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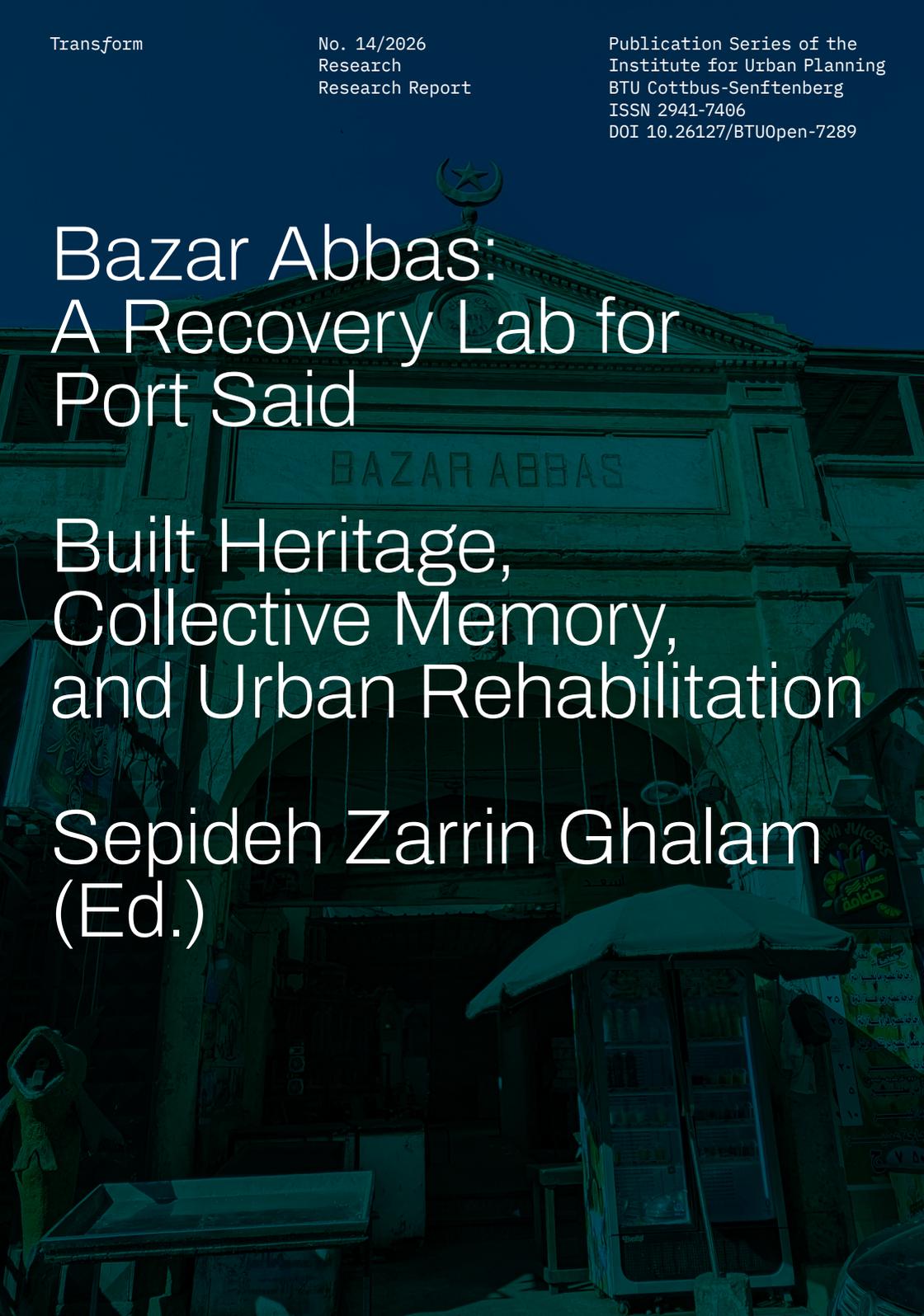
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Bazar Abbas: A Recovery Lab for Port Said

Built Heritage, Collective Memory, and Urban Rehabilitation

Sepideh Zarrin Ghalam
(Ed.)



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Abstract

This publication documents the processes and findings of the ‘Bazar Abbas: Recovery Lab of Port Said’, a pilot initiative addressing the deterioration of Port Said’s historic urban landscape. By presenting these results, the publication aims to raise awareness of the city’s urban heritage and stimulate a broader discussion on sustainable recovery strategies. Founded as a cosmopolitan hub after the construction of the Suez Canal, Port Said’s dual urban structure represents a distinctive architectural and urban heritage.

Founded as a cosmopolitan hub after the construction of the Suez Canal, Port Said’s dual urban structure represents a distinctive, yet vulnerable, architectural and urban heritage. The city’s urban fabric was profoundly shaped by successive wars and forced displacement following the post-colonial transition. Despite the profound impact of these events, however, Port Said has lacked a comprehensive recovery framework to address the resulting damage. Instead, the historic core has faced institutional neglect, with its heritage caught between shifting priorities and chronic underfunding. Today, the city is grappling with historical trauma and physical decay, as well as a development strategy that disconnects heritage from contemporary growth.

In response, the Recovery Lab acts as a platform for exploration, bridging the gap between academic research and professional practice. Using the Bazar Abbas building as a living laboratory, the project has evolved from theoretical study to the implementation of site-specific pilot interventions. The Lab has tested a multidisciplinary toolbox ranging from 3D laser scanning to participatory engagement to demonstrate how tangible recovery can be achieved despite limited resources and archival gaps. Ultimately, this volume argues that cities with complex, layered histories require an incremental, tactical approach to rehabilitation. This methodology directly addresses intertwined challenges, including restricted funding, fragmented decision-making, and administrative hurdles. By treating heritage as a vital social asset and adopting a learning-by-doing approach, the Lab overcomes institutional paralysis to deliver results. This framework offers a resilient regeneration alternative that is grounded in the practical realities of Port Said and the collective agency of its residents.

Kurzfassung

Diese Publikation dokumentiert die Arbeit der Pilotinitiative 'Bazar Abbas: Recovery Lab of Port Said', die sich mit dem Verfall der historischen Stadtlandschaft von Port Said befasst. Ihr Ziel besteht darin, das Bewusstsein für das urbane Kulturerbe von Port Said zu schärfen und eine breitere Diskussion über nachhaltige Strategien zur Stadterneuerung (urban recovery) anzuregen.

Port Said wurde nach dem Bau des Suezkanals als kosmopolitisches Zentrum gegründet und stellt mit seiner dualen Stadtstruktur ein einzigartiges architektonisches und städtebauliches Erbe dar. Im Zuge des postkolonialen Übergangs haben Kriege und Vertreibungen das Stadtgefüge tiefgreifend beeinflusst. Trotz der Schwere der Schäden gibt es bisher keinen umfassenden Plan für den Wiederaufbau und die Stadterneuerung von Port Said. Stattdessen war der historische Stadtkern institutioneller Vernachlässigung ausgesetzt. Das Erbe der Stadt blieb zwischen wechselnden Prioritäten und chronischer Unterfinanzierung gefangen. Heute kämpft die Stadt mit ihrem historischen Trauma, dem baulichen Verfall sowie einer Entwicklungsstrategie, die das kulturelle Erbe zunehmend vom zeitgenössischen städtischen Wachstum entkoppelt.

Als Reaktion darauf fungiert das Recovery Lab als explorative Plattform, die die Lücke zwischen akademischer Forschung und praktischer Anwendung schließt. Mit dem Bazar-Abbas-Gebäude als Reallabor entwickelte das als theoretische Studie gestartete Projekt praktische Pilotinterventionen. Das Lab testete einen multidisziplinären Instrumentenkasten, der vom 3D-Laserscan bis zur Bürgerbeteiligung reicht, um zu demonstrieren, wie greifbare Sanierung trotz begrenzter Ressourcen und Archivlücken gelingen kann. Letztlich zeigt dieser Band, dass Städte mit komplexen, vielschichtigen Geschichten wie Port Said einen inkrementellen, taktischen Rehabilitationsansatz benötigen. Dieser Ansatz reagiert direkt auf miteinander verknüpfte Herausforderungen wie begrenzte Mittel, fragmentierte Entscheidungswege und administrative Hürden. Indem das Lab das Erbe als lebenswichtiges soziales Gut begreift und einen Learning-by-Doing-Ansatz verfolgt, überwindet es institutionelle Lähmungen und liefert sichtbare Ergebnisse. Dieser Rahmen bietet eine resiliente Alternative für die Stadterneuerung, die in den praktischen Realitäten von Port Said und der kollektiven Handlungsfähigkeit seiner Bewohner verwurzelt ist.

Disclaimer

The authors are responsible for the choice and presentation of the information contained in this volume and for the opinions expressed therein, which are not necessarily those of the editor and do not commit the Bazar Abbas, Recovery Lab of Port Said project.

Foreword

Christoph Wessling

Port Said's architectural heritage dates back to the foundation of the city and the construction of the Suez Canal between 1859 and 1869. It reflects the colonial influences of that era. The city's strategic location at the Mediterranean entrance to the canal has brought both prosperity and international conflict. Notably, the city bore significant scars from the Suez Crisis (1956), the Six-Day War (1967) and the Yom Kippur War (1973). These upheavals, alongside the withdrawal of international institutions and large-scale demographic shifts, have accelerated the decline and neglect of Port Said's architectural fabric. Consequently, the city is largely absent from maps of cultural heritage destinations in Egypt. Despite being the third-largest city outside the Cairo metropolitan area, it is often overshadowed by ancient archaeological sites. While the city has grown significantly in recent decades, development has focused primarily on the long stretches of beach along the Mediterranean coast. Meanwhile, the historic core, oriented towards the old Suez Canal, has seen very few rehabilitation or redevelopment measures to date. Bazar Abbas is located in the heart of the old city

At the invitation of our Cairo University colleagues, we first visited Port Said in 2012 with a summer school group, taking a day trip from Cairo. In 2014, we held a ten-day architecture workshop¹ in Port Said, with students from Cairo, Alexandria, Port Said and Cottbus. The workshop focused on the typical building typology featuring wooden balconies. These activities were conceived with the aim of promoting Port Said as a potential World Heritage City, paving the way for its inclusion on the UNESCO World Heritage List. Unfortunately, this idea was not pursued further. In 2020, our urban design student Samar Abdelaal revisited this theme in her master's thesis, 'Historic Buildings Rehabilitation as a Catalyst to Reconcile Urban Segregation: A Colonial Narrative of Port Said's Historic District'. Her focus on the central streets of the historic core and its bazaar buildings, specifically Bazar Abbas, provided the initial impetus for the project 'Bazar Abbas: Recovery Lab of Port Said', which is documented in this publication.

¹ Port Said Architectural Design Workshop, September 2014: *The Second Skin – Rehabilitation Strategies and Adaptive Reuse of Timber Balcony Buildings*. Available at: https://www-docs.b-tu.de/middle-east-cooperation/public/Workshops/Report_2014_JADW_Port-Said.pdf

The project successfully integrated academic research on the revitalisation of historic cities with local training programmes, practical conservation measures and various participatory activities involving tradespeople, merchants, local residents and administrative officials. This multifaceted approach strengthened international, national and local awareness of Port Said's architectural importance. Through the interdisciplinary collaboration of architects, urban planners, landscape architects, historians, and conservators, the project identified the potentials, opportunities, and challenges inherent in rehabilitating Bazar Abbas, achieving high-quality implementation and a strong multiplier effect.

The Bazar Abbas Recovery Lab not only serves as a high-quality foundation for further structural restoration – a portion of the façade was renovated during the project – but also as a template for heritage recovery elsewhere. I hope that the many participants involved in the project's various formats will apply the experience they have gained to their respective spheres of influence. To secure the future of Port Said and other Egyptian cities, it is crucial to bridge the gap between the highly motivated local architects and actors and the complex, hierarchical administrations responsible for urban revitalisation and rehabilitation. It is essential to continue the chosen strategy of combining local stakeholder involvement, expert training and physical structural conservation. The diverse perspectives and expertise of the authors in this volume reflect the international and interdisciplinary scope of the work. The Bazar Abbas project and this publication provide a renewed opportunity to advocate for the inclusion of Port Said's architectural heritage on the UNESCO World Heritage List. I would like to express my sincere thanks to the initiators, implementers and authors for successfully realising this project. Finally, I would like to thank Sepideh Zarrin Ghalam for her dedicated project management and organisation work, which was essential in bringing both the Recovery Lab and this publication to fruition.

Acknowledgements

The Bazar Abbas: Recovery Lab of Port Said and this publication are the result of a collective effort involving numerous institutions and individuals. Firstly, we would like to acknowledge the Cultural Protection Fund (CPF) of the British Council, in partnership with the UK Government's Department for Culture, Media and Sport. We are very grateful for the CPF's generous grant, as well as for their collaborative spirit and the constructive guidance they provided throughout the project.

At BTU Cottbus-Senftenberg, we thank Christoph Wessling for his essential guidance and for providing the institutional framework, Anna Lundqvist for her invaluable support, and Simon Colwill for his academic input and supervision during the workshops. We particularly like to highlight the role of Samar Abdelaal, who initiated the project. Her master's thesis formed the basis of this research, and we thank her for her dedication from the initial proposal through to the project's implementation phase on the ground.

Our cooperation in Egypt was sustained by the dedication of our partners. We thank the Galala University team – Maged Zagwa, Mohamed Hamdy and Zainab Tphoon – for their academic cooperation. Our thanks also go to Alaa El Habashi and his team at Al Yakaniya for Heritage and Arts for their technical expertise, as well as to Mohamed Hassan and Miran Shouman of Port Said Ala Ademo for their invaluable local coordination and insights. Furthermore, we thank Mohamed Hagraas for his active collaboration through the UN-Habitat flagship programme, Inclusive Communities, Thriving Cities. We would also like to acknowledge the contributions of many colleagues who supported the project at various stages. Their diverse perspectives and engagement were integral to the ethos of the Recovery Lab workshops.

We acknowledge the involvement of the local and national authorities, including the Port Said Governorate and the National Organization for Urban Harmony (NOUH). Our thanks also go to the owners of Bazar Abbas, the Assal family, for participating in the dialogue regarding the site's future.

We are grateful to the contributing authors for their close cooperation. Our thanks also go to Lara A. Awad, Basma El Assar, Dina Elmazzahi and Logaina Fathalla for their hard work on the content and layout, and to Damoun Vahabi Moghaddam for proofreading the manuscript.

We wish to especially honour the memory of Youssef Ragab, a talented young graduate from Port Said who was a dedicated member of our workshops and rehabilitation internship team. His commitment to the rehabilitation of the bazaar and his vibrant contributions to our research reflected a profound love for his city's heritage. His untimely passing is a significant loss to all who worked with him, and we hope this volume serves as a lasting tribute to the passion and potential he brought to the project.

Finally, we express our gratitude to the people of Bazar Abbas – the shopkeepers and residents – who welcomed us into their workplace and shared insights that were invaluable to our research. Above all, this volume is a testament to their enduring connection to Port Said's heritage.

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Abbreviations and Acronyms

| | |
|------------|--|
| ANMT | Archives nationales du monde du travail |
| BBB | Building Back Better |
| BTU | Brandenburg University of Technology Cottbus-Senftenberg |
| CADN | Centre des Archives diplomatiques de Nantes |
| CPF | Cultural Protection Fund |
| CUCMS | Compagnie Universelle du Canal Maritime de Suez |
| FMECA | Failure Mode, Effects, and Criticality Analysis |
| HBIM | Heritage Building Information Modeling |
| HUL | Historic Urban Landscape |
| ICH | Intangible Cultural Heritage |
| ICOMOS | International Council on Monuments and Sites |
| IUCD | Integrated Urban Conservation and Development |
| MEC Unit | Middle East Cooperation Unit |
| NOUH | National Organization for Urban Harmony |
| OUV | Outstanding Universal Value |
| PPP | Public–Private Partnership (PPP) |
| SCA | Suez Canal Authority |
| SCC | Suez Canal Company |
| TLS | Terrestrial Laser Scanning |
| UNESCO | United Nations Educational, Scientific and Cultural Organization |
| UN Habitat | United Nations Human Settlements Programme |

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01. Framing the Recovery Lab

Bridging Research and
Practice in Port Said

Sepideh Zarrin Ghalam

Abstract

The Bazar¹ Abbas Recovery Lab was not established as a project with predetermined outcomes, but rather as an iterative process of discovery, designed to bridge the gap between academic research and the tangible realities of heritage recovery. Conceived as a multi-actor collaboration between academic institutions in Germany and Egypt, a local association, and a conservation company, the Lab emerged as a space for negotiation, experimentation, and learning. Over a period of almost three years, it evolved from an academic initiative into a process for capacity building, documentation and community engagement.

This opening paper is structured into two sections: The first section reflects on the project's methodological evolution, detailing how the institutional framework shifted towards a tactical, step-by-step approach to rehabilitation. The second section provides a roadmap for the publication, outlining the thematic flow and specific contributions of the subsequent papers. These sections present the iterative process of the Recovery Lab as a contribution to the evolving discourse on navigating the intricacies of heritage and community recovery in historically layered urban contexts. This is particularly relevant in regions grappling with the dual challenges of a colonial past and the systemic complexities of the present time.

Keywords: recovery lab, iterative methodology, multi-actor collaboration, community-driven conservation, heritage-led development

1.1 The Project: Methodology and Conceptual Approach

The following overview traces the evolution of the Bazar Abbas Recovery Lab from its inception to its practical on-site application. By navigating the complex historical and socio-spatial layers of Port Said's historic core, this project demonstrates how a theoretical and methodological framework for recovery was established – one that is both culturally sensitive and operationally incremental.

1.1.1 The Institutional Framework: Genesis and Development

The foundation of the Recovery Lab was inherently academic and institutional. The necessary platform was established by the Middle East

1 Throughout this volume, the spellings 'bazaar' and 'Bazar' are used interchangeably. However, 'Bazar' is used specifically to reflect the historical inscription on the building's façade.

Cooperation Unit (MEC Unit) at the Chair of Landscape Architecture at Brandenburg University of Technology Cottbus–Senftenberg (BTU), which is specifically tasked with academic cooperation in the region. Furthermore, BTU's double-degree master's programme in Urban Design – Revitalization of Historic City Districts (now Urban Design and Sustainable Revitalization) had already maintained deep ties and institutional frameworks with Egyptian university partners.

While the Lab's concept is rooted in iteration, its operational structure was built upon this pre-existing trust. This foundation proved crucial when the initiative was catalysed by the foundational research presented in the master's thesis of Samar Abdelaal, a graduate of the double-degree programme in 2021. Her research, titled 'Historic Buildings Rehabilitation as a Catalyst to Reconcile Urban Segregation: A Colonial Narrative of Port Said's Historic District', utilised the MEC Unit's network and established academic partnerships. The Unit instrumentalised its expertise to provide the necessary guidance and support required to translate the academic research into a successful project proposal.

Supported by the British Council's Cultural Protection Fund, in partnership with the UK Government's Department for Culture, Media and Sport, the project established a comprehensive collaborative structure with the MEC Unit as its operational and intellectual core. Led by BTU, the partnership worked closely with several Egyptian partners, including Galala University (the academic partner), Al Yakaniya for Heritage and Arts (the technical and practice partner) and Port Said Ala Ademo (the local partner for community engagement). Furthermore, the project collaborated with the UN-Habitat flagship programme, Inclusive Communities, Thriving Cities. This institutional arrangement was fundamental as it allowed for the combined application of international research standards, local expertise and community access. In doing so, the project's methodology became firmly anchored in both global best practices and local knowledge systems.

1.1.2 Context and Conflict: The Urban Layers of Port Said

Understanding the project's complexity requires recognising the layered and nuanced history of its location. Founded in 1859, Port Said was established as a model of both corporate and colonial management, set apart from the Egyptian state (IFAO, 2006; Piaton, 2017). Defined by its strategic position at the entrance to the Suez Canal, the city's

spatial configuration was driven by a colonial hierarchy that physically separated the historic core into two distinct neighbourhoods. *Afrang* or the European quarter was designed with wide boulevards, elegant architecture, and spacious gardens. Conversely, *Al-Arab* or the Arab quarter was assigned a purely functional role for the local population, built on a dense gridiron structure with narrow streets and small building plots that lacked adequate public infrastructure (ElKerdany, 2017; Piaton, 2017).

This asymmetric planning was a deliberate and powerful method of management and control. While administrative regulations were used to embed this segregation into the city's social fabric, the formal boundaries were often challenged by complex social dynamics. The vibrant Arab quarter, in particular, remained a site of agency where inhabitants continuously expressed their identity through cultural and religious ceremonies that often served as concealed political demonstrations (ElKerdany, 2017). Simultaneously, a distinct architectural hybridity emerged; a 'second skin', in the form of high timber verandas and balconies blending European morphologies with local climatic and privacy requirements to create a shared aesthetic that defied formal political boundaries (Baller, 2017, P. 42; ElKerdany, 2017).

This tension created a city characterised by urban paradoxes, where rigid colonial planning constantly intersected with local resistance and cross-ethnic economic networks (Piaton, 2026). ElKerdany (2017) explains how during its early times and until the mid of the twentieth century, the original planning concept as a dual city enforced segregated and classified lifestyle. However, the city eventually moved towards reconciliation through multiple waves of bidirectional immigration, especially during and after wars. Today, while each historic quarter continues to reflect its own distinct economic and cultural characteristics, a harmonious life manifests itself throughout (ElKerdany, 2017), proving that the inhabitants' differences could ultimately be reconciled.

Nonetheless, the colonial division has created persistent urban complications, exacerbated by a century of conflict including the Suez Crisis of 1956² and the wars of 1967³ and 1973⁴. The city suffered heavy

2 The Suez Crisis of 1956, or the Tripartite Aggression, was a military invasion of Egypt by Israel, the United Kingdom, and France. The conflict was triggered by President Gamal Abdel Nasser's nationalisation of the Suez Canal Company, which had previously been controlled by British and French interests. As the primary entry point to the Canal, Port Said became the main theatre of war; it suffered intense naval and aerial bombardment followed by a paratrooper invasion. This resulted in significant civilian casualties and the destruction of large sections of the urban fabric.

demolition during the 1956 conflict, and its population was completely evacuated between 1967 and 1974. Although nationalisation removed formal barriers, the two quarters never fully integrated, at least not from a spatial perspective, nor did they properly recover from the damages. Today, significant spatial and economic disparities persist, leaving the historic centre profoundly fragmented. These layers of segregation, resistance and displacement remain imprinted on the social fabric and are physically manifested in the ongoing deterioration of the built heritage (ElKerdany, 2017). This lack of cohesion has been intensified by recent urban expansions and a divergent development focus that leaves the historic core in a terrible state of maintenance (Baller, 2017) and increasingly disconnected from contemporary development that is directed towards the Mediterranean Sea.

1.1.3 The Focal Point: Bazar Abbas

It is within this context that the project adopted Bazar Abbas as its focal point, as the building encapsulates the very paradoxes inherent in Port Said's history. Being a prominent example of the city's second phase of development (1880s to 1920s), the structure represents the physical intersection of diverse cultural influences and the emergence of an original architectural typology driven by new Egyptian building regulations. The structure is a unique mixture of wood and masonry, distinguished by a hybrid caravanserai layout, combining commercial stalls on the ground floor with hotel rooms on the upper level accessible via wooden galleries (Al-Sadaty, 2020). As discussed by Piaton in this volume, its distinctive neoclassical elements and wooden detailing reflect the stylistic synthesis of the period. Simultaneously, the four-metre-deep arcades specifically demonstrate how local property owners took advantage of the 1888 city-planning codes to extend the building into the public thoroughfare. While Piaton notes that this created a

3 The 1967 War, also known as the Six-Day War, was a conflict between Israel and a coalition of Arab states (primarily Egypt, Jordan, and Syria). Following the Egyptian defeat and the Israeli occupation of the Sinai Peninsula, the Suez Canal was closed and became a heavily fortified ceasefire line. Port Said, situated at the canal's mouth, became a primary military target and a frontline zone. This necessitated the forced displacement of the city's entire civilian population to the interior of Egypt, leaving the urban fabric abandoned and vulnerable to deterioration for nearly eight years.

4 The 1973 War (or October War) led to the 1974 disengagement and the eventual reopening of the Suez Canal in 1975. Upon the residents' return, Port Said was declared a Free Zone in 1976 to stimulate the national economy through duty-free trade. This new economic status triggered a construction boom and rapid, unregulated redevelopment. The resulting high demand for modern commercial space led to the demolition of many historic structures, as the Free Zone economy prioritised new concrete developments over the maintenance of the city's traditional architectural heritage.

visual clash with the shallower and older verandas nearby, Bazar Abbas nevertheless established a more monumental and permanent spatial presence. Paradoxically, the depth of these arcades created a sheltered public threshold which was later occupied by shopkeepers and street vendors, thus blurring the boundaries between formal planning and local economic agency.

Furthermore, the building's history directly reflects the hidden social agency of the city. Through new archival evidence, Pitaon shows in this volume how the site's development highlights a porous social border involving complex networks of local and foreign investors that challenged traditional ethnic divisions even within the European Quarter. This defiance is further reinforced by the building's symbolic naming in honour of a Khedivial ruler, which asserted an Egyptian identity and Ottoman connection within a space governed by European norms.

Despite reaching a critical state of deterioration that led to the evacuation of its residential floor in the 1980s, Bazar Abbas remains a vital urban space with significant potential for the future. As a historic covered market, AlSadaty (2020) argues that the building could serve as a catalytic tool for the revitalisation of the surrounding Bazar Street. Therefore, current rehabilitation efforts – partially implemented but ongoing – aim to balance the protection of historic features with contemporary socio-economic needs. This approach serves as a pilot project for wider urban recovery, aligning with the strategies proposed by Baller (2017) to make the city's heritage value more visible through rehabilitation and adaptive reuse. In doing so, the project acts as a mechanism for reclaiming collective memory while fostering socio-economic regeneration.

1.1.4 Conceptual Foundation: Defining Recovery and Positioning the Lab

In order to contextualise the Lab's work, it is essential to define recovery as it applies to the unique urban conditions of Port Said. While various disciplinary definitions coexist, the conceptualisation of urban recovery has undergone significant paradigm shifts over the last three decades, transitioning from a narrow focus on physical reconstruction toward a multi-layered, adaptive socio-spatial process (Al-Harithy, 2021). Following the framework established by Al-Harithy (2021), this evolution is characterised by four critical registers of transformation.

The evolution begins with a move toward the intangible dimensions

of the city, where the recovery of collective memory, symbolic heritage and a sense of place is viewed as being equally vital as the physical infrastructure (Stanley-Price, 2007). Closely linked to this is a shift in governance and power dynamics, which moves away from top-down mandates towards models rooted in civic agency and collaborative planning that utilise local networks over external blueprints (Addison, 2003; Davis, 2005). A third register involves the transition from reactive restoration to addressing the underlying drivers of vulnerability (Wisner et al., 2004; Barakat & Zyck, 2009). Such a proactive approach is central to the Sendai Framework (2015) and the concept of 'Building Back Better' (BBB), which advocate for enhancing urban resilience rather than simply recreating past risks (UNISDR, 2015). In this context, Chang (2010) observes that, while recovery inevitably leads to a 'new normal', it does not guarantee a 'new better'; she therefore defines recovery as an adaptive negotiation with irreversible changes. Finally, the temporal goals of recovery have been reimagined as a non-linear, open-ended social process rather than a fixed endpoint (Berke et al., 1993; Smith & Wenger, 2007). This acknowledges that disasters are catalysts for transformation, necessitating a focus on re-establishing people's lives and social systems over mere physical rebuilding (Olshansky, 2005; Mileti, 1999).

Grounded in these shifting trajectories, the Bazar Abbas Recovery Lab adopts an integrated concept operationalised through three main dimensions:

First is the socio-spatial recovery which addresses the spatial paralysis caused by historical colonial segregation alongside the physical deterioration resulting from decades of systemic maintenance neglect. By intervening in Bazar Street – a site that bridges the European and Arab quarters – recovery becomes an act of urban stitching. Rather than seeking an idealised restoration of the past, this 'stitching' serves as an adaptive negotiation aimed at reintegrating segregated neighbourhoods into a cohesive, contemporary public realm.

The second dimension is the psychological and cultural recovery. This pillar acknowledges the history of a community shaped by resistance and displacement, focusing on the human impact of urban ruptures. In this context, recovery involves the reactivation of intangible heritage as a means of strengthening local identity and collective resilience, ensuring that the community remains the central protagonist of the restorative process.

Finally, socio-economic recovery recognises that heritage preservation is inseparable from the lived experience of the marketplace and the survival of the local economy. By treating the site as both an active economic resource and a vital socio-cultural space, recovery would include upgrading commercial infrastructures to ensure the Bazar remains a viable place of work while maintaining its role as a hub for social exchange.

By adopting this holistic definition, the Lab moves away from the monument-centric approach often seen in national heritage frameworks. Instead, it utilises the Historic Urban Landscape (HUL) approach (UNESCO, 2011) as a core framework for integrated conservation and development. This allows the recovery of a single building, such as Bazar Abbas, to function as a strategic catalyst for the broader systemic health and sustainable growth of the city. Within this framework, heritage is not preserved in isolation but is treated as a dynamic urban resource that supports contemporary social and economic needs. While moving beyond purely physical reconstructions is now a well-established principle in the field, the Lab framework was specifically chosen to emphasise the exploratory and recursive nature required by Port Said's complex urban fabric.

Rather than proposing a finalised or rigid master plan, the Recovery Lab serves as a platform for testing small-scale, adaptive responses to the dual challenges of post-war trauma and systemic neglect. This flexible approach treats the site as a 'living laboratory', where academic concepts are tested through direct engagement and mutual learning. By designating the project as a Lab, we acknowledge that recovery in such a contested and layered environment cannot be a merely top-down imposition; instead, it must be a process of constant calibration between the preservation of history and the evolving, often conflicting, needs of the local community.

1.1.5 The Recovery Roadmap: From Theory to Incremental Action

Translating the multidimensional definition of recovery into a functional urban strategy required a methodology as versatile as the context of Port Said itself. To bridge the gap between high-level academic theory and the practical, lived realities of the site, the Recovery Lab adopted an exploratory roadmap structured around knowledge exchange and capacity building. Rather than imposing external solutions, the Lab functioned as a facilitator of mutual growth by creating a collabora-

tive space where university research and local expertise informed one another. This learning-by-doing approach enabled the team to validate theoretical frameworks through direct site experience, integrating local narratives into the formal academic process.

Central to this roadmap was a strategy that balanced technical professional research with the necessity of community trust. The process began with analytic documentation – including 3D laser scanning, risk assessments and value studies – which was then operationalised by a rehabilitation internship team. These young practitioners conducted in-depth stakeholder mapping to ensure that intervention scenarios were grounded in local reality. Alongside this technical work, the Lab utilised workshops as mutual learning modules, bringing together academics, practitioners and local craftsmen to share their expertise. To align these professional strategies with the city's social fabric, the project engaged in small acts of contribution, such as *Semsemia* music events and the creation of a mobile fish-seller cart. The impact of the project, including these interventions, was measured through multigenerational perception surveys, ensuring that the project's first phase remained responsive to the community's psychological and cultural needs.

This roadmap was executed through a phased structure that allowed the depth of engagement to grow alongside the scale of the work. Phase I (January 2022 to January 2025) focused on documentation and the development of recovery scenarios, specifically studying the *taracina* (traditional wooden verandas) as a vital vessel for the city's collective memory. These studies culminated in tangible action, including the physical renovation of two *taracinas* and a section of the eastern façade of Bazar Abbas (Fig. 1.1). As funding expanded into Phase II (June 2025 to February 2026), the Lab shifted focus toward long-term management and stabilisation. A landmark Stakeholder Workshop in September 2025 brought together tenants, owners and heritage representatives to a single table – a critical step in negotiating the building's future. By stabilizing structural elements, the Lab has laid the groundwork for a long-term framework. This ongoing process represents a constant calibration between historical preservation and the evolving needs of the community, the results of which we hope to continue sharing in future volumes.



Fig. 1.1 Eastern façade of Bazar Abbas before and after restoration and conservation training. (Photo: above, Ahmed Emad, 2024; below, Author, 2023)

1.2 The Volume: Publication Structure and Thematic Parts

This publication is structured to reflect the multi-scalar and interdisciplinary nature of the Recovery Lab. Rather than a chronological report, the papers are organised into four thematic parts that move from the broad historical and institutional context towards more specific site-wide interventions and concluding with a vision for the city's broader urban future.

1.2.1. Part I: Historic Context and Urban Foundations

The first section of this publication establishes the historical and spatial context necessary to navigate Port Said's complex heritage landscape. To intervene effectively, the Recovery Lab anchored its work in a dual approach of archival research and field-based typological documentation. These papers provide the narrative framework for the project, moving from the history of our catalyst building to an exploration of the living heritage that defines the city's identity.

Claudine Piaton, in the paper *Bazar Abbas: An 'Arabian Market' in the European Quarter (1890s–1950s)*, provides the historical authority for the project by tracing the evolution of Bazar Abbas through French and Suez Canal archives. She identifies three distinct governance eras that shaped the city's fabric, framing Bazar Abbas as a representative of the second phase of development. Her study reveals the intricate networks of local and international traders who negotiated urban space, demonstrating that the building has always functioned as a cross-cultural catalyst. This archival foundation is vital, as it shows that the complexities of ownership and regulation encountered by the Lab are deeply rooted in the city's origins in the 19th- and 20th-centuries.

Following this historical foundation, Dina Elmazzahi's *Port Said: Architecture of Different Cultures*, delineates the architectural grammar of the city by identifying the *taracina* as a key typological element. Elmazzahi moves beyond the rigid spatial segregation of the colonial era to highlight a cohesive architectural character that bridges the European and Arab quarters. Notably, the study incorporates findings from the Lab's inaugural workshop on urban narratives, employing qualitative data to illustrate how these balconies function as custodians of collective memory. This typological mapping provided the technical vocabulary necessary for the Lab's subsequent conservation training and rehabilitation strategies.

The section concludes with the paper *Intangible Heritage as a*

Catalyst for Recover: Reflections on Port Said, which completes the city's diagnosis by integrating its living traditions into its urban fabric. Miran Shouman argues that the recovery of the historic core cannot be achieved through physical restoration alone, but must also address the social practices that sustain urban identity. By introducing cultural expressions such as *Semsemia* music, the *Allenby* festival and maritime traditions, the study identifies these practices as vital anchors for collective memory. This overview provides the final contextual layer for the Recovery Lab, demonstrating the necessity of a socio-spatial strategy that links the city's architectural fabric with its intangible heritage for a resilient, community-led urban recovery.

1.2.2 Part II: Integrated Conservation and Development – A Strategic Framework

The second part shifts the focus from context to strategy. It presents the conceptual frameworks and collective outcomes generated during the first phase of the project. This section further details how the Recovery Lab translated collaborative research into a series of strategic modules. These papers serve as a formal synthesis of the participatory workshops held in 2023 and 2024, progressing from neighbourhood-scale diagnostics to a comprehensive vision for heritage-led regeneration.

Lara A. Awad, in *Between Conservation and Transformation: Addressing the Challenges of Port Said's Inner City*, examines the city's historic core through a meso-scale lens. By positioning this scale as a structural hinge between macro-level city dynamics and micro-level building interventions, Awad provides a framework to address the intersecting physical, socio-economic and environmental pressures facing the Arab and European Quarters. Her research employs the Integrated Urban Conservation and Development (IUCD) framework, drawing on the Lab's participatory workshops to move beyond static preservation. This work results in five integrated strategies – Recover, Connect, Refunction, Upgrade and Manage – which would transition the inner city from a landscape of colonial segregation into a living urban system where heritage acts as a catalyst for inclusive regeneration.

Shifting to the micro-level, Basma El Assar contributes *The Bazar Street: Hybrid Heritage*, which synthesises the street-level inventories and daily rhythms documented during the workshops. El Assar demonstrates that Bazar Street operates as a living microcosm of Port Said's layered identity, where European planning and Arabic commerce are

functionally inseparable. By organising the workshop findings into a matrix of values and vulnerabilities, this paper illustrates how the integrated recovery of the streetscape – reconciling material integrity with socio-economic adaptability – provides the essential foundation for site-specific interventions.

The section concludes with *Beyond Bazar Abbas: Catalysing Inclusive Urban Regeneration in Port Said* by Mohamed Hagra. Expanding on the socio-economic and spatial dimensions established in the previous papers, Hagra argues that traditional marketplaces are not merely monuments, but the embodiment of accumulated social practices and economic relationships. He highlights a fundamental tension in regeneration: the trade-off between improving spatial quality and ensuring the economic viability of vendors operating on low margins. This paper synthesises the Lab's collaborative findings into a four-dimensional framework that addresses social, cultural, economic, and spatial needs. The framework culminates in a phased implementation model that synchronises the immediate community requirements with a long-term vision for climate resilience and city-wide heritage-led regeneration.

1.2.3 Part III: Site-Specific Interventions – Tools and Techniques for Heritage

The third section focuses on the Recovery Lab's technical and operational toolbox, documenting the specialised methodologies tested on-site at Bazar Abbas. These contributions demonstrate a shift from the challenges posed by an archival gap – the lack of original blueprints – towards a comprehensive, multi-layered reconstruction of the building's physical and social state.

The section begins with Samar Abdelaal's paper, *Documenting Cultural Heritage in Post-Conflict Contexts: Reflections on Bazar Abbas in Port Said*. She frames the project within the broader challenges of preserving sites where official records are incomplete due to centuries of fragmented governance and the irrecoverable loss of archives during conflicts. Abdelaal argues for an adaptive, people-centred methodology that captures the site's enduring history by integrating local collective memory and expert observation with digital tools. By distinguishing between the immediate community of tenants and the broader network of institutional stakeholders, Abdelaal demonstrates how intangible narratives can fill critical gaps in the physical record, safeguarding the value of memory and preserving the community's shared identity.

Translating this framework into a technical application, Samer Helmy Kasem and Tariq Al Murri provide an analysis in *An Integrated Methodology for Heritage Documentation*. They detail how Terrestrial Laser Scanning (TLS) was used to capture a high-precision digital record of the building's current condition. To overcome the lack of historical plans, they employ an inferential methodology, using physical evidence and social memory to hypothesise the building's original form. This process culminates in a 3D Heritage Building Information Model (HBIM), which establishes a reliable architectural and structural reference for the restoration phase.

To ensure that the rehabilitation process remains grounded in both cultural significance and structural integrity, the focus shifts to evaluating values and hazards through two further integrated studies. Alaa El-Habashi presents the *Cultural Significance of Bazar Abbas*, identifying 48 specific attributes of the building and ranking them based on historical, architectural and social values to establish a clear hierarchy for conservation. This values-based foundation is then cross-referenced in *Prioritizing Heritage Conservation through Risk Assessment: Lessons from Bazar Abbas, Port Said*. In this study, Yasser Elshayeb, Sally Ghanem, and Fayrouz Rehan use Failure Mode, Effects, and Criticality Analysis (FMECA) to quantify structural and environmental hazards, producing spatial risk maps in the process. These maps highlight critical clusters, such as zones on the first floor where up to nineteen hazards converge. This provides the lab with a data-driven framework to prioritise urgent interventions while safeguarding the building's most significant cultural attributes.

Practical conservation techniques are addressed by John Stewart in his paper *Conservation Training and Material Analysis: Mortars and Renders for Bazar Abbas Pilot Project*. Here he links the building's specific material failures to the 19th-century history of hydraulic lime, specifically the French Teil lime used in the construction of the Suez Canal. By establishing a chemical profile of the original renders through acid analysis, he provides a scientific basis for creating compatible repair strategies that prevent the decay typically caused by modern cement.

