamī* panels lost	**Decision 2** (conserve surviving *'Ajamī*; do not reconstruct lost panels); **Decision3** (reconstruct structure)	Demonstration workshops for copper, soap, and textile crafts	Lost *'Ajamī* areas left as neutral infill, making loss legible. Reconstructed structure uses traditional materials but is subtly datable. New workshop fittings are reversible.
First Floor Living Quarters	Partial collapse; mix of damaged and surviving *'Ajamī* panels	**Decision 1** (critical restoration); **Decision2** (conserve *'Ajamī in-situ*)	Exhibition galleries on the history of *al-Jdeïdé* and the house itself	Surviving *'Ajamī* panels conserved *in-situ*. Damaged areas stabilized. New display elements are freestanding, not attached to historic fabric.
Courtyard	Overgrown; paving damaged	**Decision 5** (semi-public amenity)	Central gathering space for events, cafe seating	Historic paving repaired where possible. New seating and shading are designed to be reversible. Planting respects traditional courtyard species.
Service Wings	No significant historic fabric	**Decision4** (adaptive reuse)	Cafe kitchen, restrooms, staff offices	Complete refurbishment in contemporary style, clearly differentiated from historic fabric.

Table 7: Conservation Decisions and Intervention Rationale by Space for *Bayt Ajqbāsh*

- **Treatment of the *'Ajamī* Panels: A Visual Strategy**

Consistent with Principal Decision 2, the surviving *'Ajamī* panels will be conserved by specialist conservators. Where panels are completely lost, the wall surface will be prepared with a neutral lime plaster finish, slightly recessed to indicate the original location of the panel. A discreet interpretive label will explain what was lost. This approach:

- Protects the authenticity of the surviving fragments.
- Makes the extent of loss legible to visitors.
- Avoids the ethical problems of conjectural reconstruction.
- Creates a powerful memorial to the destruction.

2.2.5.5.12 The SWOT Analysis: Testing the Proposal Against Reality

The SWOT analysis described below summarizes the main issues within the adaptive of the house, both now and for future safeguarding of its unique character and which could provide the basis of a management plan in the future. Points are not made in any order of priority.

Strengths:

- Accessibility

Connection with *Sāḥat al-Ḥaṭab*, and it is mixed-use between shops, churches, and hotels.

Accessibility by public transportation, car, or by foot.

Presence of driveways with good walkability and paths connecting to the Waqf of *Ipšīr Pāšā*

- Flexibility

The house dimensions, which are not excessive, promote adaptations and transformations.

Ground, first floors host a series of interconnecting spaces in addition to unused spaces available for new functions and wide-open space.

- Historical Value

Presented as an example of 18th century houses, the richness and diversity of decoration has increased its value.

Bayt Ajqbāsh is important, with a formal spatial relationship of buildings and spaces. These buildings, whether in the same or altered uses, make a strong statement about the historic development of the ancient city both locally and nationally.

- Increase the cultural importance of the place by using relevant ongoing practices and celebrations.

Weaknesses

- Lack of professional staff
- Negative perception regarding conservation, finding financial resources and potential investors can be difficult.
- Lack of support for conservation and enhancement
- The poor economic strength of citizens and companies

Opportunities

- Potential for Tourism Development due to rich historical and cultural resources.
- Promote and enhancement of heritage significance and quality of the context due to excellent surrounding context in addition to having very active historical landmarks in the neighborhood like *Bayt Ghazālah* (The *Aleppo's* memory museum).

Threats

The risk is related to an adaptive aspect that could be summarized as follows:

- Risk of higher restoration costs, as often happens with restoration of historic building.
- Risk related to management requires the presence of a high qualified management, able to organize functions and activities at their best to attract users in a suitable way and in a proper number.
- Risk related to the creation of a foundation with public-private capital. This new management entity should coordinate not only the ideas, management,

and visions of the public museum already operating inside the monumental house but also be able to harmonize public sector officials' visions and goals with those of private sector subjects.

- Risk related to the market response to the new functions/services.

To summarize, the suggested adaptive reused project can bring many advantages for society and thus enhance the quality of life for local community. It can provide new social dynamics within their surroundings and facilitate the regeneration of urban areas. Moreover, by involving local community in the process, their sense of attachment to and pride in their living culture is enhanced.

CHAPTER 3:

CONCLUSION

3.1 From War Resolution to Post-War Reconstruction:

Lessons for Madīnat Ḥalab al-Qadīmah

This thesis has examined the challenges and possibilities for post-war architectural heritage rehabilitation, using the *Ancient City of Aleppo* as its central case. Through analysis of international conservation doctrine, global reconstruction precedents, and detailed examination of Syrian case studies, several conclusions emerge that directly address the research questions posed at the outset.

Preserving urban and built heritage in cities is undoubtedly a complex and challenging endeavor that necessitates the consideration of various perspectives and factors[1]. Striking a balance between political, social, and economic considerations, while also safeguarding the architectural, historical, and cultural values of historic areas, can be particularly daunting[2].

International organizations, government entities, and non-governmental organizations have acknowledged the critical importance of preserving historic cities and buildings. They have initiated seminars, conferences, and workshops aimed at raising awareness about the threats these areas face, as well as promoting effective conservation strategies[3].

The preservation of historic cities entails protecting a wide array of values, including architectural, historical, archaeological, social, spiritual, economic, and political aspects[4]. These values are vital for shaping the identity and character of a city and play a crucial role in fostering a sense of place and continuity with the past[5].

The conceptual foundation established in the first two chapters provided the theoretical framework necessary to analyze the complex challenges facing *Aleppo's Ancient City*. By tracing the evolution of conservation philosophy from ancient practices through medieval transformations, modern reconstruction paradigms, and contemporary digital innovations[6], this thesis has illuminated the fundamental truth that reconstruction decisions are never merely technical—they are profound social,

[1] Jokilehto, 1986
[2] ICOMOS, 1994
[3] ICOMOS, 2000
[4] ICOMOS, 1964
[5] Jokilehto ,2006
[6] Jokilehto, 1986

psychological, and political acts that shape how societies remember, rebuild, and reimagine themselves[7].

This concluding chapter synthesizes the findings of the previous discussions to answer the three research questions that have guided this investigation.

3.1.1 RQ1: What Kind of Challenges Can Be Associated with the Preservation of Postwar Urban Heritage?

The preservation of urban and built heritage in post-conflict cities emerges from this study as an endeavor of exceptional complexity, requiring the simultaneous consideration of political, social, economic, architectural, historical, and cultural values[8]. The case of *Madīnat Ḥalab al-Qadīmah* exemplifies this multifaceted challenge with particular urgency.

The Legacy of Destruction

The destruction wrought upon Aleppo between 2012 and 2016 was catastrophic and layered. Unlike the concentrated bombing campaigns of World War II or single seismic events, *Aleppo* suffered years of sustained conflict involving shelling, aerial bombardment, ground fighting, and intentional demolitions[9]. The Great Mosque's shattered arcades, the bullet-scarred walls of *Bayt Ajqbāsh*, the collapsed vaults of the *sūqs*, and the empty shells of once-vibrant courtyard houses represent not merely structural damage but the physical manifestation of social trauma[10].

The February 2023 earthquake compounded this destruction, exploiting the vulnerabilities created by years of war and neglect[11]. The lack of maintenance during the conflict period had critically degraded masonry strength and wall connections, leaving structures dangerously susceptible to seismic forces[12]. This demonstrates how post-conflict heritage preservation must contend not only with direct war damage but with secondary vulnerabilities that emerge during periods of institutional weakness.

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[7] ICOMOS, 1994
[8] Jokilehto, 1986
[9] UNESCO, 2018
[10] Sulfaro, 2018
[11] ICCROM, 2023
[12] DGAM, 2024

Institutional and Economic Constraints

The Syrian authorities face a set of interconnected challenges that fundamentally constrain preservation capacity. War continues in parts of the country, maintaining military preparation and war effort that exhausts the national economy. International sanctions prohibit dealing with the Syrian government, cutting off access to resources, expertise, and funding[13]. The deteriorating living conditions, inflation, and decline in the national currency value mean that approximately 15,000 damaged houses in the Ancient City compete for attention with urgent humanitarian needs for healthcare, education, and basic infrastructure[14].

The report[15] on *Aleppo's* antiquities from September 2023 identifies critical institutional challenges: the *Aleppo* Endowment Directorate faces severe funding shortages, relying on self-financing from tenants or individual donations; owners confront economic hardships and scarcity of building materials including limestone and wood due to sanctions; antiquities authorities lack structural support tools and qualified personnel; and the legal framework remains outdated, with no amendment to the Antiquities Law despite the 2007 urban system update[16]. Complex ownership structures, including absentee owners, further hinder restoration efforts.

Documentation Deficiencies

Perhaps most critically for the future of informed reconstruction, this thesis has identified significant gaps in architectural documentation. While the *Madīnat al-Qadīmah* has been the subject of numerous studies since the early twentieth century—documenting monuments, traditional houses, religious buildings, *sūqs*, and urban precincts[17]—the sheer scale of the Ancient City meant that many residential structures remained undocumented before the war. Documents were lost during the conflict, and the quality of existing documentation varies considerably in accuracy, completeness, and level of detail.

[13] ICOMOS, 2022
[14] DGAM, 2024
[15] DGAM archive, 2023
[16] DGAM, 2024
[17] Sauvaget, 1941

The lack of comprehensive photographic documentation for many buildings presents particular challenges for authentic reconstruction. Without visual records of interior features, decorative details, and original material configurations, restoration efforts risk compromising historical accuracy[18]. The absence of integrated databases linking property ownership, occupancy, land use, and population data with spatial information further hampers informed decision-making by local authorities.

The Challenge of Competing Values

Beyond these practical constraints lies a more profound philosophical challenge: the cultural significance of heritage sites may shift post-conflict as communities develop new perspectives on what should be preserved[19].

The ancient debate between preserving ruins as testimony and rebuilding as renewal—first documented in fifth-century Athens[20]—remains urgently contemporary in *Aleppo*. Should the destroyed fabric be preserved as memorial to the suffering of 2012–2016, or rebuilt as symbol of Syrian resilience? Can a city do both? The case studies examined in this thesis demonstrate that there is no universal answer, only choices that must be made consciously and collectively[21].