Finally, Logaina Fathalla concludes the section with *Community-Centred Rehabilitation of Bazar Abbas*. Drawing on the collective work of the rehabilitation internship team, this paper documents a six-month immersive process that combined technical strategy with local

life. By mapping spatial interdependencies and building trust through small-scale prototypes, Fathalla demonstrates that true rehabilitation is a social process requiring trust, shared ownership and a sustainable, cross-disciplinary management framework.

1.2.4 Part IV: Beyond the Project – Speculation on Broader Urban Futures

The final section of the publication looks toward the long-term impact of the Lab through the lens of a new generation of practitioners. This section features the work of two Egyptian researchers who were inspired by the project's methodology and participated in its workshops as part of their double-degree Master study programme. Their research expands the Lab's focus from a single building and street to the metropolitan scale, envisioning a future for Port Said that is both globally recognised and locally connected.

In *Reconnecting Port Said's Historic Core with the Waterfront: Cultural Continuity and Heritage-Led Regeneration*, Raneem Saleh addresses the physical and social rupture between the city's historic centre and the Mediterranean. She argues that the waterfront must be reimagined as a cultural public realm rather than an isolated edge. Her proposed framework integrates thematic urban trails – focusing on history, commerce and maritime culture – with the adaptive reuse of heritage structures. Drawing on participatory workshops, her work offers a strategic roadmap for restoring Port Said's maritime identity through a community-led and inclusive transformation that positions heritage as a catalyst for creative clusters.

This section and the core of the publication concludes with Toka Abufarag's exploration of *Port Said City's World Heritage Potentials: An Approach Towards Holistic Urban Rehabilitation*. Abufarag evaluates the city's international significance, framing its development since 1859 as a unique testament to global cultural exchange. Utilizing UNESCO's operational guidelines, she moves from the identification of its heritage attributes to a strategic management framework. Her research identifies the layered urban fabric and intangible practices as the foundation for a potential World Heritage nomination file. By layering building age, morphology and cultural exchange patterns, Abufarag delineates key intervention zones that could guide and inform a future management plan, ensuring that Port Said's development remains grounded in its universal value.

1.2.5 Appendices

The publication features five appendices containing supplementary materials that complement the research presented in the main parts of this volume. These documents provide additional technical details, legal context and primary survey data that emerged throughout the project's various phases.

Appendix A. Catalogue of Listed Buildings in Port Said, presents a curated inventory of heritage properties protected under Law No. 144 of 2006. Compiled from the work of the Historic Port Said Association, this inventory identifies the landmarks that define the city's historic fabric. This is followed by *Appendix B. Record of Workshop Methodologies and Results*, which provides a systematic classification of the participatory processes and group-based outputs that underlie the analytical evidence in Part II. To document the practical side of the project, *Appendix C. Selected Drawings of Restoration and Conservation Training (2023)*, provides a visual focused record of the technical drawings and on-site demonstrations produced during the training phases for the wooden elements of Bazar Abbas. This appendix serves as a practical supplement to the strategies in Part III.

The final two appendices synthesise the phased survey data collected throughout the project's duration to track changing social perceptions. *Appendix D. Perception, Significance, Relevance: Bazar Abbas Baseline Survey (2023)*, summarises a study of seventy-one residents conducted at the onset of the project to map community attachment to the Bazar. Finally, *Appendix E. Awareness, Visibility, Impact: Bazar Abbas Evaluative Survey (2025)*, documents a follow-up survey of fifty-two local users, capturing their reactions to the partial façade reconstruction. These documents collectively provide the evidentiary basis for the specific legal, technical and social considerations that informed the work of the Recovery Lab.

1.3 Conclusion: The Lab as an Iterative Model

This publication demonstrates that the recovery of Port Said's historic core cannot rely on conventional, top-down methods alone. By moving its focus from foundational history to strategic frameworks and site-specific integrated approaches, the Recovery Lab has developed an iterative model that navigates existing administrative realities while maintaining methodological independence. The integration of high-tech documentation with deep community engagement illustrates that her-

itage can be reactivated as a driver for socio-economic regeneration, even in the face of significant archival gaps and legislative constraints.

The diagnostic procedures developed throughout this process – moving from academic research to targeted on-site actions – serve as a methodological pilot for working within the complex realities of the city. By bridging the gap between expert knowledge and local lived experience, the project has progressed beyond the technical repair of a single structure to establishing a pathway for cultural and spatial continuity. Ultimately, the lessons learned at Bazar Abbas, documented in this volume, offer a flexible and inclusive framework for the rehabilitation of historically layered cities. Although the way ahead for Port Said remains to be long and challenging, the Lab's transition from theoretical research to physical intervention provides a practical roadmap for balancing the city's cultural significance with that of local community needs.

References

- Addison, T. (Ed.). (2003). *From conflict to recovery in Africa*. Oxford University Press.
- Al-Harithy, H. (Ed.). (2021). *Urban recovery: Intersecting displacement with post-war reconstruction*. Routledge.
- AlSadaty, A. (2020). Port Said historic markets: A tool for urban revitalization. *Archnet-IJAR: International Journal of Architectural Research*, 14(3), 543–557. <https://doi.org/10.1108/ARCH-02-2020-0022>
- Baller, I. (2017). Strategies for the preservation of the heritage of the Suez region and Port Said as World Heritage Site. In H. Abouelfadl, D. ElKerdany, & O. Wanas (Eds.), *Revitalizing city districts: Transformation partnership for urban design and architecture in historic city districts* (pp. 35–50). Springer. https://doi.org/10.1007/978-3-319-46289-9_3
- Barakat, S., & Zyck, S. A. (2009). The evolution of post-conflict recovery. *Third World Quarterly*, 30(6), 1069–1086. <https://doi.org/10.1080/01436590903037333>
- Chang, S. E. (2010). Urban disaster recovery: A measurement framework and its application to the 1995 Kobe earthquake. *Disasters*, 34(2), 303–327. <https://doi.org/10.1111/j.1467-7717.2009.01130.x>
- Davis, D. E. (2005). Reverberations: Mexico City's 1985 earthquake and the transformation of the capital. In L. J. Vale & T. J. Campanella (Eds.), *The resilient city: How modern cities recover from disaster* (pp. 255–280). MIT Press.
- ElKerdany, D. (2017). Port Said: A cosmopolitan heritage under threat. In H. Abouelfadl, D. ElKerdany, & O. Wanas (Eds.), *Revitalizing city districts: Transformation partnership for urban design and architecture in historic city districts* (pp. 15–33). Springer. https://doi.org/10.1007/978-3-319-46289-9_2
- Institut français d'archéologie orientale (IFAO). (2006). *Port-Said, architectures XIXe–XXe siècles*. IFAO.
- Piaton, C. (2017). Port Said: Cosmopolitan urban rules and architecture (1858–1930). In H. Abouelfadl, D. ElKerdany, & O. Wanas (Eds.), *Revitalizing city districts: Transformation partnership for urban design and architecture in historic city districts* (pp. 3–14). Springer. https://doi.org/10.1007/978-3-319-46289-9_1
- Piaton, C. (2026). Bazar Abbas: An 'Arabian Market' in the European Quarter (1890s–1950s). In S. Zarrin Ghalam (Ed.), *Bazar Abbas: A Recovery Lab for Port Said – Built Heritage, Collective Memory and Integrated Urban Rehabilitation*. Institute of Urban Planning, BTU Cottbus-Senftenberg.
- Stanley-Price, N. (2007). The thread of continuity: Cultural heritage in postwar recovery. In N. Stanley-Price (Ed.), *Cultural heritage in postwar recovery* (pp. 1–16). ICCROM.
- Tierney, K., & Oliver-Smith, A. (2012). Social dimensions of disaster recovery. *International Journal of Mass Emergencies and Disasters*, 30(2), 123–146.
- UNESCO. (2011). *Recommendation on the historic urban landscape*. <https://whc.unesco.org/en/hul/>
- UNISDR. (2015). *Sendai framework for disaster risk reduction 2015–2030*. United Nations Office for Disaster Risk Reduction. https://www.unisdr.org/files/43291_sendaiframeworkfordrren.pdf
- Wisner, B., Blaikie, P., Cannon, T., & Davis, I. (2004). *At risk: Natural hazards, people's vulnerability and disasters* (2nd ed.). Routledge.

Part I

Historic Context and Urban Foundation

02. Bazar Abbas

An 'Arabian Market' in the European Quarter (1890–1950s)

Claudine Piaton

Abstract

The paper provides a concise overview of the historical development of Port Said between 1859 and the 1950s. The history of Port Said's development can be divided around three distinct periods, each corresponding to a different era in urban governance and architectural trends. The first (1850s–1880s) was the *ex-nihilo* construction by the 'Compagnie Universelle du Canal de Suez' (who originally excavated the canal) of the first urban settings, who implemented strong social and ethnic segregation between European and Arab quarters. The Egyptian authorities, operating under British rule, administered the city during the second era (which ended with the outbreak of the First World War), and there was significant construction activity and the emergence of an original architectural typology as a consequence of the enforcement of new building regulations. The third period (1920s–1950s) was characterised firstly by the city's substantial expansion northwards and eastwards, extending beyond the canal, and secondly by a remarkable renewal of architectural styles influenced by Art Deco.

This study of the Bazar Abbas, a covered market that opened in 1891, and is representative of the second phase of the city's development, addresses the question of ownership of the buildings constructed in the so-called European quarter. This historical analysis of Bazar Abbas highlights the intricate networks established by traders and wealthy landowners, both from within and outside Egypt, to occupy urban space. It also examines the impact of urban planning regulations initiated by the Egyptian government on architectural typology. The final section of the paper will examine the building's condition until the 1950s, when it was replaced by a new market, built in a more central location.

The paper is grounded in extensive documentation from the Compagnie Universelle du Canal de Suez Archives in France, and the French Diplomatic Archives Centre collections.

Keywords: Port Said, Bazar Abbas, colonial urbanism, architectural regulations, property ownership, covered markets, archival research

2.1 Introduction

The architectural development of the Suez Canal cities, particularly that of Port Said, located at the northern gateway to the canal on the Mediterranean Sea, has been the focus of attention since the early 2000s. Historians of architecture and urban planning (Collectif, 2006;

Colonas, 2016; Piaton et al., 2012; Piaton, 2016a, 2016b, 2017) have been documenting this history, while social geographers have been investigating contemporary changes (El-Kadi & Bruyas, 1995; Noweir, 2005). More recently, advocates of architectural heritage have established non-governmental organisations (NGOs), such as the Port Said Heritage Initiative (2012) and Port Said Ala Ademo (2016), to raise awareness of the valuable heritage and protect it (Megahed, 2014; Baller, 2016; Abouelmagd & Elrawy, 2022).

Undoubtedly, the most original feature of Port Said architecture is the spectacular wooden balconies or verandas¹ erected on the façades of its apartment buildings, some of which are four storeys high. In addition to these buildings, the city also contains a series of constructions that can be viewed as landmarks in the history of Egypt's industrial architecture, including the lighthouse, the docks, workshops, and workers' housing (Piaton, 2014, 2016a). Other, lesser-known and often dilapidated buildings, are also characteristic of the city's architectural mixture of wood and masonry. The National Hotel complex (Baller, 2016, p. 49; Fouad & Sharaf Eldin, 2020, p. 20) was one of the first buildings to undergo a restoration study (El Tabbakh, 2012). Bazar Abbas, one of the earliest market buildings in the old city, is among the few structures currently undergoing rehabilitation. However, little is known about the history of the building and the context in which it was constructed.

This essay intends to set forth the findings of a historical investigation of Bazar Abbas, based on archival collections held in France². First, we will review the history of Port Said's urban development, covering the period from the mid-nineteenth century to the 1950s. Then we will examine how Bazar Abbas fits into this continuum. We will demonstrate how its construction was facilitated by interactions between European and Egyptian investors within the 'European' quarter (the *Afranq*), and how its architecture was influenced by the specific architectural rules of this Egyptian city. Lastly, we will attempt to retrace the fragments of the building's history from its construction to its abandonment.

1 Veranda was the term used for these galleries at the time.

2 Archives Nationales du Monde du Travail (ANMT), Roubaix. Fonds CUCMS. Centre des Archives diplomatiques de Nantes (CADN), Fonds du Consulat de France à Port-Saïd.

2.2 A Company Town that became an Egyptian Municipality

At its inception in the early 1860s, Port Said could be viewed as a company town, a city that was founded by a single corporation to fulfil its needs. However, the city gradually deviated from this concept and pursued a unique path. By 1869, the Compagnie Universelle du Canal Maritime de Suez (CUCMS), the company that founded the city in 1859, was forced to share the management of its land holdings with the Egyptian government by establishing a 'Domaine Commun' (Piaton, 2016b). Then, in 1911, Port Said acquired full autonomy by becoming a chartered municipality. These changes in urban governance coincided with transformations to the original city zoning plan and significant architectural renewals. We propose that the city's development can be divided into three distinct phases.

2.2.1 Fleeting Developments (1859-1870s)

The first structures, which were built by CUCMS and the other companies that awarded contracts for digging the canal and the ports starting in 1859, were precarious edifices made of wood and mud. These were constructed according to a cursory urban planning document that, from the outset, set a strict boundary between the neighbourhood housing of the contractors and workers from the northern Mediterranean shores (chiefly France, Italy, Greece, and Austria), and the 'Arab village' for Egyptian labourers. Initially located to the east of the European quarter, the latter compound was moved to the west side, along the shore, by 1862. The current city map preserves the memory of the earliest settlement, which is particularly evident in the diagonal alignment of Safeya Zaghoul Street (formerly known as Quai Eugénie). In 1869, when the Suez Canal was opened, Quai Eugénie followed the Mediterranean shoreline.

The first photographs, dating back to the late 1860s, show how modest the structures at the site were back then (Fig. 2.1): a series of wooden chalets lining the shore, wood-frame barracks for workers' housing and containing construction-site facilities such as workshops and canteens. The only surviving buildings from this period today are the concrete lighthouse and the former Dussaud Company headquarters, which later became the French Consulate building and is now a Canal Museum.



Fig. 2.1 General view of the town from the lighthouse in 1870. Hippolyte Arnoux, photographer. (Source: ANMT 1995 060 1500)

2.2.2 Real-Estate Speculation and Densification: The Era of Income-Property Investment and the Wooden Verandas (1880s to 1920s)

From the 1880s onwards, the increase in canal traffic drew an influx of newcomers. At the lower end of the income scale were the many coal heavers who loaded ships in transit; at the higher end were brokers, contractors, and professionals who had come to settle permanently in Port Said. This population increase resulted in both the densification of buildings in the European quarter, known as *Afrang* at the time, and the complete restructuring of the Arab quarter (Piaton, 2017, p. 5-7).

In the *Afrang* neighbourhood, private investors purchased the land on which the earliest structures had stood; in order to build large rental apartment dwellings made of masonry stone, with wooden verandas (Fig. 2.2). The same phenomenon was observable in the Arab neighbourhood, but the plots of land were on average, six to eight times smaller. The unique typology of these structures was partly due to municipal rules specific to canal cities. In fact, the *Domaine Commun*

negotiated exceptional zoning regulations and municipal codes with the Egyptian government. One example is the code regulating the construction of arcades on the street level of apartment buildings. In 1888, the Egyptian government authorised the construction of such arcades along streets that were over 15 meters wide in Egypt's major cities. Port Said officials did not like this provision enabling landowners to extend their property onto the public thoroughfare, but they managed to negotiate limits by distinguishing between streets where the arcades were mandatory and streets where they were only tolerated (Piaton, 2016b, p. 312, 2017, p.8).



Fig. 2.2 Slavick House, 1892. Emilio Scarpa Architect. Hippolyte Arnoux, photographer. (Source: ANMT 1995 060 1500)

From 1885 to 1904, the offices of the *Domaine Commun* put the finishing touches on a vast plan to extend the city northwards. As silt accumulated on the western bank of the breakwater at the entrance

to the port, plots of land reclaimed from the sea, known as ‘from the beach’, were surveyed and registered. Although these plots hit the market by 1904, construction did not begin in earnest until the end of the First World War (Fig. 2.3).



Fig. 2.3 General view of the grounds of the beach, 1910s. (Source: ANMT 1995 060 0058)

2.2.3 Extension Northwards and on the Asian Side (1920-1960s)

After the First World War, the city underwent another growth phase. Land reclaimed from the sea to the north of the European quarter was gradually covered with buildings. Due to a shortage of property, plots that were originally zoned for single-family dwellings were finally allotted to apartment buildings. These properties were still marked architecturally by the veranda feature, which was completed in concrete in later years. Starting in the mid-1930s, a belated taste for Art Deco (streamline) became manifest, in the form of a few important buildings such as the port police headquarters, the Casa d'Italia, and the Crédit Lyonnais bank head office. The Collovitch, Aquilina, and Helpman buildings were also constructed in this style (Collectif, 2006, p. 174-189). Alongside the city's expansion northwards, a new neighbourhood called Port Fuad was developed on the Asian bank of the canal at the request of the CUCMS (Piquet, 2005).

The spatial segregation of early Port Said was solely based on ethnic identity, as is reflected by the place names. Over time, this was gradually replaced by a system of segregation based on income level and social class. As a result, the owners of the apartment buildings located on the newly reclaimed beachfront, where the city's wealthiest inhabitants resided, might be Egyptian, 'Levantine', or European, as attested by the names and nationalities recorded on property deeds and other official documents (Mohamed Leheta, Tewfiq Awad, Cépeck, Bouvier & Dormoy, etc.). Similarly, the governor-general's palace and the major infrastructure projects initiated by the Egyptian administration, such as hospitals and schools, as well as the new buildings constructed by the European communities like the British hospital, the French and Italian schools, churches, etc., were all situated on prime beachfront land along the new coast where Kitchener Street (now called 23 July Street) had been laid out (Fig. 2.4).

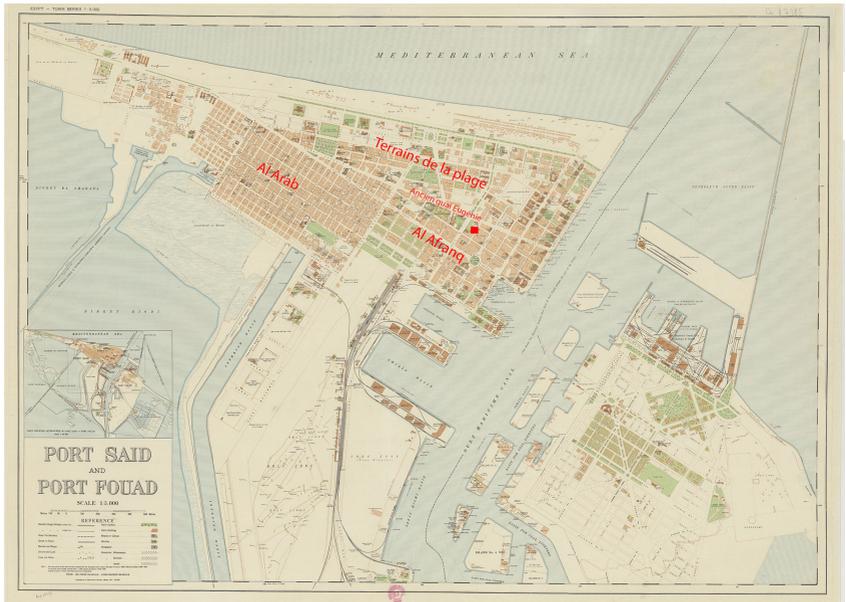


Fig. 2.4 General plan of Port Said and Port Fouad, Survey of Egypt, 1937. (Source: Bibliothèque nationale de France, Département Cartes et Plans, GE B-7285)

By the early 1950s, all the plots in the central neighbourhoods had been developed. Encouraged by the Nasser leadership, the city began to expand again. This time, the expansion reached westwards, beyond the Arab quarter. The old shanty-towns of the El Manack neigh-

bourhood were replaced by housing projects for low-income residents (Dori, 1956a, p. 329; Colonas, 2016). In the early 1960s, tourist accommodations in the form of bungalows³ and small apartment buildings replaced the famous wooden beach huts that were burned down in 1956 during the Suez War (also known as the Tripartite Aggression). However, the 1967 Israeli-Arab War brought this development to an end when the Canal was closed and the civilian population was evacuated. These communities did not return to the city until 1975, when the Canal reopened.

2.3 Markets in the European Quarter

Throughout the decades, trade has been at the heart of the city's economy. Initially it was connected to supplying ships in transit with coal, fuels and food, etc. Later, it developed to cater to visitors. In the early 20th century, Port Said was particularly renowned for its countless curiosity shops dealing in Egyptian and Far Eastern antiques, such as Au Nippon, Au Mikado, Au Japon, Au Ramswany, Bazar Oriental and African Bazar. These shops were located along Rue du Commerce (now called Abd-el Moneim Riad Street) (Fig. 2.5). Little is known about the history of the food markets where local people once shopped. However, the maps produced by the CUCMS and deeds of sale pertaining to *Domaine Commun* plots (Piaton, 2012) provide some clues about the location of the most significant marketplaces, and their respective owners.



Fig. 2.5 View of Rue du Commerce in the 1900s, photograph. (Source: InVisu Collection)

3. Torn down in 2008 (Colonas, 2016, p. 104-106).

2.3.1 Of Places and Proprietors

One of the earliest maps of the city, drafted in 1862, refers to an outdoor 'Arab Market' located behind the CUCMS chalets in the quarter where the Europeans lived. The first market building in the neighbourhood appeared on the 1869 map (Fig. 2.6).

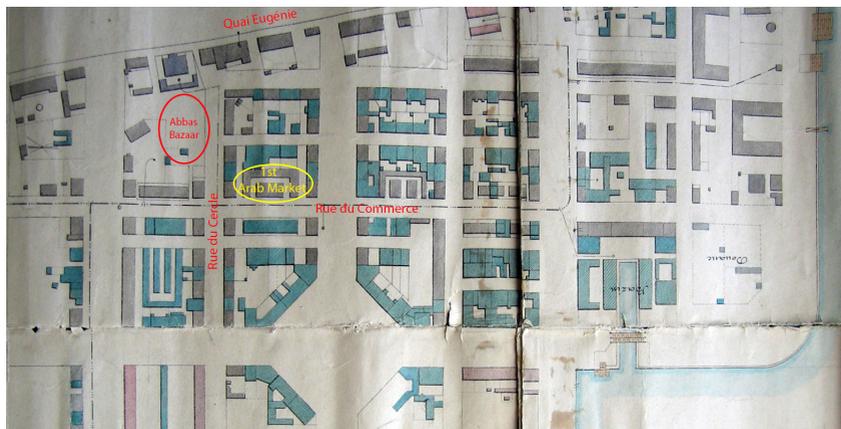


Fig. 2.6 General plan of Afranq Quarter, 1869. (Source: ANMT 1995 060 5506)

Described as a 'bazaar with a roof', it was the property of the CUCMS and had entrances on Rue du Commerce. Thanks to a drawing made by the engineer Laroche in 1868, we know exactly how the building was shaped. The central market hall was surrounded on three sides by a U-shaped building, containing a total of 24 shops on the ground level⁴ (Fig. 2.7). In 1875, a *Domaine Commun* deed of sale stated that the market building was sold to Leonidas Mavroïdis and Giorgi Zaris, who were Greek investors buying other plots of land in the neighbourhood at that time⁵. The same year, another deed was signed for the sale of the plot of land located along Rue du Cercle (later renamed Rue Pharaon and currently known as Salah el Din Street), on which Bazar Abbas stands today. The attached report to the deed explains that 'because the occupants of the Arab Bazaar sold to Mr. Mavroudīs were unable to reach an agreement with the buye', the Egyptian governor of Port Said intervened on their behalf to assign the new plot of land for the construction of a market building⁶.

4. Release of buildings and shelters to the Compagnie estate, 18 March 1868. (ANMT 1995060 3576).

5. Deeds of sale dated 1 May and 1 July 1875 (ANMT 1995060 3576).

6. Deed of sale dated 25 June 1875 (ANMT 1995060 3576).

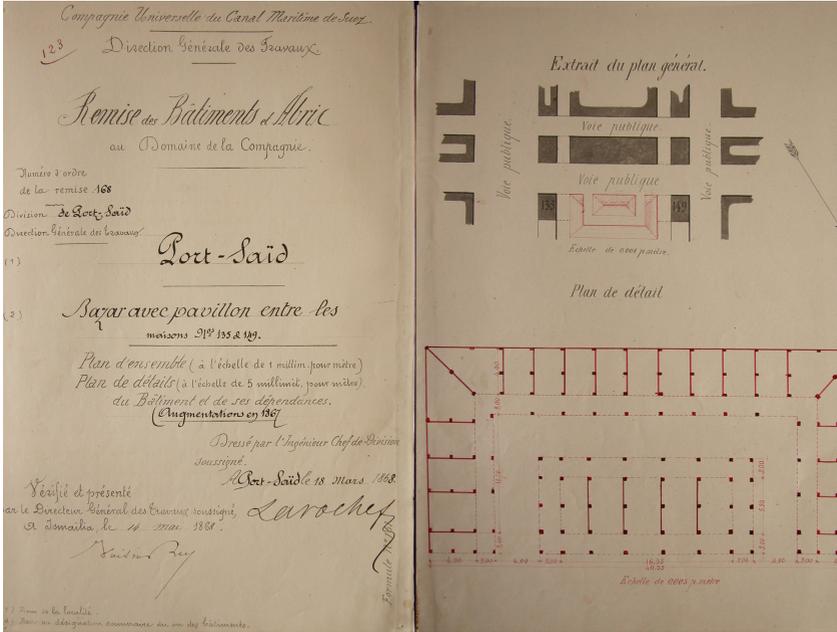


Fig. 2.7 Drawing of the first Arab Market, 1868. (Source: ANMT 1995 060 3576)

This property was purchased in 1875 by El Hadidi Neckchara, an Egyptian investor from a family that had settled in the town of Damietta before the Suez Canal was dug⁷. However, there is no evidence that Neckchara conformed with the order to build the market on that site at that time. In fact, two sources suggest that the market building was constructed later, by a different owner. Firstly, the medallion above the entrance to the market building bears the date 1891. Secondly, a deed of sale from 1901 states that the old Neckchara property had already been purchased by the partners Loïsidis and Leheta. Polycarpe Loïsidis and Ali Leheta Bey were among Port Saïd’s most prominent citizens at that time. Loïsidis, a Greek national, was an insurance company agent, a trader of flour, hardware and furniture, a ship chandler, a shipping company agent and vice-consul for Portugal. Ali Leheta Bey, an Egyptian national, was a landowner and merchant who would later become an important politician. He served as a member of the Municipality between 1911 and 1926 and as a member of the Egyptian Parliament

7. The name Nakshara or Nqshara, (in Arabic, نقشاره) originally referred to a bird. I am deeply grateful to Dr. Ahmed Nakshara for providing me with this information about his family name.

in 1924. He was also president of the local Zaghlulist committee. It was unusual for partnerships to cross ethnic lines in this way, uniting an Egyptian and a Greek. However, this is indicative of the ties that could be formed between the local and foreign merchant elites for the purpose of acquiring property. This partnership attests to the presence of Egyptian landlords in the European quarter by the end of the nineteenth century. Their numbers would increase after World War One.

In 1940, Bazar Abbas was one of the assets belonging to 'Wakf feu Osman bey Ghandar', as evidenced by a letter from the *Waqf* director, Abdel Hamid Assal, addressed to the French Consulate. The Consulate stood on land bordering Bazar Abbas to the north. Assal wrote to complain about the consular tree branches overhanging on his land, and the French Consulate raised the issue of unpleasant smells from the market and spoiled garbage⁸.

Like the Leheta family, the Ghandars were Egyptians landowners with significant property holdings in both the Arab and European quarters. One family member, Mohammed Bey Ghandar, was elected to the Municipal Commission in the 1920s. While the exact opening date of Bazar Abbas inside the *waqf* remains unclear, the minutes of the Municipal session dated 4 October 1924 indicate that Ghandar had already expressed an interest for the Bazar Abbas⁹. At that meeting, the municipality was considering the construction of a new market building to replace the bazaar, which was deemed a threat to public health¹⁰. Ghandar argued that this new building should be constructed on the same site as Bazar Abbas. He explained that if a new plot of land was selected, 'the owners of this bazaar will suffer irreparable financial loss because their building would be deserted'. However, he was the only councillor to defend the project, which was rejected by the other members as being too costly. The construction of the municipal market building on the plot where it still stands today (near Ferial Square) was completed in 1930 by a Swiss architect-engineer named Justin Alberti. That year, Bazar Abbas definitively lost its central position in Port Said's business geography. Nevertheless, in 1956, an observer noted that 'the Municipality, in the grip of a new enterprising spirit, under the aegis of an energetic Governor and an active Director of the Municipality,

8. Letters dated July 1940 (CADN 542PO/1-125)

9. Minutes of the regular meeting of the Port Said Municipal Council dated 4 October 1924 (ANMT 1995060 1197).

10. 'Bazar Abbas has just been closed for public-health violations', Minutes of the regular meeting of the Port Said Municipal Council dated 13 October 1923 (ANMT 1995060 1197).

attempted to renovate old Bazar Abbas, which is now a bit cleaner, although not yet worthy of a modern city'. (Dori, 1956b, p. 35).

2.3.2 The Architecture of Bazar Abbas

The construction of the market building, which was completed in the early 1890s, is typical of a period during which new city-planning codes were established. The property owners were able to take advantage of the regulations passed in 1888 regarding the construction of arcades. The Rue du Cercle was one of the streets where arcades were permitted. The owners and the architect occupied the street by building a line of arcades (four meters deep), unifying the three covered buildings laid out perpendicular to the street. Nevertheless, as is seen in the old photographs (Figs. 2.8, 2.9), the building clashes with its surroundings. It was the last structure built on the Rue du Cercle; all the other plots were already occupied by a row of older buildings, behind façades adorned with tall wooden verandas only two meters deep.



Fig. 2.8 'Coin du marché', 1917. View of the bazaar from the south side of Rue du Cercle. Amédée Eywinger, photographer. (Source: Collection ECPAD/Défense)



Fig. 2.9 View of the bazaar from the north side of Rue du Cercle, postcard. (Source: InVisu collection)

Although the market-building plan is similar to that of the 1860s Arab market (with a central hall opening onto the street, and a U-shaped formation of three surrounding buildings with space for 36 shops), its upper level was quite unique. The upstairs level of the two lateral wings of the U and the building in the back of the plot was converted into a hotel. Its 40 rooms were accessible via two staircases, with wooden galleries and walkways (AlSadaty, 2022). Even though the layout may be reminiscent of a typical caravanserai, the main concern here was the need to maximize return on the real-estate investment. This is because the rooms do not appear to be connected to the ground-floor shops. Moreover, the 'Hotel' sign painted next to the entrance is quite separate from the bazaar sign (Fig. 2.10). Two passages along the northern and southern edges of the plot, permitted access to additional rows of shops, and are another indication of the land use optimization at this time.

Our sources never mention the architect's name. However, based on our observations of other contracts assigned to the few architects with offices in Port Said, we can make an educated guess. The Coronis House on Sultan Mahmoud Street, and the Slavik and Leheta Houses, both located on the Canal shore, were three large masonry apartment buildings with wooden verandas constructed in the same period, and still standing today (Fig. 2.11).



Fig. 2.10 View of the former headquarters of the Dussaud company (then the French Consulate), 1900s. On the left, the side arcade of the Bazar Abbas. (Source: ANMT 1995 060 0058)



Fig. 2.11 View of the Slavik and Leheta buildings, Shokri Al Kowatli Quay. (Photo: Author, 2011)

The first two were the work of the Italian architect and engineer Emilio Scarpa¹¹ (Dori, 1956b, p. 16). On the basis of stylistic criteria, the third building has also been attributed to Scarpa. Like the Bazar Abbas, all these buildings feature neo-classical elements on the façade, particularly on the doors and windows (lintels, cornices and crowns). In addition, several details, both technical and decorative, also resemble those implemented for the Bazar Abbas: including the designs of the balcony brackets, balustrades, and the wooden lambrequin; the technique used to construct the wooden ceilings, visible in the buildings' verandas and in the central hall of the market, and the way reliefs are carved on the pediment. Taken together, these features enable us to attribute the Bazar Abbas to Emilio Scarpa.

2.3.3 An Arab Market or a European One?

As we have seen, the market building's ownership records demonstrate that Egyptian economic elites were among the first investors in the European quarter. Other factors, such as the signs on the market building and the ethnic identity of the merchants and customers, demonstrate the porous nature of the border between the two quarters, *Afrang* and *Arab*.

For example, the sign on the front of the building features two names, one in Arabic and one in French: 'Sūq 'Abbās' and 'Bazar Abbas'. From the outset, it seems that the owners wanted to emphasize the 'Oriental' nature of the new marketplace. The intention was clearly to rebuild the 'Arab market' of the 1860s. Similarly, to the public officials who equipped the city with infrastructure during the same period¹², the two private investors, Loïsidis and Leheta, asserted the Egyptian identity of their marketplace by naming it in honour of the new Khedive, Abbas II, who reigned from 1892 to 1914. Moreover, the pediment above the main entrance is crowned with an *alem* adorned with a crescent and star, symbolizing Egypt's connection to the Ottoman Empire.

However, little is known about the shopkeepers who ran the 36 stalls and the small central hall (AlSadaty, 2022). Between 1897 and 1924, fewer than a dozen were listed in Egyptian directories, including a few grocers, two butchers, and a baker – all of whom were Greek or Maltese.

11. E. Scarpa's name appears in professional directories, where he is listed as an engineer or architect. After him, his son Spiridon, also known as Spiro Scarpa, practiced in Port Said.

12. For example, Abbas Mosque, Abbas Street, Abbas Square (today's Ferial Garden), and Abbas Quay, south of Sherif Basin.



Fig. 2.12 Three different captions for the same postcard. View of the bazaar from the south, postcards. (Source: InVisu collection)

Most of the market stalls were probably too modest or informal to have advertised in print. On postcards and photographs from this period, the people depicted in the vicinity of the marketplace usually appear to be engaged in minor street trades specific to the working-class neighbourhoods in Egyptian cities, such as basket carriers, wool or cotton carders, ironers, and produce sellers, rather than European merchants and customers.

The atmosphere is not at all reminiscent of a street in a European city. Various captions printed on postcards, published by Isaac Béhar in the early 1900s, attest to the ambiguity surrounding the name of the place: 'Marché européen/European Market', 'Marché arabe/Arabian Market', and also 'Le Bazar/The Bazaar' (Fig. 2.12). Photographs taken by Amédée Eywinger in 1917 for the French Army records¹³ were captioned 'un coin du marché' (Figs. 2.8, 2.13); another postcard, published by the Popular Business Agency, reads 'Market' in English and 'Bazar' in French (Fig. 2.9).



Fig. 2.13 View of the bazaar facade from Babel Street, 1917. In the foreground, a French soldier and young cotton carders. Amédée Eywinger, photographer. (Source: Collection ECPAD/Défense)

13. Archives de l'Établissement de communication et de production audiovisuelle de la Défense (ECPAD), Ivry-sur-Seine.

The photographers may have cherry-picked their photographs to make their views of Port Said seem more exotic, preferring scenes without Europeans. Nevertheless, the images seem to accurately depict how the public space was appropriated by the two communities.

2.4 Conclusion

As Mercedes Volait clearly demonstrated in her study of Cairo and Alexandria (Volait, 2009), the current infatuation with the heritage of the late 1890s and early 1900s in Port Said is part of a broader phenomenon in Egypt. Since the late 1990s, both the government and ordinary citizens have been enamoured of a period known as the 'Belle Époque'. The recent restoration of Bazar Abbas is material evidence of this phenomenon. Indeed, the building's name alone positions it within two significant periods of Egyptian history: that of the Khedivial dynasty and that of the early resistance to British occupation, symbolised by Khedive Abbas. Moreover, the restoration provides an opportunity to re-immense ourselves once more in the urban and architectural history of modern Egypt and gain a better understanding of its diversity. It is a history in which the protagonists are just as fascinating as the forms that were produced.

Bazar Abbas is one of the structures that has no equal. It is neither a caravanserai nor a European or Arab market building. Rather, it is the product of a dense network of interactions, closely bound to the ways space was negotiated in the context of imperial domination.

References

- Abouelmagd, D., & Elrawy, S. (2022). Cultural heritage and sustainable urban development: The case of Port Said city in Egypt. *Cogent Social Sciences*, 8(1). <https://doi.org/10.1080/23311886.2022.2088460>
- Alsadaty, A. (2022). Bazaar Abbas, Port Said, Egypt: A nineteenth-century market building and centre of cultural exchange. In N. Hamza (Ed.), *Architecture and urban transformation of historical markets: Cases from the Middle East and North Africa*. Routledge.
- Baller, I. (2017). Strategies for the preservation of the heritage of the Suez region and Port Said as World Heritage Site. In H. Abouelfadl, D. ElKerdany, & C. Wessling (Eds.), *Revitalizing city districts: Transformation partnership for urban design and architecture in historic city districts* (pp. 35–51). Springer. https://doi.org/10.1007/978-3-319-46289-9_3
- Colonas, V. (2016). Architectures de la communauté grecque des villes du canal. In C. Piaton (Ed.), *L'Isthme et l'Égypte au temps de la Compagnie universelle du canal maritime de Suez (1858–1956)* (pp. 83–108). IFAO.
- Dori, L. (1956a). Esquisse historique de Port-Saïd. II. Port-Saïd après l'inauguration du Canal (1869–1900). *Cahiers d'histoire égyptienne*, VIII(1), 1–46.
- Dori, L. (1956b). Esquisse historique de Port-Saïd. III (1900–1914). *Cahiers d'histoire égyptienne*, VIII(4–5), 311–342.
- El-Kadi, G., & Bruyas, F. (1995). Le devenir d'une ville de la Méditerranée: Port-Saïd, de la mondialisation à la régionalisation. *Cahiers de la Méditerranée*, 51, 21–43. <https://doi.org/10.3406/camed.1995.1146>
- El-Tabbakh, M. (2012). There is no such thing as heritage. *Cairo Observer*. <https://cairoobserver.com/alTabbakh-redefining-heritage>
- Fouad, S. S., & Sharaf Eldin, S. (2020). Public perception affecting the significance of urban heritage: A case study of Port Said historic quarters. Wiado-mości Konserwatorskie. *Journal of Heritage Conservation*, 61, 17–30.
- Megahed, N. A. (2014). Heritage-based sustainability in Port Said: Classification of styles and future development. *Archnet-IJAR: International Journal of Architectural Research*, 8(1), 94–107. <https://www.archnet.org/publications/9097>
- Noweir, S. (2005). Devenir patrimonial contre développement urbain: L'exemple de Port-Saïd. *Autrepart*, 33, 109–126. <https://shs.cairn.info/revue-autrepart-2005-1-page-109?lang=fr>
- Piaton, C., Peyceré, D., & Godoli, E. (2012). Building beyond the Mediterranean: Studying the archives of European businesses (1860–1970). *Honoré Clair*. <https://doi.org/10.4000/books.inha.12579>
- Piaton, C. (2012). Deeds of sale from the Suez Canal Company townships. *ABE Journal*, 2. <https://doi.org/10.4000/abe.580>
- Piaton, C. (2014). Les phares d'Égypte: Laboratoire et conservatoire de l'ingénierie européenne du XIXe siècle. *ABE Journal*, 5. <https://doi.org/10.4000/abe.704>
- Piaton, C. (2016a). Architecture patronale dans l'isthme de Suez (1859–1956). *Annales islamologiques*, 50, 11–53. <http://journals.openedition.org/anisl/2112>
- Piaton, C. (2016b). Urbanisme dans l'isthme de Suez. Concéder et partager: Le domaine commun de Port-Saïd (1869–1956). In C. Piaton (Ed.), *L'Isthme et l'Égypte au temps de la Compagnie universelle du canal maritime de Suez (1858–1956)* (pp. 303–332). IFAO.
- Piaton, C. (2017). Port Said: Cosmopolitan urban rules and architecture (1858–1930). In H. Abouelfadl, D. ElKerdany, & C. Wessling (Eds.), *Revitalizing city districts: Transformation partnership for urban design and architecture in historic city districts* (pp. 3–14). Springer. https://doi.org/10.1007/978-3-319-46289-9_1
- Piquet, C. (2005). Port-Fouad: New-Harmony dans l'isthme de Suez. In D. Barjot (Ed.), *Le travail à l'époque contemporaine* (pp. 187–203). Éditions du CTHS.
- Piquet, C. (2008). *La Compagnie du canal de Suez: Une concession française en Égypte, 1888–1956*. Presses de l'Université Paris-Sorbonne.
- Institut français d'archéologie orientale (IFAO). (2006). *Port-Saïd, architectures XIXe–XXe siècles*. IFAO.
- Volait, M. (2009). La "Belle Époque": Registres, rhétoriques et ressorts d'une invention patrimoniale. *Égypte/Monde arabe*, 5–6, 33–68. <https://doi.org/10.4000/ema.2891>

03. Port Said

Architecture of Different Cultures

Dina Elmazzahi

Abstract

The historic architectural setting of Port Said, a port city, is distinguished by a blend of late 19th- and 20th-century building types and styles. The city has served as a significant interchange of cultural and architectural influences that have shaped its urban landscape, which are evident in the various structures throughout the urban areas. The built fabric of the city showcases remarkable residential typologies that demonstrate a cohesive architectural character, bridging the European and Arab quarters. Over time, these residential styles have evolved to adapt to accommodate climatic conditions, European lifestyles, Islamic decorative elements, and local traditions. Additionally, Port Said features a variety of special-purpose structures, serving religious, commercial, and cultural functions, which further contribute to the city's unique character.

This paper therefore examines the architectural significance of Port Said's historical cores and their notable buildings. To define these various residential structures, the focus will be on several key aspects: building scale, form, materials and details. The study particularly highlights the remarkable and integral role of wooden verandas, also known as *taracina*, in the city's architectural context. It also illustrates the design variations of these balconies and the urban narratives associated with different locations throughout the city.

Keywords: Port Said, residential typologies, wooden balconies, collective memory

3.1 Introduction: Identifying Historic Built Context and Its Associated Narratives

Throughout history, architecture has served as a reflection of the social fabric of a society, embodying its values, achievements and eventual decline. This is evident in everything from monumental structures to residential buildings that shape urban environments. Studying historical architecture in the context of the present day can provide valuable insights into the people who inhabited these spaces over time. Therefore, it is essential to recognise and understand historic built environments. A collection of heritage buildings and sites showcases tangible resources, including architectural styles and materials, as well as the overall significance of the structures. Additionally, there are intangible elements that highlight the cultural and social influences that have

shaped these places throughout history (ICOMOS, 1996; Vangelatos, 2019). The process of identifying, recognising and interpreting built heritage is essential for assessing its valuable assets and associated attributes. This process also fosters interest and engagement among people regarding future preservation efforts and their understanding of inherited architectural heritage. In order to enhance our knowledge and advance our understanding of cultural heritage, it is crucial to define the various values that characterise historic structures (ICOMOS, 1996). Character-defining aspects are the essential elements that convey the meanings and significance of a site. Without these elements, the importance and values of the place would be difficult to understand.

There are countless ways to categorise character-defining elements. Classifications provide a convenient means of grouping similar features and can help to capture the various aspects that contribute to a site's heritage value. They also help to identify valuable assets that should be preserved and guide conservation decisions regarding the historic site. Character-defining elements can be grouped into the following categories: style, scale, massing and composition, interior layout or exterior spatial configuration, functional features, materials and craftsmanship, as well as the customs and traditions that were or continue to be associated with the site and its broader setting (Parks Canada, 2006). Ideas and habits are fundamental components of culture and heritage, fostering cultural affiliation in the present that can be historical, political, ethnic, or related to different ways of living. These encompass collective memories and meanings associated with heritage that are connected to chronological aspects of sites (de la Torre, 2002).

This paper outlines the architectural significance of Port Said city, characterised by its unique structures and cultural impact. It explores the importance of Port Said's historical residential cores and highlights notable buildings with specific functions, including religious, commercial, and cultural structures. A qualitative approach is employed, incorporating a literature review, desktop research and field observations. In order to define the various residential structures, the study will focus on several key aspects: building scale, form, openings rhythm, materials, and details. It particularly emphasises the wooden verandas, known as *taracina*, which are a remarkable and integral component of the city's architectural landscape. Additionally, the study illustrates the activity patterns and collective memory associated with these balconies

in different locations throughout the city.

3.2 Overview on Architectural Significance of Port Said

Port Said began as a company town in 1859. Initially, it was laid out in a linear pattern centred around a harbour basin, splitting the city into two main quarters. For the first 30 years, the city consisted of temporary settlements with single-story houses that were gradually replaced by the 1880s, when the Arab area was rebuilt in 1885. The only remaining structure from the first phase of Port Said is the lighthouse, which has been obsolete for many years. The lighthouse is recognised as one of the first buildings to be constructed using reinforced concrete. The scarcity of available building materials led to the innovative use of reinforced concrete. Importing cement and metal rods by ship was more practical than transporting stones. This shortage of building materials probably contributed to the development of a unique building typology that shaped the city's urban character – the use of wood in a highly elaborate and homogeneous way (Baller, 2017; Piaton, 2012).

Strategically located at the northern entrance of the Suez Canal, Port Said displays a rich architectural heritage that reflects its diverse influences and its role as a vital trade hub. The city's buildings embody a blend of various styles, showcasing the evolution of architectural design over time as outlined in Figure 3.1 and Appendix A. From its pre-colonial era structures to post-colonial and contemporary designs, Port Said's physical fabric stands as a testament to the interplay between history, culture and architecture, as evident in its multiple purpose-built structures. The historical cores of Port Said comprise the European quarter, extending towards the Mediterranean, and the Al-Arab quarter. The latter is the former village of Gemila, occupied by indigenous inhabitants as a closed sector.

The architectural identity of the old city cores addresses local climatic and diverse socio-cultural aspects. These include dwellings, schools, various religious buildings and markets, as shown in Figure 3.1. Despite their distinct character, the European and Al-Arab quarters share a typical architectural style characterised by timber balconies, wooden and steel elements, decorative doors and windows, and arcades. The cantilevered floors or terraces, which dominate the façades, are supported by struts and simple columns or decorated arches. The rows of balconies provide Port Said's dwellers with suitable living conditions by facilitating sunlight and airflow, as well as adapt-

able spaces that differ in design, level of openness, and materials to meet the needs of the local community and each area's social fabric. Moreover, the building facades are defined by a uniform pattern, split into a vertical and horizontal grid. This linear arrangement comprises the openings, ornaments and architectural features.

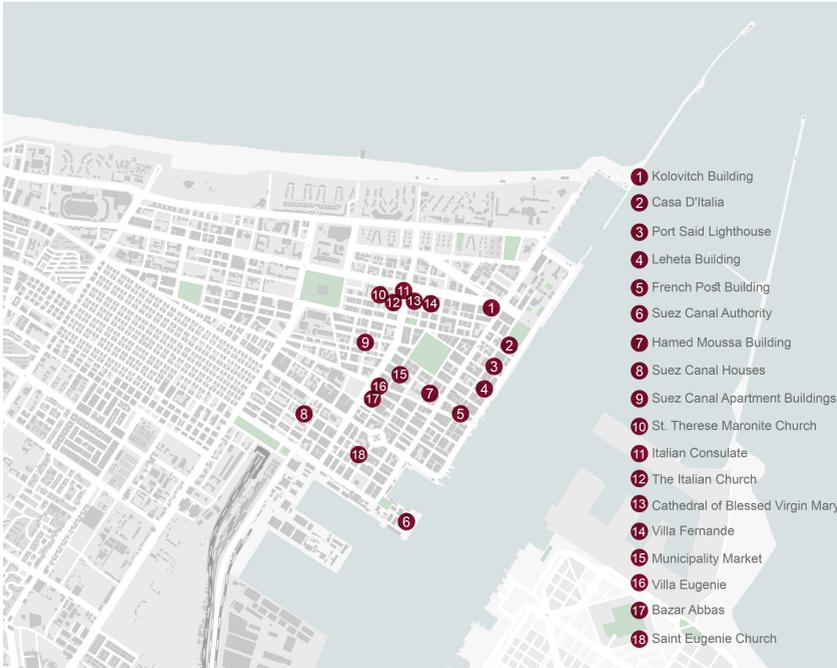


Fig. 3.1 Listed and significant structures in Port Said, see Appendix A. (Drawing: Author, 2025 adapted from [historicportsaid](https://historicportsaid.com/heritage/), <https://historicportsaid.com/heritage/>)

3.3 European Quarter

3.3.1 Background

The European Quarter was mainly inhabited by foreigners and high socio-economic level Egyptians working for the Suez Canal Company or large trading companies. The quarter's urban fabric is distinguished in character by its European-style radial main roads, which lead to urban squares and linear building blocks. Each block is divided into large plots of land with detached buildings and villas. These building plots were distinctly larger than those in the Arab quarter, creating a sense of spaciousness. Furthermore, the area comprises a hierarchy of open public spaces and gardens that serve as venues for recreation, social

gatherings, and cultural expression (ElKerdany, 2017). Port Said's built fabric, particularly that of the European quarter, is normally defined by arcades along its main streets and wooden balconies along secondary streets. This architectural identity dates back to 1888, when the Egyptian government introduced new building regulations requiring the construction of arcades along the main streets of the country's largest cities. In Port Said, this change was introduced to replace traditional verandas. However, the French Suez Canal Company was permitted to continue building verandas on secondary streets until a City Council vote in 1921 prohibited this practice. This regulation had a significant impact and has since shaped the architectural heritage of the area (Piaton, 2017).

3.3.2 Architectural Character

The European quarter's distinctive built environment comprises a diverse range of buildings with various styles and types, reflecting the period in which they were constructed. It comprises significant commercial structures, such as covered markets, cultural venues and religious buildings including mosques and churches, which have become urban symbols and serve as orientation points within the city's urban fabric. The most remarkable structures in the area, however, are the residential architecture which date back to the late 19th and early 20th century, including the Suez Company housing built specifically for its employees.

A) Late 19th Century – 1921

1. Suez Company Employees' Housing

In 1858, in preparation for the start of construction, the Company provided cabins for its workers. It then opted for wooden structures, supplied by Victor Fréret's firm in Fécamp, Normandy, to accommodate workers at Port Said beach. A special cabin was also built for Ferdinand de Lesseps in Ismailia. Once the canal had opened, carpenters and masons worked on-site using imported materials, including Nordic wood, lime from Teil and tiles and bricks from Marseille. Over time, the use of locally produced materials increased, including Egyptian cement bricks, rubble stone, and 'Sornaga' tiles. However, by the early 1900s, the Company's method of awarding construction contracts for housing and offices allowed little room for innovation as it dictated the use of materials, including rough stone and marl sourced from its

own quarries. At the invitation of the Suez Company, European companies established in Egypt constructed residences in Port Said. In 1912, Fumaroli built 50 homes for European workers, followed by an additional 60 homes in 1921. Additionally, Lanari & Dessberg also built 44 homes for indigenous workers in 1919, along with two apartment buildings for canal pilots. The traditional stone houses built for European workers in the 1920s were generally inspired by French industrial models from before the First World War. In contrast, towns built for the indigenous population followed the community organisation model pioneered by the Empain company in Heliopolis, which is located in the suburbs of Cairo (Piaton, 2012).

Urban green spaces are a consistent feature across different types of housing for Suez Company employees. Figure 3.2 shows the European single-family homes and multi-storey buildings which accommodated high-level employees, most of whom were foreigners. In contrast, the semi-detached houses, characterised by their pseudo-Moorish style, were designated for lower-ranking workers. These styles maintain a precise balance and symmetry, which is especially noticeable in administrative buildings, such as the Suez Company headquarters, the port workshops, the Post Office, and the Police Station located near the port. These structures project a strong sense of sovereignty, governance, and control. Additionally, the tribunal court and various commercial buildings, including department stores and covered markets, further illustrate this theme. It has been suggested that the incorporation of Oriental and pseudo-Islamic ornamentation on some government buildings was a deliberate choice intended to make them more appealing to residents. Architectural features such as decorative borders around windows, crenelation along rooftops, wooden balconies supported by struts and Arabic motifs all contribute to this aesthetic (ElKerdany, 2017).

2. The Residential Typologies of European Quarter

The urban parcels of the European quarter exhibit dwellings from the late 19th- and early 20th-century, which are typically three or four storeys high. The area's architectural significance is shaped by prominent components that define its built identity, such as arcades and wooden verandas. These arched walkways appear along the main streets and squares, reminiscent of those found in the streets of Cairo, designed to resemble the architecture of Italian and French cities. All the east-west



- - - - - Multi-storey apartment building
 - - - - - Single-family & Semi-detached houses

Fig. 3.2 Port Said map in 1937 by the Egyptian survey authority. (Source: Egyptian Survey Authority, 1937)

streets were lined with covered walkways formed by extended wooden balconies supported by wooden poles. These balconies protected the southern facades from the sun, while also creating symmetry and harmony by offering the same protection to the northern facades. Only the wider east-west streets, such as Eugenie Street, featured arcades. In contrast, north-south-oriented streets alternate and change in form, so that a street with arcades follows a street with wooden balconies. Moreover, the buildings' datum hierarchy is defined by elevated foundations due to the risk of flooding and water inundation during periods of high-water levels in Lake Manzala. The ground floors are approximately two metres above the ground level, while the balconies begin on the first floor at a considerable height above the pavement. The vestibules consist of a corridor leading to a 10-step staircase, which in turn leads to the shell of the main staircase. This staircase is lit from the outside through a window that allows light to penetrate within (Crosnier-Leconte et al., 2006).

In terms of interior layout, each floor generally consisted of two symmetrically arranged apartments surrounding the staircase, with

their doors facing each other. Great attention was paid to ornamentation, with white marble steps and cast metal handrail that were often decorated with an elegant pattern and accented with coloured glass. The high ceilings were both spacious and functional, featuring two wing windows with shutters that opened onto balconies. The rhythm of the openings presents a linear or segmental shape that follows the general module and building proportions. The walls were generally constructed of burnt brick and covered with a thick, matt lime mortar, which was often painted with a yellowish colour. The back walls were made of brick or sandstone blocks with wooden planks stacked horizontally or diagonally for structural support, allowing for the positioning and rigidity of the stacked stones or concrete (Crosnier-Leconte et al., 2006).

The architecture of the European quarter is characterised by the integration of Western styles with local attributes and Oriental-style elements. The timber verandas give the streets a unique homogeneity and special atmosphere as shown in Figure 3.3; they are considered the exterior equivalent of *mashrabiyas* and the interior shaded areas of Ottoman courtyard houses. They are embodied by diverse, distinct features and are inspired by Islamic ornaments which were at times fabricated of wood or iron. Examples include different forms and designs of angle braces, railings, poles, and lambrequins, as seen in Figure 3.4 (Baller, 2017). The clear vertical and horizontal articulations showcased in the pattern lines of the columns, structural components and decorations respect the overall proportions and define the architectural style.

Correspondingly, the residential buildings have an environmental value that responds to the city's climate conditions, as showcased in the arcades, which provide pedestrians with sheltered spaces in which to stroll and cross the streets, offering protection from the sun and rain. On the floors above, spacious balconies mirror the vast shaded areas created by the colourful stucco facades. Likewise, other streets feature covered walkways defined by facades adorned with a continuous row of balconies that protrude two meters outward and are supported by a series of wooden columns placed on the pavement, with lengths ranging from 5.60 meters to 6.10 meters. These balconies add extra space to the apartments, while also offering protection from the weather and providing better lighting with well-shaded and ventilated spaces inside the apartments (Baller, 2017; Crosnier-Leconte et al., 2006).



Fig. 3.3 The second skin wooden balconies in the European quarter. (Photo: Author, 2025)



Fig. 3.4 Wooden and iron details of angle braces, railings, poles and lambrequins. (Photo: Author, 2023)

B) Late 1920s – 1930s

The built structures erected during this period paved the way for a subsequent era of architectural experiments, where reinforced concrete replaced stone, and especially, wood, which had become too expensive following the decision by the city to ban the construction of wooden balconies. These attempts were particularly prevalent in the area between Eugenie Street (Safiya Zaghloul) and 23 July Street. The neighbourhood flourished with the Art Deco architectural style in the late 1920s, as can be seen in Figure 3.5. Ferial Park Square is the best place to recognise the transition between Port Said's typical architecture, which can still be seen on the square's southern and eastern sides, and the new construction styles on the rest of its boundaries. Along Salah El-Din and Al-Gabarti Streets, the beautiful facades of 1930s buildings can be seen. These buildings were constructed using reinforced concrete and are painted and decorated with geometric motifs as well as fitted with prominent glass windows that surround their rooms. However, while concrete replaced wood, the original structure along with the designs



Fig. 3.5 The reinforced concrete buildings nearby Ferial garden. (Photo: Author, 2025)

of the arched arcades have been preserved. Similarly, the wooden columns that line and protect the pavements have been incorporated into these new construction materials (Crosnier-Leconte et al., 2006).

3.4 Arab Quarter

3.4.1 Background

The Arab Quarter originated as a slum in 1859. There was no oversight from either the government or the Suez Canal Company, until a disastrous fire prompted major redevelopment in 1884 (Piaton, 2016). It was mainly inhabited by the lower socioeconomic fabric comprising the canal workers, labourers and fishermen. In 1874, the company's services had created an urban plan for the entire area, following a uniform urban pattern. The entire land was subdivided into tiny plots, ranging from 30 to 50 m², according to rules set by the Common Domain, to be sold to the inhabitants. This was a way to permanently settle the workforce and, at the same time, control building alignments and ultimately recover on taxes. It is still possible to observe the impact of this

subdivision into smaller, more easily sellable plots, in its architecture (Piaton, 2017). These small parcels of land, which are adjacent to each other, form regular clusters of buildings, creating an urban fabric of two streets' width, with ten meters for the main roads and three meters for the secondary service roads. The main roads are lined with wooden arcades or covered passages, while the narrower ones are considered as alleys or backstreets. Figures 3.6 and 3.7 indicate that the ground floors open onto the streets and feature shops, while the upper floors are mainly residential units. The main streets are colourful, with a wide variety of goods. Usually, each street or a section specialises in a particular commodity. Additionally, the Arab sector lacks any open spaces or squares for gatherings or general activities (ElKerdany, 2017).

3.4.2 Architectural Character

The Arab Quarter, located to the west, has a different character to the European sector, but was constructed in a similar style. It is separated from the European area by Mohammed Ali Street. Figure 3.8 illustrates how the Arab quarter is bordered by arcaded roads, including Mohammed Ali Street, Eugenie Street and the 30-meter-wide Tallatine Street, which extends westward from De Lesseps Street. These design distinctions reflect the country's local customs and the modest material resources available to the population. Remarkably, the dwellings are approximately the same height as those in the European area, yet they tend to be much smaller in size. Every six to eight residential blocks in the Arab neighbourhood are roughly equivalent to one urban block in the European neighbourhood, where the building footprint occupies maximum plot coverage. Shopfronts line the facades of the buildings along these streets, while the entrances to the apartments are typically located on the sides of the buildings with narrower doors (Crosnier-Leconte et al., 2006).

The Arab area is distinguished by social cohesion among its inhabitants, which fosters a strong sense of community as they interact and share spaces in the alleys and urban pockets. The urban planning in Port Said has been successful because, despite structural differences, the city has maintained a unique homogeneity. The consistent application of its architectural style is evident in the facades, which adhere to similar standards and forms. The application of the wooden second-skin style in the facade is subject to the same standards and forms. However, the Arab neighbourhood is characterised by simpler

architectural components. For instance, the ceilings under the arcades are constructed of exposed wooden panels or are plastered without any decorative elements. The struts supporting the balconies are made only of wood. The entrance vestibules lack intricate carvings, and are instead covered with painted surfaces that create the illusion of marble at the bottom. Additionally, the steps of the staircases are made from a mixture of crushed marble and sand aggregate (terrazzo), rather than solid marble (Crosnier-Leconte et al., 2006).

One notable difference between the two neighbourhoods is the appearance of their balconies. While the balconies in the European neighbourhood are open and inviting, the balconies in the Arab neighbourhood are more closed off, preserving the family's privacy. Wooden verandas serve as a double-layered facade, providing residents with the flexibility of exposure or enclosure in varying degrees as seen in Figures 3.6 and 3.7. Sometimes, they are closed or screened off with glazed or wooden shutters, but more often, they feature wooden screens with a small central opening. This design enables those behind the grates to observe the street from above without being seen in return. The design is adaptable to different materials used over time, including wood, steel and concrete. It also allows for adaptation to local climatic conditions, cultural differences and changing building techniques. Wooden balcony shutters reflect the Baghdadi style, featuring wooden sticks arranged in diagonal and interlocking curves. An intricate sliding system is neatly positioned within the pillars supporting the balconies. This system enables the mashrabiyya to be raised or lowered according to the time of day or the residents' preferences. Additionally, traces of Art Nouveau sometimes adorn the iron ornaments on the balconies and their iron balustrades (Crosnier-Leconte et al., 2006; ElKerdany, 2017).



Fig. 3.6 The ground floors in the Arab quarter serve as shops open to the streets, while the upper floors are used for residential purposes. (Photo: Author, 2025)



Fig. 3.7 Wooden verandas typically have glazed or wooden shutters for enclosure, but commonly feature wooden screens with a small central opening. (Photo: Author, 2023)



Fig. 3.8 Mohamed Ali Street bordered by arched facades. (Photo: Author, 2025)

3.5 Taracina Urban Narratives

Balconies serve as tangible expressions of a collective memory, connecting communities' shared values, habits, historical events and social transformations of communities to specific places. As external building elements, they connect different domains, including public and private, individual and communal as well as the indoor and outdoor (Tuna Ultav, 2019). Accordingly, as the timber verandas, or *taracinas*, are a significant component of Port Said's architectural typologies and differ in their design complexity, aesthetics, and level of openness or exposure toward the streets between the European and Arab quarters. In addition to the tangible assets, the study contextualises these balconies, illustrating them as a continuation of the public realm and highlighting their role in activity patterns and collective memory related to different locations throughout the city, as indicated in Figure 3.9.

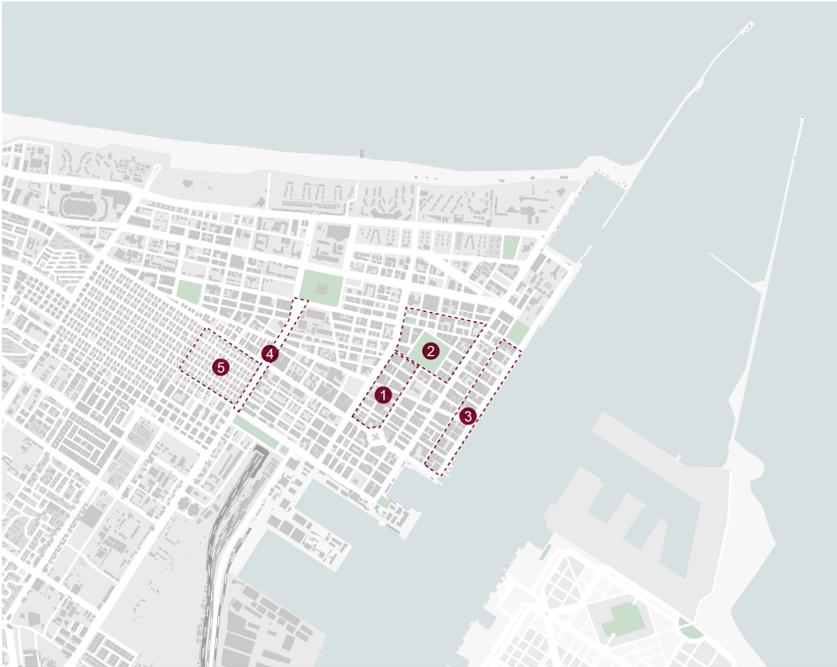


Fig. 3.9 The mentioned locations to illustrate the collective memories of balconies throughout the city. (Drawing: Aurhor, 2025)

Based on the first workshop in the series of activities planned for the project 'Bazar Abbas: Recovery Lab of Port Said', participants documented local-centred urban narratives within the European and

Arab neighbourhoods. Wooden balconies were regarded as a leading element during this practice. To comprehensively explore the urban context of Port Said, the chosen study zones were covered, including the Bazar Abbas area, the Ferial Garden, Palestine Street, Mohamed Ali Street and the Arab Quarter (BTU Cottbus-Senftenberg, 2023).

3.5.1 Bazar Abbas Area

The primary objective of the Recovery Lab was to explore and connect the personal narratives of local people with their inherited stories about Bazar Abbas. These narratives will serve as a foundation for developing an approach to protect and preserve the site. Bazar Street is rich with memories of past eras and offers a multi-sensory experience, characterised by the aromas of food, the sounds of vendors and passers-by chatter as well as the vibrant colours and visuals of the urban landscape. This narrow street provides a pedestrian-friendly environment. The market zone has witnessed significant historical events since the city's foundation. During World War II, part of the Marché Municipal was destroyed and this area was designated as a free zone, a status it retains to this day. The bazaar embodies a spirit of constant activity, with traders calling out and using colourful umbrellas for shade while customers still bargaining, all of which continues to thrive. Residents enjoy sitting in the local cafes there, which makes the area deeply rooted in collective memory.

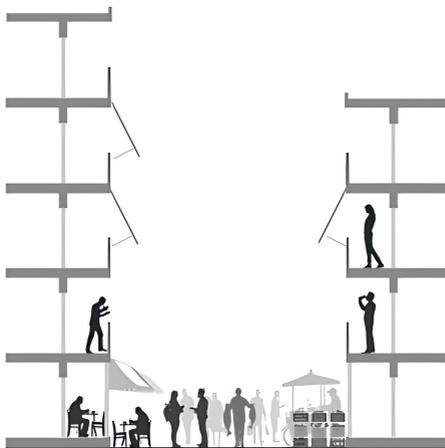


Fig. 3.10 Illustration of local narratives connected to Bazar Abbas. (Drawing: Author, 2025)

3.5.2 Ferial Garden

The Ferial Garden, which is bordered by four streets, is imbued with the collective memory of historical events, social transformations and patterns of activity. The various cultures represented in this vast space have each contributed to the greenery in their own way. The balconies on all four sides of the garden tell stories from different eras. For instance, it witnessed the opening ceremony of the Suez Canal. In the 1920s, the area served as an English club that hosted various sports, including tennis and floating plate. During the era of Gamal Abdel Nasser, televisions were placed in the streets so that the community could gather and watch together. A man would sell gasoline from his cabriolet while singing songs by Um Kalthoum as he drove around the area. A musical show took place at the music kiosk, and children gathered in the adjacent streets to play football, sometimes causing noise and annoyance to the neighbours. There is a notable contrast between past and present human behaviour, particularly noticeable in the use of sheds. Initially, the awnings were designed to protect people from the sun; however, after the arrival of the Arabs, they began to serve the purpose of providing privacy.



Fig. 3.11 Illustration of collective memories connected to Ferial Garden. (Drawing: Author, 2025)

3.5.3 Palestine Street

Given Port Said's identity is strongly connected to the canal, it is essential to explore the collective memories associated with this waterfront street, which stands as the city's face to the world. Palestine Street

has witnessed many significant historical events, including the digging of the Suez Canal and the establishment of Port Said, followed by the Suez Crisis and its subsequent designation as a free-trade zone. The street embodies the spirit of connection and openness. With ships from all over the globe passing within sight, the street carries an international maritime atmosphere that has shaped Port Said's cosmopolitan history. It is an ideal place for evening strolls, taking in the sea views and the chance to enjoy catching the Mediterranean breeze. Moreover, traces of colonial-era façades and arcaded structures can still be seen.

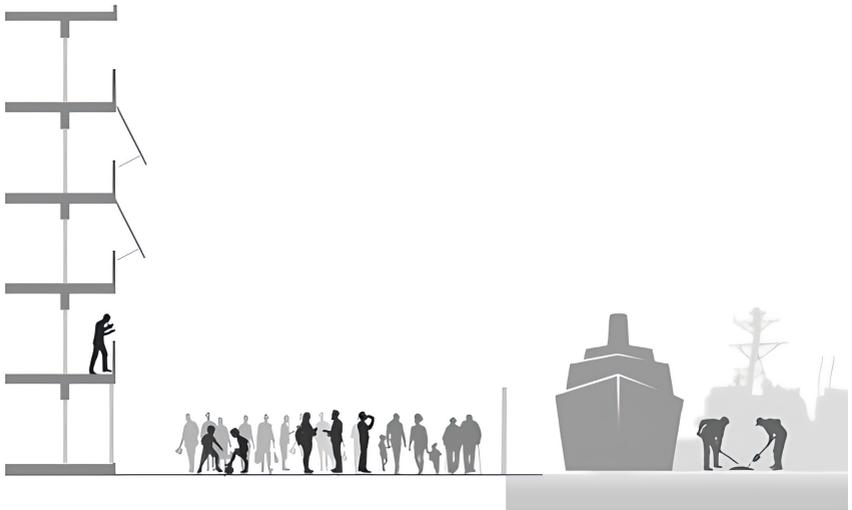


Fig. 3.12 Illustration of past memories associated with Palestine Street. (Drawing: Author, 2025)

3.5.4 Mohamed Ali Street

Mohamed Ali Street is a prominent location, because it divides the Arab and European quarters, bringing together the city's diverse social and cultural life. During the war, Arabs needed permission to enter the European quarter, and the street has become associated with memories of conflict and popular resistance. Both communities experienced the same traumatic events and celebrated similar victories during the war, as each side confronted the same urban challenges and shared the same aspirations. Historically, Mohamed Ali Street has been a focal point for the ceremonial spirit of Port Said. It has hosted parades, official processions and community gatherings, serving as both a symbol of

authority and a space for collective life. During celebrations, the people of Port Said traditionally played *Semsemia* music. The *Allenby* Festival is celebrated during Sham El-Nessim, a holiday which once involved burning of dolls in the likeness of Edmund Allenby, the British High Commissioner. Nowadays, these dolls are manufactured instead of being burned (Fig. 3.13).



Fig. 3.13 Illustration of urban narratives associated with Mohamed Ali Street. (Drawing: Author, 2025)

3.5.5 The Arab Quarter

Stories from the Arab Quarter highlight a deep sentimental attachment to the past, particularly to a time when the quarter was a close-knit community where neighbours knew and trusted one another. Today, the area's most pressing challenges are the lack of space and overcrowded living conditions. People often sit and socialise in the narrow alleys or spending entire days on their balconies, where they eat, sleep and work. They engage and interact with passers-by, and watch children playing while vendors are selling goods in every corner. The quarter is characterised by small-scale commerce, workshops and street markets that are seamlessly integrated into daily life. Open spaces are largely residual or created informally in front of mosques, markets or street corners.

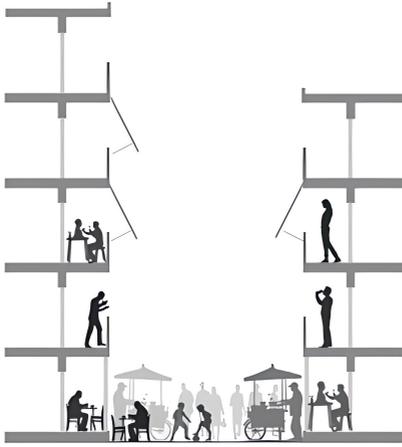


Fig. 3.14 Illustration of urban narratives connected to Arab Quarter. (Drawing: Author, 2025)

3.5.6 Layers of Hidden Collective Memories

Port Said is a city of overlapping traces, layered by waves of history, trade, colonisation, and resistance. Its memories are not only physical, evident in its architecture and spatial ensembles, but also sociocultural, as embodied in its faded stories. These layers of memories and social practices can be traced through balconies located in various spots throughout the city. The foundational layer dates back to the creation of Port Said during the construction of the Suez Canal. The colonial and cosmopolitan layers are reflected in memories of division and coexistence; the European quarters, with their cafes, arcades and clubs, contrast sharply with the dense alleys of the Arab quarter. Bazar Abbas Street, Mohamed Ali Street and the remnants of colonial façades whisper tales of merchants and sailors. The nationalist and war layers highlight the narratives of resistance and displacement, of bravery and loss. The Post-war reconstruction layer saw Port Said being rebuilt as a 'free zone' to promote trade, with the construction of modern apartment blocks. The contemporary layer reflects Port Said's current state of mind, oscillating between nostalgia for its cosmopolitan past and the realities of marginalisation within Egypt's coastal development narrative. Collecting these narratives thus provides a framework for better understanding of the context and culture of Port Said, leading to a more place-based decision making.

3.6 Challenges and Recommendations for Architectural Typologies in Port Said

The urban fabric of Port Said is characterised by a striking contrast between its two historic cores, giving rise to significant architectural and sociocultural challenges. This dual urbanism has reinforced colonial divisions, resulting in unequal access to spaces. The European quarter features a planned built environment with arcaded streets, covered markets and more defined public spaces which provide shaded pedestrian pathways and places for social interaction. However, many of these arcades are currently in decline; they are often encroached upon by commercial activities or disconnected from the daily lives of its local residents. This situation raises important questions about preservation and management. In contrast, the Arab quarter has a denser built environment lacking any designated open spaces and wide streets. Social interactions here take place in the narrow alleys and local street markets, leading to congestion, limited recreational areas and reduced environmental quality. This increasingly dense urban landscape reflects the sociopolitical hierarchies established during the colonial period.

To address these imbalances, there is an urgent need for equitable public spaces in the Arab neighbourhoods that do not disrupt the existing social fabric. Additionally, the arcades in the European quarter should be regulated and integrated to meet the needs of the residents, thereby improving accessibility and pedestrian flow in the covered walkways. This situation raises important questions about spatial justice in contemporary Port Said. Furthermore, it is essential to preserve the narratives embedded in architecture through spatial design, material choices and symbolic forms that can capture local identity and bring to light stories that are often overlooked or silenced. Adopting a narrative approach, it enables us to better engage with the lived experiences, memories and diverse voices of the community, going beyond just the physical forms and structures.

References

- Baller, I. (2017). Strategies for the preservation of the heritage of the Suez region and Port Said as World Heritage Site. In H. Abouelfadl, D. ElKerdany, & O. Wanas (Eds.), *Revitalizing city districts: Transformation partnership for urban design and architecture in historic city districts* (pp. 35–50). Springer. https://doi.org/10.1007/978-3-319-46289-9_3
- BTU Cottbus—Senftenberg. (2023). *Urban (heritage) narrative workshop: Every taracina has a story. March 2023*. Middle East Cooperation Unit. https://www-docs.b-tu.de/middle-east-cooperation/public/Bazar_Abbas/Report_2023_UHNW_PortSaid.pdf
- Crosnier-Leconte, M.-L., Ghitani, G., & Amin, N. (2006). *Port-Saïd architectures XIXe—XXe siècles*. IFAO.
- De la Torre, M. (Ed.). (2002). *Assessing the values of cultural heritage*. The Getty Conservation Institute. http://hdl.handle.net/10020/gci_pubs/values_cultural_heritage
- Egyptian Survey Authority. (1937). *Egypt. Town series 1:5,000. Port Said and Port Fouad* [Map]. Bibliothèque nationale de France. <https://gallica.bnf.fr/ark:/12148/btv1b532668390>
- ElKerdany, D. (2017). Port Said: A cosmopolitan heritage under threat. In H. Abouelfadl, D. ElKerdany, & O. Wanas (Eds.), *Revitalizing city districts: Transformation partnership for urban design and architecture in historic city districts* (pp. 15–33). Springer. https://doi.org/10.1007/978-3-319-46289-9_2
- ICOMOS. (1996). *Principles for the recording of monuments, groups of buildings and sites*. <https://www.icomos.org/images/DOCUMENTS/Charters/archives-eng.pdf>
- Parks Canada. (2006). *Canadian register of historic places*. <https://www.historicplaces.ca/media/5422/sos-guideen.pdf>
- Piaton, C. (2012). European construction companies in the towns along the Suez Canal. In *Building beyond the Mediterranean* (Vol. 1, pp. 92–103). Éditions de l'Institut national d'histoire de l'art. <https://doi.org/10.4000/books.inha.12729>
- Piaton, C. (2016). Architecture patronale dans l'isthme de Suez (1859-1956). *Annales Islamologiques*, 50, 11–53. <https://doi.org/10.4000/anis1.2112>
- Piaton, C. (2017). Port Said: Cosmopolitan urban rules and architecture (1858–1930). In H. Abouelfadl, D. ElKerdany, & O. Wanas (Eds.), *Revitalizing city districts: Transformation partnership for urban design and architecture in historic city districts* (pp. 3–14). Springer. https://doi.org/10.1007/978-3-319-46289-9_1
- Tuna Ultav, Z. (2019). Balcony railings as a representative element of collective memory: Balcony railings of Ankara apartment blocks. *Athens Journal of Architecture*, 5(1), 111–126. <https://doi.org/10.30958/aja.5-1-6>
- Vangelatos, G. (2019, October 18). *How does architecture impact society? A high-level look*. HMC Architects. <https://hmcarchitects.com/news/how-does-architecture-impact-society-a-high-level-look-2019-10-18/>

04. Intangible Heritage as a Catalyst for Recovery

Reflections on Port Said

Miran Shouman

Abstract

Port Said is a historic, cosmopolitan Mediterranean city whose identity has been shaped by diverse cultures from around the world. While the city's architectural heritage has received considerable recognition, its buildings remain in a critical state due to a lack of formal preservation and systematic maintenance. Furthermore, the city's intangible cultural heritage has received even less attention, despite its vital role in preserving collective memory, social practices and identity. This paper argues that the city's recovery cannot be achieved through physical restoration alone, but rather by addressing tangible and intangible heritage together as an integrated process. Port Said has immense potential in this regard, with cultural expressions such as *Semsemia* music and dance, oral traditions, popular festivals and the *Allenby* Theatre acting as vital anchors. These living practices are closely linked to the city's urban fabric and history, yet their potential to drive change remains largely overlooked in current regeneration models. Using Port Said as a case study, this paper provides an overview of these possibilities and demonstrates how the Bazar Abbas Recovery Lab has addressed this integration. This was approached in two ways: first, by mapping and formulating a vision based on the preservation of intangible cultural heritage; and second, by bringing *Semsemia* music to Bazar Abbas in real time to test a model for reactivating a historic space.

Keywords: intangible cultural heritage, socio-spatial strategy, *Semsemia*, community-led recovery

4.1 Introduction

Port Said occupies a unique place in Egypt's urban and cultural history. Founded in 1859 and opened as the gateway to the Suez Canal in 1869, the city developed into a cosmopolitan port, shaped by maritime trade, colonial encounters, migration and resistance (Hussein, 2024). These historical layers produced a distinctive cultural landscape comprising tangible elements of its unique architectural typology, such as wooden *taracin*s and arcades, as well as a rich intangible heritage including music, oral histories, rituals and popular performance traditions.

In recent decades, urban development and socio-economic transformations have placed both tangible and intangible heritage at risk. Although conservation discussions and efforts have recently emerged in Port Said, they largely remain confined to architectural and physical

levels, focusing on the protection of buildings rather than the city's living systems. In Port Said, intangible heritage is not only a reflection of the past but also embedded in daily life, community memory, and new expressions of identity.