These challenges underscore the multifaceted issues that need to be addressed to ensure preservation, restoration, and sustainable development of *Madīnat Ḥalab al-Qadīmah.* Addressing these challenges requires a collaborative approach that involves local communities, governments, and international organizations to effectively preserve postwar urban cities[22].

3.1.2 RQ2: What Are the Subsequent Possible Solutions in Its Rehabilitation?

The comprehensive review of historical and contemporary reconstruction cases undertaken in this thesis reveals a spectrum of possible approaches, each offering distinct lessons for *Aleppo's* recovery[23]. Rather than prescribing a single model,

[18] ICOMOS, 1964
[19] ICOMOS, 1994
[20] Jokilehto, 1986
[21] Diefendorf, 2014
[22] UNESCO, 1972
[23] Jokilehto, 1986

this investigation suggests that *Aleppo's* rehabilitation must draw selectively from multiple precedents, adapting their principles to local conditions and community values[24].

Learning from the Spectrum of Approaches

From ***Dresden's Frauenkirche***, *Aleppo* learns that trauma need not be erased for a city to live again, nor must a city remain in ruins to remember[25]. The deliberate reintegration of blackened original stones alongside new lighter stone creates a hybrid object that is both a functioning building and a permanent archive of destruction[26]. For *Aleppo*, this suggests that surviving fragments from the Great Mosque, *Bayt Ajqbāsh*, or the *sūqs* can be visibly incorporated into new construction, their scars carrying memory forward.

From ***Buda* Castle's two reconstruction eras**, *Aleppo* confronts the uncomfortable truth that each generation selects its own "authentic" layer[27]. The post-war reconstruction (1945–1985) valued medieval revelation over nineteenth-century fabric, preserving ruins as memorials and keeping voids as spaces of memory[28]. The National Hauszmann Program (2019–2030) reverses this valuation, seeking to restore the turn-of-the-century appearance and erasing post-war interventions[29]. For *Aleppo,* this demonstrates that reconstruction decisions are never final—they reflect contemporary political priorities and philosophical commitments that future generations may reverse.

From **the *Iseum Savariense***, *Aleppo* learns both the power of reconstruction to make the past visible and the danger of irreversible interventions[30]. The pioneering anastylosis that influenced the *Venice Charter* also damaged original marble through direct contact with modern materials[31]. This teaches that all layers must be respected—ancient fabric, mid-century reconstruction, and later

[24] ICOMOS, 1994
[25] Sulfaro, 2018
[26] Garland, 2008
[27] Diefendorf, 2014
[28] Diefendorf, 2014
[29] Sosztarits & Mohácsi, 2018
[30] Sosztarits & Mohácsi, 2018
[31] ICOMOS, 1964

interventions—and that interventions must be reversible to protect original material for future generations[32].

From the ***Malkocs Bey Mosque*** in *Siklós, Aleppo* gains a model of honest distinguishability and sensitive adaptation to community needs[33]. The deliberate use of different materials to distinguish new from old, the thorough documentation preceding intervention, and the building's dual function as museum and place of worship demonstrate that reconstructed monuments can serve living communities while preserving memory.

From ***Florence's*** **third way**, *Aleppo* learns that respect need not mean replication, and modernity need not mean erasure[34]. The rebuilt riversides use modern materials honestly while respecting the rhythm, scale, and spatial character of the historic city. For *Aleppo's* vast areas of damaged ordinary fabric—the houses, courtyards, and narrow streets that define the Ancient City's character—this approach suggests that spatial DNA can be restored even where individual buildings are beyond salvage.

From ***Warsaw's*** **exact replication**, *Aleppo* witnesses the power of symbolic authenticity[35]. Despite being a "complete falsification" of new fabric dressed in old forms, Warsaw's reconstruction earned UNESCO inscription because its symbolic authenticity as an act of national defiance transcended material concerns[36]. This precedent, though officially designated an "exception," suggests that *Aleppo's* reconstruction might similarly be valued for its meaning rather than its material originality.

From ***Cologne's*** **tabula rasa**, *Aleppo* receives a cautionary lesson about preserving context[37]. The isolated churches standing amidst modernist thoroughfares demonstrate that preserving monuments without their urban fabric

[32] Jokilehto, 2006
[33] Sosztarits & Mohácsi, 2018
[34] Diefendorf, 2014
[35] Diefendorf, 2014
[36] UNESCO, 1980
[37] Diefendorf, 2014

risks turning heritage into museum pieces[38]. The Ancient City's value resides not only in individual buildings but in their relationships to one another, the dense, intricate urban tissue that gives each monument its meaning.

From ***Siponto's* wire mesh**, *Aleppo* discovers that new work can be honest about its newness while creating profound emotional connections to the past[39]. Tresoldi's ethereal reconstruction abandons material replication entirely, using transparency to evoke lost volumes while highlighting absence rather than filling it[40]. This approach offers possibilities for areas where destruction is too complete for traditional restoration.

From ***Gibellina's Cretto**, Aleppo* confronts the most radical transformation: the entombment of ruins beneath a white concrete labyrinth that preserves only the ancient paths[41]. *Burri's* work cancels the past while memorializing it, covering while revealing. This suggests that artistic transformation might offer meaning where neither reconstruction nor ruin-preservation seems adequate[42].

From the ***Palmyra arch replica**, Aleppo* must consider the perils of technological replication divorced from place[43]. The displaced replica, carved by robots from digital data and exhibited in global cities while never returning to *Syria*, represents heritage as spectacle—the image prioritized over substance, the global audience over local community[44].

A Framework for *Aleppo's* Rehabilitation

Synthesizing these lessons, this thesis proposes that *Aleppo's* rehabilitation should be guided by the following principles:

[38] Jokilehto, 1986
[39] Wong, 2017
[40] Sulfaro, 2018
[41] Sulfaro, 2018
[42] Mazzucchelli ,2010
[43] Wong, 2017
[44] ICOMOS, 2022

First, distinguish between rebuilding, redevelopment, and regeneration[45]. The goal is not merely to restore the city to its pre-war state, but to leverage the disaster as an opportunity to enhance quality of life for future residents through innovative approaches while preserving essential character[46].

Second, place community engagement at the center[47]. The pre-war period in *Madīnat Ḥalab al-Qadīmah* was characterized by a culture of mutual support and community solidarity. Harnessing this culture is essential for driving a participatory process. Local owners, residents, and philanthropists have already demonstrated remarkable initiative in restoring *sūqs* and historic buildings despite lack of government funding[48]. This grassroots resilience must be supported, not supplanted.

Third, adopt differentiated strategies for different areas[49]. The Ancient City is not a single monument requiring uniform treatment. Some areas may be reconstructed with visible scars (following Dresden); some may preserve ruins as memorials (following *Oradour*); some may be artistically transformed (following Siponto or Gibellina); some may be rebuilt with honest new materials respecting historic form (following *Florence*); some voids may be kept as spaces of memory (following post-war *Buda* Castle)[50]. The choice must be made consciously for each site.

Fourth, ensure all interventions are grounded in evidence[51]. The impressive comeback of grassroots initiatives, while inspiring, must be supported by proper documentation to ensure historical accuracy. Where documentation is lacking, intervention must be cautious and reversible[52].

[45] Diefendorf, 2014

[46] UNESCO, 1976
[47] ICOMOS, 1994
[48] Abdulkarim, 2021
[49] Diefendorf, 2014
[50] Wong, 2017
[51] ICOMOS, 1964
[52] Jokilehto, 1986

Fifth, integrate modern infrastructure while preserving spatial character[53]. Like *Bucharest* after the 1847 fire, *Aleppo* must reconcile heritage with contemporary demands for safety, accessibility, and functionality[54]. The historic street pattern, building heights, and relationships between public and private space constitute the city's spatial DNA and should guide new construction.

Sixth, prepare for generational recovery[55]. As *Dresden's* reconstruction unfolded across decades and *Warsaw's* continued until 1984, *Aleppo's* recovery must be understood as a multigenerational commitment. Early decisions need not determine everything; later generations can add their own layers of meaning[56].

3.1.3 RQ3: How Important Is the Architectural Documentation of Historic Buildings in the Rehabilitation Process?

The investigation undertaken in this thesis demonstrates conclusively that architectural documentation is not merely a technical preliminary to reconstruction but the very foundation upon which informed, ethical, and authentic rehabilitation must rest.

Documentation as the Basis for Informed Decision-Making

Interventions for the structural rehabilitation of heritage buildings require deep understanding of their original conception, historical evolution, construction techniques, material properties, and the various phenomena they have been subjected to over time[57]. Without comprehensive documentation, interventions risk compromising historical significance, introducing incompatible materials, or failing to address underlying structural vulnerabilities[58].

[53] UNESCO, 1976
[54] Sulfaro, 2018
[55] Diefendorf, 2014
[56] ICOMOS, 1994
[57] ICCROM, 2003
[58] ICOMOS, 1964

The case of the *Malkocs Bey* Mosque exemplifies best practice: systematic excavation and study preceded restoration, revealing beneath layers of later modifications the original architectural system and rich forms of the sixteenth-century structure[59]. The restoration was preceded by fundamental, systematic research of the architectural structure and archaeological excavation, ensuring that interventions were grounded in evidence rather than speculation.

Conversely, the *Iseum Savariense* demonstrates the dangers of inadequate foresight[60]. While the reconstruction was innovative for its time, the failure to protect original marble elements from direct contact with modern concrete led to deterioration from environmental damage[61]. Better documentation of material properties and conservation science would have suggested reversible interventions that preserved both layers[62].

Documentation as the Preserver of Authenticity

The concept of authenticity, as expanded by the Nara Document (1994)[63], recognizes that authenticity judgements may be linked to diverse sources of information including form, materials, use, function, traditions, techniques, location, and spirit. Architectural documentation preserves these sources of information, enabling future generations to understand what was authentic about a structure even after intervention[64].