This paper highlights the role of intangible cultural heritage in Port Said, focusing on Semsemia music and its associated narratives, as well as performance traditions such as the *Allenby* Theatre. Moving beyond a purely physical or nostalgic perspective, the paper argues that these traditions have the potential to contribute to the city's holistic recovery. It also considers how recent community initiatives, particularly the public Semsemia gatherings organised by the Bazar Abbas Recovery project, demonstrate the capacity of intangible heritage as a tool for placemaking, urban regeneration and cultural sustainability.

4.2 Intangible Cultural Heritage: Concepts and Urban Context

The Convention for the Safeguarding of Intangible Cultural Heritage (ICH), adopted by UNESCO in 2003, defines intangible cultural heritage as practices, representations, expressions, knowledge, and skills that communities consider as part of their culture. Unlike tangible heritage, these assets are dynamic and are continuously recreated in response to social, cultural and environmental contexts. In the context of Port Said, this definition helps to shift the focus from static buildings to living streets.

In the context of urban design, the notion of intangible heritage is invariably associated with that of space. It is evident that streets, markets, theatres, waterfronts and public spaces function as public stages on which cultural practices are performed, transmitted and recreated. At the Recovery Lab, an attempt was made to move beyond a purely physical approach by adopting the Historic Urban Landscape framework, which treats the city as a layered system of both tangible and intangible values (UNESCO, 2011). Within this theoretical framework, Port Said serves as a pertinent case study. The city's intangible heritage is indicative of its cosmopolitan character, a history of resistance, and a strong sense of local identity. Through the medium of the Lab, it was observed that practices such as *Semsemia* music act as cultural archives, preserving collective memories of solidarity and everyday life along the canal, a function that buildings alone cannot fulfil. The following section provides a concise overview of some of these traditions.

4.2.1 Semsemia: Music, Memory, and Identity

The Semsemia is a traditional string instrument associated with coastal cities along the Suez Canal, particularly Port Said, Ismailia, and Suez. It derives from *al-tanbura*, an instrument still played by the Nubian people in Egypt. Typically handcrafted, the instrument is made with five strings and lacks tuning pegs. Historically, the introduction of the *Semsemia* in Port Said in the 1930s is attributed to the Nubian musician Abdullah Kabarbar. Over the years, *Semsemia* has evolved into a manifestation of the culture of the canal region, while also serving as a symbol of resistance. It has been intimately intertwined with the popular response to political events in Egypt (Tawfik, 2022).

Semsemia songs form part of a powerful oral tradition in Port Said and were first performed in *al-Dammah*, a popular genre of folk music specific to the cities along the Suez Canal. The term *Semsemia* is Arabic for ‘gathering’, reflecting the practice of collective singing influenced by Sufi music. These songs gained increasing importance during periods of conflict, telling stories of resistance, displacement, longing and pride. The lyrics often reference Port Saidian streets, neighbourhoods, battles and shared experiences, thus transforming the music into a form of historical documentation. Even in times of peace, the songs continue to narrate everyday struggles, humour, and social values and practices. This cultural phenomenon serves to facilitate the transmission of memory (Attia, 2024).

Semsemia performances are accompanied by rhythmic movement, clapping and improvised dance, which are inspired by the sea and the fishing process. This creates a shared performative space between the musicians and the audience. The dance associated with *Semsemia* is informal and widespread, reflecting the *Bamboutia* way of fishing and their gatherings. For the people of Port Said, *Semsemia* represents more than just music. It is an emotional narrative tied to place, memory and identity. Hearing the songs immediately evokes images of the sea, food, the canal, resistance and shared histories. This profound emotional resonance is precisely why *Semsemia* remains a living practice, sustained by the enthusiasm of subsequent generations (Cluster Cairo & Port Said Ala Ademo, 2022). Today, the geography of these performances has shifted away from the historic core; weekly events now take place at the New Bazar located in the southern extension of the Arab quarter. These gatherings are family events, where performers recite old and new songs, often accompanied by the audience singing along.



Fig. 4.1 A *Semsemia* event held weekly at the New Bazar, located in the southern part of the Arab quarter. (Photo: Sepideh Zarrin Ghalam, 2023).

4.2.2 Performance Spaces and Popular Culture: Allenby Theatre

The *Allenby* Festival and its associated effigy-burning tradition represent a unique intersection of political history and popular performance. According to oral history, this act celebrates the departure of Edmund Allenby, the British High Commissioner in Egypt, in 1925. The festival is said to be an expression of Egyptian national unity and social cohesion for the working classes in the face of colonial occupation and the native elite, who adopted the European cultural heritage of the festival. The fine artist Muhsin Khudayr was the first to create an Allenby effigy in the city (Abouelmagd & Elrawy, 2022).



Fig. 4.2 *Allenby* theatre in the Arab quarter. (Photo: Mecano, 2019)

Every year, audiences in Port Said look forward to Khudayr's puppet theatre, which not only entertains, but also discusses social and political issues. The theatre takes place in spring and summer, especially on the night before Sham El Nasim, when numerous Port Said citizens visit the theatre. Many singers and artists also offer to participate in the activities for free, keen to be associated with this very special event.

4.2.3 Culinary Heritage of Port Said: Food, Memory, and Seasonality

The food traditions of Port Said are an important yet often overlooked aspect of the city's intangible cultural heritage. These culinary practices are closely tied to cultural practices, seasonality and everyday social life, and serve as a means of transmitting identity through taste and communal experience.

Mangaona, for example, is a traditional dessert pastry historically associated with Port Said's Italian community. Sold mainly in spring, it was once carried through the streets by Italian vendors who walked with wooden boxes and loudly called out *Mange una*, which means 'eat one' in Italian (Cluster Cairo & Port Said Ala Ademo, 2022). This performative act of selling transformed the street into a social space in which sound, movement and taste played a significant role. Despite the decline of the Italian community, *Mangaona* continues to be produced and consumed in Port Said every spring. It reflects the city's cosmopolitan past, demonstrating how traditions can outlive their original communities and become fully embedded in local identity.

Other desserts such as *Tamria*, *Zalabia*, and *Samnia* are deeply rooted in the Arab Quarter of Port Said. These sweets were historically prepared and sold in this neighbourhood because the ingredients were cheap and affordable for Egyptians at that time. Over time, they have spread across the city, yet they remain unique to Port Said, thereby reinforcing its distinct culinary identity.

Furthermore, Port Said's maritime identity is strongly expressed through its distinctive methods of cooking fish and seafood. Residents are known for an old, specialized method of grilling and cooking fish in a ceramic oven known as the Slab oven. This oven, combined with specific spice mixtures and preparation techniques, produces flavours that are strongly associated with the city (Cluster Cairo & Port Said Ala Ademo, 2022). In addition to grilling, fish is used to prepare traditional soups. These techniques constitute embodied knowledge that is

passed on through practice rather than written recipes. This reinforces their status as intangible heritage and attracts tourists to Port Said, who come to enjoy its unique seafood cuisine. As the Recovery Lab's focus is on reactivating Bazar Abbas and its surrounding street, it is vital to document this culinary heritage. These traditions represent the social and sensory life that has historically defined the market as a communal hub.

4.2.4 Tuzzah Game

In the 1960s, *Tuzzah* was a popular street game specific to the Arab quarter, whose rules resembled football but which was played with a tennis ball. It served as a training ground for local talent, with many professional players at Al Masry Football Club having started their careers playing this game as children. According to Abu al Arabi Nijm, a local resident and one of the earliest organisers of *Tuzzah* matches, children used to collect tennis balls that flew over the fence of the Foreigners Sports Club (now the Ferial Gardens) in the European quarter and carry them back to the Arab quarter to play with them (Cluster Cairo and Port Said, 2022).

Later, *Tuzzah* became a site of urban spectacle where neighbours gathered in plazas, streets, *taracinas*, and rooftops to watch matches, similar to the Ramadan Tournaments found in other Egyptian cities. These events transformed the neighbourhood into a shared arena, reinforcing the importance of the street as a space for community life. However, following the outbreak of the Coronavirus pandemic, these games were stopped. Official restrictions since then have prevented both the *Tuzzah* tournament and the *Allenby* festival from taking place in public spaces, placing both traditions in a vulnerable position and threatening their continued existence in the city.

4.3 From Narratives to a Socio-Spatial Strategy

This brief overview attempts to highlight the profound link between the intangible cultural heritage of Port Said and its historic urban fabric. While these practices function as a living archive that exists within the community, their social visibility and continuity are often enhanced by the specific urban stages where they occur. Rather than suggesting that the heritage depends entirely on the place, our methodology sought to understand how certain spaces and cultural practices mutually reinforce one another.

The methodology of the Recovery Lab was developed through a series of structured workshops. In the first workshop, as described in Paper 3 of this book, five teams collected local narratives and oral histories relating to both the tangible and intangible heritage of the city (BTU Cottbus-Senftenberg, 2023). Building on these initial stories, the second and third workshops transitioned into a spatial mapping process (BTU Cottbus-Senftenberg, 2024; 2025). For example, one of the teams working on intangible heritage made a strategic selection of traditions based on previous work and the direct observations of participants. This data was then overlaid onto a morphological map of the historic city centre to highlight the relationship between specific urban forms and the cultural activities that take place there.

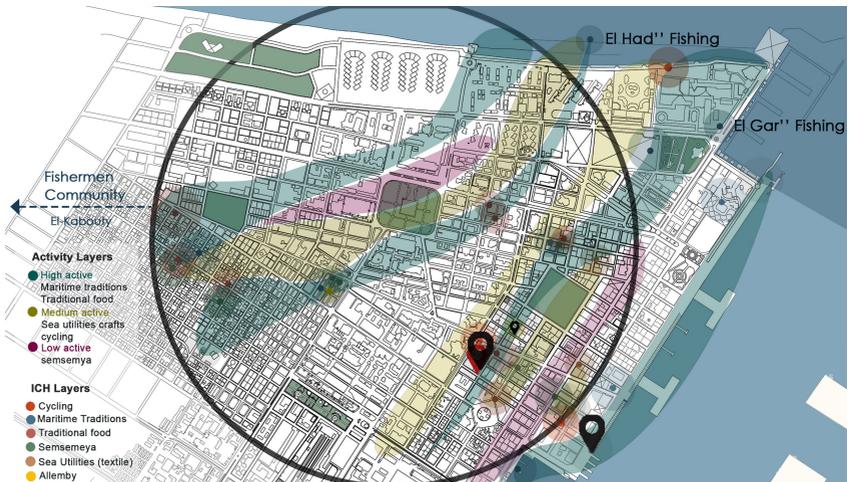


Fig. 4.3 Rapid analysis of the current status of ICH. (Source: Project Archive, work of Intangible Cultural Heritage and City Branding Team in the Urban Rehabilitation Workshop, September 2024)

Through this exercise, the team identified how streets, waterfronts and seemingly insignificant corners can function as stages for collective memory. Although these spaces are often overlooked on official maps, they are highly visible and significant to the local people who inhabit them. The mapping exercise documented the sites of the *Bamboutia* traditions and the *Tuzzah* game. Notably, the team recorded Port Said's unique cycling culture, which sets it apart from other Egyptian urban contexts. They also recorded the locations of traditional craftsmanship, such as the production of beach umbrellas and chairs. By identifying these social nodes, the Lab revealed that, as the physical fabric decays,

the associated practices are often displaced, making an integrated recovery strategy essential.

Following the rapid mapping phase, the team conducted a preliminary assessment of the status of these traditions in their urban context. This analysis identified a significant gap: while maritime traditions and traditional cuisine remain highly active, *Semsemia* music is currently less active due to the absence of dedicated performance spaces in the historic core. To address this, the team formulated a vision for the study area and proposed a sense-based strategy. While vision formulation should ideally be a fully participatory process involving all stakeholders, the work presented here remains a workshop practice or a preliminary exploration of how to reactivate the area. This involved proposing locations where the urban fabric would be designed to engage all the senses, incorporating the sounds of *Semsemia* music, the unique flavours of local cuisine, and the visual imagery of the fishing industry into daily street life.

To test the validity of such a socio spatial approach, the project conducted several live demonstrations. It is important to note that these were primarily workshop exercises or temporary interventions designed to test whether intangible heritage could act as a catalyst for site reactivation and, if so, how. The first exercise was a short-term activity during the initial workshop in March 2023, in which a team led a *Semsemia* parade along a designated route to Bazar Abbas. Subsequently, the Bazar Abbas Recovery Lab hosted *Semsemia* events within the building on various occasions to observe community interaction in a more contained setting. The immediate impact was evident in the spontaneous gathering of residents and passers-by, drawn into the historic space by the music.

The importance of these workshop practices became apparent when the community started to organise their own *Semsemia* events independently of the Lab's formal programming within the Bazar Abbas. This shift from facilitated exercises to community initiatives suggests that even short-term workshop practices can bridge the gap between neglected buildings and their social reactivation. Furthermore, a survey conducted after these events confirmed that these cultural gatherings had successfully drawn public attention back to the Bazar Abbas (see Appendix E). Of those surveyed, 62% of locals were aware of the activities, and 88% of these confirmed that the events had directly benefited the neighbourhood by improving safety and enhancing its reputation.

Although limited, this data suggests that the intervention successfully drew public attention back to the historic fabric and was received with noticeable positivity. However, sustaining this momentum depends on the Bazar being fully rehabilitated with the active engagement of the local community. Otherwise, these gains risk being temporary rather than representing a lasting reclamation of the historic space.



Fig. 4.4 A *Semsemia* event organised by the Recovery Lab, attracted locals inside to the Bazar Abbas. (Photo: Marwan AlSamman, 2023)



Fig. 4.5 A *Semsemia* performance held by the Recovery Lab at Bazar Abbas. (Photo: Sepideh Zarrin Ghalam, 2024)

4.4 Conclusion

This reflection offers a concise summary of the intangible cultural heritage of Port Said and its potential to drive urban change. Rather than presenting a definitive recovery model, the insights shared here aim to initiate a dialogue about how living traditions can inform the recovery and regeneration of the historic city centre.

The experimental activation of Bazar Abbas through public *Semsemia* gatherings, conducted as part of a short-term workshop, demonstrates how cultural heritage can stimulate interest in neglected sites. While these interventions are temporary, subsequent self-organised events and positive public reception suggest that even small-scale practices can draw attention back to historic sites. These moments of activation re-establish the relationship between culture and place, reminding us that urban heritage is a lived experience, not just a physical one.

Above all, this reflection draws attention to the limitations of conservation strategies that focus solely on physical restoration. In contexts where historic urban fabric suffers from systemic neglect, prioritising intangible cultural heritage may initially appear to be a secondary or peripheral concern. However, the Recovery Lab has demonstrated that a holistic approach that values living traditions alongside physical structures is, in fact, a necessity for sustainable development. We hope that these initial observations will encourage further exploration into how the soul of the city, including its songs, stories and social rituals, can be incorporated into future planning and conservation strategies, thus ensuring a more meaningful and resilient urban recovery.

References

- Abouelmagd, D., & Elrawy, S. (2022). Cultural heritage and sustainable urban development: The case of Port Said city in Egypt. *Cogent Social Sciences*, 8(1). <https://doi.org/10.1080/23311886.2022.2088460>
- Attia, D. S. A. (2024). Promoting the musical heritage of Egypt through digital platforms. *The Scientific Journal of the Faculty of Tourism and Hotels, Alexandria University*, 21(2). <https://doi.org/10.21608/thalexu.2024.336050.1137>
- BTU Cottbus-Senftenberg. (2023). *Urban (heritage) narrative workshop: Every taracina has a story, March 2023*. Middle East Cooperation Unit. https://www-docs.b-tu.de/middle-east-co-operation/public/Bazar_Abbas/Report_2023_UHNW_PortSaid.pdf
- BTU Cottbus-Senftenberg. (2024). *Reimagining Bazar Abbas: Workshop on exploring urban recovery scenarios, September 2023*. Middle East Cooperation Unit. https://www-docs.b-tu.de/middle-east-cooperation/public/Bazar_Abbas/Report_2023_URW_PortSaid.pdf
- BTU Cottbus-Senftenberg. (2025). *Heritage for tomorrow: Workshop on integrated urban rehabilitation, July 2024*. Middle East Cooperation Unit. https://www-docs.b-tu.de/middle-east-cooperation/public/Bazar_Abbas/Report_2024_URW_PortSaid.pdf
- Cluster Cairo & Port Said Ala Ademo. (2022). *Port Said urban and cultural heritage exhibition* [Exhibition]. Port Said, Egypt. <https://clustercairo.org/2022/11/23/portsaid-urban-and-cultural-heritage-exhibition/>
- Hussein, A. A. S. (2024). The historic urban landscape approach as a tool for Port Said heritage conservation. In L. Makhoulfi (Ed.), *Urban heritage and sustainability in the age of globalisation* (pp. 235–260). Open Book Publishers. <https://doi.org/10.11647/obp.0412.11>
- Tawfik, K. (2022, July). *Aswat 6: The simsimiyya from the Suez Canal: Handcraft of identities* [Paper presentation]. Aswat series: The simsimiyya from the Suez Canal: Handcraft of identities, Institut français d'archéologie orientale (IFAO), Cairo, Egypt. <https://doi.org/10.13140/RG.2.2.16852.27528>
- UNESCO. (2011). *Recommendation on the historic urban landscape*. <https://whc.unesco.org/en/hul/>
- UNESCO. (2003). *Convention for the safeguarding of the intangible cultural heritage*. <https://ich.unesco.org/en/convention>

Part II

Integrated Urban Conservation and Development

A Strategic Framework

05. Between Conservation and Transformation

Addressing the Challenges of Port Said's Inner City

Lara A. Awad

Abstract

The historic inner city of Port Said, structured around the Arab and European Quarters, reflects the layered legacies of colonial planning, socio-spatial segregation, and uneven urban transformation. This paper examines the inner city at the meso-scale, where physical deterioration, socio-economic pressures, environmental risks, functional fragmentation, and governance gaps converge. Grounded in the integrated urban conservation and development (IUCD) framework and informed by the Historic Urban Landscape (HUL) approach, the study draws on participatory workshops conducted between 2023 and 2025 to analyse heritage as a dynamic urban system shaped by everyday practices and institutional forces. Using Bazar Abbas as a meso-scale urban laboratory, the research demonstrates how documentation, scenario-building and strategic planning can be integrated to reconcile conservation and development. The findings articulate five interlinked strategies – Recover, Connect, Refunction, Upgrade, and Manage – highlighting the meso-scale as a critical arena for heritage-led, inclusive and adaptive urban regeneration in historic port cities.

Keywords: urban heritage regeneration, inner city scale, integrated urban conservation and development

5.1 Introduction

Since its establishment, the historic core of Port Said has mainly revolved around two quarters: the Arab Quarter and the European Quarter. From the city's earliest days, when the Suez Canal was being constructed, these two areas became the basis around which the settlement grew around (Crosnier-Leconte et al., 2006; ElKerdany, 2017; Piaton, 2017). They were, however, established very differently. The European Quarter was designed by company engineers resembling the planning logics of European colonial towns. It was designed to reflect order and sophistication with wide boulevards, green squares and stately façades. The Arab Quarter, by contrast, was shaped as a workers' housing area. Its grid was tighter, with smaller plots and narrower streets, offering minimal space for collective life or public amenities (ElKerdany, 2017). Two places, built side by side, carried two very different urban morphologies.

This duality extended beyond its buildings but also about to encompass the lives lived within them and the unequal opportunities afforded

by each quarter. The European Quarter became a place of privilege and leisure filled with cafés, gardens and arcades that supported a European way of life. The Arab Quarter, on the other hand, became the opposite, a place of resilience, where Egyptian workers inhabited modest plots, but had established a distinct cultural identity. They had named its streets after local towns and national figures, giving daily life a rhythm that reflected their traditions (Abdelaal, 2021; ElKerdany, 2017; Piaton, 2017). Over time, some of these were erased gradually due to wars, waves of migration and economic shifts, however, the imprint of segregation remained visible in the city's morphology and deeply rooted in its memory.

Examining Port Said at the meso-scale, which encompasses these two quarters (Fig. 5.1), offers a perspective which is not provided by neither the macro nor the micro scales alone. On the one hand, the inner city reflects how broad historical forces, such as colonial urban planning, displacements and economic decline, have shaped the space. On the other hand, it provides the immediate context for more targeted interventions, such as the rehabilitation of Bazar Abbas. In other words, this meso-scale is a transitional perspective, connecting foundational transformations at the city level with the intimate changes

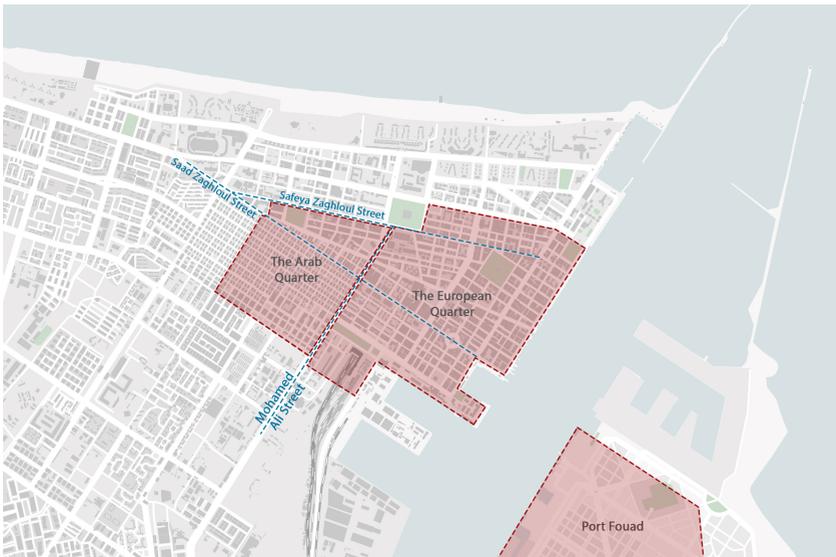


Fig. 5.1 Map showing the Arab and European quarters and the historical buildings located within them. (Drawing: Author, 2025, adapted from Abdelaal, 2021)

felt in specific buildings and streets (ICOMOS, 2011; UNESCO, 2011). It is also at this level that tensions and opportunities are clearly revealed, specifically segregation and integration, decay and resilience, as well as abandonment and renewal.

This section draws on this meso-perspective, as a means to ask a set of critical questions. How do the Arab and European quarters reflect the contradictions in Port Said's history? Where are the fractures and the continuities in the urban fabric? More importantly, what possibilities exist that would help in reconciling the fragmented parts into a shared urban future? These questions are addressed through the framework of Integrated Urban Conservation and Development (IUCD), which is rooted in the UNESCO Historic Urban Landscape (UNESCO, 2011). IUCD encourages us to treat the city not as an open museum, but as a living system. Where heritage, memory and development must be perceived and addressed together.

A series of participatory workshops were held by the Bazar Abbas Recovery Lab between January 2023 and January 2025, which formed the basis for this analysis. These workshops brought together students, researchers and community members. Together, they walked the streets of Port Said, observing, talking, and mapping what they encountered. The process was as much about listening as it was about documenting. Where they listened to residents' stories and the traces left in buildings, as well as how the city itself communicates its fragility and resilience. From these collective exercises, a picture emerged of the inner city, not just its problems, but also its hidden potential.

The purpose of this section is therefore twofold. Firstly, it aims to explicitly identify the problems and pressures affecting the Arab and European quarters today. This involves addressing issues ranging from the decay of their architectural fabric to the socio-economic imbalances throughout their history. Secondly, it seeks to use these findings as a basis for an integrated development approach. This approach would reframe the inner city, viewing it not as a relic of colonial segregation, but as a dynamic space of possibility. Paving the way to understanding how Port Said can move towards a more sustainable and inclusive urban future.

5.2 Urban Problems and Challenges at the Inner City Scale

To understand the current condition of the inner city of Port Said, it is essential to focus on the interrelated challenges, visible within the Arab

and European quarters. These challenges include the physical, social, environmental, functional and governmental dimensions. Addressing these issues at the meso-scale provides a clearer reading of the city-wide dynamics which also reveals localised dysfunctions.

5.2.1 Physical and Architectural Issues

The most pressing challenge in Port Said's inner city is the deterioration of its historic built fabric. Though once distinguished by their contrasting planning logics and architectural vocabularies, both the Arab and European quarters are now subject to similar patterns of neglect, demolition and incompatible redevelopment (Fouad & Sharaf Eldin, 2020). The Arab quarter, which was initially a compact grid-iron settlement for canal labourers, lacks public squares and open spaces. This is a deficiency that exacerbates historical vulnerabilities, such as the devastating fire of 1884 (Piaton, 2017). Currently, the Arab quarter is heavily degraded with many buildings in a state of disrepair (Fig. 5.2). This includes the quarter's narrow streets, small plots, and modest buildings with wooden balconies and screens that reflect its local identity (Abdelaal, 2021).

By contrast, the European Quarter was originally designed with wider boulevards, public gardens and richly detailed façades, encom-



Fig. 5.2 An example of a building in the Arab quarter with closed verandas. (Photo: Sepideh Zarrin Ghalam, 2022)

passing various architectural styles including Art Deco, Art Nouveau and post-modern architecture beside the colonial style. However, it is currently suffering from a wave of demolitions. In recent decades, historic villas and arcaded streetscapes have been demolished and replaced by high-rise blocks. These interventions have dramatically altered the fabric of the European Quarter, gradually erasing its distinctive character and identity (Fouad & Sharaf Eldin, 2020; Hussein, 2024). The systematic blind application of building regulations across the city, has led to the quarter being defaced rapidly and drastically. This mainly occurs when little consideration is given to the urban and architectural morphology of the historic core. This can be seen in the demolition of its important landmarks such as the American Embassy (Fig. 5.3) which stands as an example of the systematic loss of architectural heritage (Fouad & Sharaf Eldin, 2020). Without careful monitoring, such interventions could permanently erase the cosmopolitan layers of Port Said's identity.



Fig. 5.3 Left: The American Consulate in Port Said. Right: Its demolition in 2018. (Source: Fouad & Sharaf Eldin, 2020)

5.2.2 Socio- Economic Pressures

The social fabric of Port Said's historic core has undergone repeated transformation due to displacement, migration and economic shifts. Originally segregated between Arab workers and European elites, the two quarters remain marked by inequalities in living conditions and investment. Many foreign communities left the city following the wars in the 20th century and by the nationalisation of the Suez Canal. Most importantly, however, the cosmopolitan networks that once characterised the city have dissipated (ElKerdany, 2017). Their departure was followed by successive waves of internal migration, particularly from

rural Egypt. These waves have brought about remarkable changes to the demographic profile of the Arab Quarter and put a strain on its limited infrastructure (Wladika, 2015).

Today, high unemployment rate and economic recession are putting intense pressure on the inner city. The dismantling of the Free Trade Zone in the 1990s reduced Port Said's importance as an economic hub. This left the city's residents with fewer opportunities for upward mobility and social advancement (Saleh, 2023). The recession has significantly affected the historic buildings in the inner city, which have become either underutilised (Fig. 5.4) or occupied informally. However, it has also led to social frustration due to the lack of sustainable job creation. The economic recession has led to a loss of faith in conservation strategies. The number of residents who perceive heritage as a burden rather than an asset is growing in numbers, which is further weakening community-based management (Fouad & Sharaf Eldin, 2020).



Fig. 5.4 Underutilised historical buildings in the Arab quarter. (Source: Abouelmagd & Elrawy, 2022)

5.2.3 Environmental and Climatic Pressures

Port Said's geographical location has made its historic centre vulnerable to environmental hazards. The city is essentially a thin, narrow strip of land between the Mediterranean Sea, the Suez Canal, and Lake Manzala. The proximity of the city to the coast exposes its historical buildings to high levels of humidity, salt spray and sea breezes. This accelerates the deterioration of historically significant façades and damages building foundations. These climatic conditions, along with poor maintenance strategies and inadequate practices, have expedited the decay of the architectural and ornamental elements of historical buildings. This has affected many timber balconies, plaster surfaces, and arcade façades in both the Arab and European quarters (Fouad & Sharaf Eldin, 2020).

Global climate change exacerbates these issues. Predictions suggest that sea levels in the eastern Mediterranean could rise by up to 30 cm in the near future. This poses a significant threat that jeopardises Port Said's low-lying districts (Fouad & Sharaf Eldin, 2020). This is not only an environmental issue but also a heritage challenge facing the inner city of Port Said. Saltwater intrusion and flooding could permanently damage many historic structures and archaeological layers.

Environmental pressures intersect with governance shortcomings. On the one hand, the large infrastructural project of Suez Canal expansion received state-level attention. On the other hand, local environmental management strategies in the historic core remain weak. In short, there is little evidence of coordinated strategies for environmental actions. This includes strategies addressing issues like coastal protection, climate adaptation or sustainable water management with a focus on the vulnerability of heritage areas (Hussein, 2024). Without such integration, environmental risks threaten to accelerate the loss of Port Said's historic identity.

5.2.4 Functional Challenges

The impact of urban segregation remains visible in the spatial dynamics and functional distribution of Port Said's inner city. The European Quarter, for example, was designed for leisure, culture and commerce, and provided facilities such as clubs, cafés and gardens. In contrast, the Arab Quarter was developed with minimal public amenities and overcrowded dense housing. This morphological imbalance is evident in the unequal distribution of activities between the two quarters (ElKerdany, 2017; Piaton, 2017). The commercial activity is mostly concentrated on certain streets, while many covered markets remain abandoned (Fig. 5.5). This is due to the markets' unorthodox designs, which do not align with local traditions, and the fact that vendors, and customers alike prefer the visibility of street markets, which better reflect the Arab cultural practices (Abelaal, 2021).

This separation of uses has made the historical core less able to function as a cohesive urban system. Instead of complementing each other, the Arab and European quarters operate distinctively but in isolation as disconnected nodes. The absence of integrated land-use planning exacerbates this disconnection, leading to unequal investment and fragmented development efforts.

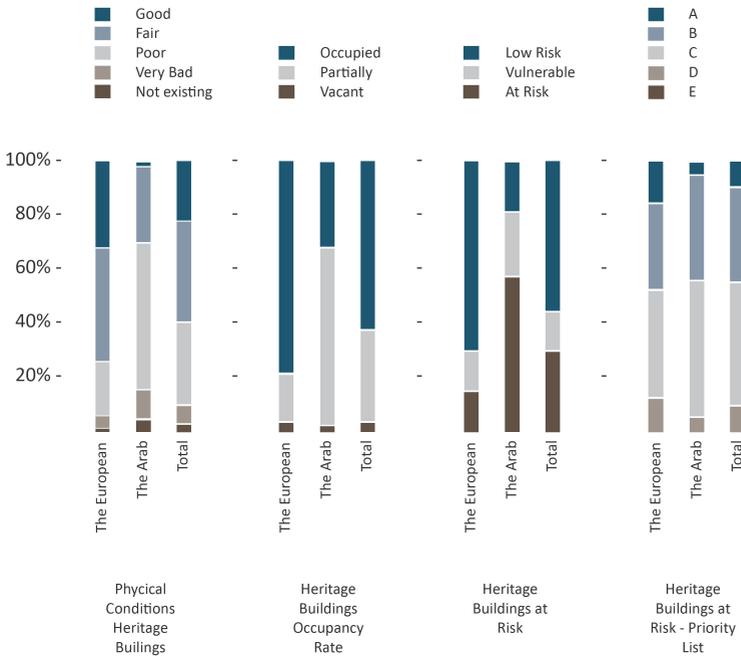


Fig. 5.5 Graph illustrating the physical conditions, occupancy rate and vulnerability of historical buildings. (Source: Wladika, 2015)

5.2.5 Governance and Management Gaps

The governance of the inner city represents a serious structural challenge. The governance of the inner city poses a considerable structural challenge. Port Said has been the focus of several conservation campaigns and governmental decrees. These include the 2009 and 2011 Cabinet decisions that recognised over 600 buildings as heritage structures. However, these decisions have not been effectively implemented. Within only a few years, dozens of these protected buildings were demolished despite their official recognition. This highlights a clear lack of enforcement, as well as conflicts between real estate interests and heritage preservation (Hussein, 2024).

Meanwhile, civil society groups such as local associations and the Alliance Française have raised awareness and documented large parts of the historic urban fabric. Yet their efforts remain fragmented due to the absence of necessary institutional support (Hussein, 2024). The lack of a comprehensive management framework, in addition to bureaucratic

inefficiencies and overlapping jurisdictions, leads to inconsistent decision-making. In consequence, this undermines both heritage protection and the development of sustainable urban strategies for the inner city.

5.2.6 Linking Challenges to Broader City-Wide Dynamics

The problems of the inner city should be addressed holistically. This is because they reflect broader urban expansion dynamics, economic changes, and environmental pressures. Port Said's geographical location, surrounded mostly by the sea, the canal and Lake Manzala, has led to a scarcity of land and elevated property values. This has increased the pressure to demolish historic buildings in favour of more profitable new developments (Hussein, 2024). Additionally, rising sea levels and coastal erosion pose a further threat to the already fragile built environment (Fouad & Sharf Aldin, 2020).

At the same time, city-wide development initiatives have not been adequately integrated with inner-city conservation efforts. Instead, the historic core has been marginalised and disconnected from the city's economic engines of growth. Without assuring that the inner-city regeneration aligns with broader metropolitan planning, Port Said risks growing its spatial and social divides. The analysis of the Arab and European quarters reveals localised challenges as well as structural tensions that are reshaping the city as a whole.

5.3 Spatial Patterns and Dynamics

Examining the spatial patterns and dynamics of the inner city of Port Said aim to provide an understanding on how the urban challenges are spatially produced and experienced across the Arab and European quarters. At the meso-scale, the pattern of movement, land use, stakeholder interventions and historical layering reveal how segregation and vulnerability can be addressed not only as abstract conditions but as tangible spatial processes.

5.3.1 Street Network Continuity/Discontinuity

The historic duality between the Arab Quarter and the European Quarter can be notably seen in the inner city's street network. The Arab Quarter's compact grid and narrow streets is an example of pedestrian-oriented morphology (Fig. 5.6). This urban design prevents vehicular access, yet it sustains traditional forms of street life like vending and small-scale commerce. Whereas the European Quarter is shaped dif-

ferently reflecting a more modernised logic of circulation. This can be seen in its wider streets and more formal urban design that accommodates cars, parking and public landmarks (Abdelaal, 2021).



Fig. 5.6 Pedestrian heat map, where the red colour indicates higher frequencies and yellow indicates otherwise. (Source: Abdelaal, 2021)

Public transport is almost solely dependent on privately operated minibuses and taxis, with no municipal system in place. The two historic quarters contain a few of the city's primary transport hubs. Where four microbus lines are concentrated and they link the inner city to the wider urban system (Fig. 5.7). This structure showcases the inner city's role as a connective tissue of Port Said but also highlights ruptures. This includes inconsistent pedestrian access between the two quarters as well as uneven mobility infrastructure (Abdelaal, 2021).

5.3.2 Functional Distribution of Land Uses and Commercial Flows

Commercial activity has historically been an essential driver of Port Said's economy. However, its spatial expression differs in the Arab Quarter from the European Quarter. In the Arab Quarter, commercial streets are dominant (Fig. 5.8). It hosts many specialised markets including fish, fruit and clothing but also mixed-use retail. These spaces are shaped by street vendors and shopkeepers who often extend their premises to include parts of the street. While in the European Quar-

ter, commercial typologies are characterised by their formality. This is expressed in the structured shopping streets and market halls, where informal interventions barely exist (Abdelaal, 2021; Saleh, 2023).

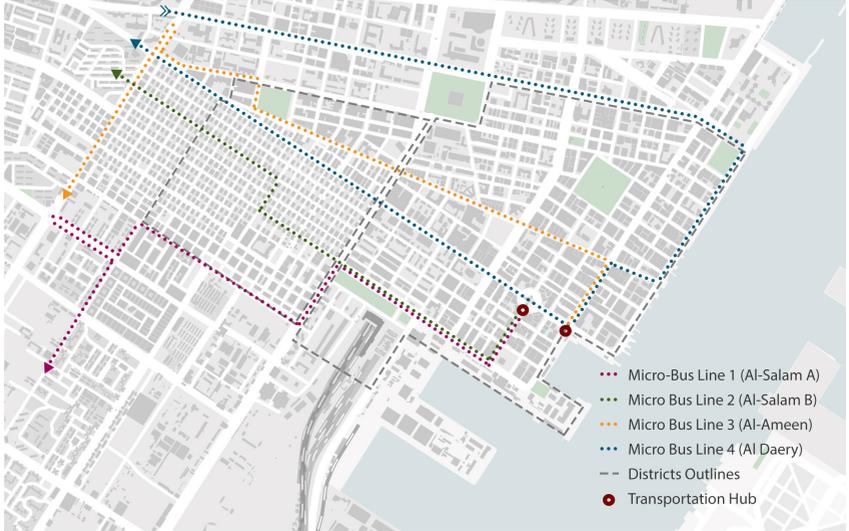


Fig. 5.7 Accessibility analysis map. (Drawing: Author, 2025, adapted from Abdelaal, 2021 & Saleh, 2023)

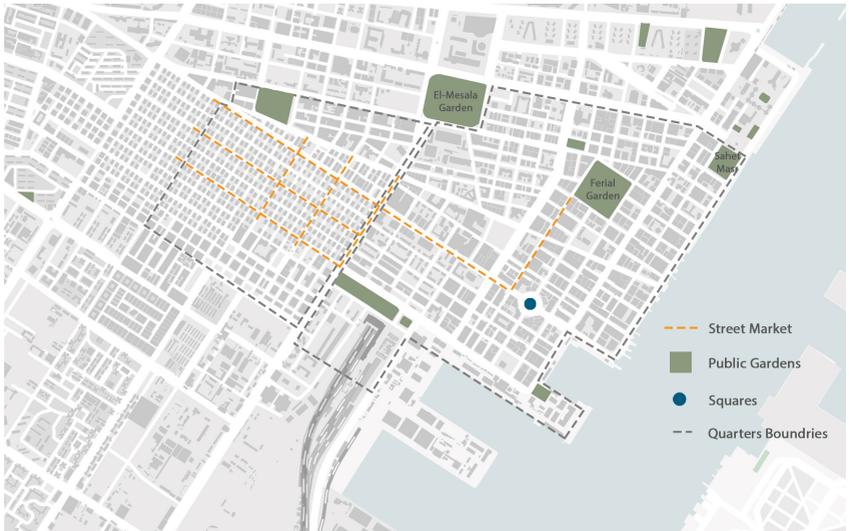


Fig. 5.8 Open Public Spaces. (Drawing: Author, 2025, adapted from Abdelaal, 2021 & Saleh, 2023)

Ground-floor commercial activities constitute more than 80% of uses in the inner city. While residential and institutional functions are notably scarce (Fig. 5.9). Despite vibrant commercial ground floors, buildings are often left with abandoned or underused upper floors. Commercial flows remain strong along Al-Shohadaa Street, which historically separates the Arab Quarter from the European Quarter. In the Arab Quarter, vibrant street markets remain an anchor of social and economic life despite the pressures following the Free Zone's cancellation. Meanwhile, in the European Quarter, commercial activities have shifted towards leisure-oriented consumption, especially the waterfront redevelopment. This has further widened the gap between the two quarters (Abdelaal, 2021; Saleh, 2023).

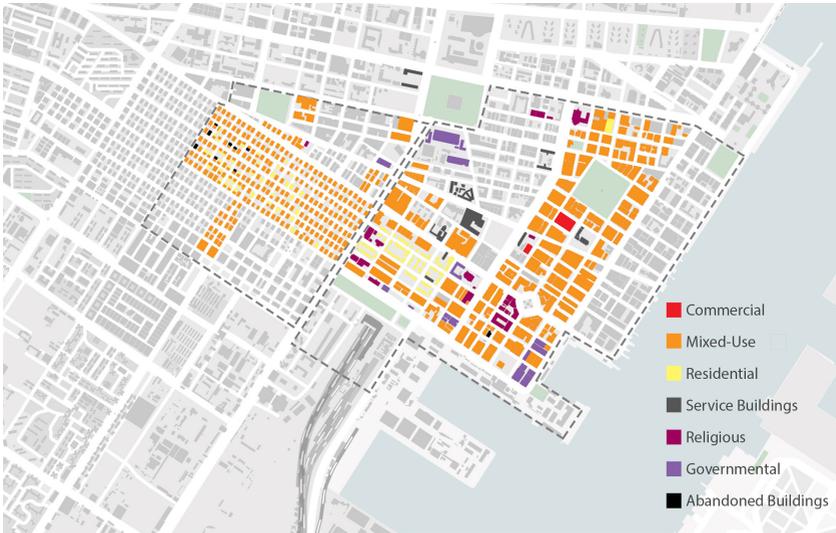


Fig. 5.9 Land-use analysis map. (Drawing: Author, 2025, adapted from Abdelaal, 2021 & Saleh, 2023)

5.3.3 Stakeholder Interventions and Modifications to the Urban Fabric

The architectural fabric of the inner city is considered the result of multiple layers of stakeholder interventions. The Suez Canal Company initially imposed its colonial planning logic in the European Quarter. It constructed villas for employees and regulated the urban form in the Quarter. On the other hand, the Arab Quarter developed smaller-scale typologies. It merged commerce and housing, where limited resources and community self-organisation can be manifested (ElKerdany, 2017).

Over time, both quarters have been subjected to a range of actors that reshaped them. This can be seen in vendors adapting ground floors, government interventions like introducing modern markets, and private developers inserting high-rise towers since the 1970s (Abdelaal, 2021).

These modifications highlight tensions between continuity and rupture. On one hand, arcaded streets, villas and wooden verandas are main aspects of Port Said's identity and heritage. On the other hand, contemporary concrete blocks and high-rise apartment buildings disrupt the homogeneous historic urban fabric (Fig. 5.10). From an IUCD perspective, such interventions show how difficult it is to balance between adaptive reuse and safeguarding authenticity. Stakeholders pursue different agendas, often fragmented. But an integrated meso-scale framework could help align their efforts with conservation-oriented regeneration (Abdelaal, 2021).



Fig. 5.10 Map showing comparison between heritage buildings and incompatible high-rise buildings with more than 6 floors. (Drawing: Author, 2025, adapted from Abdelaal, 2021 & Saleh, 2023)

5.3.4 Ruptures and Continuities Across the Inner City

The evolution of the inner city can be divided into four phases. (1) The early years until 1919, now mostly demolished except for the deteriorating lighthouse. (2) The interwar period, characterised by the introduction of key services such as the train station, mosques, and churches. (3) The prosperous years of the 1930s, when commercial, administrative, and residential buildings increased significantly. And (4) the post-1940

phase, which introduced SCC villas and later, high-rise infill development (Fig. 5.11). These phases show how economic and political cycles left distinct imprints on the built environment of the inner city (Abdelaal, 2021).

On one hand, continuities can be seen in the constant existence of commercial activities in ground-floors. As well as the symbolic role of public squares and gardens, which are mostly located in the European Quarter. On the other hand, ruptures are equally evident. It can be seen in the privatisation of the waterfront, the economic decline after the Free Zone era, and the insertion of heterogenous modern buildings into the historic fabric. At the meso-scale, these ruptures and continuities show how heritage values can be fragile when governance is fragmented. From an IUCD perspective, addressing these discontinuities is important to reconnect the Arab and European quarters. This can lay the ground for them being complementary rather than divided urban entities (Abdelaal, 2021; Saleh, 2023).

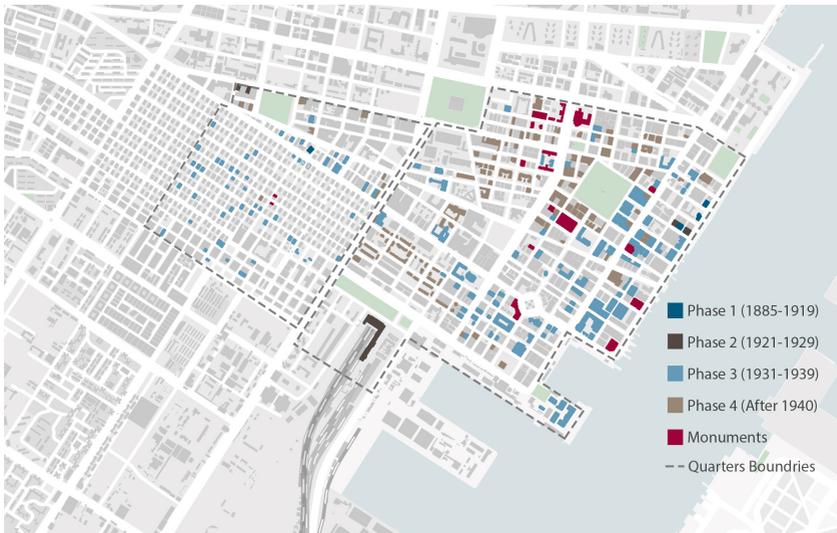


Fig. 5.11 Historic building age. (Drawing: Author, 2025, adapted from Abdelaal, 2021)

5.4 Workshops: Methodology and Implementation

The three workshops – Workshop 1: Urban (Heritage) Narratives (March 2023), Workshop 2: Urban Recovery Scenarios (September 2023), and Workshop 3: Rehabilitation and Cultural Tourism (July 2024) – were designed as participatory platforms bringing together academics, her-

itage professionals, planners, students, local NGOs, and residents. A range of tools was employed across the workshops, including narrative mapping and oral histories, scenario building, stakeholder mapping, visioning exercises, and integrated urban development planning. Although each workshop addressed a different thematic focus, they followed a comparable structure combining expert inputs, fieldwork, group-based exercises, and collective discussions (Table 5.1).

| | Workshop 1 March 2023 | Workshop 2 September 2023 | Workshop 3 July 2024 |
|-----------|---|--|--|
| Focus | Narrative and Documentation | Recovery Scenarios | Rehabilitation and Cultural Tourism |
| Inputs | Lectures on Port Said's history, heritage, and NGO experiences. | Expert lectures on regeneration, design, climate, and recovery. | Lectures on urban development, preservation, tourism and mobility. |
| Fieldwork | Tours in Port Said and Port Fouad; Semsemia storytelling. | Excursions in Cairo's districts and Port Said's quarters. | Tours of quarters, Semsemia tours, Bazar Abbas site mapping. |
| Tools | Narrative mapping, documentation, collective memory exercises. | Scenario building mapping, stakeholder analysis, dynamics tables. | Vision building, exercises, proposals, interventions, assessments. |
| Structure | Lectures, tours, surveys, interviews with locals, discussions, presentations. | Cairo excursions, field surveys, group work, colloquium, roundtable. | Online preparatory sessions; kick-off, inputs, reflections. |

Table 5.1 Structure of Recovery Lab workshops.

The workshops were conducted under the umbrella of the integrated urban conservation and development (IUCD) approach. Challenges related to architectural heritage, socio-economic dynamics, and urban morphology, were perceived as interconnected rather than isolated, laying the ground for the integration of heritage conservation, socio-economic development and urban management. Focusing on Port Said's inner city, the meso-scale allowed participants to see clearly the intermediate layer of the city, such as the two distinct Quarters, the urban markets, and connective streets. By taking Bazar Abbas and its surrounding neighbourhoods as the focus study area, the workshops set the example of a living laboratory where heritage preservation, recovery scenarios, and rehabilitation strategies could be explored in an integrated manner.

Across the three phases, the workshops evolved as a progressive application of the IUCD approach at the meso-scale. Workshop 1 focused on reading and interpreting the inner city of Port Said, where tangible and intangible heritage were documented as living systems shaped by everyday practices. Workshop 2 aimed to translate these readings into urban recovery scenarios where conservation, socio-economic regeneration and climate adaptation were linked. And, workshop 3 focused on consolidating the earlier insights into integrated rehabilitation and cultural tourism strategies. Altogether, the three workshops moved from interpretation to generating strategies and implementation where the IUCD approach is considered as a learning-based framework tested through Bazar Abbas as a meso-scale urban laboratory (BTU Cottbus-Senftenberg, 2023; 2024; 2025).

5.5 Workshops: Findings and Outputs

Across the three workshops, priority zones were identified – from the Arab and European Quarters to Bazar Abbas and wider public spaces – and thematic strategies were developed ranging from heritage documentation to socio-economic regeneration and cultural tourism (see Appendix B, Table B.1).

5.5.1 Critical Issues, Opportunities and Stakeholders Conflicts

Several recurring critical issues emerged including physical deterioration of Bazar Abbas and the Marché Municipal (roofs, façades, arcades, and drainage). In addition to violations by vendors and the chaotic use of streets and arcades, loss of legibility of heritage façades and public

spaces due to new layers and informal adaptations, social vulnerabilities linked to the marginalisation of residents and street vendors. As well as climate risks and the lack of shaded, accessible, or green public spaces.

At the same time, the workshops identified a set of opportunities, notably heritage as a catalyst for regeneration through elements such as the *taracina*, arcades, and historic markets. In addition to the activation of community memory and intangible practices including *Semsemia*, crafts, and culinary heritage as tools for place identity. It also identified the role of cultural tourism as a driver of socio-economic growth, and the potential of public space revitalisation and sustainable mobility to enhance connectivity between the Arab and European quarters.

Participants and stakeholders often agreed on the value of heritage and the importance of linking conservation to socio-economic benefits. However, several tensions were identified throughout the workshops. Conflicts were evident between street vendors and shop owners, as vendors' extension to streets supported livelihoods but often disrupted circulation and visibility. Tensions also arose between municipal authorities and NGOs or academic actors. Local authorities prioritised economic development, while experts pushed for heritage preservation and sustainable practices. Additionally, residents desired quieter, functional neighbourhoods, while cultural tourism development risked gentrification. These conflicts mirrored the meso-scale complexity of Port Said's historic quarters: balancing everyday use with heritage conservation, and immediate needs with long-term recovery (BTU Cottbus-Senftenberg, 2023; 2024; 2025).

5.5.2 Workshops' Outputs

The three workshops provide an integrated analytical reading of Port Said's inner city as a meso-scale system (Table 5.2). Within which heritage, socio-economic practices, environmental conditions, and governance intersect. The workshops progressively revealed how the challenges of the Arab and European quarters are interconnected and require coordinated responses instead of producing isolated thematic outputs. Across all workshops, heritage was perceived as a layered construct combining architectural fabric, everyday practices, and collective memory. Narratives, oral histories, and cultural practices such as *Semsemia* highlighted the role of intangible heritage in sustaining place

identity, reinforcing the Historic Urban Landscape (HUL) conception of heritage as dynamic and lived rather than static (UNESCO, 2011; Bandarin & van Oers, 2012). This perspective challenges object-based conservation approaches that overlook social meaning.

| Dimension | Key Findings | IUCD Interpretation |
|----------------------------|---|---|
| Workshops Evolution | From narratives to scenario building to implementable strategies. | Progressive operationalisation of IUCD approach. |
| Heritage Conception. | Heritage understood as layers (built fabric, memory, practices, everyday use). | Aligns with HUL and IUCD's view of heritage as dynamic and lived. |
| Spatial Conditions | Deterioration, encroachments, fragmented mobility, lack of climate-responsive public space. | Meso-scale problems requiring integrated spatial strategies. |
| Socio-economic Dynamics | Informal trade central to the local economy; conflicts between vendors, shop owners, residents. | Informality as a structural condition, not a planning failure. |
| Environmental Challenges | Heat exposure, lack of shading, limited green infrastructure. | Public space as environmental and social infrastructure. |
| Governance & Participation | Fragmented institutional roles; strong local knowledge and engagement. | Participation essential for managing change and aligning interests. |

Table 5.2 Analytical synthesis of workshop outputs through the IUCD lens.

Spatial and environmental analyses showed that deterioration, violations and interrupted mobility are meso-scale issues. They are produced by the accumulation of informal adaptations and weak coordination mechanisms. Street markets and public spaces emerged as critical nodes where layers like climate exposure, commerce, mobility, and social interaction overlap. Therefore, and according to the IUCD approach, such spaces must be addressed through integrated, multi-sectoral strategies (Corten et al., 2014). Socio-economic findings further demonstrated that informality is a main feature of the inner city. Fed by the conflicts between vendors, shop owners, residents, and authorities and their competing claims over space and livelihoods. These conflicts draw attention to the misalignments between formal planning frameworks and lived urban realities (ElKerdany, 2017).

Overall, the workshops illustrate a clear evolution from documentation and interpretation toward scenario-building and implementable regeneration strategies. This progression confirms the meso-scale as the critical arena where conservation and development can be reconciled, providing the analytical foundation for the five integrated strategies: Recover, Connect, Refunction, Upgrade, and Manage.

5.6 Integrated Urban Conservation and Development (IUCD) as a Framework for Port Said

The integration of conservation within broader development frameworks is rooted in the Historic Urban Landscape (HUL) approach. As a holistic and values-based methodology, HUL moves beyond the protection of isolated monuments to treat heritage as an essential component of dynamic urban systems (UNESCO, 2011). Inspired by the HUL Recommendation alongside the Burra Charter (ICOMOS, 2013), this integrated model synthesises cultural significance with socio-economic vitality, environmental resilience, and participatory governance. This approach is particularly relevant for Port Said, where the inner city embodies both colonial-era urban layers and living traditions. The IUCD framework allows us to see the inner city as a hinge scale (meso) where strategic visions (macro) are translated into site interventions (micro). In this sense, Bazar Abbas is not a stand-alone project but a laboratory of IUCD, testing how conservation and redevelopment can co-exist and support social cohesion, creative economies, and resilience (Megahed, 2014).

1. Recover: Strengthen social and historical values

This step focuses on the recovery of the inner city, ensuring its cultural memory is legible and that heritage actively supports community identity and the local economy. This is achieved through the following actions:

- » Propose inventory and prioritise key heritage corridors, such as Bazar Street and the Canal front, for urgent façade and roof stabilisation.
- » Create small cultural hubs in existing public spaces, such as pocket plazas, arcades, to host *Semsemia*, oral-history sessions, and rotating micro-exhibitions.

2. Connect: Re-link historic core and waterfront

This step seeks to reweave the physical and experiential connections between the inner city, the Canal, and the Mediterranean front through the following actions:

- » Design clear pedestrian routes and cycle lanes running through the inner city (from Mohamed Ali to Palestine Street and on to the waterfront), prioritising wayfinding and sightlines to major heritage sites.
- » Introduce targeted traffic-calming measures, such as time-based delivery restrictions and a park-and-ride scheme on the quarter's periphery, to increase pedestrian space and improve the safety of market streets.

3. Refunction: Adaptive reuse to create mixed, resilient economies

This step aims to reuse under-utilised historic buildings to accommodate creative industries, training, and tourism services while safeguarding the fabric through the following actions:

- » Create a creative quarter zoning overlay comprising compact clusters of educational facilities, studios, markets and creative offices, supporting mixed-use and flexible leases for young people and small firms.
- » Launch short-term, flexible tenancy schemes (such as work-studio units) in underused buildings, and pair these with business incubation support and rehabilitation grants.

4. Upgrade: Public realm, climate adaptation, and infrastructure

This step aims to raise the quality of streets, markets and parks to support day-to-day life and climate resilience which can be done through

several actions including:

- » Implement a public space toolbox including shading systems, planted pergolas, permeable paving, rainwater harvesting in key streets and market roofs (such as the proposed ecological roof for the Marché Municipal).
- » Sequence upgrades following a phased approach. This begins with short-term measures, such as providing shade and regulating stalls, moves on to mid-term projects, such as repairing the market roof and improving drainage, and concludes with long-term interventions, such as establishing a tree network and green corridors between the Arab and European Quarters.

5. Manage: Inclusive governance and sustainable funding

This step aims to transition to projects that are durable and have representative governance and financing. This can be achieved through several actions:

- » Establish a creative quarter management body comprising local shop owners, street vendors, residents, SCA representatives, the municipality, and NGOs. This body will oversee maintenance, small grants, the events calendar and permit coordination.
- » Form market associations for Bazar Abbas and Marché Municipal, operating under a framework of co-management delegation and public-private-social partnership principles, to ensure fair cost-sharing and vendor representation (based on the Barcelona model).
- » Implement pilot revenue streams, such as digital marketplace, mobile app promotions, event fees, and concession management, to generate funds for ongoing conservation and maintenance.

Applying the IUCD framework to Port Said's inner city demonstrates how the meso-scale becomes the bridge between macro strategy and micro interventions. The five strategies mentioned above demonstrate that heritage regeneration encompasses more than just conserving buildings; it also involves activating social memory, reconnecting urban networks, repurposing structures to promote economic stability, enhancing resilience to climate change and integrating governance. This approach was also tested in the workshops, where the meso-scale provided a space in which to translate abstract principles into practical scenarios. By piloting these actions in Bazar Abbas, a testing ground will be created that generates knowledge and impact on a larger scale.

Ultimately, this establishes conservation as the main driver of inclusive development, maintaining the relevance and vitality of heritage cores for future generations.

5.7 Conclusion

This paper examined Port Said's inner city through a meso-scale lens, focusing on the Arab and European quarters where historical segregation and contemporary urban transformation can be manifested. The analysis demonstrated that physical deterioration, socio-economic pressures, environmental risks, functional fragmentation, and governance gaps are not isolated problems, but interrelated conditions produced through long-term historical, spatial, and institutional dynamics. Reading these challenges at the meso-scale revealed how everyday practices, informal economies, and inherited urban morphologies continue to shape vulnerability as well as resilience within the historic core.

By applying a framework that integrates conservation directly into the development process, the study reframed the inner city not as a static heritage zone but as a living urban system where conservation and development must be addressed simultaneously. The participatory workshops conducted between 2023 and 2025 played a key role in operationalising this approach, progressively moving from documentation and interpretation toward scenario-building and implementable strategies. Through Bazar Abbas as a testing ground, the workshops demonstrated how tangible and intangible heritage, climate adaptation, socio-economic regeneration, and governance can be integrated within a coherent meso-scale framework.

The five strategies – Recover, Connect, Refunction, Upgrade, and Manage – translate IUCD principles into actionable directions tailored to Port Said's inner city. They demonstrate that heritage-led regeneration is not limited to safeguarding architectural fabric, but involves activating social memory, reconnecting urban systems, enabling adaptive reuse, improving environmental performance, and embedding inclusive governance mechanisms. Ultimately, the study argues that the meso-scale is the critical arena where the tensions between conservation and transformation can be reconciled, offering a transferable methodological approach for historic port cities facing similar challenges of fragmentation, decline, and redevelopment pressure.

References

- Abdelaal, S. (2021). *Historic buildings rehabilitation as a catalyst to reconcile urban segregation: A colonial narrative of Port Said's historic districts* [Unpublished Master's thesis, Alexandria University & Brandenburg University of Technology].
- Abouelmagd, D., & Elrawy, S. (2022). Cultural heritage and sustainable urban development: The case of Port Said city in Egypt. *Cogent Social Sciences*, 8(1). Doi: 10.1080/23311886.2022.2088460
- Bandarin, F., & van Oers, R. (2012). *The historic urban landscape: Managing heritage in an urban century*. Wiley-Blackwell. <https://doi.org/10.1002/9781119968115>
- BTU Cottbus-Senftenberg. (2023). *Urban (heritage) narrative workshop: Every taracina has a story, March 2023*. Middle East Cooperation Unit. https://www-docs.b-tu.de/middle-east-cooperation/public/Bazar_Abbas/Report_2023_UHNW_PortSaid.pdf
- BTU Cottbus-Senftenberg. (2024). *Reimagining Bazar Abbas: Workshop on exploring urban recovery scenarios, September 2023*. Middle East Cooperation Unit. https://www-docs.b-tu.de/middle-east-cooperation/public/Bazar_Abbas/Report_2023_URW_PortSaid.pdf
- BTU Cottbus-Senftenberg. (2025). *Heritage for tomorrow: Workshop on integrated urban rehabilitation, July 2024*. Middle East Cooperation Unit. https://www-docs.b-tu.de/middle-east-cooperation/public/Bazar_Abbas/Report_2024_URW_PortSaid.pdf
- Corten, J. P., Geurts, E., Meurs, P. H., & Vermeulen, R. (Eds.). (2014). *Heritage as an asset for inner-city development: An urban manager's guide book*. NAi010 Publishers.
- Crosnier-Leconte, M.-L., Ghitani, G., & Amin, N. (2006). *Port-Saïd architectures XIXe—XXe siècles*. IFAO.
- ElKerdany, D. (2017). Port Said: A cosmopolitan heritage under threat. In H. Abouelfadl, D. ElKerdany, & O. Wanas (Eds.), *Revitalizing city districts: Transformation partnership for urban design and architecture in historic city districts* (pp. 15–33). Springer. https://doi.org/10.1007/978-3-319-46289-9_2
- Fouad, S. S., & Sharaf Eldin, S. (2020). Public perception affecting the significance of urban heritage: A case study of Port Said historic quarters. *Wiado-mości Konserwatorskie. Journal of Heritage Conservation*, 61, 17–30.
- Hussein, A. A. S. (2024). The historic urban landscape approach as a tool for Port Said heritage conservation. In L. Makhloufi (Ed.), *Urban heritage and sustainability in the age of globalisation* (pp. 235-260). Open Book Publishers. <https://doi.org/10.11647/obp.0412.11>
- ICOMOS. (2013). *The Burra Charter: The Australia ICOMOS charter for places of cultural significance*. <https://australia.icomos.org/publications/charters/>
- Megahed, N. A. (2014). Heritage-based sustainability in Port Said: Classification of styles and future development. *Archnet-IJAR: International Journal of Architectural Research*, 8(1), 94–107. <https://www.archnet.org/publications/9097>
- Piaton, C. (2017). Port Said: Cosmopolitan urban rules and architecture (1858–1930). In H. Abouelfadl, D. ElKerdany, & O. Wanas (Eds.), *Revitalizing city districts: Transformation partnership for urban design and architecture in historic city districts* (pp. 3–14). Springer. https://doi.org/10.1007/978-3-319-46289-9_1
- Saleh, R. (2023). *Port Said's cultural integrity: Weaving history, culture, and creativity along the Mediterranean front* [Unpublished Master's thesis, Alexandria University & Brandenburg University of Technology].
- UNESCO. (2011). *Recommendation on the historic urban landscape*. <https://whc.unesco.org/en/hul/>
- Wladika, S. A. M. (2015). *Port Said—No future without the past: Integrated rehabilitation concept for the urban heritage* [Master's thesis, University of Stuttgart and Ain Shams University]. Integrated Urbanism and Sustainable Design (IUSD). https://iUSD.asu.edu.eg/?page_id=1747&id=1021

06. The Bazar Street

A Hybrid Heritage

Basma El-Assar

Abstract

Situated at the heart of Port Said's European Quarter, Bazar Street is a historically significant and socially vibrant corridor that encapsulates the city's hybrid typology. This study uses the Integrated Urban Conservation and Development (IUCD) approach, a comprehensive framework for integrating conservation into wider urban development. However, this paper applies a targeted selection of its multi-layered methodology to translate street-level inventories, surveys and collaborative workshops into values, vulnerabilities and indicative guidelines¹. In line with the Historic Urban Landscape (HUL) recommendation, these frameworks enable a layered interpretation of the street, where architecture, economy and culture are inextricably linked. The study focuses on the architectural, socio-cultural and economic dimensions that best express Port Said's layered identity. The findings reveal that architectural dialogue, economic diversity and collective memory sustain the street's significance, whereas threats such as material decay, institutional rigidity and the erosion of the historic streetscape pose critical risks. Synthesising these findings, the paper proposes a strategy balancing heritage protection with contemporary urban needs to maintain continuity. The analyses presented here establish Bazar Street as a living microcosm of Port Said and a vital pilot site for testing heritage-led regeneration on a small scale.

Keywords: Port Said, Bazar Street, hybrid typology, integrated urban conservation and development, urban heritage

6.1 Introduction

Bazar Street is situated at the intersection of the European and Arab quarters of Port Said, occupying a strategic urban location. Historically positioned as a buffer between these distinct quarters, the street has evolved into a vital economic and social link. This transformation was fuelled by its function as a commercial artery, a pivotal element of urban life in a port city (Abdelaal, 2021). Such markets serve as commercial hubs and spaces for social interaction, where the city's hybrid identity is manifested (AlSadaty, 2020).

1 This paper uses the results of on-site surveys, stakeholder interviews and participatory workshops conducted by the Recovery Lab between 2023 and 2024 as its primary data. The spatial guidelines proposed herein were developed through inter-team dialogue and the efforts of the workshop teams. An overview of the workshop methodologies and results can be found in Appendix B, and the baseline survey report can be found in Appendix D.

For the purposes of this paper, hybrid identity is defined as the multi-layered urban character of Port Said that cannot be classified exclusively as either European or Arab. Rather, the city's architecture and social practices reflect a maritime culture shaped by both influences. Consequently, Bazar Street's heritage value lies in the intertwined relationship between its urban form and everyday life. As a microcosm of Port Said's wider identity, the street embodies the city's values and reflects its current challenges. Therefore, Bazar Street emerges as a key site for a pilot regeneration project that could provide a framework for the recovery of the broader historic inner city.



Fig. 6.1 The Bazar Street in the inner city. (Drawing: Author, 2025)

6.2 Street-Level Inventory

Bazar Street extends for around 405 metres through the European quarter, connecting two important urban areas: El-Mansheyah Square to the south and the Ferial Gardens to the north. It cuts across two of

the city's main roads, Abd El-Moneim Riad Street and Safeya Zaghloul Street (Fig. 6.2). With an average width of eight metres, the street has a compact, spatially constrained profile, frequently punctuated by shop extensions and vendor carts. Hosting traditional Arab commercial functions within the European grid reinforces the hybrid typology and strategic role of the street within the urban fabric. The density of micro-scale economic activities within the eight-metre-wide streetscape creates a sense of functional narrowness, where the physical width is constantly negotiated between pedestrians, heritage structures and mobile market elements.



Fig. 6.2 The Bazar Street location and accessibility. (Drawing: Author, 2025, adapted from Google Earth Image)

6.2.1 Architectural Aspects

Archival maps from 1937 show that Bazar Street was originally designed as a corridor for institutions and services within the European quarter. At that time, it housed a fire station, civic offices and various consulates, including those of France and Yugoslavia (Egypt Survey Authority, 1937). Initially, the street's commercial identity was anchored by only two sites, known as the Arab market and the Bazar Abbas (Abdelaal, 2021; Saleh 2023).

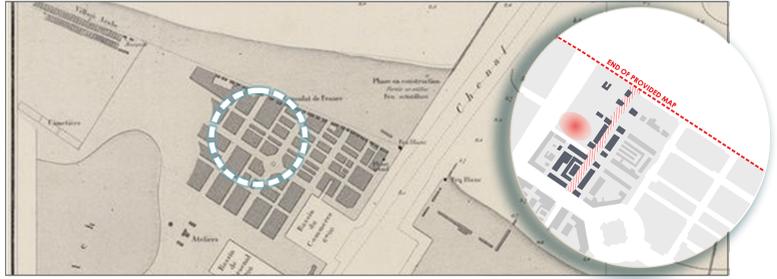
Today, land-use mapping reveals a radical shift, indicating that approximately 90% of the built environment is now commercial, with trade spilling into every available space (Fig. 6.3). Although Bazar Abbas and the Municipality Market continue to operate, they are now part of a much denser informal commercial landscape (AISadaty, 2020). Activity is concentrated in three main clusters: furniture and appliances; food and beverages; and clothing. This transition from a civic service

street to a saturated marketplace reflects the broader mid-century transformation of the European quarter discussed by Piaton (2017), whereby institutional uses were replaced by commerce after foreign residents left.



Fig. 6.3 Commercial land use map of the Bazar Street in 1937 (right) and the current situation (Left). (Drawing: Author, 2025, adapted from Recovery Lab Workshops; and Egyptian Survey Authority, 1937)

The morphology of Bazar Street reflects the tension between historical continuity and modern disruption. Traditional one- to four-storey buildings dominate the skyline, but this rhythm is increasingly interrupted by high-rises (Fig. 6.5). Although these newer structures utilise modern materials such as aluminium, the older buildings retain the city's distinctive hybrid features: European-influenced cornices paired with local motifs, festoon decorations and wooden *taracinas* (timber verandas). These elements create a dynamic interplay of light and shadow that shapes the sensory experience of the street (BTU Cottbus-Senfenberg, 2024). However, contemporary additions often disrupt the historic scale and materiality. The contrast between fragile wooden arcades and encroaching concrete volumes creates a fragmented landscape in which 19th-century wrought-iron railings sit alongside mid-20th-century concrete parapets and irregular 21st-century frames. This juxtaposition of consular heritage and dense retail strips reflects Port Said's broader evolution, in which European planning and Arabic commerce are in constant overlap.



CITY FOUNDATION

1869



PROSPERITY PERIOD

1937



POSSIBILITIES OF RECOVERY

NOW

Fig. 6.4 Morphological evolution of the Bazar Street. (Drawing: Author, 2025, adapted from Larousse, & Compagnie universelle du canal maritime de Suez, 1869; and Egyptian Survey Authority, 1937)

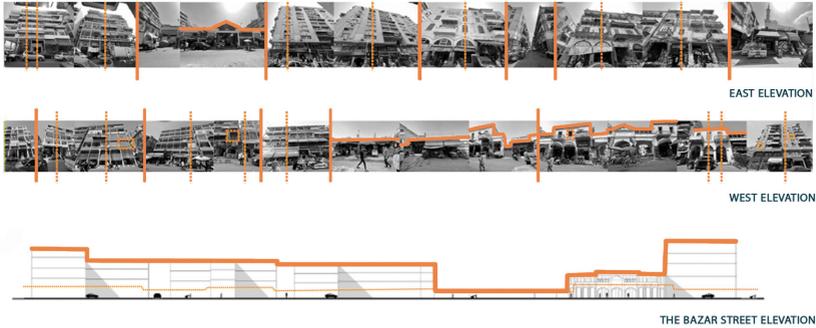


Fig. 6.5 Street skyline and elevation. (Source: Project archive; work of the Critical Reconstruction Team in the Urban Recovery Workshop, September 2023)

6.2.2 Socio-Cultural Aspects

The rhythms of movement and trade on Bazar Street link the tangible built environment to intangible social practices (Saleh, 2023). As a port city, the daily life of Port Said is shaped by a convergence of maritime traditions and commercial routines. On a smaller scale, these cycles manifest as overlapping patterns of trade and sociability (Fig. 6.6). Daily activity follows a recognisable cycle. Mornings are dedicated to logistics and household shopping, whereas dense crowds gather in the late afternoon and evening for shopping and dining. The street remains a social hub late into the night, supported by various cafés and restaurants. Weekly patterns reach their peak on Fridays and at weekends, when families are specifically attracted to the fish restaurant node. The street's appearance is also dictated by the season; winter storms often lead to muddy conditions due to poor drainage, and summer heat prompts shop owners to install shading devices that, over time, obscure the historic façades.

These shifting layers of activity illustrate a dynamic streetscape that constantly adapts to the needs of its users. Residents have a strong attachment to this vibrancy; however, surveys indicate that they frequently criticise the street's overcrowding and poor maintenance. (see Appendix D). This public perception highlights the tension between the street's role as a primary commercial corridor and its physical vulnerabilities. Gathering points further illustrate this complexity. The fish restaurant area is a key spatial focal point, creating a vibrant but congested area between Abd El-Moneim Riad and Safeya Zaghoul Streets. In contrast, the stretch extending towards Ferial Garden has a more visible residential presence and is largely used as a passageway.

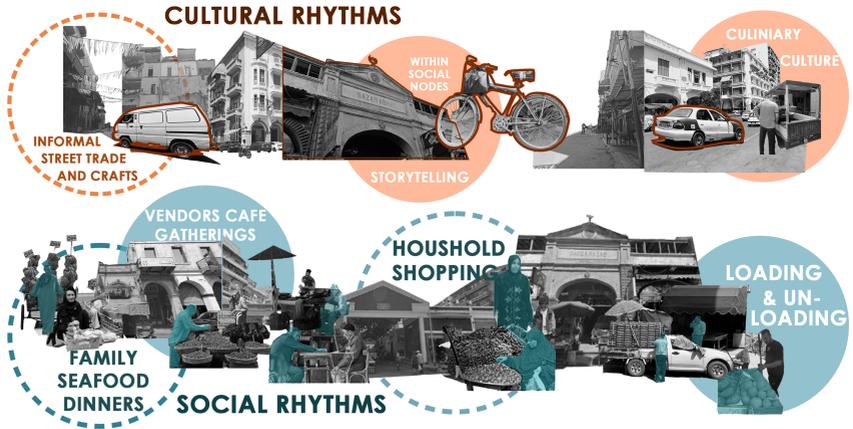


Fig. 6.6 Social and cultural rhythms of the street. (Drawing: Author, 2025, based on data from project archive)

Collectively, these patterns reflect broader urban behaviours that are distinctive to the European quarter, where the street acts as a stage for the city's shared maritime and commercial identity.

6.2.3 Economic Aspects

The shifting social patterns and public perceptions of Bazar Street are reflected in its economic spatial arrangement. The densest concentration of commerce can be found in the first section, between Abd El-Moneim Riad and Safeya Zaghloul Streets. Here, formal shops and informal vendors create a saturated market environment. In this area, goods often spill onto the pavement and vendor carts become semi-permanent fixtures. This often results in the interior of formal shops being used primarily for storage rather than retail. The product mix is heavily dominated by food-related commerce, including bakeries, juice stalls, supermarkets, and the fish restaurant (AlSadaty, 2020). Within the street's 8-metre width, these dense commercial clusters force shop displays to extend over the sidewalks, creating a shared corridor for pedestrians and vehicles.

Ultimately, Bazar Street combines attributes belonging to neither the European nor the Arab quarter. Rather than being defined by one singular logic, it condenses the layered typologies, informal practices and hybrid rhythms of the entire city into a single, linear market. The street functions as a microcosm of Port Said, where architectural, social and economic identities all overlap. Understanding this complexity is

the first step in identifying the specific values that must be safeguarded in the face of mounting urban pressures.

6.3 IUCD: Methodology and Interpretive Lens

Having documented the complex, multi-layered reality of Bazar Street, the question arises as to how such a hybrid context can be interpreted and addressed effectively. To transform raw observations into practical recovery strategies, this study adopts the integrated urban conservation and development (IUCD) framework. Alongside the Historic Urban Landscape (HUL) recommendation, these frameworks facilitate an understanding of the street's layered identity, providing the necessary transition from site-level data to the strategic directions of Recovery, Connection, Re-functioning, Upgrading and Management introduced in Paper 5 as the essential pillars for Port Said's urban regeneration.

It is important to clarify that the IUCD is not a codified international framework, as the HUL Recommendation is. Here, it is used as a working term to capture the synthesis of integrated conservation ideas emerging since the 1975 Declaration of Amsterdam (ICOMOS), which first stated that integrated conservation must be one of the first objectives of urban and regional planning. This paradigm shift was reinforced and further developed by the HUL Recommendation, which defined urban heritage as a historic layering of cultural and natural values extending beyond monuments to include the broader urban context (UNESCO, 2011). Similarly, Bandarin and van Oers (2012) argue that historic cities must be approached as complex systems in which conservation is inseparable from development processes.

Through this lens, historic urban heritage is considered a dynamic framework whose content evolves over time, blurring the distinction between conservation and development (Meurs, 2014) while continuously adapting to changing circumstances (Geurts & Corten, 2014). Conventional conservation models, which typically prioritise the restoration of the physical fabric, are not well-suited to the realities of Bazar Street. Here, the hybrid typology, socio-economic functions and cultural practices are intertwined. In a historic market, architectural survival is directly tied to economic relevance. Consequently, retail development in these areas is the main interface between conservation and urban regeneration.

In this sense, IUCD is relevant for two reasons. Firstly, it acknowledges the interdependence of values and vulnerabilities. Secondly, it

provides a structure for interpreting how street-level phenomena are connected to city-wide processes. The IUCD process can be understood as a sequence of interconnected phases, including preparation, guideline setting and planning, all of which are underpinned by continuous participation. In the case of Bazar Street, these phases were not abstract academic concepts, but practical elements of the Bazar Abbas Recovery Lab workshops (BTU Cottbus-Senftenberg, 2023; 2024).

The significance of these workshops lies in the way the teams experimented with layering diverse approaches, such as public space and climate adaptation, mobility and infrastructure, heritage and memory, and markets and the economy. Although IUCD is a comprehensive framework, it is applied here as a targeted interpretive methodology. This enables Bazar Street to be viewed not as an isolated, declining market, but as an integral part of Port Said's broader identity. This layered interpretation is crucial in transforming the preliminary efforts of the workshops and the dialogue between the teams into the specific values and vulnerabilities detailed in the following section.

6.4 Values

The value of historic cities and urban areas lies not only in their physical fabric, but also in the intangible dimensions of their heritage, such as their history, memories and cultural practices (UNESCO, 2011). In this study, values and vulnerabilities are considered two interdependent analytical layers: values explain why specific urban characteristics are important, while vulnerabilities highlight their susceptibility to external pressures and threats. Evaluating these values provides a framework for prioritising interventions and balancing conservation with adaptation. In the case of Bazar Street, it is necessary to look beyond façades and structures in order to consider the social practices, economic functions, and cultural meanings that continue to bring the space to life.

6.4.1 Architectural Values

Bazar Street is characterised by Port Said's distinctive blend of European urban planning and local expression. Its architecture reflects the city's typical hybrid typology, in which local and European features merge (Baller, 2017; ElKerdany, 2017). The most prominent examples are Bazar Abbas and the Municipality Market, which follow Neoclassical principles of monumental scale, geometric order and symmetry, as defined by pedimented entrances and rhythmic cornice lines.

| HYBRID ARCHITECTURAL FEATURES | NAME & USE | INDICATORS OF INTEGRITY | | | |
|--|---|--------------------------|------------------------|-----------------------------|------------------------|
| | | WHOLENESS AND INTACTNESS | CONTINUITY OF FUNCTION | INTERRELATION OF COMPONENTS | IMPACT OF ALTERATIONS |
|  | 1. Use of Cornices and Classical ornamentations | PARTIAL CONTINUITY | WHOLLY INTACT | WHOLLY INTACT | FRAGMENTED OR OBSCURED |
|  | 2. Taracinas with wrought-iron railings | PARTIAL CONTINUITY | WHOLLY INTACT | WHOLLY INTACT | PARTIAL CONTINUITY |
|  | 3. Entrance Reinforced with a Pediment | PARTIAL CONTINUITY | PARTIAL CONTINUITY | FRAGMENTED OR OBSCURED | FRAGMENTED OR OBSCURED |
|  | 5. Stone Mouldings around wooden shutters | FRAGMENTED OR OBSCURED | PARTIAL CONTINUITY | WHOLLY INTACT | FRAGMENTED OR OBSCURED |
|  | 6. Arcades used for shading | WHOLLY INTACT | PARTIAL CONTINUITY | PARTIAL CONTINUITY | FRAGMENTED OR OBSCURED |

Table 6.1 Historical architectural elements and indicators of their integrity. (Source: Project Archive)

This formal order coexists with a hybrid fabric, creating a visual dialogue in which European and Ottoman-Mediterranean influences are reinterpreted through local ornamentation. The architectural value of Bazar Street lies less in individual façades than in their collective integration: together, these buildings form a coherent and distinctive streetscape. Although there are evident disruptions, such as high-rise insertions from periods of political turmoil, encroaching vendor stalls and fragmented façade lines, these interruptions paradoxically highlight the street’s resilience. Despite these pressures, the underlying geometry and rhythm remain legible.