For *Aleppo*, the documentation challenge is urgent[65]. While the *Madīnat al-Qadīmah* has been the subject of numerous studies, many residential houses remain undocumented. Documents were lost during the war. The quality of existing documentation varies considerably in accuracy and completeness. The

[59] Sosztarits & Mohácsi, 2018

[60] Sosztarits & Mohácsi, 2018
[61] Jokilehto ,1986
[62] ICOMOS, 1964
[63] ICOMOS, 1994
[64] Jokilehto, 2006
[65] UNESCO, 2018

lack of comprehensive photographic documentation for many buildings presents particular challenges for authentic reconstruction[66].

Documentation as a Tool for Management and Monitoring

Heritage management and monitoring change are constant processes requiring ongoing attention[67]. Ancient cities are dynamic, influenced by climate change, urban development, and natural disasters. Regular monitoring and updating of databases with new information are essential practices[68].

Integrating property ownership, occupancy, land use, and population data with spatial information in a Geographic Information System (GIS) can significantly enhance urban management. By correlating tabular data with spatial information, local authorities can gain valuable insights for informed decision-making. Printed base maps, digital cameras, and handwritten inventory sheets, the basic tools currently used for post-war damage assessment—must evolve toward integrated digital systems[69].

Documentation as a Living Record

Inventories and lists should not be considered final documents[70]. They must be viewed as living records requiring periodic review and updates to reflect new information. New research, findings, or events may impact understanding and interpretation of heritage sites, necessitating database updates.[71] Engaging local communities, experts, and stakeholders in monitoring and updating processes contributes to more comprehensive understanding[72].

The building information should be updated to include detailed photographic documentation of interior features, measured drawings, and condition assessments

[66] ICOMOS, 1994
[67] UNESCO, 1976
[68] UNESCO, 2016
[69] ICCROM, 2003
[70] UNESCO, 2016
[71] ICOMOS, 1994
[72] ICCROM, 2003

to guide conservation proposals and resource allocation. Digital tools and technologies can streamline data collection, analysis, and dissemination, making it easier to maintain up-to-date information[73].

The Specific Case of *Aleppo*

The aim of documentation in *Madīnat Ḥalab al-Qadīmah* must be to illustrate the Outstanding Universal Value (OUV) of the site through investigation of its architectural and urban heritage using mapping and heritage inventories as main tools[74]. Thematic maps and preliminary inventories should be prepared for various elements of urban settlement, while detailed inventories are needed for residential and public properties[75].

The lack of quality in architectural documentation has significant implications for preservation and management[76]. Proper documentation is essential for understanding historical significance, architectural details, and condition[77]. By establishing a practice of regularly updating databases with new information, heritage managers can ensure comprehensive and accurate records, safeguarding cultural heritage for future generations and enabling informed decision-making[78].

3. 2 Synthesis: Heritage as Process, Not Product

This thesis has argued throughout that heritage must be perceived as a process of connecting people and places to their past[79]. The case studies examined—from ancient Rome to contemporary Syria—demonstrate that this process is never neutral[80]. It is shaped by political ideology, cultural memory, technical capability, and

[73] Wong, 2017

[74] UNESCO, 1972
[75] UNESCO, 1976
[76] Jokilehto, 1986
[77] Jokilehto, 2006
[78] UNESCO, 2016
[79] Jokilehto, 1986
[80] Sulfaro, 2018

symbolic intent[81]. Each generation selects its own "authentic" layer, and each reconstruction reveals as much about the present as about the past[82].

For *Madīnat Ḥalab al-Qadīmah*, this understanding carries profound implications. The Ancient City is not a fossil to be preserved in a single moment, nor a blank slate for modernist experiment[83]. It is a palimpsest of Ayyubid, Mamluk, Ottoman, and French mandate layers, each added by communities responding to their own needs and values. The post-war reconstruction will become another layer in this long history—a layer that future generations will read as evidence of how early twenty-first-century Syrians responded to catastrophe[84].

The impressive comeback of *Madīnat Ḥalab al-Qadīmah's sūqs* and historic buildings, despite lack of government funding, testifies to the power of grassroots initiative, local owners, and philanthropists. Their efforts demonstrate that heritage is not something done to communities but something communities do for themselves[85]. The role of authorities and international organizations should be to support, enable, and guide—not to supplant or dictate[86].

3. 3 The Three Research Questions Reconsidered

Returning to the questions that initiated this investigation:

RQ1 revealed that challenges associated with postwar urban heritage preservation extend far beyond physical damage to encompass institutional weakness, economic constraints, documentation gaps, and profound philosophical dilemmas about what should be preserved and how.

RQ2 demonstrated that solutions exist across a spectrum of approaches, from exact replication to artistic transformation, from preserved ruins to hybrid objects. The

[81] ICOMOS, 1994
[82] Diefendorf, 2014
[83] Jokilehto, 1986
[84] ICOMOS, 1994
[85] ICCROM, 2003
[86] UNESCO, 1976

challenge for Aleppo is not to choose among these models but to learn from all of them, adapting their principles to local conditions and community values.

RQ3 established that architectural documentation is not merely important but essential—the foundation upon which informed, ethical, and authentic reconstruction must rest. Without comprehensive documentation, intervention risks compromising the very heritage it seeks to preserve.

3. 4 Architectural and Heritage Protection Principles for Aleppo

Synthesizing the case studies and doctrinal analysis, the following principles should guide Aleppo's recovery:

Principle of Material Evidence: Original fabric, however fragmentary, possesses irreplaceable historical value[87]. All interventions must prioritize the preservation, stabilization, and where possible, reintegration of original stones, timbers, and decorative elements. New materials must be distinguishable upon close inspection, ensuring that the building's biography remains legible[88].

Principle of Documentary Fidelity: Reconstruction is ethically defensible only when based on complete and detailed documentation[89]. Where documentation is insufficient, conjecture must be resisted. Missing elements may be left incomplete, marked as lost, or replaced with neutral contemporary infill that does not pretend to be historic[90].

Principle of Spatial Continuity: The urban morphology of Aleppo—its street patterns, courtyard relationships, and visual axes—constitutes heritage in its own right[91]. Reconstruction must respect this spatial DNA, even where individual

[87] ICOMOS, 1964
[88] Jokilehto, 2006
[89] ICOMOS, 1964
[90] Sulfaro, 2018
[91] UNESCO, 1976

buildings are replaced. New construction should reinforce, not disrupt, the historic grain of the city[92].

Principle of Community Meaning: Heritage values not only in fabric but in the meanings communities attach to places[93]. Reconstruction decisions must engage those for whom these places hold memory and identity. The process of recovery is as important as the physical outcome in restoring social fabric alongside built fabric[94].

Principle of Transparency: Every intervention must be documented and communicated[95]. The public has a right to know what is original, what is reconstructed, and what is new. This transparency honors the past and educates future generations about both the destruction and the response[96].

Principle of Gradual Implementation: Post-war recovery is a generational project[97]. Hasty reconstruction risks irreversible errors. Aleppo's rehabilitation should proceed incrementally, with each phase evaluated before proceeding to the next. This allows for course correction as circumstances evolve and new information emerges[98].

3. 5 The Specific Case of Bayt Ajqbāsh

The detailed analysis of *Bayt Ajqbāsh* in Chapter 2 demonstrates how these principles apply at the building scale. This 18th-century merchant house embodies Aleppo's layered history: its Christian patronage, its *'ajami* decorations fusing local and European styles, its conversion to a church hostel, its later life as a museum, and its survival through war. The restoration work undertaken since 2017—careful documentation, structural stabilization, anastylosis of original fragments—offers a model for approaching damaged heritage with humility and precision.

Bayt Ajqbāsh teaches that authenticity in Aleppo is not about freezing a single moment but about carrying forward a complex, sometimes painful, but ultimately rich

[92] Diefendorf, 2014
[93] ICOMOS, 1994
[94] Sulfaro, 2018
[95] ICOMOS, 1964
[96] ICOMOS, 1994
[97] Jokilehto, 1986
[98] Sulfaro, 2018

and continuous story. Its recovery demonstrates that ethical intervention is possible even under difficult conditions, provided the principles of documentation, transparency, and respect for original fabric guide every decision.

3. 6 Limitations and Future Research

This thesis focused primarily on architectural and doctrinal dimensions of post-war recovery. Several important areas warrant further investigation:

- **Economic sustainability:** What funding models can support long-term heritage maintenance in post-war Aleppo?
- **Craft training:** How can traditional building skills be revived and transmitted to new generations?
- **Legal frameworks:** What revisions to Aleppo's building codes are needed to balance heritage protection with contemporary needs?
- **Digital heritage:** How can digital archives be maintained and made accessible over decades and centuries?

3.7 Final Reflection

The poem that opened this thesis spoke of a garden that became a forest of snakes—a world transformed by violence into something unrecognizable and threatening[99]. For Aleppo, the task of recovery is not to pretend the snakes never came, nor to preserve only the memory of the garden, but to build a city that acknowledges both: the beauty that was destroyed and the violence that destroyed it[100].

Heritage reconstruction, done ethically, is not nostalgic[101]. It is an act of continuity that the people of *Aleppo* remain the heirs of their history, even when that history includes wounds. The Ancient City cannot be restored to a pristine pre-war state, nor

[99] Lamb, 2004
[100] Sulfaro, 2018
[101] ICOMOS, 1994

should it be. Its authenticity in the 21st century will lie in its ability to carry forward its layered past, including the scars of conflict, while making room for new life.

This thesis argued that such recovery is possible, but only through rigorous documentation, transparent intervention, community engagement, and principled adherence to international conservation standards adapted to local realities[102]. Aleppo's future, like its past, will be built stone by stone, decision by decision, generation by generation. The responsibility of those who work on its heritage today is to ensure that when future inhabitants walk its streets, they can read in its walls the true story of their city—not a simplified myth, but a complex, authentic record of a place that has endured.