A layered analysis provides a more in-depth valuation of integrity,

which is sustained through three key factors:

- » *Continuity of expression:* The persistence of one- to four-storey buildings, as well as the survival of *taracinas* and arcaded fronts, sustains a specific street-scale character. Horizontal visual lines link traditional wooden elements to wrought-iron railings and eventually to the geometric concrete parapets of later periods.
- » *Morphological coherence:* The geometry of the street remains largely unchanged from historical maps. Its width and length serve as a persistent marker of place, surviving despite various informal intrusions.
- » *Rhythmic persistence:* Although modern high-rises have disrupted the scale and proportion of the street enclosure, the traditional rhythm of one- to four-storey buildings still dominates the collective experience.

Ultimately, the architectural integrity of Bazar Street should be judged not by the features of individual buildings in isolation, but by how these features are integrated into a distinctive architectural dialogue that defines the streetscape.

6.4.2 Socio-Cultural Values

According to Jokilehto (2006), values are constructed through dialogue and social exchange, forming the cultural identity of a community. In this context, Bazar Street is an intricate tapestry of activities and users, as captured by the local proverb shared during the Urban Narratives Workshop: *Almkn b'nsah*, which translates as 'a place only comes alive through its people' (Fig. 6.7). The social dimension is analysed through three lenses: habits and activities, public perception and sense of belonging.

A) Social Habits and Activities

The street inventory reveals a complex matrix of uses, but its true social value lies in the continuous emergence of activities tied to communal identity. Despite alterations, the market retains an authentic charm that supports small-scale traders and artisans. Local cafés have become vital nodes for street vendors, creating gathering spots with varying intensities throughout the day. These social hubs are overlaid with retail activities that overflow into the street, attracting a daily influx of shoppers and forging a unique connection between the city's past and future (Saleh, 2023).

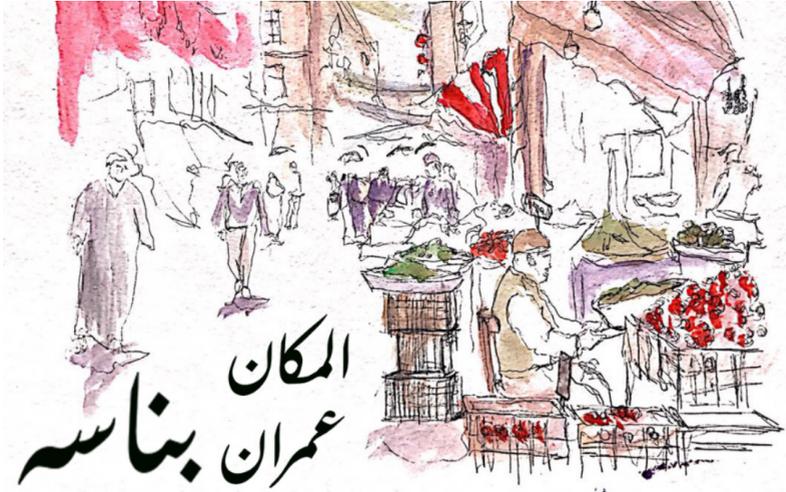


Fig. 6.7 Sketch of the street's social tapestry. (Source: Project Archive; work of the Al-Bazar Zone Team in the Urban Narrative Workshop, March 2023)

B) Public Perception

Public perception confirms that Bazar Street is seen as a vibrant lifestyle hub rather than just a functional zone. Surveys conducted in 2023 (see Appendix D) revealed that residents define the market through sensory experiences as a place of particular smells, sounds, and memories. Most respondents attributed the street's importance first to its rich social life, followed by its historical and architectural features.

To capture the 'unseen' aspects of the street, participants in the Urban Narratives workshop invited passers-by to draw what they could see through transparent panels. This exercise enabled participants to transform their perception of a place into a tangible image. Some drew activities and products, while others focused on the tangible elements visible in the street (Fig. 6.8). Despite these different perspectives, the drawings collectively affirm that the street is perceived as being more than just a collection of buildings: it is a stage for coexistence and exchange. Consequently, the bazaar's social value lies in the fact that it has many different meanings. It supports multiple interpretations and serves as a shared reference point for belonging.

C) Adaptability and the Sense of Belonging

Interviews with local shopkeepers reveal a deep sense of belonging rooted in the street's role as a repository of memories. Remarkably, this



Fig. 6.8 Examples of drawings by passers-by. (Source: Project Archive; work of the Al-Bazar Zone Team in the Urban Narrative Workshop, March 2023)

attachment endures despite the street's current state of disrepair; the merchants' dedication to the area remains a potent social force even as the historic fabric is severely neglected. For these shopkeepers, Bazar Street is a pillar of their identity, not merely a commercial zone. Many of them recall their formative years during the city's economic resurgence and share nostalgic accounts of the *taracin*s and the historic Bazar Abbas, which form part of the street's collective memory.

Significantly, this loyalty has persisted through successive waves of transformation. Whether during the Free Zone boom of the 1970s, the post-war return of evacuated families or more recent shifts in trade, the shopkeepers have continuously renegotiated their relationship with the space. This shows that the bazaar's value is not fixed in the past, but survives through an extraordinary capacity for adaptation. Ultimately, collective memory anchors the street's identity, while the merchants' adaptability allows for the continuity of its commerce and social relevance.

6.4.3 Economic Value

The street's physical integrity directly supports its enduring commercial character. Beyond current activity, its economic value lies in the

persistence of inherited trade networks and rental structures, as well as the distinct diversity of goods on offer. Analysis of the street’s economic chains (Fig. 6.9) reveals the continuity of these networks. Goods are imported from Cairo and wholesale hubs, and then redistributed through retail stores anchored by Bazar Abbas to the wider Port Said region. Additionally, the Municipality Market plays a crucial role in facilitating the sale of local products, including fish from regional fishermen, flour from government-owned mills, and timber from Damietta. This diverse supply gives Bazar Street a vibrant commercial scene that contrasts with the specialised markets found elsewhere in the city. Historically, food, clothing and furniture were categorised by location, though recent encroachment by vendors has blurred these boundaries.

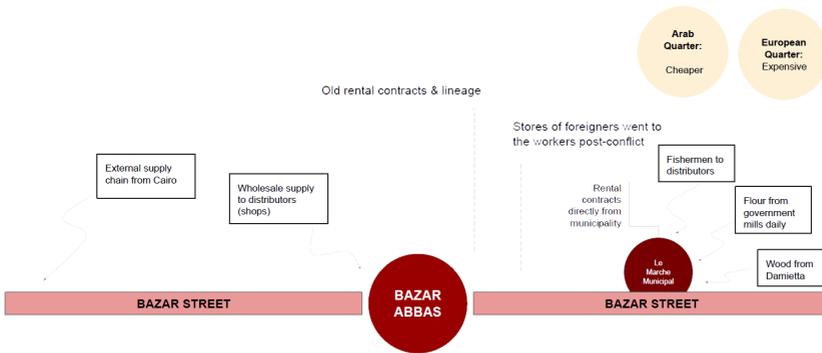


Fig. 6.9 Economic chains within the Bazar Street. (Source: Project Archive; work of the Socio-Economic Regeneration Team in the Urban Recovery Workshop, September 2023)

This mixture of products provides a critical socio-economic function: a balanced shopping experience. Interviews conducted by the Socio-Economic Regeneration workshop team in 2023 indicated that Arab markets are perceived as cheaper, which is often associated with lower quality. In contrast, European Quarter markets are seen as prohibitively expensive. Bazar Street, however, occupies a middle ground. It offers reasonable quality at moderate prices, catering to a broad cross-section of the population.

Ownership patterns also provide an insight into the economic identity of the street. Originally owned by foreign residents of the city, these stores were reclaimed by locals after the conflicts and nationalisation period of the mid-twentieth century (Saleh, 2023). This transfer of ownership established a community-based economic foundation that was later locked in place by old rental laws. These inherited contracts have

acted as an informal barrier against full gentrification, helping to preserve the street's traditional character².

Ultimately, the economic value of Bazar Street is not merely found in financial turnover, but also in the persistence of patterns that reflect the development of global port cities. By preventing the displacement of long-term tenants, these informal structures have safeguarded the street's continuity. This analysis of economic chains provides a scalable model that could inform a city-wide socio-economic regeneration strategy.

6.5 Vulnerabilities and Threats

Building on the previous section, which identified the values that make Bazar Street significant, this section explores the vulnerabilities and threats that endanger these values. In this context, vulnerabilities are understood to be internal structural weaknesses, such as rigid legal frameworks and physical neglect, while threats are defined as external pressures, including rapid urbanisation and unmanaged commercial growth. These forces manifest themselves in the material fabric of the Bazar, its economic functions and its social life, thereby endangering the street's tangible and intangible attributes.

6.5.1 Architectural Vulnerabilities and Physical Threats

Although Bazar Street has demonstrated historic resilience, it is currently facing critical risks from modern interventions and incompatible constructions, which have altered the skyline and introduced a wave of informal alterations. Furthermore, the hybrid architectural features are now being obscured by standardised shop signs, plastic sheets and corrugated metal fixed directly to historic façades. Traditionally, the street used integrated arcades for shade and wooden *mashrabiya*-style screens, but these have been replaced by haphazard fabric awnings and umbrellas as informal vendors have taken over the public realm.

The material fabric has suffered significant fragmentation, with the original brick, stucco and marble surfaces being replaced by peeling

² The rental law is a series of mid-20th-century decrees that froze rents and granted tenants perpetual, inheritable leases. In the Egyptian context, this created a profound urban paradox: it provided social stability for merchant families and prevented the gentrification of historic markets, but the negligible returns left landlords with no incentive or capital for maintaining their properties. This resulted in severe physical deterioration and structural vulnerability, which is discussed further in Section 6.5.3. Notably, this system is now transitioning following Law No. 164 of 2025, mandating a five-year period for non-residential units to transition to market-rate contracts. The full impact of these new regulations on the streetscape and social fabric of Bazar Street will be known in the years to come.

plaster or bare concrete. The historic fabric's susceptibility to physical decay is a primary vulnerability, triggered by the threat of unmanaged commercial interventions and exacerbated by inconsistent municipal oversight (Abdelaal, 2021). Furthermore, the absence of designated pedestrian pathways and inadequate public lighting, which relies almost entirely on spill-over from shop fronts, creates a dangerous overlap between foot traffic and vehicles. These alterations are not just an aesthetic deformation; they undermine the value of hybridity and erode a core component of Port Said's identity.

6.5.2 Socio-Cultural Vulnerabilities

The Bazar's intangible heritage, including its collective memory and communal adaptability, is under increasing strain due to rapid urbanisation. Historically, this adaptability has been key to the street's survival, but its capacity to accommodate contemporary functions is now diminishing. As the street struggles to integrate modern uses, public perception shifts, collective memory fragments, and the area loses its status as a shared reference point for the city's youth. Although urban growth provides some economic opportunities, if it is not managed properly, it poses a significant risk to the integrity of the urban fabric and threatens to erode the community's established identity.

This isolation is clearly illustrated by the 2023 baseline survey data, in which participants under 18 years old no longer associate the term 'Bazar' with this historic site, but with the new bazaars and malls instead. Younger demographics expressed a significant lack of knowledge regarding the importance of the Bazar Abbas building itself (see figures 3, 11 and 12 in Appendix D). This is in sharp contrast to the 24–44 age group, who still view it as a primary landmark. This growing disparity in heritage awareness poses a significant vulnerability. Without a shared sense of value across generations, the social fabric of the street is at risk of unravelling, transforming the former strength of adaptability into a liability.

6.5.3 Threats to Economic Values

Structural and economic frameworks pose a significant risk to the day-to-day functioning of Bazar Street. One primary yet less visible vulnerability lies in the legal and economic frameworks, specifically rent control laws which have frozen leases at rates that fail to cover maintenance costs amid rising inflation. This has effectively turned

tenants into quasi-proprietors, making it extremely difficult for landlords to address violations. Consequently, the rigidity of these frameworks stunts the street's adaptability: spaces that could be upgraded or repurposed remain frozen in outdated configurations, thereby undermining the institutional resilience of the Bazar (AlSadaty, 2020).

On a daily basis, the Bazar suffers from the pressures resulting from its success as a commercial hub. Over-commercialisation has led to the corridor being saturated with stalls and signage, turning public space into an extension of private retail (Fig. 6.10). Vendor carts, which often operate under informal agreements with shopkeepers, have become semi-permanent fixtures. In many cases, sidewalks have been completely repurposed for storage or selling, eliminating their intended pedestrian function. These practices have become normalised across Port Said's markets and have embedded encroachment into the commercial identity of the street, making the regulation of public space increasingly difficult (Abdelaal, 2021).



Fig. 6.10 Informal alterations to façades. (Source: Project Archive; work of the Critical Reconstruction Team in the Urban Recovery Workshop, September 2023)

This intensification is driven by a shift in modern consumer behaviour, representing an unprecedented change to traditional market typologies. As new users demand new functions, the street is facing a physical impasse because it cannot be expanded horizontally or vertically without compromising its heritage value. In this sense, economic dynamism presents a conflicting duality. While it is essential to the street's identity, yet it also threatens the qualities that make the corridor significant.

6.6 Indicative Guidelines

Having examined the values and vulnerabilities of the street, this section

presents a synthesis of the various indicative guidelines proposed by the workshop teams. The preceding analysis treated each layer individually; however, the hybrid typology of Bazar Street necessitates an integrated approach. By addressing identified values and vulnerabilities collectively, these guidelines move beyond isolated repairs to safeguard the urban integrity of the streetscape.

This framework adopts multiple dimensions of integrity, moving beyond the purely physical to include the social, economic and functional layers of the city (Jokilehto, 2006). In this context, integrity is understood as a condition that enables a heritage resource to continue conveying its values over time. The following sections therefore categorise the workshop findings based on their contribution to the street's morphological, sociocultural, economic, and functional characteristics. These guidelines are not comprehensive, but they aim to preserve the values that define the historic identity of Bazar Street.

6.6.1 The Architectural Layer: Spatial Framework and Regulation

The architectural layer acts as an active framework that defines the morphological integrity of the corridor. It preserves the historic relationship between street width and buildings, as well as distinctive architectural styles. This layer provides the essential structure that safeguard visual and sensory integrity and clarity of architectural boundaries, which are necessary for social and economic interaction. By reinforcing these boundaries, the guidelines promote social cohesion, creating safe pedestrian environments and enabling buildings to adapt to modern trade practices. Based on these findings, the following guidelines are proposed:

- » Protect the urban profile and streetscape by limiting disruptive, high-rise construction that threatens the historic scale of the district
- » Implement rainwater management systems tailored to the width and high-density context of the street to provide long-term functionality.
- » Reclaim pavements by regulating vendor spillover and carts to restore clarity to architectural boundaries and enable safe movement.
- » Maintain distinctive elements, including arcades, *taracinas* and wrought iron details, through targeted conservation that upholds the visual character of the hybrid typology.
- » Manage alterations to shopfronts to prevent modern awnings and signage from obscuring historic façades or compromising the aes-

thetic quality of the urban fabric.

- » Focus resources on key heritage assets such as Bazar Abbas, the Municipality Market and Villa Eugenie, using a value-led assessment to maintain their economic relevance.
- » Reintroduce traditional materials such as basalt and brick paving to reinforce historical continuity and the tactile experience of the streetscape.

6.6.2 Socio Cultural Layer: Continuity and Communal Activation

The socio-cultural layer emphasises the social cohesion of the street, establishing a connection between the richness of communal life and tangible urban interventions. This layer is intrinsically linked to the street's morphological layout, where the scale of the street creates conditions that encourage social proximity. Evidence for this approach was provided by the Experimental Design team, whose pilot project used Bazar Street as a starting point for city-wide interventions. Their performances and *Semsemia* parades showed how local cultural events can promote wider stability. The Intangible Heritage and Cultural Tourism teams further developed this approach by mapping sensory experiences and proposing heritage trails that use the arcades as a structuring thread to revive maritime culture.



Fig. 6.11 Photos from the pilot project of the Experimental Design Team. (Source: Project Archive; Urban Recovery Workshop, September 2023)

Accordingly, the following guidelines are proposed:

- » Integrate intangible heritage nodes into spatial planning by designating specific zones for traditional music, cuisine and maritime history, to safeguard the collective memory of the area.

- » Develop tourism trails that link the ferry terminal to the Arab quarter via the street arcades, utilising historic nodes to create narrative continuity.
- » Foster community resilience by introducing storytelling areas and sports amenities designed to attract and retain younger residents, ensuring a sense of place.
- » Regulate and promote seasonal cultural events to sustain social bonds and attract local and regional visitors to the district.

6.6.3 Economic Layer: Resilience and Enterprise Integration

The economic layer focuses on the economic and functional integrity of the street, viewing trade as the vital force that preserves heritage. This resilience relies on a well-maintained streetscape that signals a healthy market, supported by community-based enterprises. The Socio-Economic Regeneration team explicitly targeted this by supporting small and medium-sized enterprises (SMEs) and enhancing the visibility of local products. Their framework bridged the gap between heritage skills and contemporary markets by offering vocational training and traditional craft programmes. Furthermore, the team experimented with shared infrastructure systems, such as communal storage and delivery logistics, as well as introducing mixed-use functions within existing cafés. To combat the effects of physical decay, the team proposed periodic food festivals and pop-up events to generate new footfall and broaden the customer base. From these strategic perspectives, the followings are proposed:

- » Provide capacity building, vocational training and digital tools to enhance the competitiveness of traditional merchants and maintain the vitality of the marketplace.
- » Reinforce traditional manufacturing through public showcases and training programmes that link heritage skills with consumer demands.
- » Encourage cafés and retail units to adopt diverse, mixed-use functions to attract a broader demographic and secure the continued use of the historic fabric.
- » Implement collective systems for storage, tools and logistics to reduce operational costs for vendors and improve efficiency.
- » Ensure that physical improvements, such as enhanced walkability and cultural tourism trails, are designed to maximise trade flows.

IMPLEMENTATION PHASES

short term



- LEGEND**
- Social**
 - 1 Community cultural space + kitchen (community center)
 - 2 Community mural on Public Spaces
 - 3 Community self-help groups (self-management system, clean-up activities, community representations)
 - 4 Introduce multi-coded elements in the street (for sitting, shade, announcements)
 - Cultural**
 - 1 Include bazaar street in the City tours
 - 2 Management Groups (preserve the local heritage)
 - Economic**
 - 1 Program to support innovative SMEs in Port Said
 - 2 Support existing businesses development (capacity building, digitalisation)
 - 3 Introduce shared facilities systems (shared shopping carts, shared bikes, shared tools, ...)
 - 4 Support traditional Crafts training, showcase the process, ...)
 - 5 Vocational Training for Women
 - Spatial**
 - 1 Creating a car free street (streetscape)
 - 2 Fixing the infrastructure (drainage, asphalt, urban pockets, ...)
 - 3 Introduce climatic intervention (shading, green elements, ...)
 - 4 Enhance waste management systems in the street and neighborhood
 - 5 Apply noise reduction techniques (awareness, regulations, ...)

Fig. 6.12 Short term projects proposed by the Socio-Economic Regeneration Team. (Source: Project Archive; Urban Recovery Workshop, September 2023)

6.7 Conclusion: A Framework for Urban Recovery

Bazar Street is much more than just a commercial strip. It is an encapsulated reflection of Port Said’s complex identity. The street’s architecture, morphology and socio-economic patterns reveal, on a small scale, the negotiations and continuities that define the wider city. This study shows that the street acts as a microcosm of Port Said, embodying the dialogue between the various influences that shaped its hybrid typology, the persistence of collective memory and the economic networks of the port city.

The IUCD approach has demonstrated how inventories, values and workshop outcomes can converge to create guidelines that enable adaptation without compromising historical legibility. It should be noted, however, that the proposals developed by the workshop teams are indicative practices rather than comprehensive planning. They represent a preliminary effort to test the feasibility of heritage-led recovery on a small scale.

These street-level interventions provide the necessary link between the mesoscale analysis explored in Paper 5 and the architectural interventions required for the Bazar Abbas building. This vision is most specifically articulated in the following part of this volume, which examines how Recovery Lab proposals are translated into focused, small-scale interventions within the Bazar Abbas building itself.

References

- Abdelaal, S. (2021). *Historic buildings rehabilitation as a catalyst to reconcile urban segregation: A colonial narrative of Port Said's historic districts* [Unpublished Master's thesis, Alexandria University & Brandenburg University of Technology].
- AlSadaty, A. (2020). Port Said historic markets: A tool for urban revitalization. *Archnet-IJAR: International Journal of Architectural Research*, 14(3), 543–557. <https://doi.org/10.1108/ARCH-02-2020-0022>
- Baller, I. (2017). Strategies for the preservation of the heritage of the Suez region and Port Said as World Heritage Site. In H. Abouelfadl, D. ElKerdany, & O. Wanas (Eds.), *Revitalizing city districts: Transformation partnership for urban design and architecture in historic city districts* (pp. 35–51). Springer. https://doi.org/10.1007/978-3-319-46289-9_3
- Bandarin, F., & van Oers, R. (2012). *The historic urban landscape: Managing heritage in an urban century*. Wiley-Blackwell. <https://doi.org/10.1002/9781119968115>
- BTU Cottbus–Senftenberg. (2023). *Urban (heritage) narrative workshop: Every taracina has a story, March 2023*. Middle East Cooperation Unit. https://www-docs.b-tu.de/middle-east-cooperation/public/Bazar_Abbas/Report_2023_UHNW_PortSaid.pdf
- BTU Cottbus–Senftenberg. (2024). *Reimagining Bazar Abbas: Workshop on exploring urban recovery scenarios, September 2023*. Middle East Cooperation Unit. https://www-docs.b-tu.de/middle-east-cooperation/public/Bazar_Abbas/Report_2023_URW_PortSaid.pdf
- Egyptian Survey Authority. (1937). *Egypt. Town series 1:5,000. Port Said and Port Fouad* [Map]. Bibliothèque nationale de France. <https://gallica.bnf.fr/ark:/12148/btv1b532668390>
- ElKerdany, D. (2017). Port Said: A cosmopolitan heritage under threat. In H. Abouelfadl, D. ElKerdany, & O. Wanas (Eds.), *Revitalizing city districts: Transformation partnership for urban design and architecture in historic city districts* (pp. 15–33). Springer. https://doi.org/10.1007/978-3-319-46289-9_2
- Geurts, E., & Corten, J.-P. (2014). Urban heritage strategies – integrated conservation. In J.-P. Corten, E. Geurts, P. Meurs, & R. Vermeulen (Eds.), *Heritage as an asset for inner-city development: An urban manager's guide book* (pp. 38–47). NAI010 Publishers.
- ICOMOS. (1975). *The Declaration of Amsterdam*. <https://www.icomos.org/en/and-charters-and-texts/179-articles-en-francais/ressources/charters-and-standards/169-the-declaration-of-amsterdam>
- Jokilehto, J. (2006). Considerations on authenticity and integrity in the World Heritage context. *Edinburgh Architecture Research*, 30, 1–16. <https://www.repository.ed.ac.uk/handle/1842/3233>
- Larousse, & Compagnie universelle du canal maritime de Suez. (1869). *Plan de Port Saïd / levé en mai 1869 par Mr Larousse* [Map]. Bibliothèque nationale de France. <https://gallica.bnf.fr/ark:/12148/btv1b53078060m>
- Meurs, P. (2014). From monument to urban heritage. In J.-P. Corten, E. Geurts, P. Meurs, & R. Vermeulen (Eds.), *Heritage as an asset for inner-city development: An urban manager's guide book* (pp. 23–27). NAI010 Publishers.
- Piaton, C. (2017). Port Said: Cosmopolitan urban rules and architecture (1858–1930). In H. Abouelfadl, D. ElKerdany, & O. Wanas (Eds.), *Revitalizing city districts: Transformation partnership for urban design and architecture in historic city districts* (pp. 3–14). Springer. https://doi.org/10.1007/978-3-319-46289-9_1
- Saleh, R. (2023). *Port Said's cultural integrity: Weaving history, culture, and creativity along the Mediterranean front* [Unpublished Master's thesis, Alexandria University & Brandenburg University of Technology].
- UNESCO. (2011). *Recommendation on the historic urban landscape*. <https://whc.unesco.org/en/hul/>
- Wladika, S. A. M. (2015). *Port Said—No future without the past: Integrated rehabilitation concept for the urban heritage* [Master's thesis, University of Stuttgart and Ain Shams University]. Integrated Urbanism and Sustainable Design (IUSD). https://iusd.asu.edu.eg/?page_id=1747&id=1021

07. Beyond Bazar Abbas

Catalysing Inclusive Urban Regeneration in Port Said

Mohamed Hagrass

Abstract

Port Said City, in Egypt, faces many urban challenges that require comprehensive regeneration strategies, which will have to balance heritage preservation with new urban development. This research takes a holistic approach to urban regeneration strategies for Port Said, using the revitalisation of Bazar Abbas as a catalyst for city-wide regeneration¹. This is achieved through an integrated framework that addresses the spatial, social, cultural and economic dimensions. A comprehensive mixed-methods approach has been used, which includes ethnographic observations, stakeholder interviews, economic chain analysis and participatory mapping. The study revealed tensions between economic viability and spatial quality, complex stakeholder power dynamics, and infrastructure deficits. A phased implementation strategy has been developed around four dimensions: social activation, cultural programming, economic diversification and spatial improvements. In Port Said, heritage-led urban regeneration requires the careful arrangement of competing stakeholder interests through multi-dimensional planning approaches that operate simultaneously at neighbourhood and city-wide scales. This study demonstrates that successful urban regeneration depends on integrating economic viability with cultural preservation, community empowerment and infrastructure development, all of which must be guided by a clear long-term vision.

Keywords: heritage-led regeneration, stakeholder analysis, inclusive urban planning, socio-economic development, cultural preservation

7.1 Introduction

Port cities around the world face intersecting challenges from global economic change, heritage conservation and local community needs (Giovinazzi & Moretti, 2010). The city of Port Said has all of the above elements which create an environment of tension between past and present (AlSadaty, 2020); a historical port established in 1859 with the construction of the Suez Canal; an increasingly threatened multicultural architectural and urban identity due to fast-paced urbanisation, rapidly deteriorating infrastructure and socio-economic inequality (Abouel-magd & Elrawy, 2022); and is a key location for many traditional markets

¹ This paper is based on the collective outputs of the second Recovery Lab workshop, which took place in September 2023. It specifically draws on research conducted by the socio-economic regeneration thematic team, which was supervised by the author.

(especially historic roofed bazaar's) where this pressure is felt. Built in 1891, Bazar Abbas is a classic example of Port Said's architectural heritage. An early example of a mixed-use building, it combined market stalls on the ground floor with residential units on the first floor, creating an integrated urban lifestyle that was common in Mediterranean port cities during the nineteenth century. However, years of abandonment, war-related damage and disorganised growth have significantly damaged the structure, placing it at risk of collapse.

The historic districts in Port Said, including the precinct of Bazar Abbas, are representative of larger trends in Egypt regarding the preservation of cultural heritage buildings. While there are national plans, such as Egypt's Vision 2030, that aim to promote economic diversity, improve quality of life and preserve cultural heritage (Ministry of Planning and Economic Development, 2023), many of these programs have been developed independently of concerns for heritage conservation efforts. Recent research supports the implementation of comprehensive urban conservation practices, combining the physical restoration of heritage structures with social and economic regeneration, community engagement and climate adaptation (UNESCO, 2011; UNESCO, 2016).

This research examines how heritage-led regeneration may foster wider socio-economic change in Port Said through the revitalisation of Bazar Abbas and the surrounding old market area as a case study. This project also addresses three specific research questions: (1) What are the various multifaceted challenges that exist in the context of historic marketplace environments and their urban settings? (2) How can power dynamics among stakeholders be balanced through inclusive governance? (3) What phased strategies can balance immediate community needs with long-term heritage preservation and economic sustainability?

7.2 Literature Review

The literature review is based on previous research into port cities, and waterfront regeneration/transformation; traditional markets and urban revitalisation; and finally, heritage led regeneration, with the aim to inform about the potentials and opportunities for regeneration at Port Said.

7.2.1 Port City Regeneration and Waterfront Transformation

Due to their dual roles as economic gateways and cultural frontiers, port

cities have gained significance in urban studies (Hoyle, 2000). Although the reform of port-city relationships has been extensively studied, especially concerning the transition from integrated port-urban regions into separated zones with the rise of containerisation and the subsequent relocation of ports to deeper waters outside of the historic city centre (Marshall, 2001), there are numerous examples of waterfront regeneration initiatives in historically marginalised and physically degraded former port districts. Initially, these regeneration efforts were primarily based on private property-led developments through flagship cultural attractions and luxury housing projects (Brownill, 1990). While these efforts generated economic gains, local residents were largely excluded from decision-making processes regarding urban development, which resulted in their exclusion from the benefits of regeneration. As a result, such regeneration efforts tended to favour tourism-related consumption over fostering genuine and vibrant urban life. In this regard, port cities in the Mediterranean region face unique challenges in terms of the superposition of their historical identities and current pressures from mass tourism, migration and climate change (Hein, 2011).

7.2.2 Traditional Markets and Urban Revitalisation

Historically, traditional, covered marketplaces fulfilled a wide range of urban functions, such as retail and commerce, social gathering points, centres of cultural exchange, all of which symbolised civic identity. In the context of Middle Eastern cities, marketplaces formed an integral part of the urban fabric and were typically linked to residential districts and public institutions (Hakim, 2007). The decline of traditional marketplaces has been attributed to a variety of factors, including the emergence of modern retail outlets, changing consumer behaviour and inadequate infrastructure (Bianca, 2000). However, increasing awareness of the contribution of traditional marketplaces to urban sustainability has led to regeneration strategies that aim to preserve their functional roles while improving the quality of the infrastructure. A well-documented example of successful marketplace regeneration can be seen in the 'Barcelona Model', which involved coordinated municipal action, thorough renovation of the market's architecture and the active participation of stakeholders (Guàrdia Bassols et al., 2010).

7.2.3 Heritage-Led Urban Regeneration

Heritage-based regeneration strategies recognise the importance of

built heritage as a resource for sustainable urban development, considering it capable of producing economic benefits while supporting the identity of local populations (Tweed & Sutherland, 2007). Heritage-based regeneration aligns with the principles of UNESCO's Historic Urban Landscape approach, which extends the focus of heritage conservation from individual monuments to entire systems of heritage and contemporary uses (UNESCO, 2011). The success of heritage-based regeneration depends on balancing several goals: the physical preservation of heritage structures, economic feasibility, social justice, environmental sustainability and cultural authenticity (Pendlebury, 2009). Factors contributing toward successful heritage-based regeneration further include a strong institutional framework for managing heritage sites, legislation that allows for flexible use of protected buildings, education and training programs for site managers and stakeholders as well as monitoring systems that evaluate progress along a range of indicators (Veldpaus et al., 2013).

7.2.4 Egyptian Urban Heritage Context

The Egyptian legislative framework for heritage protection has evolved over time through a number of laws dealing with various types of heritage. However, despite this framework providing comprehensive legislation for the protection of all aspects of cultural heritage, its implementation is severely vulnerable due to a lack of official designations of protected sites, the loopholes in the law, and insufficient resources available for enforcing protective measures (Osman, 2018). Research focused on Port Said has demonstrated how the competing forces of heritage preservation and pressure for economic growth are creating conflict among stakeholders, resulting in rapid destruction driven by speculative real estate interests and a lack of adequate legal protection (Ibrahim & Mohamed, 2022).

7.3 Methodology

The methodology used for this research was an integrated quantitative and qualitative research method that was specifically designed to reflect the multilayered nature of urban regeneration in Port Said and, specifically focusing on Bazar Abbas and its surroundings as a pilot intervention. The study used qualitative methods (such as participant observations, semi-structured interviews, and participatory mapping) to examine the complex and dynamic power relationships

among various stakeholders. Quantitative methods (such as ethnographic observations and economic chain analysis) were employed to describe the socio-economic flows and relationships. Data collection and analysis took place between March 2023 and September 2025 through repeated rounds of fieldwork, workshop facilitation and collaborative analysis.

7.3.1 Ethnographic Observations and Interviews

Participant observation was the main methodology to gain insight into how people live their everyday lives in Bazar Abbas and in the surrounding environment, what kind of spatial practices they have developed and what type of user behaviours they exhibit. Observations took place at different times and seasons to account for time/season-related variations. Attention was also paid to identifying user groups with distinct needs and interests, such as children, older residents, shopkeepers, street vendors and daily visitors. Semi-structured in-depth interviews were carried out with forty stakeholders in three rounds of field research. These interviewees consisted of shopkeepers, residents, vendors, clients, government officials and members of civil society organisations. The questions for the interview protocol covered topics such as the respondents' personal histories with the bazaar and old market, their opinions on the current situation in the neighbourhood, problems they had encountered, their ideas for developing the bazaar and their willingness to collaborate on initiatives to regenerate the bazaar.

7.3.2 Stakeholder Power Analysis and Economic Chain Analysis

Stakeholder influence matrices were created based on the results of the stakeholder analysis (Reed et al., 2009) to visualise all actors involved in the regeneration of Bazar Abbas. Each actor was evaluated according to two criteria: their level of interest in the regeneration project and their degree of control over it. This matrix facilitated strategic decisions regarding stakeholder management and potential collaboration. An economic chain analysis was performed to depict the flow of goods, money and value in the marketplace system. Interviews focused on the sourcing processes, pricing mechanisms, client bases, rental agreements and financial risks and opportunities of the respective markets as well as their suppliers. An examination of three historical market segments (i.e. textiles, fish, and vegetables), as well as supply chains and rental contracts, were also part of the analysis.

7.3.3 Participatory Mapping and Workshop Development

A comprehensive spatial analysis was carried out using systematic field surveys and participatory mapping techniques to understand the broader urban structure in which Bazar Abbas is embedded. Spatial data collection captured information on land use, building conditions, architectural types, the quality of public spaces, the availability of infrastructure, circulation systems and accessibility to other urban nodes. In addition to the market itself, the 'impact area', including the immediately adjacent streets and blocks, was considered since the conditions of these streets and blocks can both negatively and positively affect the vitality of the market.

During workshops, participants were invited to co-produce spatial knowledge through participatory mapping. Using base maps, participants identified important locations, circulation routes, problematic areas and opportunities and the resulting maps were synthesised to reveal common spatial understandings and priorities. This approach recognised that local residents and market users possessed intimate knowledge of spatial dynamics that observers alone could not access.

7.3.4 Workshops, Participatory Scenario Development and Case Study Analysis

The workshops and case studies together contributed to the development of the heritage-based regeneration strategies for the old market. The five sequential workshops progressed from the development of heritage narratives to recovery planning, integrated rehabilitation and stakeholder workshops. These incorporated expert lectures, heritage tours, discussion and collaborative design activities across five themes: critical reconstruction; public space and climate adaptation; heritage-led regeneration; experimental design; and socio-economic revitalisation. Outcomes included stakeholder analyses, needs assessments, vision statements, hierarchical objectives, proposals for activities and roadmaps for implementing the outputs were later merged into integrated guidelines.

In parallel, a comparative case study analysis was undertaken to examine successful examples of market regeneration and heritage-based urban development projects. Two cases were studied in detail: the Grand Bazaar in Istanbul, exemplifying the integration of heritage conservation and tourism whilst maintaining the authenticity of commerce; and Kawran Bazaar in Dhaka, showing how market

regeneration can improve the imageability of the market, enhance the quality of public space and align the traditional and contemporary functions of the market. Other cases from Barcelona and Mediterranean port cities provided additional lessons and guidance on governance, financing, stakeholder engagement, spatial design, sequencing and monitoring of regeneration projects that were contextualised for Port Said through workshop discussions reflecting on local capabilities, cultural preferences and resource constraints.

7.3.5 Data Analysis and Synthesis

All qualitative data collected through interviews, observations and workshops were analysed by means of a thematic classification. All transcripts and field notes were organised systematically to extract recurring themes across economic, cultural, social and spatial dimensions, thus revealing key needs, challenges, opportunities and contradictions. stakeholder information was transformed into power-affinity matrices; economic chains were visualised to display the supply flows and the distribution of value; and the spatial data were mapped to show land-use, building conditions and infrastructure deficits. A crosscutting analysis revealed ‘contradictions of dynamics’, in which interventions favouring one objective would generate conflicts with others (e.g. increasing pedestrian safety and decreasing vendor revenue, or attracting visitors and displacing existing uses). These insights were utilised to develop strategies that balanced conflicting objectives.

7.4 Current Situation Analysis: Needs, Challenges and Potentials

The analysis of Port Said’s city-wide urban context, with specific focus on Bazar Abbas and its surrounding old market area, provided a rich picture of how various needs, challenges and opportunities across four thematic domains (economic, cultural, social and spatial) are interconnected. This section synthesises data from ethnography, stakeholder interviews, economic analysis, and participatory mapping in order to establish the baseline from which the vision for Port Said and the action plan were developed.

7.4.1 Economic Dimension

Market shop owners have expressed a primary need to develop the market area and revitalise the bazaar’s functionally, where the poorly maintained upper floor levels would represent a previously unexploited

potential for diversifying the economic base. Economic security has been a persistent concern for vendors who want to develop regulatory frameworks to protect them from arbitrary eviction. The lack of visibility is one of the primary factors limiting their performance, as the majority of the market hall is inaccessible and hidden from pedestrian view. There are many economic opportunities for this neighbourhood. A variety of new shopping experiences can be created through adaptive re-use of existing structures, utilising heritage ambiance and artisanal products as competitive advantages. Heritage tourism is also an emerging trend and is currently underutilised by Port Said's unique character and increasing tourist traffic. Training programs supporting traditional craft-people and the establishment of shared facilities can assist vendors reduce their costs and improve customers' experience.

7.4.2 Cultural Dimension

Community members have expressed a desire to revive traditional festivals and cultural celebrations, such as the *Allenby* Resistance Festival², which represents a significant loss of intangible heritage as a result of economic difficulties. The deterioration of building facades and architectural elements has created a need for preservation and restoration efforts to preserve the historic built environment and to support community members' sense of belonging to the site. The cultural heritage of a community provides a foundation upon which to build both social cohesion and economic development. Festivals can serve as a means to promote a sense of community and provide financial benefits associated with increased tourism. Restoring the historic facades can enable communities to showcase their unique architectural features, setting Port Said apart from other cities. Providing training programs and workspaces can help preserve endangered traditional craft skills.

7.4.3 Social Dimension

Members of the community identified a number of social needs that are not being adequately met. They expressed a need for gathering spaces for people of all ages, as the children need safe places to play and older adults need easily accessible spaces in which to rest and

² The *Allenby* Festival is an annual folk celebration held in Port Said, Egypt, every April during *Sham El-Nessim*. The festival traditionally involves the burning of a straw effigy representing Lord Edmund Allenby, the British High Commissioner of Egypt from 1919 to 1925, to symbolise the city's historical resistance to British colonial rule.

socialise. The bazaar functions and the old market area serve as a vital social infrastructure for the community but poor conditions limit their effectiveness. Although there are challenges to overcome, yet Port Said's community has significant social capital. Long term residents express a strong sense of ownership, and civil society organisations are taking steps to promote community development. Developing multipurpose community spaces and organising inter-generational activities can foster community connections and facilitate the transfer of cultural knowledge.