[102] ICCROM, 2003

SECTION 4:

APPENDIX & REFERENCES

4.1 The New Sarāy

Location, cadastral and Technical References

Location Map	Quarter	Parcel area/ number	Plot Area	First Floor Building Area
	Citadel Parameter Taḥt al-Qal'at	11/ 2302	8613 m^2	4939 m^2

Historical Period	Geographical Coordinates	
	Latitude	longitude
French Mandate	36°11'50.61"N	37° 9'45.87"E

First Floor Plan

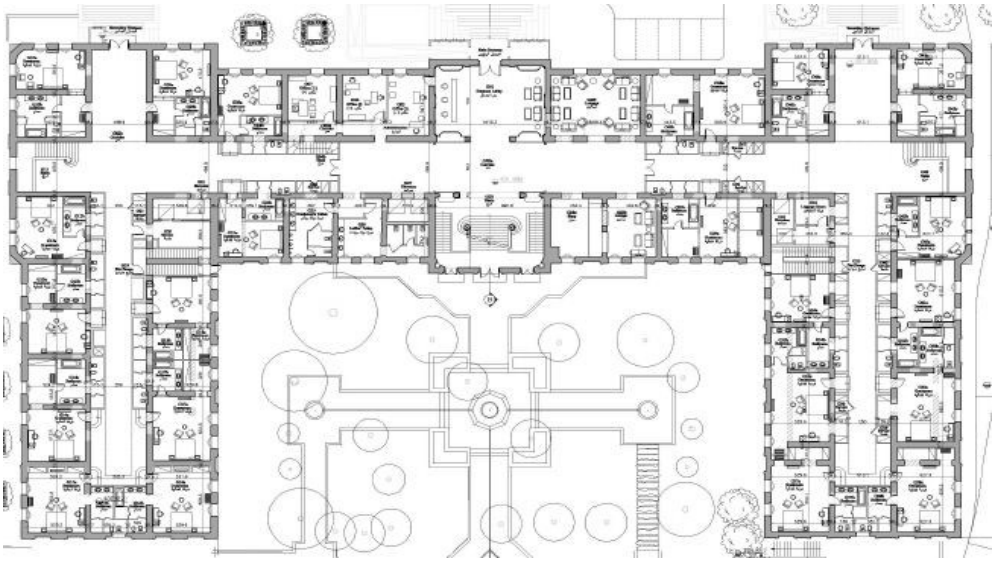


Fig 60: Plan of the first floor of the *New Sarāy*

History of the Building

The idea for the construction of a new government building dated back to the late ʿOsmāns period. In 916 ADS, the establishment of a new government house was initiated towards the gate of the citadel, connected to the "*Madrasat AL-Sulṭānīyah*" from the east of it. The state engineer demolished "*Madrasat AL-Ghawthīyah*" and built in the same place the foundations of the *New Sarāy*. The construction of the foundations was stopped after Aleppo was captured.[1] However, construction was halted and then re-started in 1928 after the establishment of the State of Syria under the French Mandate. The *New Sarāy* was built between 1928 and 1933 to serve as the main government building in the city. It was opened in 1933 during the period of Mayor *Nabih Martini*.

[1] Al-Ghazzī 1952

The *New Sarāy* was designed the Armenian contractor, *Kevork Baboyan*, who was born in *Ghāzī ʻntāb (in Türkiye*) in 1895 and got his architect diploma in 1929.	
The building become the house of the government in Ḥalab and the regular seat of the governor and the mayor of the city. It served as government building until 2008, when the new building of the Ḥalab city council was opened. In 2011, the *New Sarāy* was under renovation to become a hotel before the crisis.	
Description	
The building is located to the south of *Qal'at Ḥalab* and adjacent to its main entrance. It is surrounded with the *Qal'at* square and *Madrasat AL-Sulṭānīyah* from the west, *Al-ʾAṭrūš Mosque* from the south, the *Palace of Justice* and *Ḥmām Īlbġā* from the east and the *Qal'at* from the north. Designed in a U-shape, it comprised three floors and a basement. There was a large atrium in the middle with rooms on both sides and to the south, there was a large garden.	
Values	
Architectural & aesthetic value	It was an important example of local modern architecture, inspired in the model of its facades the simulation of defensive balconies of the towers in the facing citadel. The facades of the building bear the characteristics of authentic Aleppo Islamic architecture and do not resemble the facades of buildings erected during the French Mandate period.
Homogenization of the site and its importance value	Located in the place of *Sūq al-Jum'ah* area, south of the *Qal'at*. It was built in front of the majestic *Qal'at* to be a government building that would receive foreign ambassadors, consuls, and official guests, and express the greatness and history of "*Ḥalab*." Those coming from "*Damascus*" by train would get off at the "*Shām aljmylyyh*" station and take the bus until the Government Palace, passing from the main avenue (currently *al-Qūwatlī Street*) to *Bāb al-Faraj* towards *al-Khandaq*, *Bāb al-Naṣr*, then to *Bāb al-Ḥadīd* until they reached the *New Sarāy* who was also one of those achievements that took place in Syria in the 1930s.

Historical value	The *New Sarāy* is a building that symbolizes the sovereignty of national decision-making. It was established by assembling historical facts. The idea of building a new government house came when French General *Henri Gouraud* declared the state of Aleppo in September 1920. Therefore, construction began in 1928 AD, after the formation of the Syrian state under the French mandate. The building represents an important part of the city's memory with all the meanings of pride and belonging to this country. During the 1930s, student demonstrations were marching towards the *New Sarāy*, their representatives were standing on the outside stairs addressing the masses, and the governors were standing on the balcony of the governor's room delivering their speeches in response to national sentiments. It was the place of the former residence of the ruler of Syria and serve as the city's main government building.
Date of Damage	
12 or 29 June 2014	First explosion, destroyed the eastern aisle of the building, former police administration.
4 September 2014	Second explosion, destroyed the western aisle of the building.
5 September 2014	Third explosion destroyed the central section of the building. The explosives were placed underneath the building, leaving a large crater.[2]
Damage Assessment	
	Total loss of the building.
Damage Mapping	

.52 UNESCO & UNITAR-UNOSAT 2018

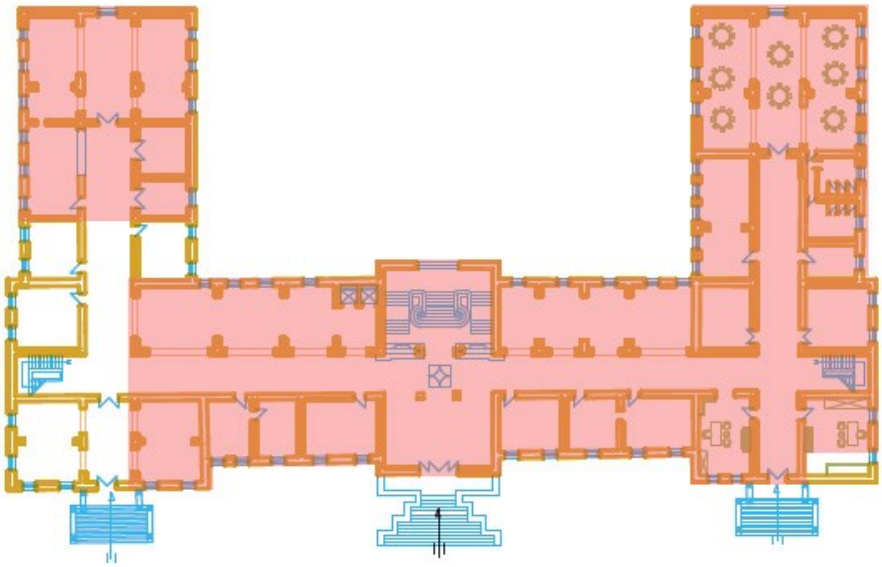


Fig 61: Plan of the damage assessment of the First Floor of the New Sarāy



Fig 62: Plan of the damage assessment at the Main Facade of the New Sarāy

Photos	
Before	After
	
Fig 63: View of north facade (before the damage)	*Fig 64: View of north façade (after the damage)*



Fig 65: General view



Fig 66: The New Sarāy after the damage

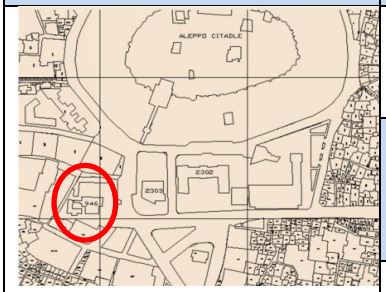


Fig 67: The New Sarāy in 2011



Fig 68: The New Sarāy in 2017

4.2 Al- Ḵusruwīyah Madrasat

Location, cadastral and Technical References				
Location Map	Quarter	Parcel area/ number	Plot Area	First Floor Building Area
	Al-jlūm	8/946	7030 m^2	2887 m^2
	Historical Period	Geographical Coordinates		
		Latitude		Longitude
	Early ʿOttomān	36°11'49.19"N		37° 9'38.79"E
Ground Floor Plan				

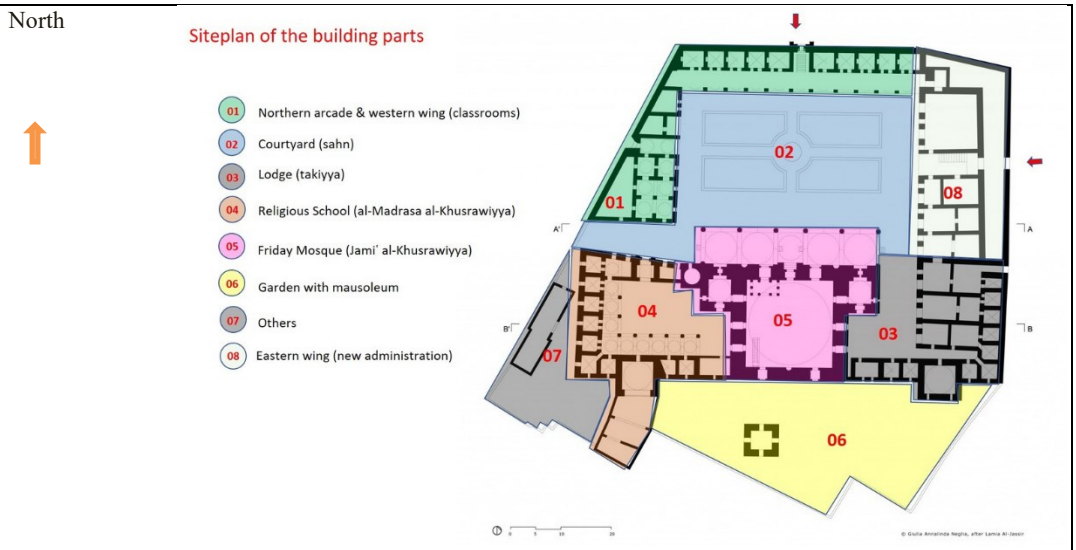


Fig 69: Plan of the Ground floor of Al- Ḵusruwīyah Madrasat

History
1547: *Al- Ḵusruwīyah Madrasat* is a mosque complex in *Ḥalab*. It is located southeast of the *Qal'at*. The mosque was commissioned by *Ḵusraw Pāshā* while he was governor of *Ḥalab* under *Al-Sulṭān Sulaymān I*. The complex suffered from the 1822 earthquake, when the *Khān* and most of the shops were demolished. In the following years, it was abandoned and then became a shelter for the poor and homeless. The first restoration works were conducted in 1884 by the governor *Jamīl Pāshā Nmyq*.
The renowned court architect *al-Mi'mār Sinān* designed it.
During the 20th century, the eastern aisle was rebuilt.
Description
The complex consists of a mosque, a *Madrasat*, rooms for travelers, a public kitchen, shops, and other facilities. It had three entrances leading to a large courtyard. The courtyard was surrounded by guest rooms and a cross-vaulted portico to the north. On the west side of the courtyard was the public kitchen. The mosque was flanked by *the Madrasat* to the west and several rooms to the east (storage areas, a stable, toilets and six other rooms before the earthquake, and study rooms and a library in the twentieth century). To the south of the mosque, there was a small-domed mausoleum.
The eastern section has been rebuilt at the beginning of the 20th century.
Until 2012, the mosque was the location of the *Madrasat al-Sharī'ah*, (the Quran school).

Values	
Architectural and artistic Value	*Al- Ḵusruwīyah Madrasat* is highly regarded as one of the first major projects of *al-Miʿmār Sinān*, the chief architect of the empire in *Istanbul* at the time.[3] The building considers a milestone for the beginning of the transformation of style for both the city scene and the architecture of mosques in *Ḥalab* in the middle of the 10th / 16th century. This was the first ʿOsmāns imperial complex established there by a senior ʿOsmāns official. [4] Unlike previous mosques built in *Ḥalab*, *Al- Ḵusruwīyah Madrasat* was designed as a prominent central building in the middle of an independent architectural complex aimed at a direct and striking visual impact. This indicates a shift from the Mamluk character to the ʿOsmāns imperial character. In the wake of the distinctively different architectural style of *Al- Ḵusruwīyah Madrasat* and its *of Jāmiʿ al-Jumʿah*, new decor elements appear in *Ḥalab*. Most prominent are the polychrome painted underglaze tiles with floral and geometric patterns, which covered the window lunettes in the prayer hall and at the front facade inside the portico. The minaret was provided with an ornament band of blue-and-white underglaze tiles below its balcony.[5]
Social and Economic Value	Among the various social, educational, and religious functions for which *Al- Ḵusruwīyah Madrasat* Endowment was established, the *Tekiyeh*. The ʿOsmāns sultans established themselves as guardians of the Islamic pilgrimage to the holy cities of *Mecca* and *al-Madīnah* after the conquest of Arab lands (1516-1517), and this played a crucial role in its religious legitimacy.[6] *Ḥalab* was not only an important station serving the southern pilgrimage route to the Hejaz during the ʿOsmāns period, but also became the second most important regional center in the empire for internal and external trade, located at the crossroads of major routes between Europe, Asia, and Africa. [7]

[3] Kafescioğlu 1999, p: 83–84.
[4] Watenpaugh 2004, p: 61, 173.
[5] Necipoglu 2005, p: 473.
[6] Watenpaugh 2004
[7] Watenpaugh 2004

	Therefore, income revenues contributed to *Al- Ḵusruwīyah Madrasat* halting, such as shops and khans, in achieving a higher economic interest as it is an important investment in the commercial infrastructure of the city and the state.
Educational Value	*Al- Ḵusruwīyah Madrasat*, as a religious school, until it was destroyed, was the most important and most prestigious Islamic educational institution in *Ḥalab* and the northern region of *Syria*.
Date of Damage	
2 September 2014	The mosque at the center of the complex was destroyed.
	Only some of the northern porticoes have been conserved.
Damage Assessment	
	Total loss of the building except the Northern portico. The complex demolished by explosives which caused the building to cave in, and all that remains is a large crater.
Damage Mapping	

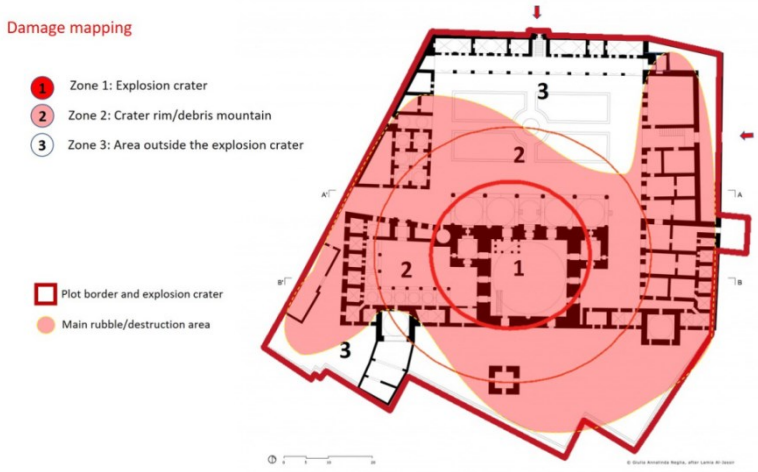


Fig 70: Plan of the damage assessment at the first floor of Al- Ḵusruwīyah Madrasat

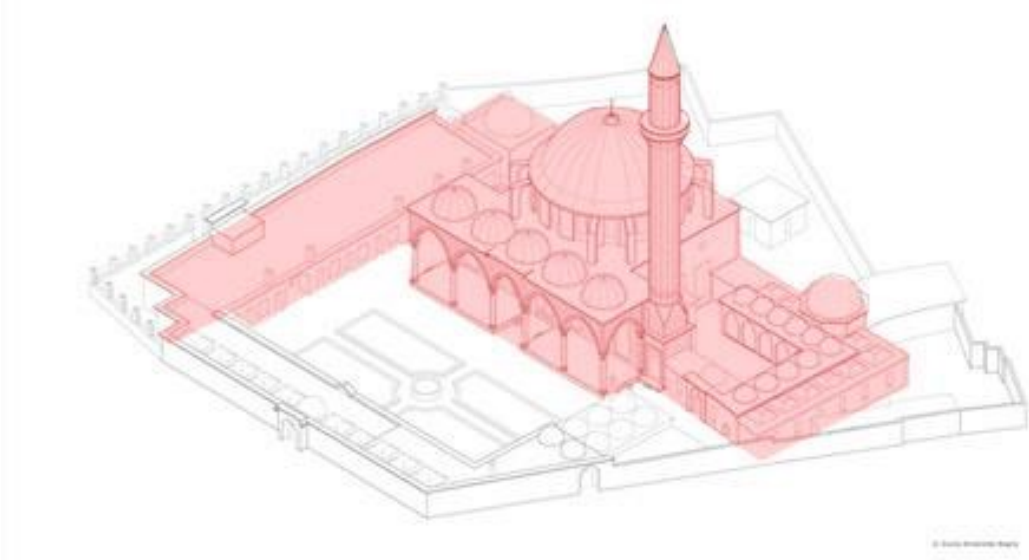


Fig 71: 3D of the site of Al- Ḵusruwīyah Madrasat

Photos



Fig 72: Al- Ḵusruwīyah Madrasat and Jāmi‘ Al-‘Ādilīyah

Before	After

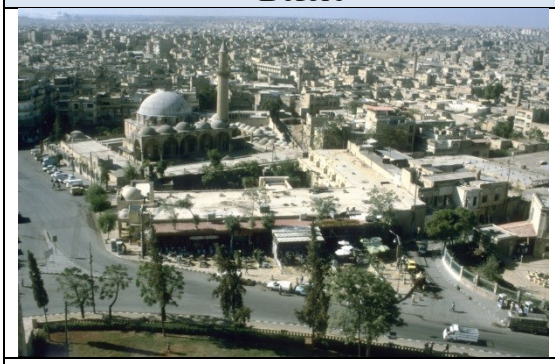



Fig 73: Al- Ḵusruwīyah Madrasat before destruction	*Fig 74: Al- Ḵusruwīyah Madrasat after destruction*



Fig 75: View from the al-Qal'at towards Al- Ḵusruwīyah Madrasat



Fig 76: View from the al-Qal'at towards Al- Ḵusruwīyah Madrasat



Fig 77: The Northern gallery of Al-Ḵusruwīyah Madrasat



Fig 78: The Northern gallery of Al-Ḵusruwīyah Madrasat after destruction

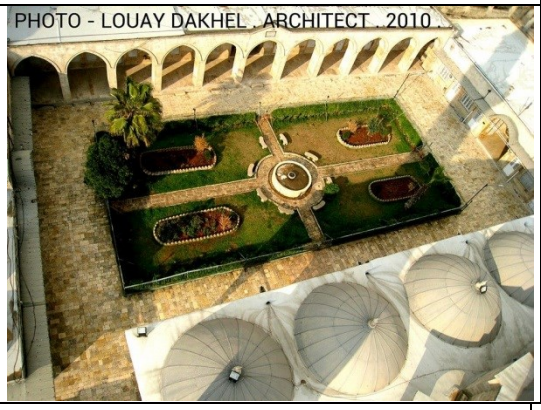


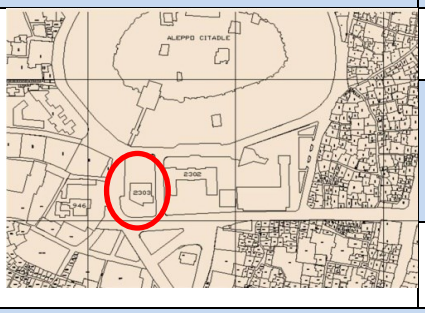
Fig 79: View at portico, dome, and minaret of Jāmi‘ al-Jum‘ah