7.4.4 Spatial Dimension

The most important spatial needs revolve around deficiencies in infrastructure and environmental quality. As there are no public facilities available, there is little shade, the drainage system is inadequate and the sidewalks are too narrow to accommodate walking. Any intervention into the physical environment will involve making difficult decisions, such as removing cars to enhance pedestrian experience or allowing vendors to continue accessing the bazaar for deliveries. Despite the constraints, there are still opportunities for spatial development; for example, blocking cars for certain time periods during the day could enhance the pedestrian experience while still allowing access for the delivery of goods. Providing climate-based design interventions and public amenities would significantly improve the users' experience. Strategic interventions into small 'pockets' of the city could create rest areas and parks without requiring large-scale construction.

The current situation analysis is summarised in Table 7.1, which presents the key needs, challenges, and potentials across four dimensions: economic, cultural, social, and physical or spatial.

7.5 Key Findings

Findings from a combination of ethnographic observations, interviews with stakeholders, economic chain mapping and participant workshops were used to develop regeneration plans. These findings illustrate the complex dynamics that regeneration plans must consider in order to produce sustainable and equitable outcomes.

7.5.1 Tensions Between Economic Viability and Spatial Quality

A clear trade-off was found between interventions to improve market quality versus those that aimed at enhancing vendors' economic via-

bility. While shop expansions into arcades and streets may create visual clutter, they are a necessary business strategy for vendors who are operating in highly competitive markets with extremely low profit margins. Planning approaches that prioritise order in public spaces by removing extensions would greatly harm vendors’ ability to earn a living. Conversely, extending the lack of regulations that allow vendors to expand freely creates accessibility issues and safety concerns,

| | Key Needs | Main Challenges | Primary Potentials |
|----------|--|--|---|
| Economic | Revitalise the old market area with unique offerings and modern amenities; protect businesses from displacement | Poor visibility; loss of free-zone status; competition from modern retail | Heritage tourism, adaptive reuse, creating unique shopping experiences, and traditional crafts revival |
| Cultural | Revive traditional festivals; intergenerational heritage spaces; restore historic façades | Festival cancellations, noise conflicts, inadequate heritage protection laws, and poor institutional coordination | Heritage as a catalyst for community development and tourism; facade restoration showcasing distinctive architecture |
| Social | Intergenerational gathering spaces; safe play areas for children; accessible spaces for the elderly; youth sports facilities | Limited space creating tensions; safety concerns (structural instability, poor lighting); trust deficits between residents and authorities | Strong social capital through long-term residents, active civil society organisations, and capacity for multipurpose community spaces |
| Spatial | Basic infrastructure: public toilets, shade/ rest areas, drainage, improved paving, waste management | Trade-offs between pedestrian access vs. vehicle/vendor needs; shop extensions vs. public space; limited inter-agency coordination | Car-free periods; climate interventions (shade, ventilation); strategic use of underutilised urban pockets |

Table 7.1 Summary of needs, challenges, and potentials across four dimensions.

degrading the quality of public space and potentially decreasing customer traffic, which could ultimately affect long-term market viability.

The regeneration plan must therefore find ways to negotiate acceptable solutions that meet the goals of both market quality and economic viability for vendors, rather than optimising one goal at the expense of the other. Examples of compromise solutions include zoning areas for vendor extensions that have specific standards for materials and setback requirements, time-share models allocating shared space between pedestrians and vendors at various times during the day, and other alternatives such as shared spaces and marketing support, to reduce the need for further physical expansion.

7.5.2 Complex Stakeholder Power Dynamics

In addition to a variety of stakeholders, there exists a range of power levels among stakeholders with differing interests. There are powerful stakeholders such as municipal government officials (who control permits and funding), funding organisations (who can fund interventions) and shop owners (who are responsible for implementing the interventions). However, the distribution of power is skewed toward shop owners with older rental agreements and family ties. These shop owners possess informal power through personal connections and knowledge of the local area, yet have little formal authority. Street vendors are an example of a group that operates under even more precarious conditions than shop owners and are subject to being removed regardless of their contributions to the market economy. Although municipal government officials have the formal authority to make decisions, they are constrained by limited budgets, competing priorities and a lack of capacity for comprehensive planning. Religious institutions have some degree of social influence, yet their level of engagement varies when it comes to participating in secular development initiatives.

This illustrates the need to employ forms of inclusive governance that would engage with all stakeholders and seek to share decision-making power among all parties involved (Healey, 1997). Managing stakeholder relationships requires differentiated strategies: close collaboration with high-power supporters (e.g. local heritage groups, aligned officials and funding partners); careful engagement and confidence-building with high-power neutral or resistant actors (e.g. some shop owners and cautious officials); empowerment and voice amplification for low-power supporters (e.g. customers, children and marginalised vendors); and

monitoring of opposition stakeholders while seeking opportunities for interest alignment.

7.5.3 Bazar Abbas as Microcosm of Broader Urban Challenges

The conditions present at Bazar Abbas and the old market are representative of larger trends throughout Port Said's historic centre indicating that the success of interventions in this neighbourhood may be replicable for similar surrounding areas. As previously mentioned, infrastructure deficiencies and deterioration of heritage buildings exist across large sections of Port Said's historic centre. Additionally, socio-economic disparities in the old market area, as well as between the Al Arab and the European quarters, reflect broader trends of economic informality present in many post-colonial cities. If successful, this pilot project could demonstrate the feasibility of replicating the regeneration strategy and create momentum for future similar efforts.

7.5.4 Phased Implementation as Strategic Necessity

Due to limitations in available financial resources, institutional capacity and political will, the scope of regeneration needs far exceeds the available funds, capacities and will to implement comprehensive changes immediately. Therefore, a phased approach to implementation will be required. Interventions should be sequenced based upon urgency, feasibility and logical dependency. Short-term priorities will focus on activating the social and economic life of the bazaar and providing immediate quality-of-life improvements. Medium-term priorities will focus on building community cohesion. Long-term priorities will focus on developing sustainable tourism and expanding the scale of the regeneration.

7.5.5 Climate Adaptation as Urgent Imperative

Port Said's coastal vulnerability makes climate resilience a fundamental prerequisite for long-term heritage preservation and community well-being. Flooding caused by heavy rainfall and extreme heat events disproportionately impact vulnerable populations (Haddad et al., 2025). Thus, regeneration plans must incorporate climate-resilient design features and strategies, including permeable pavers for stormwater management, strategically planted trees to provide thermal comfort and passive cooling strategies to mitigate heat stress.

7.6 Vision and Implementation Strategy

An evidence-based vision framework for regeneration has been developed drawing upon the situation analysis and the main findings from this study, through a series of participative workshops (Fig. 7.1). This defines regeneration in relation to the old market as a living, vibrant and sustainable community hub, maintaining Port Said's distinctive architectural and cultural heritage while promoting economic growth, social unity and an improved quality of life. A central component of the vision recognises the bazaar and the old market as living urban infrastructure which serves the contemporary community needs, while maintaining the historical legacy. The core principles of the vision are as follows:

- » Community-led development processes empower local stakeholders to be actively involved;
- » Integrated conservation and development: Heritage preservation and socio-economic revitalisation occur simultaneously;
- » Inclusive governance: A balance between competing interests is achieved through transparent decision making;
- » Cultural authenticity: Traditional practices take precedence over tourism commodity production;
- » Long-term sustainability: Enduring financial models and institutional frameworks.

Vision and Implementation Strategy

13 Interconnected Goals Across 4 Dimensions

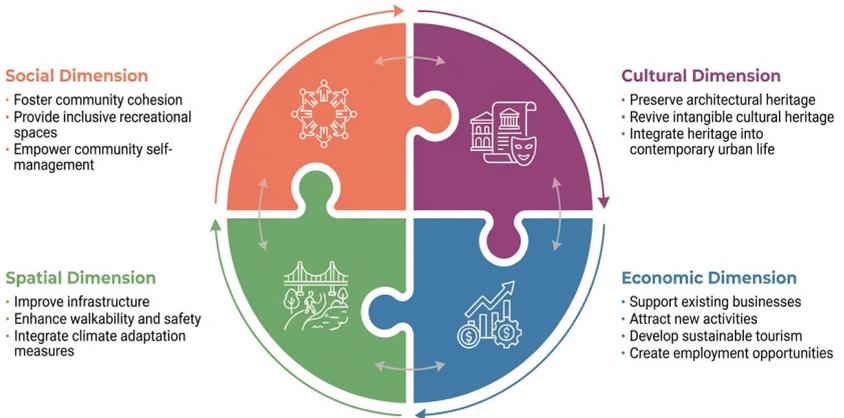


Fig. 7.1 Vision and implementation strategy.

7.6.1 Four Dimensions and Implementation Framework

The vision framework organises regeneration interventions across four dimensions. The social dimension has three goals): fostering community cohesion; providing inclusive recreational spaces; and empowering community self-management. The cultural dimension has three goals): protecting architectural heritage; reviving intangible cultural heritage; and integrating heritage into contemporary urban life. The economic dimension which has four goals): supporting existing businesses; attracting new economic activities; promoting sustainable tourism; and generating job opportunities. The spatial dimension includes three goals): improving physical infrastructure; increasing walkability and safety; and incorporating climate adaptation measures. The integrated framework includes thirteen goals across the four interdependent dimensions, with each dimension being supported by the others.

7.6.2 Phased Implementation Strategy

Immediate actions (0–2 years) will focus on critical socio-economic activation, such as establishing community spaces, creating self-help groups, launching business support programmes and repairing essential infrastructure. Medium-term actions (2–5 years), will promote entertainment and strengthen communities, by establishing children’s playgrounds, sponsoring sporting competitions and cultural events and providing public facilities. Long-term actions (5+ years), will focus on tourism and sustainable maintenance, such as cycling tours, fishing competitions and mini-bazaar nodes throughout the city.

Implementation over time allows for rapid successes to build confidence among stakeholders and demonstrate results to attract additional funding, while also allowing for continuous learning through an iterative cycle process. However, the risk exists that momentum may be lost or fragmentation may possibly occur unless a cohesive long-term vision is guiding the phasing process. The use of quantifiable indicators will allow for monitoring of progress across the four social, cultural, economic and spatial dimensions. Baseline data is collected during the initial research phase and continues to be monitored through periodic surveys and stakeholder feedback. As illustrated in Table 7.2, the phased implementation strategy sequences regeneration intervention from immediate activation to long-term sustainability, with continuous monitoring across all four dimensions.

| Phase | Timeline | Focus | Key Activities |
|-------------|-----------|---|---|
| Short-term | 0-2 years | Socio-economic activation, critical preservation, spatial comfort | Community centre, self-help groups, business training, infrastructure repair, car-free timeshare, waste management |
| Medium-term | 2-5 years | Entertainment, community strengthening, pre-long-term prerequisites | Children's play areas, sports competitions, cultural events, public facilities, mixed-use spaces, food tasting events |
| Long-term | 5+ years | Tourism integration, sustainable maintenance, city-wide scaling | Cycling tours, fishing competitions, mini bazaar nodes across Port Said |

Table 7.2 Implementation phasing summary.

7.7 Discussion

The old market regeneration initiative offers valuable insights for heritage-led urban development in post-colonial contexts, particularly in port cities like Port Said, which are facing convergent pressures of globalisation, heritage loss and socio-economic marginalisation. This section discusses the conceptual model of heritage-led regeneration for Port Said, highlighting its key implications for theory and practice.

7.7.1 Integrated Conservation and Development as Necessity, Not Option

The findings reinforce the growing scholarly consensus that heritage conservation cannot succeed in isolation from broader development processes (Bandarin & van Oers, 2012; Veldpaus et al., 2013). Traditional approaches that prioritise the physical preservation of historic buildings while neglecting socio-economic conditions, infrastructure deficits and community needs have resulted in the unsustainable and inequitable restoration of heritage sites. The restored facades of historic buildings have served to mask poverty, displacement and the loss of cultural identity.

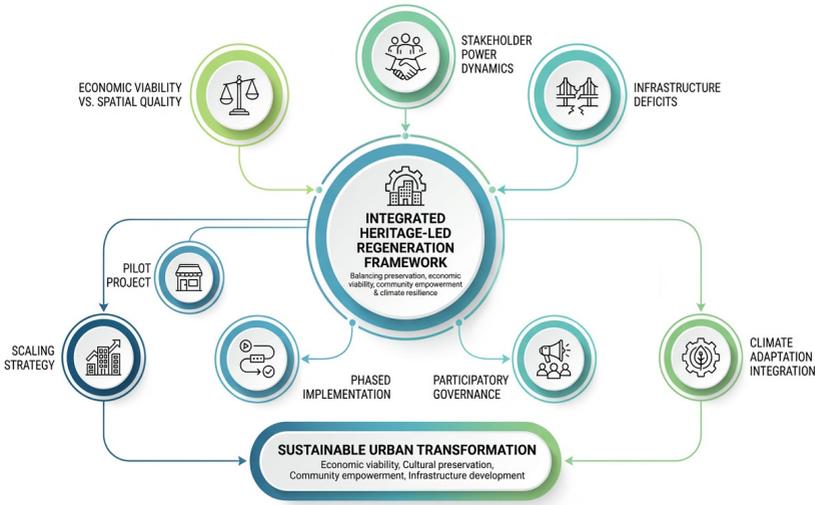


Fig. 7.2 Conceptual model of integrated heritage-led regeneration framework for Port Said.

The four-dimensional framework used in this research (i.e. social, cultural, economic and spatial) shows how integration can be operationalised through structured goal-setting, activity coordination and phased implementation. However, integration is not simply coordinating technical activities but must further involve fundamental changes to institutional culture, funding mechanisms, and power relationships. Heritage agencies must be engaged with economic development goals; planning authorities must recognise cultural values as legitimate development objectives; and community stakeholders must be empowered as decision-makers and not merely consulted as informants.

Egypt’s institutional framework, in which responsibility for heritage is divided among multiple ministries and governorates, makes it difficult to integrate the different aspects of heritage-led regeneration. The Bazar Abbas Recovery Lab’s partnership model provides an example of how to bridge the institutional silos between international universities, national heritage organisations, local civil society groups and municipal authorities (BTU Cottbus – Senftenberg, 2023). However, the sustainability of such partnerships depends on formalising coordination mechanisms and integrating collaborative planning into regular governmental practice.

7.7.2 Participatory Governance as a Strategy for Reconciling Stakeholder Tensions

The complex power dynamics of the stakeholders involved in this study demonstrate the limitations of top-down planning approaches which assume a unified public interest, or that experts have identified the optimal solution for all parties involved in heritage regeneration (Healey, 1997). Heritage regeneration inherently involves winners and losers who experience benefits and costs differently depending upon their stakeholder group. For example, infrastructure improvements provide vendors with increased business opportunities, but may prevent them to extend their property. Reduced noise pollution improves residents' quality of life, but it may also lead to neighbourhood decline when economic decay result in decreased commercial activity. Tourist visits to heritage sites provide tourists with unique experiences, but may result in the eventual displacement of residents, the commercialisation of heritage sites and the loss of cultural traditions.

Participatory governance models offer mechanisms to negotiate trade-offs openly through transparent processes that allow all interested parties to express their views, particularly those who are marginalised and typically excluded from decision-making (Fung & Wright, 2006). The workshop-based methodological approach used in this study allowed participants to communicate their needs, understand each other's perspectives, identify commonalities, and collaborate to reach compromises. Community self-help groups, management boards and participatory mapping are examples of continued governance mechanisms that can foster continued participation after the initial consultation. However, participatory governance has its own limitations. Even though participatory governance seeks to address issues related to power imbalances, they continue to exist during and after the participatory process itself. Educated and well-connected individuals tend to dominate the discussions. Time-constrained vendors and residents may find it difficult to participate in lengthy meetings. Technical complexity (e.g., structural engineering, legal frameworks and financial modelling) creates dependency on outside expertise, thereby reducing the agency of community members. Therefore, maintaining participation requires sustained facilitation, capacity building and institutional commitment that are costly and at times subject to political fluctuations.

7.7.3 Pilot Projects as Catalysts for Systemic Change

The decision to focus revitalisation efforts on Bazar Abbas as a pilot site was made based on strategic realism. Due to resource constraints, comprehensive revitalisation efforts could not be undertaken throughout the entire historic core of Port Said. Pilot projects would rather enable more focused investment, demonstrate feasibility, facilitate learning from experience and build political capital and stakeholder trust, which can facilitate gradual scaling-up. However, there are risks associated with using pilot projects. Focused investment in one area of the city may exacerbate existing inequalities and generate resentment in under-resourced areas of the city. Isolated pilot projects that remain 'islands of success' do not transform broader systemic problems. In order to achieve scale, institutions must not only replicate individual interventions but also transform their institutional capacities, policy frameworks and resource allocations to sustain continued regeneration (Westley et al., 2006).

The mini-bazaar nodes concept, which was discussed at the project workshops, enables scaling up through network logic. Instead of focusing future investment on Bazar Abbas and the old market, resources will be shifted to establish new regeneration nodes in various parts of Port Said, creating a distribution of benefits and building a city-wide heritage infrastructure system. This requires an initial investment to develop replicable methodologies, train local implementation teams and document lessons learned, which ultimately reduces the cost of implementing each node and increases local ownership.

7.7.4 Climate Adaptation as Heritage Conservation Imperative

Although the integration of climate adaptation measures into heritage regeneration is becoming increasingly recognised in academic literature (Orbasli, 2007), this is still being inadequately incorporated into practice. Given Port Said's coastal vulnerability and increasing heat stress, climate resilience is not just another 'nice-to-have' consideration but a fundamental prerequisite for long-term heritage preservation and community well-being.

Climate adaptation does not have to compete with heritage conservation; in fact, many traditional building techniques and urban morphologies exhibit climate responsive design elements (e.g. cooling through passive solar design, ventilation through openings in the wall, shading and thermal mass) that should be preserved and improved

upon, rather than replaced with energy-intensive mechanical systems (Fernandes et al., 2015). The timber verandas (*taracina*) that characterise Port Said's architecture provide essential shade for pedestrian travel and allow for cross-ventilation in interior spaces. These climate functions must be retained in restoration work. However, climate adaptation also requires new interventions, such as permeable paving and bioswales to manage storm water runoff, strategic tree planting to cool the city through urban forestry, raised floor levels or flood walls for vulnerable structures, and potentially, in the long run, managed retreat from areas at high inundation risk may also be necessary. Reconciling heritage preservation with necessary climate adaptations requires creative design, thoughtful material selection and honest assessments of what historic features can be preserved and which must evolve.

7.7.5 Economic Sustainability Beyond Tourism

Although heritage tourism presents an important economic opportunity for Port Said, over-reliance on tourism is also associated with risks such as seasonality, external impacts (e.g. pandemic, political instability and recessions) and the commodification of culture, as well as the displacement of local practices by businesses catering to tourists (Rypkema, 2005). Thus, it is necessary to implement sustainable strategies that diversify the heritage economy in addition to promoting local businesses which provide goods and services to the resident population, and preserving some areas for local trades, even though they are economically marginal. In addition to the aforementioned strategies, it is crucial to ensure that tourism-generated revenue supports community members rather than displacing them.

Promoting current businesses and establishing shared facilities, in conjunction with offering vocational training, will demonstrate a commitment to promoting economic inclusiveness and diversity. However, achieving an economic balance between viable businesses and equitable social conditions can be difficult. The competitive nature of markets encourages businesses to increase scale and profitability through upscaling; however, this results in pricing out low-income residents. While protecting vulnerable traders from regulatory actions may safeguard social equity, regulatory actions may also constrain economic dynamism. Achieving long-term sustainable equilibrium will continue to require ongoing government oversight and a willingness to intervene in market outcomes through either subsidies, regulations,

or direct provision.

7.8 Conclusion

Heritage-led urban regeneration exemplifies broader challenges facing the post-colonial cities navigating modernisation pressures while preserving cultural identity and ensuring social equity. Traditional marketplaces represent more than just architectural monuments; they are the embodiment of hundreds of years of accumulated social practices, economic relationships and cultural meanings that form the fabric of city life. Regenerating these spaces is ultimately about regenerating communities by strengthening social ties, reviving economic opportunities, preserving cultural continuity and creating inclusive public realms where diverse residents can thrive.

This research examined the challenges associated with heritage-led urban regeneration in Port Said, using the revitalisation of Bazar Abbas and the old market as a case study for a pilot regeneration project. A mixed methods approach (qualitative and quantitative) was used to conduct this research, which identified multiple challenges and needs associated with the economic, cultural, social and spatial dimensions of heritage-led regeneration. These results highlight critical trade-offs between the economic feasibility of regeneration initiatives and the quality of the built environment, as well as the complex distribution of power among stakeholders. They also underscore the potential benefits of inclusive governance and expose persistent gaps in infrastructure that characterise many post-colonial urban contexts. These factors point to the need for integrated, context-sensitive frameworks to guide sustainable regeneration.

The vision framework for regeneration was developed using a collaborative participatory process. It identifies four dimensions of regeneration, comprising thirteen objectives, and sets out a phased approach to implementation. This will allow for the strategic ordering of interventions within regeneration phases, while maintaining consistency in terms of clear objective hierarchies and monitoring indicators. The research has contributed to the theoretical development of urban planning by demonstrating the potential of historic marketplaces to act as catalysts for comprehensive regeneration when interventions simultaneously address heritage preservation, socio-economic revitalisation, community empowerment, and environmental sustainability.

References

- AlSadaty, A. (2020). Port Said historic markets: A tool for urban revitalization. *Archnet-IJAR: International Journal of Architectural Research*, 14(2), 283–301. <https://doi.org/10.1108/ARCH-02-2020-0022>
- Bandarin, F., & van Oers, R. (2012). *The historic urban landscape: Managing heritage in an urban century*. Wiley-Blackwell. <https://doi.org/10.1002/9781119968115>
- Bianca, S. (2000). *Urban form in the Arab world: Past and present*. Thames & Hudson.
- Brownill, S. (1990). *Developing London's Docklands: Another great planning disaster?* Paul Chapman Publishing.
- BTU Cottbus–Senftenberg. (2023). *Bazar Abbas: Recovery Lab of Port Said*. Middle East Cooperation Unit. <https://www.b-tu.de/middle-east-cooperation/projects/bazar-abbas-2023-25>
- Fernandes, J., Mateus, R., & Bragança, L. (2015). The potential of vernacular materials to the sustainable building design. In M. R. Correia, G. Carlos, & S. Rocha (Eds.), *Vernacular heritage and earthen architecture* (pp. 623–629). CRC Press.
- Fung, A., & Wright, E. O. (Eds.). (2006). *Deepening democracy: Institutional innovations in empowered participatory governance*. Verso.
- Giovinazzi, O., & Moretti, M. (2010). Port cities and urban waterfront: Transformations and opportunities. *TeMA–Journal of Land Use, Mobility and Environment*, 2. <https://doi.org/10.6092/1970-9870/123>
- Guardia Bassols, M., Oyón Bañales, J. L., & Fava, N. (2010). Retailing and proximity in a liveable city: the case of Barcelona public markets system. *15th International Conference on Urban Planning and Regional Development in the Information Society GeoMultimedia 2010*, 621–630. <https://hdl.handle.net/2117/7511>
- Haddad, E. A., Araújo, I. F., Elshahawany, D. N., Sacco, J. G., Rogelis-Prada, M. C., Pomonis, A., et al. (2025). *The economic impacts of flooding in Egyptian port cities*. Policy Center for the New South. <https://www.policycenter.ma/publications/economic-impacts-flooding-egyptian-port-cities>
- Hakim, B. S. (2007). Generative processes for revitalizing historic towns or heritage districts. *Urban Design International*, 12, 87–99.
- Healey, P. (1997). *Collaborative planning: Shaping places in fragmented societies*. Macmillan. <https://doi.org/10.1007/978-1-349-25538-2>
- Hein, C. (Ed.). (2011). *Port cities: Dynamic landscapes and global networks*. Routledge. <https://doi.org/10.4324/9780203844434>
- Hoyle, B. (2000). Global and local change on the port-city waterfront. *Geographical Review*, 90(3), 395–417. <https://doi.org/10.2307/3250860>
- Marshall, R. (Ed.). (2001). *Waterfronts in post-industrial cities*. Routledge.
- Ministry of Planning and Economic Development. (2023). *Egypt's Vision 2030*. Arab Republic of Egypt. https://mped.gov.eg/Files/Egypt_Vision_2030_EnglishDigitalUse.pdf
- Osman, K. A. (2018). Heritage conservation management in Egypt: A review of the current situation and a proposed framework. *Ain Shams Engineering Journal*, 9(4), 2907–2918. <https://doi.org/10.1016/j.asej.2018.10.002>
- Orbasli, A. (2007). *Architectural conservation: Principles and practice*. Wiley-Blackwell.
- Pendlebury, J. (2009). *Conservation in the age of consensus*. Routledge. <https://doi.org/10.4324/9780203874004>
- Reed, M. S., Graves, A., Dandy, N., Posthumus, H., Hubacek, K., Morris, J., Prell, C., Quinn, C. H., & Stringer, L. C. (2009). Who's in and why? A typology of stakeholder analysis methods for natural resource management. *Journal of Environmental Management*, 90(5), 1933–1949. <https://doi.org/10.1016/j.jenvman.2009.01.001>
- Rypkema, D. D. (2005). *The economics of historic preservation: A community leader's guide*. National Trust for Historic Preservation.
- Tweed, C., & Sutherland, M. (2007). Built cultural heritage and sustainable urban development. *Landscape and Urban Planning*, 83(1), 62–69. <https://doi.org/10.1016/j.landurbplan.2007.05.008>
- UNESCO. (2011). *Recommendation on the historic urban landscape*. United Nations Educational, Scientific and Cultural Organization. <https://whc.unesco.org/en/hul/>
- UNESCO. (2016). *Global report on culture for sustainable urban development: Sustainable Development Goals*. United Nations Educational, Scientific and Cultural Organization. <https://unesdoc.unesco.org/ark:/48223/pf0000245999/PDF/245999eng.pdf.multi>
- Veldpaus, L., Pereira Roders, A. R., & Colenbrander, B. J. F. (2013). Urban heritage: Putting the past into the future. *The Historic Environment: Policy & Practice*, 4(1), 3–18. <https://doi.org/10.1179/1756750513Z.000000000022>

Part III

Site-Specific Interventions

Tools and Techniques for Heritage Recovery

08. Documenting Cultural Heritage in Post-Conflict Contexts

Reflections on Bazar Abbas in Port Said

Samar Abdelaal

Abstract

Heritage sites worldwide are increasingly confronted with multifaceted challenges. In post-colonial and post-conflict contexts, these challenges are further intensified as historical, social, and political complexities intersect, creating layered and often contentious challenges for preservation and management. A critical concern in such contexts is the documentation of heritage and its ongoing transformations, and more importantly, ensuring that this documentation remains accessible to local communities, researchers, and practitioners.

This paper addresses these challenges by examining the Bazar Abbas project in Port Said, Egypt, a city shaped by colonial heritage and conflict. Drawing on the experience of the Bazar Abbas project in Port Said, the discussion highlights the practical challenges of digitally documenting Bazar Abbas and fostering community participation in the process. By positioning Port Said within broader discussions on post-conflict heritage documentation, this study identifies key gaps in current documentation practices and the historical factors that have contributed to their emergence. Furthermore, it argues that employing non-traditional methodologies, such as incorporating local collective memory and the insights of experts, can play a significant role in strengthening cultural heritage documentation.

Keywords: heritage documentation, cultural heritage management, Bazar Abbas, Port Said.

8.1 Introduction

8.1.1 Cultural Heritage Significance in Shaping Collective Memory

Cultural heritage is not just an important element of our urban environment and daily lives. It is a vibrant, tangible expression of our identity, collective memory, and shared experiences (Neglia et al., 2024). It passes down traditions, stories, and identities across generations, continuing to shape our present lives (Danesh & Rajabi, 2022). Therefore, any damage to any cultural heritage, whether partial or total, has an impact that goes far beyond the loss of a physical component. It represents a profound loss to the collective identity and memory of local communities (Ahmad Taha, 2022). For this reason, preserving cultural heritage is necessary to ensure that cultural continuity is passed on to future generations (Danesh & Rajabi, 2022). The proper foundation

of any conservation effort to safeguard cultural heritage is therefore a careful, detailed study that recognises its inherent worth, what can be called the ‘the value of memory’, which powerfully connects people to their past and forms their collective identity (Neglia et al., 2024). Within this framework, accurately recording, documenting, and evaluating the cultural heritage is not just helpful, it is absolutely critical for the success of any conservation or preservation efforts (Santana Quintero, 2017).

8.1.2 Introduction to the Bazar Abbas Documentation Process

In this context, this paper briefly outlines the documentation initiative for Bazar Abbas in Port Said. This documentation commenced following the successful securing of funding from the British Council’s Cultural Protection Fund, in partnership with the Department for Culture, Media and Sport. This initiative is also supporting the partial restoration, as well as additional cultural and educational activities at the site. However, upon initiating the restoration process, it was found that no comprehensive, reliable architectural plans existed for the building’s current state or for its original condition. While earlier valuable preliminary efforts were made by AISadaty (2020) and Badr (2018), these still lacked precise measurements and reliable survey data. Accurate documentation was urgently needed to develop a proper rehabilitation plan. To address this challenge, the Middle East Cooperation Unit, as the project lead, contracted Diwan for Architecture and Patrimony, a local expert body led by Eng. Samer Helmy Kasem and Eng. Tariq Al Murri. They were tasked with undertaking a detailed recording of the current structure of Bazar Abbas, which is also documented in the following paper in this publication. Meanwhile, the project team took responsibility for initiating efforts to recover the original plans.

This paper provides an overview of the Bazar Abbas documentation process, examining opportunities and challenges involved in documenting cultural heritage, particularly in complex post-colonial and post-conflict environments. Crucially, it emphasizes the significance of collective memory in heritage documentation, especially when physical evidence is scarce and primary sources lie in community narratives and lived experiences. The study demonstrates how technological data and human experience can complement each other to advance cultural heritage documentation.

8.2 The Impact of Conflicts on Cultural Heritage

8.2.1 Cultural Heritage Vulnerability in Conflict and Modern Contexts

Although heritage is under threat even in times of peace, armed conflict remains one of the main reasons for the destruction of built heritage (Belal & Shcherbina, 2019). In several Arab nations, previous and ongoing conflicts have been a primary driver of the deterioration and destruction of numerous World Heritage Sites and historic structures (Ahmad Taha, 2022). Cultural heritage is often at extreme risk during times of conflict, as it may be intentionally targeted, suffer collateral damage, or be neglected even after the conflict ends (Neglia et al., 2024).

The pressures of modernity, which are becoming increasingly prevalent, intensify this vulnerability. Rapid waves of change have reshaped cities and often disrupted the fundamental relationship between people and place (Turner & Tomer, 2013). However, despite the growing importance of cultural heritage in both conflict and peacetime scenarios, many historic sites globally, and especially in the MENA region, suffer from a critical deficiency. They lack the systematic documentation, monitoring, and benchmarking practices needed to guide long-term management and preservation, making accurate documentation an immediate and vital priority (Eppich & Garcia Grinda, 2015).

8.2.2 Overview of Historical Conflicts in Port Said

Most of the challenges outlined previously are evident in Port Said. This historically significant Egyptian city has been fundamentally shaped by a succession of political conflicts and significant demographic shifts, the effects of which are still evident in its urban environment today. These include the city's initial segregated urban planning approach, the inauguration of the Suez Canal, and several other key historical turning points. Notable historical events include the Great Fire of 1884 in the Arab Village, which necessitated a major reconstruction and led to the creation of the Arab Quarter in 1885 (Hussein, 2024), as well as the disruptions caused by the two World Wars. However, the most severe modern trauma was the Six-Day War in June 1967, which resulted in the Israeli occupation of the eastern bank of the Suez Canal. This forced the complete evacuation of the city in 1969, which lasted for five years. Following the October 1973 War, returning residents found a city that had been severely damaged with significant losses to its urban heritage

(Wladika, 2015). This historical devastation has been compounded by the contemporary mindset of the government and residents towards modernity, favouring the construction of new buildings over the preservation of historic structures. Consequently, Port Said's valuable historic areas have been partly neglected, creating critical problems that now threaten its built heritage (Fouad & Messallam, 2021).

8.3 Community Engagement in Cultural Heritage Preservation

8.3.1 Community Attachment to Port Said's Urban Heritage

Throughout these transformations, the Port Said community has preserved its connection to its heritage and continues to appreciate its cultural value. From 2003 to 2012, grassroots efforts in Port Said centred on raising awareness and mobilising residents to safeguard endangered historic buildings. A survey by Sharafeldin and Fouad (2019) confirmed this passion and commitment, revealing significant public support for heritage preservation and demonstrating that residents were willing to participate, with 40% reporting a strong emotional attachment to the local heritage. However, this strong community commitment is currently being undermined by systemic issues. Respondents consistently highlighted two key problems: limited access to reliable heritage information and weak coordination between the government and the community. These findings underscore the urgent need for a more inclusive and collaborative approach in Port Said that can effectively strengthen local commitment to safeguarding heritage whilst simultaneously resisting the pressures of gentrification (Fouad & Messallam, 2021).

In addition, a consistent observation throughout the project is the profound connection between the local community and Port Said's urban heritage, a relationship that extends beyond Bazar Abbas itself. The survey conducted by Fouad and Sharafeldin (2021) empirically validates this strong community attachment. Their research indicated that 78% of residents believe that protecting the authenticity of the city's spatial and architectural features is essential for enhancing the city's image and developing sustainable cultural tourism. Furthermore, 40% of residents in the *Afrang* quarter explicitly recognised an emotional attachment to their local heritage.

8.3.2 Defining Community and Stakeholders in Cultural Heritage Management

In order to understand the dynamics of preserving and managing cultural heritage, it is necessary to have a clear definition of the relevant actors involved. Cultural heritage management is not just a policy goal, but a fundamental human right (Bennoune, 2016). For any recovery or documentation effort to succeed, the deep relationship between a heritage site and its local residents must be prioritised. This people-centred philosophy is crucial because it enables us to draw on the traditional knowledge and practices that local people possess. This approach strengthens community ties to heritage, which is especially vital in regions facing instability and difficult circumstances (Rufián Fernández et al., 2020). Due to this profound connection, authentic community participation is essential for preserving, managing, and sustaining local heritage (Fouad & Messallam, 2021). Ultimately, cultural heritage preservation only gains its true significance when it emerges from the social fabric and includes the very community that gives it life (Rufián Fernández et al., 2020).

However, translating this theory into meaningful action requires us to address a challenging question: Who exactly is the ‘community’? Despite its critical role, the term is often loosely defined in international frameworks, blurring it with broader categories such as local people, NGOs, and stakeholders (Turner & Tomer, 2013). Scholars offer several perspectives: some focus on shared interests tied to a specific geographic area, while others prioritise shared identity and common goals over physical location (Sapu, 2009). Importantly, the traditional idea of a homogeneous community often fails to reflect the complex reality of modern places (Turner & Tomer, 2013). Many areas function less like unified communities and more like diverse neighbourhoods where residents coexist without sharing a single cultural identity. For this reason, using the term ‘stakeholders’ may be more accurate. This label acknowledges the diverse roles, varying interests, and inherent power dynamics involved in every heritage project (Turner & Tomer, 2013).

In light of the Bazar Abbas project, we use the term ‘community’ to refer only to the tenants of the Bazar; however, we use the term ‘stakeholders’ to encompass all those actors involved in the project, including the legal owners, the municipality, local NGOs, the National Organization of Urban Harmony, other experts and the project team.



Fig. 8.1 Bazar Abbas stakeholders workshop in September 2025. (Photo: Sarah Medhat, 2025)

8.4 Heritage Documentation in Port Said

8.4.1 Brief Identification of Documentation Gaps

Crucially, in order to meaningfully contribute to present-day debates, the study must first examine the origins of the documentation challenge and the emergence of these gaps. While many scholars place Port Said within the broader context of European colonialism in Africa, the city was, in fact, a uniquely colonised territory, characterised by the tension between its significant international status and the intense rivalry among various colonial powers, which complicated its governance structure (Huber, 2012).

The governance of the Suez Canal Zone, particularly Port Said, differed notably from the rest of Egypt. It was characterised by a complex, multi-layered governance structure. This unique structure was primarily influenced by two overlapping entities: the Suez Canal Company (SCC), which oversaw transit operations; and the British government, which had been the occupying power since 1882 and the leading company stockholder since 1875 (Huber, 2012). Until the canal's inauguration in 1869, the SCC was responsible for planning and determining the architectural styles in canal towns, after which the Egyptian government incorporated them into Egyptian common law. Ismail Pasha also mandated the co-management of the new towns

by establishing a commission comprising members of the Egyptian government and the Anglo-French SCC. In 1911, a City Council was established to oversee the city's urban administration (Hussein, 2024). Over time, this governance structure evolved and adopted different models; however, the SCC authorities remained the principal governing power until 1956, when Nasser nationalised the canal (Piquet, 2004).

8.4.2 Findings of the Archival Investigation

Three years of archival research and direct observation have revealed that the cumulative impact of these conflicts and overlapping governance has created three significant documentation challenges. Firstly, archival materials are highly fragmented and decentralised, scattered between entities in Cairo and Port Said (Egypt) and Roubaix and Paris (France). Access is inconsistent, with much of the material unavailable digitally. Secondly, the city's unique, multi-layered governance structure has led to a lack of defined responsibility, making it difficult to determine which archive holds the relevant data and the role played by each entity. Thirdly, and most fundamentally, the several wars and conflicts resulted in the irrecoverable loss of a significant volume of original documents.

The absence of an original architectural plan for Bazar Abbas has necessitated an immediate and fundamental shift in the documentation strategy. Consequently, the team has adopted an alternative, people-centred approach, which is explained in detail in the paper, titled, 'An Integrated Methodology for Heritage Documentation' in this volume. Although this methodology may be considered less traditionally accurate than relying on original documents, it serves two critical functions: safeguarding the remaining physical structure and capturing the invaluable collective memory of its users. This urgent documentation was also undertaken as a preventive measure against further structural degradation due to the building's poor condition and the risk of losing original community members, who constitute the project's primary source of intangible and living heritage.

8.4.3 Technology Integration in Heritage Documentation

Over the past few decades, digital technologies have become an integral part of life, changing the way people around the world engage with cultural heritage. Communities are increasingly engaging with historic sites, monuments and artefacts via digital platforms (Rufián Fernández

et al., 2020). Digital documentation has also emerged as a valuable tool for cultural preservation, offering a high level of accuracy in preserving physical characteristics and distinctive details. Once digitised, this data can serve a variety of purposes, including conservation, management and education. Furthermore, in cases of partial or severe damage to heritage sites, digital archives provide critical references for restoration and recovery operations (Danesh & Rajabi, 2022).

In the case of Bazar Abbas, the team aimed to capture the site's current condition and reconstruct its original structure, creating the first digital archive of the site. Digital documentation technologies were used as the primary tool for virtual reconstruction and to mitigate the loss of historical documents. Using 3D laser scanning and virtual modelling methods, the team was able to precisely capture the bazaar's current structural state. These digital datasets serve as a spatial framework onto which collective memories and oral histories can be mapped. One example is the documentation of the external courtyard staircase, which was once one of the building's two main circulation routes connecting the ground floor, first floor and rooftop service areas. Through the collective memories of tenants, the team were able to document the remaining elements and trace the lost sections, enabling the reconstruction of the original staircase layout. This process provided a clearer understanding of Bazar Abbas's original circulation system. Thus, this synthesis of digital and human elements transforms the documentation into a dynamic record of the building's lived history.

8.5 Conclusion

While heritage preservation and rehabilitation are vital actions for urban continuity, this paper has emphasised the crucial role of thorough documentation in fully understanding and appreciating the value of cultural heritage and its profound link to local identity. However, the ideal of basing all documentation on confirmed data and verifiable resources is often unachievable in historical contexts characterised by prolonged political and historical conflicts. Given this reality, we must adopt a more flexible and alternative approach to documenting surviving cultural heritage.