Fig 80: Al- Ḵusruwīyah Madrasat: an explosion crater where the mosque once stood

4.3 Al-Sulṭānīyah – al-Ẓāhirīyah aljwānyh Madrasat

Location, cadastral and Technical References

Location Map	Quarter	Parcel area/ number	Plot Area	Ground Floor Building Area
	Taḥta al-qal'at	2303	2957 m^2	911 m^2
	Historical Period	Geographical Coordinates		
		Latitude	Longitude	
	al-Ayyūbīyah	36°11'49.51"N	37° 9'42.66"E	

Ground Floor Plan

North

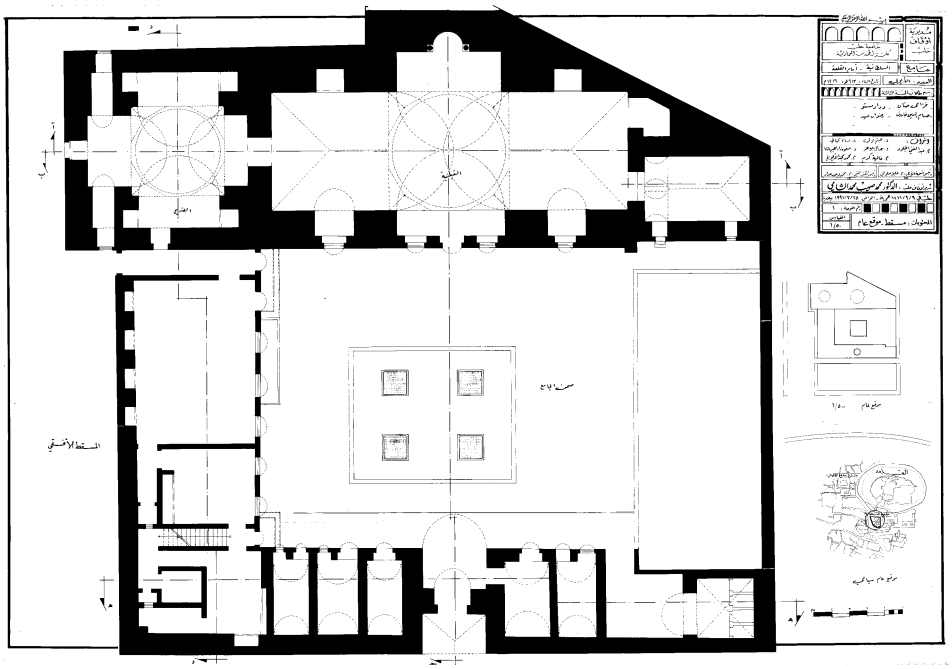


Fig 81: Plan of the ground floor of Al-Sulṭānīyah Madrasat

History

The *Madrasat* stands below the Qal'at, south of the upper entry block and immediately east of the barbican. A space of thirty meters separates its north facade, where the portal is, from the line formed by the other buildings around the moat. Most of this space must have been occupied by some other building. [8]

Al-Sulṭānīyah Madrasat was built in 1223 AD by the Ayyubid governor of Ḥalab, al-Sulṭān *'Abd al-'Azīz* or by *Ḍyfh khātwm*, wife of *al-Malik 'Abd al-'Azīz Ghāzī* (son of *Ṣalāḥ al-Dīn*), died few years before. The supervision of the atabeg was *Shihāb al-Dīn Tughril* in 1223/620 AH.[9]

The building suffered severe damage in the 1822 earthquake and was deserted until 1884 when the governor of Ḥalab, *Jamīl Pāshā*, restored it again.

It contains also in a mausoleum, the tombs of *al-Malik al-Ẓāhir Ghāzī* and *Ḍyfh khātwm*.

The little minaret is Mamlūk.

The western aisle was destroyed, and a section the northern part has been rebuilt during the 20th century.

In 1979, the General Directorate of Islamic Endowments added several sections and an upper floor in the northeastern corner.

Description

Al-Sulṭānīyah Madrasat is a complex located in *Taḥta al-Qal'at*. It is a religious, educational, and funerary complex. It contains the tomb of *al-Sulṭān al-Malik al-Ẓāhir* the son of *Ṣalāḥ al-Dīn*.

The *Madrasat* is located just south of the gateway to the al-Qal'at and used as a mosque.

The building is entered through a recessed, vaulted portal on its north side. The interior is simple but was overly renovated. It was a typical Ayyūbīyah madrasat with a portal gives onto a shallow *Īwān* that opens onto the complex's rectangular courtyard (16.8 × 19.7m). Directly across the courtyard is the facade of the prayer hall, which is composed of three bays. The central bay before the *miḥrāb* is domed. Small cells open onto the courtyard from the western, eastern, and northern sides.[10]

A domed tomb chamber occupies the southeastern corner of the complex and is accessible via the eastern bay of the prayer hall and a long, narrow corridor off the southeastern corner of the courtyard.

A tripartite arcade led to a spacious tripartite prayer hall with a deep southern niche set with a splendid *miḥrāb*. The southeastern corner contained the mausoleum of *al-Ẓāhir Ghāzī*, while the southwestern corner was chamfered on the exterior at an unusual angle.

The madrasat had rows of student cells on its eastern and western sides.

[8] Ibn Shaddad 1688
[9] Tabbaa 1997
[10] Tabbaa 1997

Values	
Historical Value	It was included *al-Madrasat al-Ẓāhirīyah* and the shrines of the sons of Sultan the Conqueror *Ṣalāḥ al-Dīn al-Ayyūbī*. It is considered one of the oldest and most beautiful mosques in Syria. It has one of the most beautiful mihrabs in the Islamic world, and there are also the graves of some martyrs such as *al-Shaykẖ Muḥammad al-Shāmī*
Architectural and Artistic Value	Despite its notable location opposite the citadel, its modest height and architectural style made it easily overlooked, especially as more elaborate structures were built in the area later. The madrasa's portal, *miḥrāb*, and mausoleum continue to hold significant cultural and historical importance, displaying the rich pious foundation, craftsmanship, and royal burials of the Ayyūbīd period in *Ḥalab*. The *miḥrāb* of colored marble marquetry was the only element of decoration in this austere architecture. It was one of the wonders of the world in its beauty and mastery. It was a remarkable piece, of al-Ayyūbīyah architecture with decorative motifs and two small supporting columns with Corinthian capitals (belonging to an older building?). *Tamerlane* wanted to take it, but he was told not to remain in its original state, so he kept it. This kind of marble decoration had close parallels in *miḥrābs* of the *Madrasa Shadhbakhtīya*, the *Mashhad al-Ḥusayn* and the *Madrasat al-Firdaus* in *Ḥalab*. This feature was also adopted in *Konya* under the *Saljuqs of Rūm*, where it appears on two buildings, made by craftsmen from *Syria*.[11] The portal, with its elaborate inscriptions, testified to a rich pious foundation, albeit executed in an austere style, while the mihrab was an excellent example of early-sixth/12th-century craftsmanship. The mausoleum, finally, was the only surviving example of a royal burial in the city of *Ḥalab*, signaling the rank of the deceased monarch with the inscriptions above its windows and asking passers-by to offer a *raḥimahu Allāh* over *al-Ẓāhir Ghāzī* and his father.

[11] Tabbaa 1997: 154-155

Educational Value	*Al-Sulṭānīyah Madrasat* was significance of the in the pre-modern cityscape of Aleppo during the Ayyubid period. As a royal foundation, the madrasa held prestige in the economy of awqāf and served as a center for learning through its *al-Ẓāhirīyah Madrasat.* It was shared between the The madrasat was a college for two rites, for the teaching the theory of *al-Shāfi'īyah* and-*al-Ḥanifīyah* sects, for scholars who devote their time to science, who model their conduct for the best examples, for those who have been chosen of the two sects to profess in this college.[12]
Date of Damage	
7 December 2014	Hit by tunnel explosion.
Damage Assessment	
	Total loss of the building except the remains on the northern side of the courtyard and the minaret.
Damage Mapping	

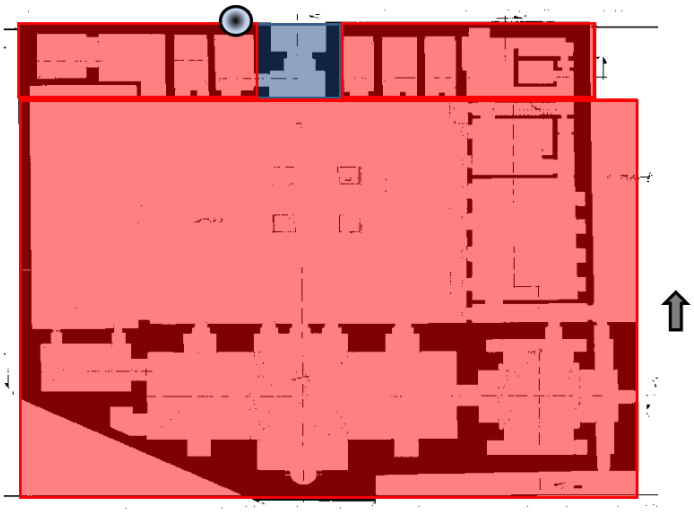


Fig 82: Plan of the damage assessment at the ground floor of Al-Sulṭānīyah Madrasat

Photos

[12] Creswell 1923: 7

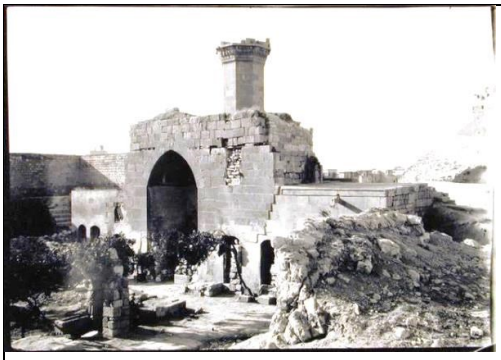


Fig 83: North side of courtyard



Fig 84: Madrasat al-Sulṭānīyah

Before	After

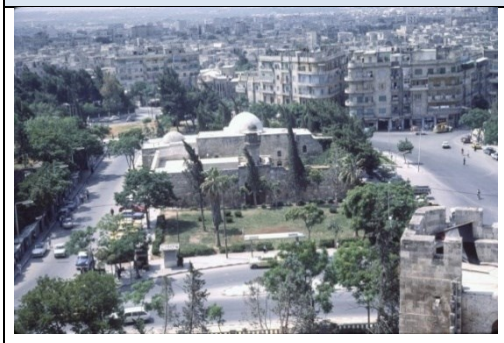


Fig 85: View over complex from al-qal'at, looking south



Fig 86: View from the al-qal'at



Fig 87: Courtyard, north wing of Madrasat al-Sulṭānīyah



Fig 88: Madrasat al-Sulṭānīyah 2019



Fig 89: View of entrance portal on north façade of Madrasat al-Sulṭānīyah



Fig 90: View of entrance portal on north façade of Madrasat al-Sulṭānīyah 2018



Fig 91: The main façade of Madrasat al-Sulṭānīyah



Fig 92: The main façade of Madrasat al-Sulṭānīyah 2018

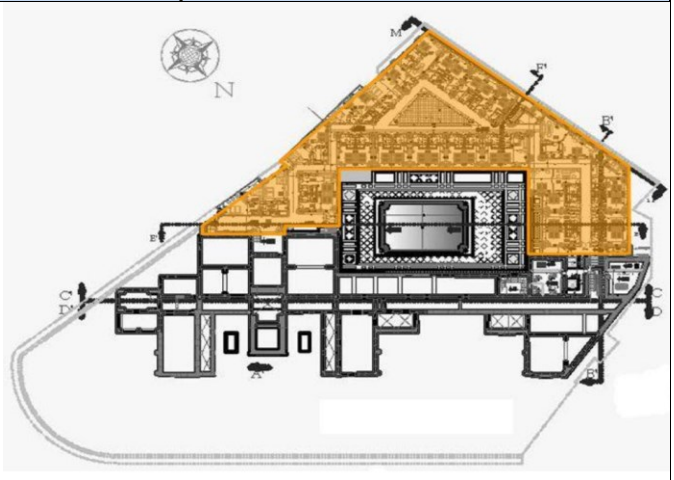
4.4 Al-Ḥamīdīyah Hospital (Carlton Hotel)				
Location, cadastral and Technical References				
Location Map	Quarter	Parcel area/ number	Plot Area	Ground Floor Building Area
	Taḥta al-qal‘at	7/ 3334	6975 m^2	1793 m^2 (old building)
	Historical Period		Geographical Coordinates	
			Latitude	Longitude
	Late ʿOttomān		36°11'53.75"N	37°9'36.73"E
Ground floor plan				
				

Fig 93: Plan of the ground floor of the Carlton Hotel
The Hotel Ground floor marked in yellow, the other part related to the hospital

History	
Its construction was completed in 1897 AD.[13] Then the hospital was officially inaugurated and put into service in the year 1318 AH / 1900 AD. The hospital was established for the poor and needy residents of the city and strangers arriving there, free of charge. Subsidies and funds began to be collected from the people of the city to build this hospital, and it was decided that it would be built on the ruins of *Dār al-ʻAdl* (Justice Building) that *Ḥalab* had known during the reign of *al-Sulṭān al-ʻĀdil Nūr al-Dīn Muḥammad al-Zinkī* (1118 - 1174), west of the *Qal'at*, which was demolished by the devastating earthquake that struck the city in the year 1822. After the end of Ottoman rule, the name of the hospital was changed, and it became known as the "National Hospital." During the period of the French Mandate, the hospital was expanded by adding a two-story block on its back side, like the original building in terms of the general mass, decorative elements, and spaces, and it began to take the shape of the letter "U" in late 1924. In the 1920s, a special department for manufacturing medicines was added to the hospital, to which a pharmacy was attached. The building was used as a nursing school in the late twentieth century.	
In late 2010, it was restored and used as a hotel called the 'Carlton Hotel'. It had around ninety room in a new building.	
Description	
This late ʿOsmāns building, located in front of the entrance of the *Qal'at*, contains 32 rooms, 2 large houses, 2 long salons, a house for washing clothes, a place for washing the dead, 2 bathrooms each with 8 baths, 2 rooms with a curtain for clothes, a department store (pharmacy), a room for examining patients, 2 rooms for examining eyes and regular operations, and 2 large gardens in length. 84m and 20m wide, from the direction of the hospital and from both ends. They are decorated with beautiful columns and surrounded by a wall with a beautiful vestibule and two rooms for the janitor. The total area of this hospital with its contents was 17,913m^2.[14]	
Value	
Architectural Value	It had historic and architectural importance as the first modern hospital built in *Ḥalab* and one of the best-preserved examples of public buildings established in the city after the ʿOsmāns reform. It occupied a significant location at the foot of the al-qal'at's entrance. Al-Ḥamīdīyah Hospital was built according to the modern European architecture that has spread since the end of the ʿOsmāns era in *Istanbul* and major *ʻArab* cities, with some Greek (ancient Greek) evident in the pyramidal shape of the red-tiled roof gable that was tops the building.

[13] Ṭabbākh 1988
[14] Ṭabbākh 1988

Educational Value	It was the approved place for training doctors from the Faculty of Medicine at the University of Aleppo from its establishment in 1967 until the opening of the University Hospital in 1972.
Date of Damage	
15 February 2014	First explosion from a tunnel under the building. Destruction of an aisle of the new hotel extension.
8 May 2014	Second explosion, done also from a tunnel under the building, resulted to the complete destruction of the building.
Damage Assessment	
	Total loss of the building caused by explosives that were placed in a tunnel underneath it in May 2014.
Damage Mapping	

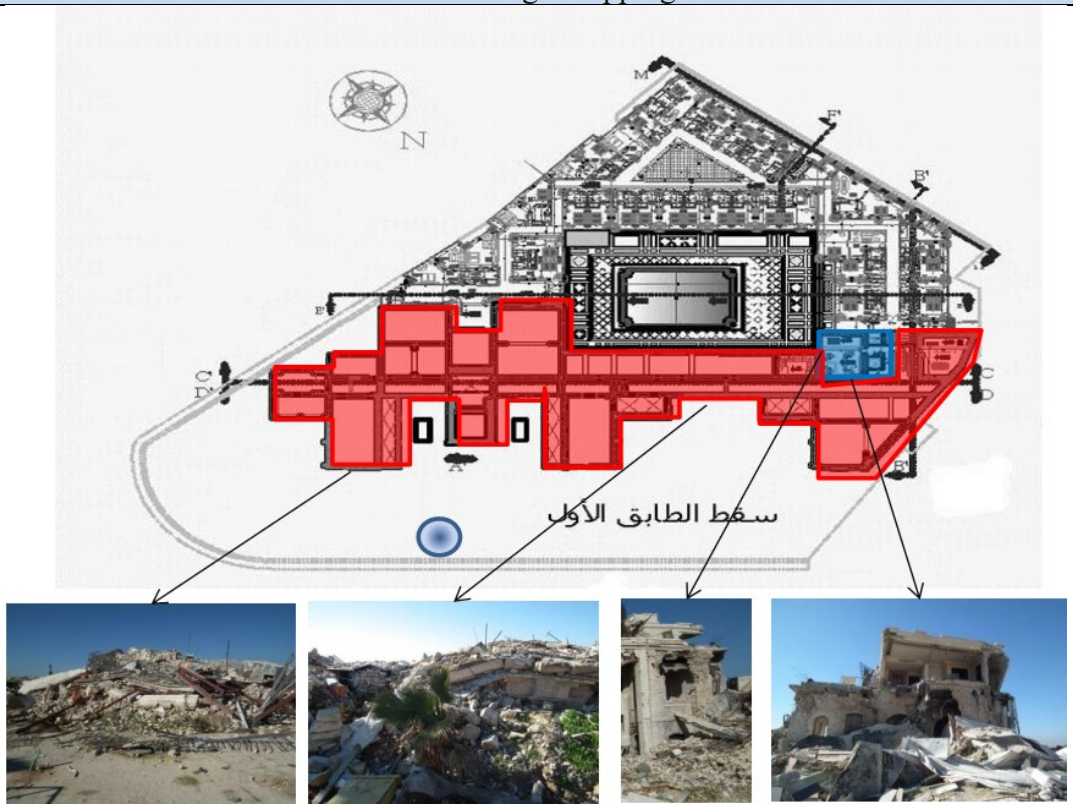


Fig 94: Plan of the damage assessment at the ground floor of Al-Ḥamīdīyah Hospital

Photos



Fig 95: Overview of Al-Ḥamīdīyah Hospital

Before	After
	
Fig 96: Overview of Al-Ḥamīdīyah Hospital 2006	*Fig 97: Overview of Al-Ḥamīdīyah Hospital(Carlton hotel) after destruction 2017*
	
Fig 98: The new Sarāy that shows the plaza opposite the entrance of the al-qal'at Ḥalab and Carlton hotel.	*Fig 99: The Carlton Hotel after destruction in 2017*



Fig 100: The Carlton Hotel



Fig 101: The Carlton Hotel after destruction in 2017



Fig 102: The northern façade of the courtyard at the Carlton Hotel



Fig 103: The remains of the inner northern façade of the Carlton Hotel

4.5 Bayt Ajqbāsh

Location, cadastral and Technical References

Location Map	Quarter	rcel area/ number	Plot Area	round Floor uilding Area
 Fig 104: Earth Map Satellite Imagery of Aleppo	Al-Jadīdah	6/ 2303	492 m^2	311 m^2
	Historical Period	Geographical Coordinates		
		Latitude	Longitude	
	ʿOttomān	36°12’22.096”N	37°9’23.902”E	

History

Bayt Ajqbāsh is located in the *Al-Jadīdah* quarter of Aleppo, near the *Jasmine* Gate. It was constructed in 1757 A.D. (1171 A.H.) by the *Qārāʿ Alī* family, a wealthy Christian merchant family, reflecting the prosperity of Aleppo's mercantile elite during the Ottoman period.

The house later passed to the *Ajqbāsh* family, from whom it derives its current name. Subsequently, it came into the possession of the Syrian Catholic Church, which used the building as a hostel for the poor, serving a charitable function within the community.

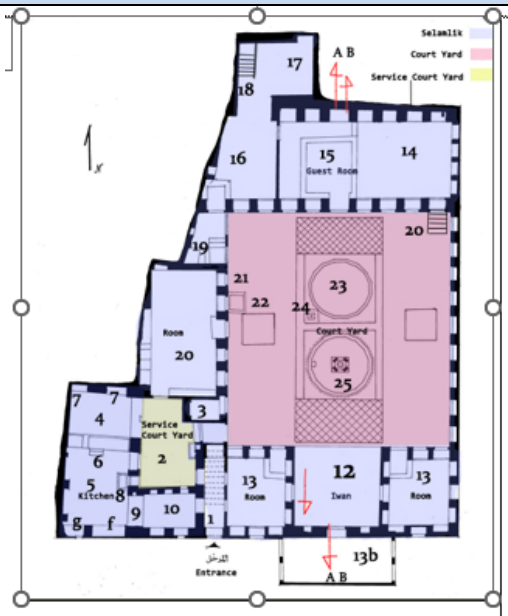
In 1975, the Directorate General of Antiquities and Museums (DGAM) acquired the property and transformed it into the Popular Traditions Museum, dedicated to preserving and displaying the material culture, costumes, and crafts of Aleppine life.

The building has suffered physical losses over time. During the 20th century, rooms on its eastern side were demolished to widen the street connecting *ʻWjh al-Kīlānī* and *al-Hatab* square. More recently, the house sustained damage and looting during the Syrian revolution, with conditions documented in 2016–2017 by UNESCO. Subsequent consolidation and restoration work, led by architect *Pierre Ghassan Zarz* between 2019 and 2021, focused on structural stabilization and the careful reuse of original stone fragments.

The building is home to the Popular Traditions Museum since 1975, showing fine decorations of the Aleppine art.

Today, *Bayt Ajqbāsh* remains one of *Aleppo's* finest examples of 18th-century domestic architecture, notable for its courtyard layout, fusion of local and European Baroque decorative styles, and its layered history as a private residence, church hostel, and public museum. It stands as both a survivor of conflict and a symbol of *Aleppo's* multicultural heritage.

Ground floor Plan



1. Entrance
2. Service room
3. latrines
4. Room
5. Kitchen. g. latrines. f. tanūr
6. Stair led to the cave
7. Fireplace
8. Well
9. Wood platform
10. Ḥammām
11. Basin
12. Īwān
13. Qubba – 13 b- Room
14. ʿAtaba
15. Lower rooms.
16. Lower rooms
17. Stairs
18. Stairs to the terrace
19. Western room
20. Stairs from the *qaʿa*
21. Stone grid for ventilation of the basement
22. Tank
23. Garden
24. Pool

Fig 105: *Plan of the ground floor of Bayt Ajqbāsh*

Description

The western entrance leads to a central courtyard of rectangular shape, around which the spaces of the house are arranged. On the south is a high *īwān* flanked by two rooms, while the main *qa'ah* (hall) extends along the northern side. The service section is located on the western side. The house contains five levels: the ground, mezzanine, an upper floor and the underground floor which has a cellar and cave with cistern. The courtyard is surrounded by an *īwān* with four rooms, which also hold the kitchen and facilities. European influence is evident in this house, as are many houses in *Aleppo* in the 18th century; the windows are framed with carved stones of baroque and rococo styles. The *qa'ah* is a rectangular space with one *ṭzr* and an '*ataba* decorated by ornate *'ajami* panels on the ceiling and walls. The other three rooms on ground floor and *īwān* are also adorned with *'ajami* panels.

Values

Historical Value:	*Bayt Ajqbāsh* embodies over 250 years of *Aleppo's* layered urban history. Built in 1757 by the Christian merchant family *Qārā ʿAlī*, it reflects the prosperity

	of Aleppo's mercantile elite during the Ottoman period. Its successive ownership—passing to the *Ajqbāsh* family, then to the Syrian Catholic Church as a hostel for the poor, and finally to the Directorate General of Antiquities and Museums in 1975—traces the social, religious, and institutional transformations of the city. The building stands as a material witness to *Aleppo's* multi-confessional society and the charitable, commercial, and cultural networks that structured its urban life.
Architectural and Artistic Value:	The house exemplifies the distinctive domestic architecture of 18th-century *Aleppo*, organized around a central rectangular courtyard with spaces arranged according to traditional Levantine hierarchy. Its five levels (ground, mezzanine, upper floor, underground cellar, and cave with cistern) demonstrate sophisticated spatial planning adapted to urban density and domestic needs. The *qa'ah* hall with its *'ataba* and richly decorated *'ajami* panels represents a masterful example of Aleppine interior craftsmanship. The carved stone window frames in Baroque and Rococo styles document the European artistic influences that reached *Aleppo* through trade networks, creating a unique fusion of local and international aesthetics. These decorative elements are not merely ornamental but are primary documents of 18th-century artistic sensibilities and the technical mastery of Aleppine craftsmen.
Architectural Integrity Value:	Despite the demolition of rooms on the eastern side for street widening—a loss that itself records the impact of 20th-century modernization—the building retains its essential spatial organization and a remarkable concentration of original fabric. The courtyard, *īwān, qa'ah,* and surviving rooms preserve their historical relationships, allowing visitors to experience the authentic spatial sequence

	of an Aleppine merchant house. The structure's survival through earthquakes, urban development, and Syrian Revolution, followed by careful documentation and consolidation (2017–2021), has maintained its physical integrity as a rare surviving example of its typology.
Socio-Cultural Value:	*Bayt Ajqbāsh* embodies *Aleppo's* tradition of intercommunal coexistence. Built by a Christian family in a predominantly Christian quarter yet participating fully in the architectural language of the city, it testifies to the shared urban culture that transcended sectarian boundaries. Its conversion to a hostel for the poor under the Syrian Catholic Church reflects the role of religious institutions in social welfare, while its later transformation into the Popular Traditions Museum democratized access to heritage, making domestic high culture available to all citizens. The building thus represents both elite merchant society and the broader social fabric of *Aleppo*.
Museum and Interpretive Value:	Since 1975, the building has served as the Popular Traditions Museum, housing collections of Aleppine costumes, household objects, textiles, and crafts. This adaptive reuse created a powerful dialogue between the historic container and its ethnographic contents, together conveying the texture of traditional domestic life more effectively than either could alone. The museum setting allows visitors to encounter Aleppine material culture within an authentic spatial context, deepening understanding of how these objects functioned in daily life. The building itself becomes the largest artifact in the collection.
Educational Value:	*Bayt Ajqbāsh* serves as an open textbook of Aleppine architectural history, construction

	techniques, and decorative arts. It offers scholars, students, and craftspeople direct access to traditional building methods: stone carving, *'ajami* panel painting, timber construction, and spatial organization. The documented restoration work following wartime damage provides a case study in ethical conservation practice, demonstrating principles of documentation, minimal intervention, anastylosis, and transparency that can guide future heritage projects throughout Syria.
Authenticity of Trauma and Survival Value:	The damage inflicted during the Syrian revolution—documented in the 2016–2017 UNESCO surveys—and the subsequent consolidation work have added a new layer to the building's biography. The scars of conflict, carefully stabilized rather than erased, record the vulnerability of heritage to war and the commitment of Syrian and international heritage professionals to its survival. This phase of the building's life holds profound emotional and testimonial value, speaking to both destruction and resilience. The building now stands as a quiet monument to cultural continuity beyond trauma.
Symbolic and Identity Value:	For Aleppines, *Bayt Ajqbāsh* represents a tangible link to their city's cosmopolitan past and a hopeful symbol of its possible future. Its survival through war and its careful recovery embody the possibility of preserving Aleppo's multi-layered identity—neither frozen in time nor rebuilt as a sanitized replica but carried forward with its complexities and wounds honestly visible. The building asserts that Aleppine identity is not defined by any single era or community but by the continuous, sometimes painful, always rich accumulation of generations.
Touristic and Economic Value:	As one of the best-preserved historic houses open to the public in Aleppo, *Bayt Ajqbāsh* holds significant potential for cultural tourism. Its location in the *Al-*

	Jadīdah quarter, near other historic landmarks, positions it within a heritage corridor that can attract visitors and support local economic recovery. The museum generates employment for custodians, guides, and conservators while sustaining traditional crafts through associated workshops and exhibitions. Heritage tourism centered on authentic sites like *Bayt Ajqbāsh* offers a sustainable path for post-war economic revitalization rooted in *Aleppo's* unique cultural assets.
Date of Damage	
2013,	The Museum has been looted: glassware, baghdadian daggers and six darts and some clothes. the polychrome wooden panels were stolen.
7 March 2015	A hole in a wall has been open to access the building.
Damage Assessment	
	Severe damage to the building. There is clear evidence of debris around the walls, the roof of the building is heavily damaged, and a small section of it to the southeast have collapsed. There is a hole in the southwest corner of the roof.
Damage Mapping	



Fig 106: The Collapsed areas marked in red color to the west and north facades

Photos	
Before	After

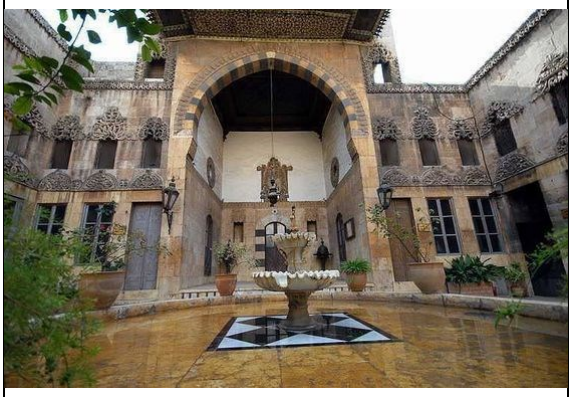



Fig 107: The south *īwān* (2005)	Fig108: The south *īwān* (2017)
	
Fig 109: The west façade (2005)	Fig 110: The west façade (2017)
	
Fig 111: The north façade (2005)	Fig 112: The north Façade (2017)

	
Fig 113:The east façade (2005)	Fig 114: The east façade (2017)

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A

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