In order to effectively assemble the historical narrative, we must broaden our scope beyond the original blueprints and consider other sources such as collective memory and expert physical observations. The rapid advancements in technology complement this multi-source

strategy by providing powerful tools with which to document the current state, reconstruct original structures and plan for future safeguarding. This integration of human testimony, physical analysis, and cutting-edge technology is particularly important in regions such as the Middle East, which are experiencing ongoing conflicts and continuous transformations. Ultimately, the methodology for documenting cultural heritage in such complex settings must be adaptive and holistic. It must move beyond a narrow reliance on confirmed historical records in order to effectively capture the full, layered history of the endured cultural heritage.

References

- Ahmad Taha, M. N. (2022). Cultural heritage and contemporary armed conflicts in the Arab world. In A. Versaci, H. Bougdah, N. Akagawa, & N. Cavalagli (Eds.), *Conservation of architectural heritage* (pp. 181–197). Springer International Publishing. https://doi.org/10.1007/978-3-030-74482-3_15
- AlSadaty, A. (2020). Port Said historic markets: A tool for urban revitalization. *Archnet-IJAR: International Journal of Architectural Research*, 14(3), 543–557. <https://doi.org/10.1108/ARCH-01-2020-0002>
- Badr, B. A. A. (2018). *Bāzāru qī khudaywīī abāqsuⁿ bimadināni būsa^īdi 1309 h / 1891 m dirāsata āthārīāta mi[‘]mārīāta* [Khedive Abbas Bazaar in Port Said city 1309 AH / 1891 AD: An archaeological architectural study]. *Abadiyat al-Ittihād al-Aam lil-Athariyin al-Arab* [Yearbook of the General Union of Arab Archaeologists], 21(1), 456–516.
- Belal, A., & Shcherbina, E. (2019). Heritage in post-war period challenges and solutions. *IFAC-PapersOn-Line*, 52(25), 252–257. <https://doi.org/10.1016/j.ifacol.2019.12.491>
- Bennoune, K. (2016, October 26). *Cultural heritage is a human rights issue*. UNESCO. <https://whc.unesco.org/en/news/1581>
- Danesh, M. M., & Rajabi, A. (2022). Importance of digital techniques of documentation for the conservation of cultural heritage. In A. Versaci, H. Bougdah, N. Akagawa, & N. Cavalagli (Eds.), *Conservation of architectural heritage* (pp. 415–425). Springer. https://doi.org/10.1007/978-3-030-74482-3_32
- Eppich, R., & Garcia Grinda, J. L. (2015). Management documentation: Indicators & good practice at cultural heritage places. *The International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences*, XL-5-W7, 133–140. <https://doi.org/10.5194/isprsarchives-XL-5-W7-133-2015>
- Fouad, S., & Messallam, O. (2021). Investigating the role of community in heritage conservation through the ladder of citizen participation approach: Case study, Port Said, Egypt. *International Journal of Current Research*, 10(11), pp.75363-75370. DOI: <https://doi.org/10.24941/ijcr.33194.11.2018>
- Fouad, S., & Sharaf Eldin, S. (2021). Public perception influence on the reshaping urban heritage: A case study of Port Said historic quarters. *Space and Culture*, 26(4), 579–597. <https://doi.org/10.1177/12063312211018397>
- Huber, V. (2012). Connecting colonial seas: The ‘international colonisation’ of Port Said and the Suez Canal during and after the First World War. *European Review of History: Revue européenne d’histoire*, 19(1), 141–161. <https://doi.org/10.1080/13507486.2012.643612>
- Hussein, A. A. S. (2024). The historic urban landscape approach as a tool for Port Said heritage conservation. In L. Makhloufi (Ed.), *Urban heritage and sustainability in the age of globalisation* (pp. 235-260). Open Book Publishers. <https://doi.org/10.11647/obp.0412.11>
- Neglia, G., Angrisano, M., Mecca, I., & Fabbrocino, F. (2024). Cultural heritage at risk in world conflicts: Digital tools’ contribution to its preservation. *Heritage*, 7(11), 6343-6365. <https://doi.org/10.3390/heritage7110297>
- Piquet, C. (2004). The Suez Company’s concession in Egypt, 1854–1956: Modern infrastructure and local economic development. *Enterprise & Society*, 5(1), 107–127. <http://www.jstor.org/stable/23700381>
- Rufián Fernández, F. J., Fernández Díaz, M., Sabrine, I., Ibáñez, J. J., Claramunt-López, B., Escobar, A., & González Zarandona, J. A. (2020). The documentation and protection of cultural heritage during emergencies. *The International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences*, XLIV-M-1-2020, 287–293. <https://doi.org/10.5194/isprs-archives-XLIV-M-1-2020-287-2020>
- Santana Quintero, M. (2017). Harnessing digital workflows for conserving historic places. *The International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences*, XLII-5-W1, 9–14. <https://doi.org/10.5194/isprs-archives-XLII-5-W1-9-2017>
- Sapu, S. (2009). *Community participation in heritage conservation*. Getty Conservation Institute. https://getty.edu/conservation/publications_resources/teaching/cs_tn_community.pdf
- Sharafeldin, S., & Fouad, S. (2019, May 9–10). *Port Said’s historic city centre: Peculiarity versus metamorphosis* [Paper presentation]. 2nd International Conference on Contemporary Affairs in Architecture and Urbanism (ICCAUA), Alanya, Turkey. <https://www.researchgate.net/publication/344434634>
- Turner, M., & Tomer, T. (2013). Community participation and the tangible and intangible values of urban heritage. *Heritage & Society*, 6(2), 185–198. <https://doi.org/10.1179/2159032X13Z.00000000013>
- Wladika, S. A. M. (2015). *Port Said—No future without the past: Integrated rehabilitation concept for the urban heritage* [Master’s thesis, University of Stuttgart and Ain Shams University]. Integrated Urbanism and Sustainable Design (IUSD). https://iusd.asu.edu.eg/?page_id=1747&id=1021

09. An Integrated Methodology for Heritage Documentation

The Case of Bazar Abbas in Port Said

Samer Helmy Kasem
Tariq Al Murri

Abstract

Heritage sites in post-conflict and post-colonial contexts often face a dual crisis of physical deterioration and archival silence. This study addresses these challenges by applying a comprehensive documentation framework applied to Bazar Abbas in Port Said, Egypt – a site marked by structural instability and a lack of historical blueprints. The research details a novel, dual-layered methodological approach: employing terrestrial laser scanning (TLS) to capture the complex, encroached current reality with high precision, while simultaneously utilising an inferential methodology to reconstruct the building's original architectural form. By synthesising intrinsic physical evidence, extrinsic comparative analysis of contemporary colonial structures and the social memory of local occupants, the research bridges the gap between technical surveying and historical recovery. This article concludes that such adaptive, multi-source documentation strategies are essential for safeguarding cultural assets where traditional archival records are absent, ensuring heritage remains accessible and relevant for future restoration and community engagement.

Keywords: heritage documentation, cultural heritage management, Bazar Abbas, Port Said

9.1 Introduction: The Imperative for Documentation

Preserving cultural heritage in post-colonial and post-conflict environments presents a distinct set of challenges, where physical deterioration often coincides with the erosion of archival memory. This article addresses these challenges by examining the Bazar Abbas project in Port Said, Egypt. Located in a historic district defined by functional superposition and structural fragility, Bazar Abbas serves as a vital example of why accurate architectural documentation is essential. The primary motivation for this study stems from the absence of any reliable architectural records or historical plans dating back to the building's construction. Consequently, the building is considered an unfinished manuscript, necessitating a documentation strategy that integrates forensic architectural inference with high-precision digital surveying.

9.1.1 Methodological Process: From Inference to Digital Precision

To address these complexities, the process adopts a two-tiered methodological approach. The documentation of the current conditions

relied on the deployment of terrestrial laser scanning (TLS) technology, specifically utilising the Leica BLK360. This decision was driven by the need to capture high-density point clouds in a volatile, crowded environment characterised by narrow spaces and obstructions. This digital workflow facilitated the transition from raw data to Heritage Building Information Modelling (HBIM), enabling the detailed mapping of structural deviations, material degradation, and geometric irregularities that traditional surveying methods could not capture. Simultaneously, the reconstruction of the original state employed an inferential methodology. In the absence of archival evidence, the survey team treated the building as a forensic puzzle, utilising principles of axial symmetry, structural logic and comparative architectural analysis to hypothesise the form of missing elements such as the original staircases, roof trusses and circulation systems.

9.1.2 Information Gathering and Data Synthesis The efficacy of this documentation framework relies on a multi-source data gathering strategy that overcomes the limitations of physical surveying alone. Information was aggregated through three primary channels. Firstly, substantial physical evidence was gathered; the laser scanning data provided the geometric ground truth, revealing subtle indicators of change such as movement joints and conflicting material compositions – specifically burnt brick columns versus original limestone masonry – as well as remnants of wooden joists.

Secondly, an external comparative analysis was conducted; in the absence of direct blueprints, the team analysed historical photographs spanning from 1917 to the 1980s and studied contemporary buildings in Port Said to deduce the stylistic and functional patterns of the era. Thirdly, the project utilised social memory and oral history. By actively engaging with the site's occupants, the team identified lost functions – such as the original fish market drainage systems – and located removed elements, including the southern staircase. By synthesising these diverse digital, physical and social data streams, this article demonstrates how adaptive documentation methodologies can successfully reconstruct the narrative of heritage sites where the physical fabric is compromised and the historical record is incomplete.

9.2. Bazar Abbas Documentation Process

The project to reconstruct the original state of Bazar Abbas poses a

unique methodological challenge. While the current state was documented in a prior phase, developing scientific restoration plans requires an accurate model of the bazaar's architectural and functional form at its inception. This research details a specialised survey methodology used to compile material, visual and testimonial evidence to resolve structural ambiguities and recreate the presumed original condition.

9.2.1 Inferential Methodology for Reconstructing the Original Model

In the complete absence of proven scientific drawings, the documentation process shifted to an inferential analysis, treating the structure as an unfinished manuscript requiring the restoration of its missing chapters. Work commenced by reviewing available textual and visual materials; although published research was often contradictory, it served as a guide for the physical survey (Fig. 9.1). Photographic evidence collected between 1917 and the mid-1980s helped to visualise the original form and aided in the creation of a mathematical model of the rate of deterioration to identify areas requiring urgent intervention. Furthermore, observations of contemporary colonial buildings in Port Said provided indicators with which to formulate hypotheses about missing elements, particularly the style of windows and missing wooden railings.

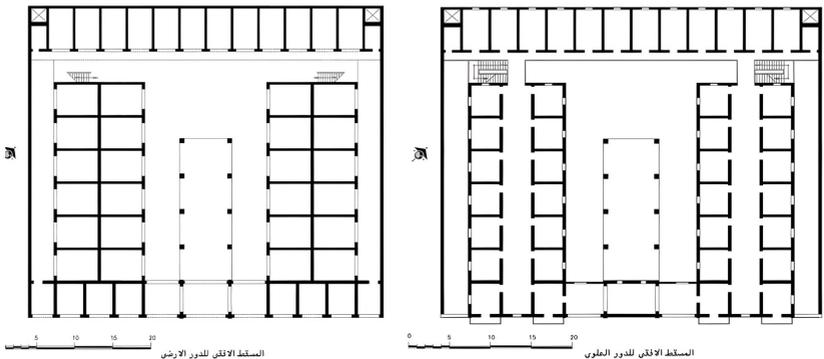


Fig. 9.1 Example of plans used at project inception to guide the documentation and work plan. (Source: Badr, 2018)

The social dimension also played a vital role, with residents providing insights into historical contexts and functional modifications. Social interaction was essential for building trust and gaining access to private spaces. Systematic dialogue with elderly residents revealed how elements had moved over time, helping to pinpoint the original locations of components that had been removed or obscured.

9.2.2 Forensic Reconstruction: Resolving Architectural and Structural Ambiguities

A thorough examination of the building raised difficult questions regarding elements with no precedent in other similar structures. A thorough examination of the building raised challenging questions regarding elements with no precedent in other similar structures. The investigation first focused on the corridor above the front arcades, which links the northern and southern wings. Physical observation revealed movement and settlement joints, which suggested a lack of structural connectivity. Examining historical photographs, the team hypothesised that this passageway had initially been roofless but was modified shortly after the construction to include a west-side wall, wooden windows facing the street and a tiled roof of the same type as the original.

The lost staircases posed a further challenge. The team identified an open space in the southern wing which local residents confirmed had contained a wooden stairwell that had been removed by the local authorities to prevent access. Physical evidence supported this theory, including a remnant of a wooden joist in the eastern wall and faint lines of paint indicating the direction of the staircase. Due to evidence being erased in the northern wing, which had been modified for smoking fish, the team postulated the existence of a matching staircase based on structural symmetry. Similarly, the collapse of parts of the upper voids in both the northern and southern wings helped to form a complete picture of the original plans. The evidence also suggested that the interior partition walls were constructed at a later stage, after the roof beams and tiled roof had been erected.

Examination of the western wing's circulation, specifically regarding its connection to the other two buildings and the roof access system, resolved the puzzle that was of the building's layout. The remains of the dilapidated wooden beams and a wooden terrace initially provided evidence for the reconstruction of the horizontal circulation system. However, understanding the access to the upper roof required a mixed-methods approach: conversations with local residents were crucial in determining the purpose of the remaining wooden elements and the function of the suspended bridge. This led to the discovery of traces of a flying staircase – a wooden flyover matching a higher beam – which maintenance workers had used to reach the tiled roof. To confirm these findings, a shaped piece of wood found among the ruins was compared with architectural details from contemporary Port Said

buildings. This comparative analysis verified that the fragment was part of a repeating unit for the balcony and bridge railings, providing the final link in the forensic reconstruction of the western wing.

Regarding the central court, investigations revealed its original purpose and documented subsequent structural changes. The flooring was confirmed to slope towards the centre, which, combined with the requirement for a constant water supply and drainage system, corroborates oral testimonies that the court originally served as a fish market. Furthermore, residents described a roof truss covering the court that was similar to those on the north and south buildings, but which extended in only two directions. One resident's account specifically detailed the collapse of the supporting beam for this truss, a narrative that was confirmed by physical evidence in the form of marks on the western exterior wall of the connecting passageway.

Analysis of the non-original structural components revealed significant discrepancies in the construction materials used. Tests of the building materials showed that the columns surrounding the central void are made of fired brick, which contrasts with the limestone and stone of all the original load-bearing elements. This discrepancy, coupled with the weak connection observed between the roof elements of this void and the eastern corridor building, suggests that these columns were constructed at a later date. Furthermore, residents' accounts of their childhood years in the bazaar provided the documentation necessary to determine the original locations of public and private toilets at the northern and southern ends of the western building.

Successful implementation of this inferential methodology, which synthesised investigative visual analysis, on-site physical inspection and detailed social testimony, provided a credible foundation for the final 3D model. Overall, this approach contributed to forming approximately 50% of the conception of the bazaar's original state. The resulting 3D model simulates the presumed original design and provides architects and restorers with a vital visual and analytical reference. This is essential for planning interventions aimed at restoring the historical and architectural integrity of Bazar Abbas and ensuring that the site remains a living heritage resource.

9.2.3 Documentation of Current Conditions using Laser Scanning

Documenting the current condition involves a scientific endeavour that establishes an analytical baseline for structural analysis, restoration

design and long-term monitoring. The preparatory phase required a precise definition of the objectives, ensuring that all outputs met requirements for E57 point clouds, DWG drawings and IFC/OBJ 3D models. The bazaar’s location – characterised by narrow spaces and unstable conditions – rendered accurate documentation imperative. A review of preliminary data from historical sources revealed inaccuracies, necessitating a comprehensive, zero-sum approach. The team selected Terrestrial Laser Scanning (TLS), specifically utilising the Leica BLK360 for its ability to capture high-density data within such a crowded environment.

Recognising that laser scanning could not achieve full coverage due to physical obstructions, the digital workflow was integrated with supplementary tools. Non-metric photographic documentation was employed for visual references to clarify shadowed areas (Fig. 9.2),

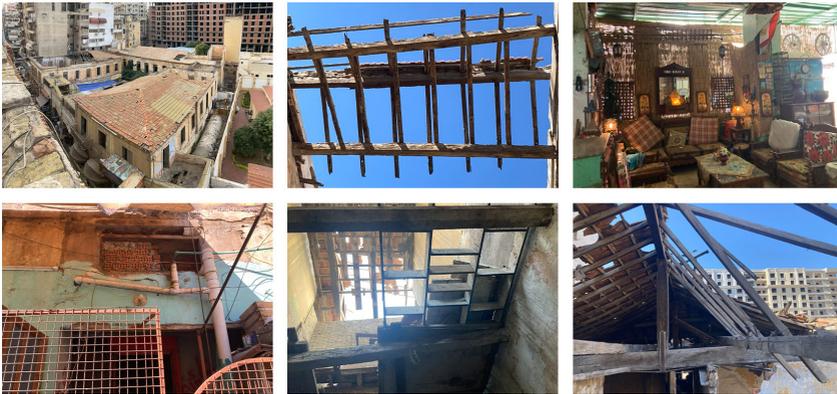


Fig. 9.2 Supplementary photography documenting the building’s current condition. (Photo: Samer Helmy Kasem, 2024)

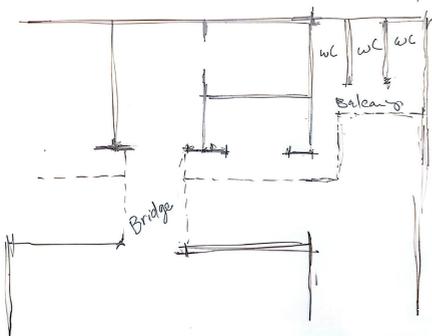


Fig. 9.3 Field sketch of the West Wing, second floor (northern side), utilised for architectural reference. (Photo: Samer Helmy Kasem, 2024)

while manual sketches captured precise architectural details, adding qualitative depth to the digital engineering record (Fig. 9.3).

9.2.4 Field Challenges

The team encountered significant accessibility challenges; vertical movement in the rear wing was virtually impossible due to collapsed balconies. To address this, the team constructed longitudinal scaffolding to create a safe path and a stable base for the laser stations (Fig. 9.4). In order to address critical information gaps in inaccessible areas, the team applied architectural inference based on the axial symmetry of the building's classical design. Identifying a central longitudinal axis enabled hard-to-reach spaces to be modelled using measurements from their surveyed counterparts. Each inferred element was assigned a degree of confidence to ensure that the resulting model remained a reliable scientific hypothesis.

External documentation required circumvention of security restrictions due to the building's proximity to the Suez Canal Authority. To compensate for the inability to use drones, the team utilised a time factor by scanning in the early mornings to minimise interference (Fig. 9.5). Higher vantage points were accessed via adjacent roofs and the mosque minaret to form accurate facades. For the western facade, a vertical scanning technique was employed by extending the scanner horizontally outside the building to generate a point cloud of the surface.



Fig. 9.4 Hazardous conditions and the use of temporary scaffolding to access collapsed sections of the upper floor. (Photo: Samer Helmy Kasem, 2024)



Fig. 9.5 Façade documentation conducted during low-activity hours. (Photo: Samer Helmy Kasem, 2024)



Fig. 9.6 Photographic record of areas that are inaccessible for laser scanner. (Photo: Samer Helmy Kasem, 2024)

9.2.5 Digital Processing and HBIM Modelling

Digital processing transformed raw point cloud data into advanced engineering outputs intended for structural analysis. The scans were merged and processed to reduce noise and ensure geometric consistency. This resulted in a point cloud covering approximately 70% of the area. Notably, the collapse of roof sections enabled the modelling of internal trusses that had previously been inaccessible. The point cloud was then processed to extract 2D floor plans documenting modern encroachments and sealed openings. Vertical sections revealed wall inclinations and specific instances of masonry collapse. These drawings documented the condition of architectural elements, clarified deterioration and integrated the results of ongoing restoration work, which currently accounts for around 5% of the building's total area.

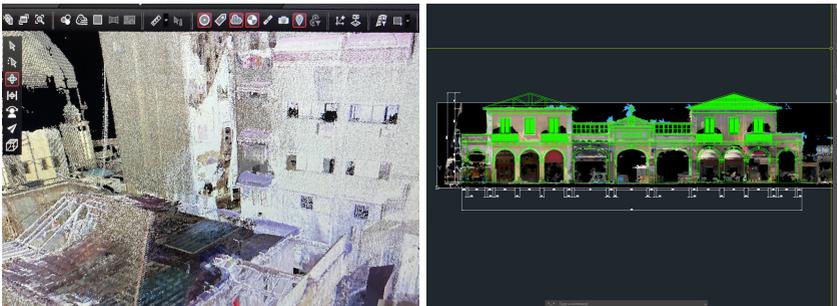


Fig. 9.7 The point cloud as a product of the laser scanner. (Screenshot: Samer Helmy Kasem, 2025)

Fig. 9.8 CAD façade drafting based on orthographic images generated from the point cloud data. (Screenshot: Samer Helmy Kasem, 2024)

For the 3D modelling phase, the team adopted an HBIM approach. Using SketchUp™ for its flexibility, the methodology focused on creating a detailed, component-based representation to accurately reflect the true nature of the building. The walls were modelled as individual brick units covered with mortar, and the roof was reconstructed using individual tile units. This level of detail illustrates the extent to which the building's structure deviates from an ideal geometric form.



Fig. 9.9 3D drawings of the building's current situation. (Survey & Drawing: Samer Helmy Kasem, 2024, 2025)

9.2.6 Analytical Considerations and Project Deliverables

At this stage, the fieldwork is converted into specialised analytical tools and administrative documents. The primary objective was to precisely define the scope of the structural analysis, focusing on critical high-risk areas and timber trusses. To this end, the model was embedded with real-world material properties, specifically accounting for mortar thickness and brick unit characteristics. These were calibrated through on-site sample material tests (Fig. 9.11). Alongside this technical data, interaction with the local community was vital in order to gather oral histories regarding functional modifications and to gain their trust and consent necessary to access more private areas (Figs. 9.12).



Fig. 9.11 Study of building materials and their condition. (Photo: Samer Helmy Kasem, Ahmed Nour & Wesam Ahmed, 2024, 2025)



Fig. 9.12 Talking to the community and finding historical information about the building. (Photo: Ahmed Nour, 2025)

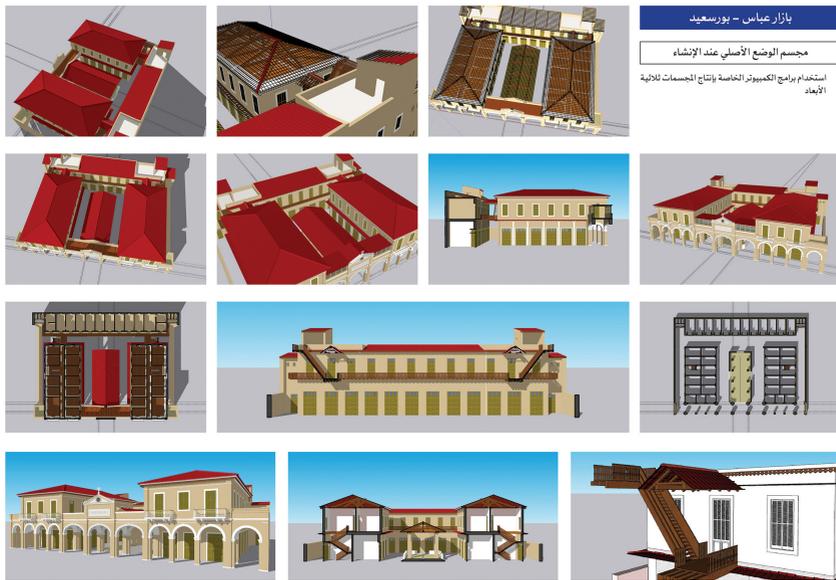


Fig. 9.13 The original design of the building was the result of observations and discussions with the local community. (Survey & Drawing: Samer Helmy Kasem, 2024, 2025)

To ensure that the findings could be used for future conservation purposes, the final deliverables were organised into a comprehensive package. These included high-density point clouds in E57/LAS formats, DWG CAD files for plans, elevations and sections, an analytical 3D model and an animation model. This animated interface enables virtual movement within the building and facilitates a thorough yet remote visual inspection of the bazaar's structural integrity and current condition.

9.3 Conclusion

Although heritage preservation and rehabilitation are vital for the continuity of urban life, this paper emphasises the importance of thorough documentation for fully appreciating the value of cultural heritage and its close link to local identity. In historical contexts marked by prolonged conflict, the principle of basing documentation solely on verifiable archival resources is often unattainable. This reality necessitates a more flexible, multi-source approach that incorporates collective memory, expert physical observation and digital surveying.

This strategy is complemented by technological advancements in high-resolution surveying and predictive modelling, which provide powerful tools for reconstructing original structures and planning future protection efforts. The combination of human testimony and cutting-edge technology is particularly important in regions such as the Middle East, where ongoing conflict and transformations are occurring. Ultimately, the methodology for documenting cultural heritage in such complex environments must be adaptable and inclusive. It should move away from a narrow reliance on historical records in order to capture the full, multi-layered history of the living heritage that remains.

References

- Badr, B. A. A. (2018). Bāzāru ʾal-khudaywī abāḡsuⁿ bīmadīnati būʿsaʿīdi 1309 h / 1891 m dirāsata ʾathārīāta miʾmārīāta [Khedive Abbas Bazaar in Port Said city 1309 AH / 1891 AD: An archaeological architectural study]. *Abadiyat al-Ittihad al-Aam lil-Athariyin al-Arab [Yearbook of the General Union of Arab Archaeologists]*, 21(1), 456–516.

10. Cultural Significance of Bazar Abbas

Alaa El Habashi

Abstract

This significance report¹ for the Bazar Abbas and its surrounding adopts the values-based analysis approach from the Burra Charter process (2013) combining the aims to assess cultural significance and identify factors and issues to develop a matrix for setting priorities in intervention. The scope of this report includes the buildings directly facing Bazar Street defined by Mohammed Mahmoud to the North and Abd El-Moneim Riad to the South. Attributes of Bazar Abbas for the purpose of this report will be studied on the architectural scale due to more immediate plans for restoration works whilst other attributes will be analysed on a neighbourhood scale also known in this report as the Bazar Street zone. This, however, does not imply a lesser significance of other surrounding buildings in the urban block. Further detailed assessment work is also encouraged for other buildings in the vicinity that have been highlighted as potentially high priority in this assessment.

Keywords: Bazar Abbas, cultural significance, values, conservation directives

10.1 Introduction: Values and Significance

This report relates the values and their identified attributes to the beneficiaries and stakeholders of Bazar Abbas in Port Said. The aim is to assess how the people would relate to and understand the various historic and heritage components of the building, ensuring that future rehabilitation and the operational management would be sponsored and assigned to the most relevant personnel, institutions and entities. It should be noted that a report on values and their attributes was produced by Jaclyn Chua, a participant of the second workshop. The values and attributes table formulated in that report has been adopted here as the basis for the significance assessment. However, since that report was produced, many aspects, features, and components of the building have been revealed and understood, a fact that required an update of that table. The updated table of attributes is provided below, along with a brief explanation of why they were included in this report.

¹ Editor's note: This paper is based on the 'Cultural Significance Report' submitted by Dr Alaa El Habashi (Al Yakaniya for Heritage and Arts) on 29 March 2024 as a project deliverable. The editorial team provided the proofreading and formatting for this publication. Unless otherwise stated, all figures, tables and diagrams are sourced from Al Yakaniya for Heritage and Arts (2024).

We have identified and assessed an additional 30 attributes, bringing the total to 48.

The following table (Table 10.1) shows the attributes and values at two main levels: Bazar Street and the bazaar building itself. In order to determine and establish conservation directives for the restoration of Bazar Abbas, we must focus on the attributes of the building and study the relationship of each attribute to the values, and the importance that each attribute expresses. We must also study and analyse the guiding considerations and their importance through the attributes associated with them and the values they express.

| S.No. | Attributes | Values (V) | | | Zone | Condition (C) | Intactness (I) | | | | Legibility (L) | | Figures/Ref | Investigation | Evaluation of priorities | | | Intervention strategy (T1-4) |
|-------|---|---------------|----------|--------|-------------------------------|---------------|----------------|-----|-------|------|----------------|-----|-------------|---------------|--------------------------|--------|-----|------------------------------|
| | | Architectural | Historic | Social | | | Critical | Bad | Sound | High | Medium | Low | | | High | Medium | Low | |
| 1 | All Bazar Street | 1 | 1 | 1 | All Bazar Street | 0 | H | H | H | M | | | X | X | 4 | 0 | 4 | 3.1 |
| 2 | Bazar Abbas | 1 | 2 | 1 | All Bazar Street | 2 | | | M | M | | | X | X | 5 | 1 | 2 | 4,3,2,1 |
| 3 | Mirche Municipal | 1 | 2 | 1 | All Bazar Street | 1 | | | M | H | | | X | X | 3 | 1 | 4 | 4,1 |
| 4 | Suez Canal Administrative Building | 1 | 1 | 1 | All Bazar Street | 0 | H | H | H | M | | | X | X | 5 | 0 | 4 | 3,1 |
| 5 | Mexique | 1 | 1 | 1 | All Bazar Street | 0 | H | H | H | M | | | X | X | 3 | 0 | 4 | 3 |
| 6 | Fakous Building | 1 | 1 | 1 | All Bazar Street | 0 | H | H | H | M | | | X | X | 2 | 0 | 2 | 1 |
| 7 | Coffee Shops - Princessa, Talaab | 1 | 1 | 1 | All Bazar Street | 0 | H | H | H | M | | | X | X | 2 | 0 | 2 | 1 |
| 8 | Building Facades associated with second period 1911-1939 | 1 | 1 | 1 | All Bazar Street | 0 | H | H | H | M | | | X | X | 2 | 0 | 2 | 1 |
| 9 | Building Facades associated with third period 1931-1939 | 1 | 1 | 1 | All Bazar Street | 0 | H | H | H | M | | | X | X | 2 | 0 | 2 | 1 |
| 10 | Buildings built later than 1940s | 1 | 1 | 1 | All Bazar Street | 0 | H | H | H | M | | | X | X | 1 | 0 | 1 | Ref p x |
| 11 | Single story window structures | 1 | 1 | 1 | All Bazar Street | 0 | H | H | H | M | | | X | X | 1 | 0 | 1 | Ref p x |
| 12 | Facades and arcways | 1 | 1 | 1 | All Bazar Street | 0 | H | H | H | M | | | X | X | 3 | 0 | 3 | 3,1 |
| 13 | Entrances and windows | 1 | 1 | 1 | All Bazar Street | 0 | H | H | H | M | | | X | X | 3 | 0 | 3 | 3,1 |
| 14 | Shop activities (Cloths, fruits, vegetables, general wares) | 1 | 1 | 1 | All Bazar Street/ Bazar Abbas | 0 | H | H | H | M | | | X | X | 2 | 0 | 2 | Ref p x |
| 15 | Market activities | 1 | 1 | 1 | All Bazar Street/ Bazar Abbas | 0 | H | H | H | M | | | X | X | 2 | 0 | 2 | Ref p x |
| 16 | Shop activities Expansions onto arcades, walkways and streets | 1 | 1 | 1 | All Bazar Street/ Bazar Abbas | 0 | H | H | H | M | | | X | X | 2 | 0 | 2 | Ref p x |
| 17 | Shop signs and advertisements | 1 | 1 | 1 | All Bazar Street/ Bazar Abbas | 0 | H | H | H | M | | | X | X | 2 | 0 | 2 | Ref p x |
| 18 | Shading features (Umbrellas, awnings) | 1 | 1 | 1 | All Bazar Street/ Bazar Abbas | 0 | H | H | H | M | | | X | X | 2 | 0 | 2 | Ref p x |
| 19 | Roof | 2 | 1 | 1 | Bazar Abbas | 2 | | | M | | | | X | X | 2 | 1 | 5 | 2,1 |
| 20 | Structures (Pillar, Columns, Walls) | 2 | 1 | 1 | Bazar Abbas | 2 | | | H | | | | X | X | 2 | 2 | 5 | 1 |
| 21 | Stairs | 1 | 1 | 1 | Bazar Abbas | 2 | | | L | | | | X | X | 2 | 2 | 4 | 4,1 |
| 22 | Facades (Courtyards) | 2 | 1 | 1 | Bazar Abbas | 2 | | | M | | | | X | X | 3 | 2 | 5 | |
| 23 | Facades (Front Facade) | 2 | 1 | 1 | Bazar Abbas | 1 | | | M | | | | X | X | 3 | 1 | 4 | 3,2,1 |
| 24 | Treatment (Front facade) | 2 | 1 | 1 | Bazar Abbas | 1 | | | H | | | | X | X | 3 | 1 | 4 | 3,1 |
| 25 | Verandah 1F (Front Facade) | 2 | 1 | 1 | Bazar Abbas | 0 | H | H | M | | | | X | X | 3 | 0 | 3 | 3,1 |
| 26 | Arcades GF (Front Facade) | 2 | 1 | 1 | Bazar Abbas | 0 | H | H | M | | | | X | X | 3 | 0 | 3 | 3,1 |
| 27 | Arcades 1F (Courtyard facade) | 2 | 1 | 1 | Bazar Abbas | 2 | | | H | | | | X | X | 3 | 0 | 3 | 3,1 |
| 28 | Timber Shutters 1F (Front Facade) | 2 | 1 | 1 | Bazar Abbas | 2 | | | L | | | | X | X | 3 | 2 | 5 | 2,1 |
| 29 | Cast Iron Balustrades (Front Facade) | 2 | 1 | 1 | Bazar Abbas | 1 | | | M | | | | X | X | 3 | 0 | 1 | 3,1 |
| 30 | Verandah 1F (Courtyard) | 2 | 1 | 1 | Bazar Abbas | 2 | | | L | | | | X | X | 3 | 2 | 5 | 2,1 |
| 31 | Fine traditions | 1 | 1 | 1 | Bazar Abbas | 2 | | | M | | | | X | X | 3 | 1 | 4 | 2,1 |
| 32 | Courtyard structures | 1 | 1 | 1 | Bazar Abbas | 0 | M | | | L | | | X | X | 3 | 0 | 3 | 4,3,1 |
| 33 | Interiors GF | 1 | 1 | 1 | Bazar Abbas | 0 | M | | | L | | | X | X | 2 | 0 | 2 | 4,1 |
| 34 | Interiors 1F | 1 | 1 | 1 | Bazar Abbas | 2 | | | M | | | | X | X | 2 | 2 | 4 | 4,1 |
| 35 | Floor finishes | 1 | 1 | 1 | Bazar Abbas | 1 | | | M | | | | X | X | 2 | 1 | 3 | 4,1 |
| 36 | Ceiling finishes | 1 | 1 | 1 | Bazar Abbas | 2 | | | M | | | | X | X | 2 | 2 | 4 | 4,1 |
| 37 | Wood Trusses | 2 | 2 | 2 | Bazar Abbas | 2 | | | H | | | | X | X | 4 | 2 | 6 | |
| 38 | Single Rooms (western wing) | 1 | 1 | 1 | Bazar Abbas | 2 | | | M | | | | X | X | 2 | 2 | 4 | |
| 39 | Double Rooms (northern & southern wings) | 1 | 1 | 1 | Bazar Abbas | 2 | | | M | | | | X | X | 2 | 2 | 4 | |
| 40 | Bazar Abbas Wood (Front Facade) | 1 | 1 | 2 | Bazar Abbas | 2 | 1 | | L | H | | | X | X | 3 | 1 | 4 | |
| 41 | Top wooden flap | 2 | 2 | 2 | Bazar Abbas | 2 | | | M | | | | X | X | 4 | 2 | 6 | 4,1 |
| 42 | Middle wooden flap | 2 | 2 | 2 | Bazar Abbas | 2 | | | M | | | | X | X | 4 | 2 | 6 | 4,1 |
| 43 | One Authentic Shop Door | 1 | 1 | 2 | Bazar Abbas | 1 | | | M | | | | X | X | 3 | 1 | 4 | |
| 44 | Cast Iron Downpipe | 1 | 1 | 2 | Bazar Abbas | 1 | | | M | | | | X | X | 2 | 1 | 4 | |
| 45 | Mosaic (Hydraulic lime plaster & Tiles) | 2 | 2 | 2 | Bazar Abbas | 1 | | | M | | | | X | X | 4 | 1 | 6 | |
| 46 | Spaces of various Hierarchy | 1 | 1 | 1 | Bazar Abbas | 1 | | | M | | | | X | X | 3 | 1 | 4 | |
| 47 | Fish vending activities (restaurant and market) | 1 | 1 | 1 | Bazar Abbas | 0 | H | H | H | M | | | X | X | 2 | 0 | 2 | Ref p x |
| 48 | Community of old residents and shopkeepers | 1 | 1 | 1 | Bazar Abbas | 0 | H | H | H | M | | | X | X | 2 | 0 | 2 | Ref p x |

← All the Attributes related to the Bazar Abbas building

Table 10.1 Comprehensive value assessment matrix for Bazar Street and Bazar Abbas.

10.2 Values and Attributes

By studying the part related to the bazaar building in the table of attributes and values shown above (Table 10.1), and introducing the importance of each of these attributes, we can explain the attributes related to the building and their relationship with the four basic values

The following table (Table 10.3) illustrates the importance of each of the attributes in the building. The importance of the attribute increases according to the number of values it expresses, and therefore it has importance or priority in plans for preservation, restoration, revitalisation or rehabilitation. For example, by looking at attribute No. 32 (Courtyard Structures) in Table 10.3, we can see that the courtyard structures of the bazaar building express historical, architectural and social values, linking the achievement of a social role in one of the parts of the building with its architectural vocabulary, as well as what has been expressed throughout the history of the building’s construction.

| Values | Common in 3 Values | | | Common in 2 Values | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | Common in 1 Value |
|---------------|--------------------|----|----|--------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|---|---|-------------------|
| | 32 | 40 | 46 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 35 | 36 | 37 | 38 | 39 | 41 | 42 | 43 | 44 | 45 | 14 | 15 | 33 | 34 | 47 | 48 | | | |
| Architectural | * | * | * | | | | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | |
| Urban | * | * | * | * | * | * | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Historic | * | * | * | | | | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | |
| Social | * | | | * | * | * | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | * | | |

Table 10.3 Significance ranking of building attributes based on their expressed values.

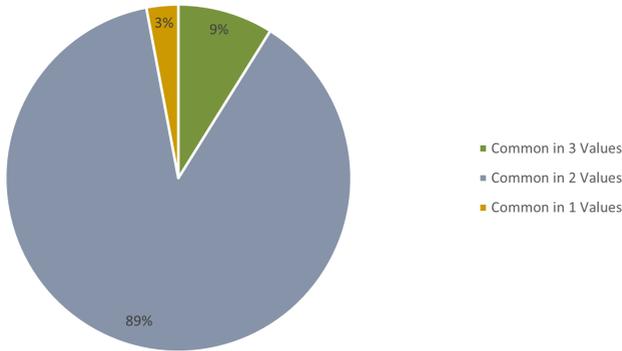


Fig. 10.2 Proportional overlap showing attributes that embody single versus multiple heritage values.

10.2.2 Attribute Condition

An assessment of the current state of the building’s attributes (Table 10.4), reveals that most of the attributes are in a critical condition, requiring radical treatment and intervention. For example, vanished attributes such as the building’s original stairs (attribute No. 21), the building’s roofs (attribute No. 19), as well as attributes in poor condition such as the floor finishing materials (attribute No. 35), some of which are in sound condition and require minor repairs, such as the ground floor corridors (attribute No. 26).

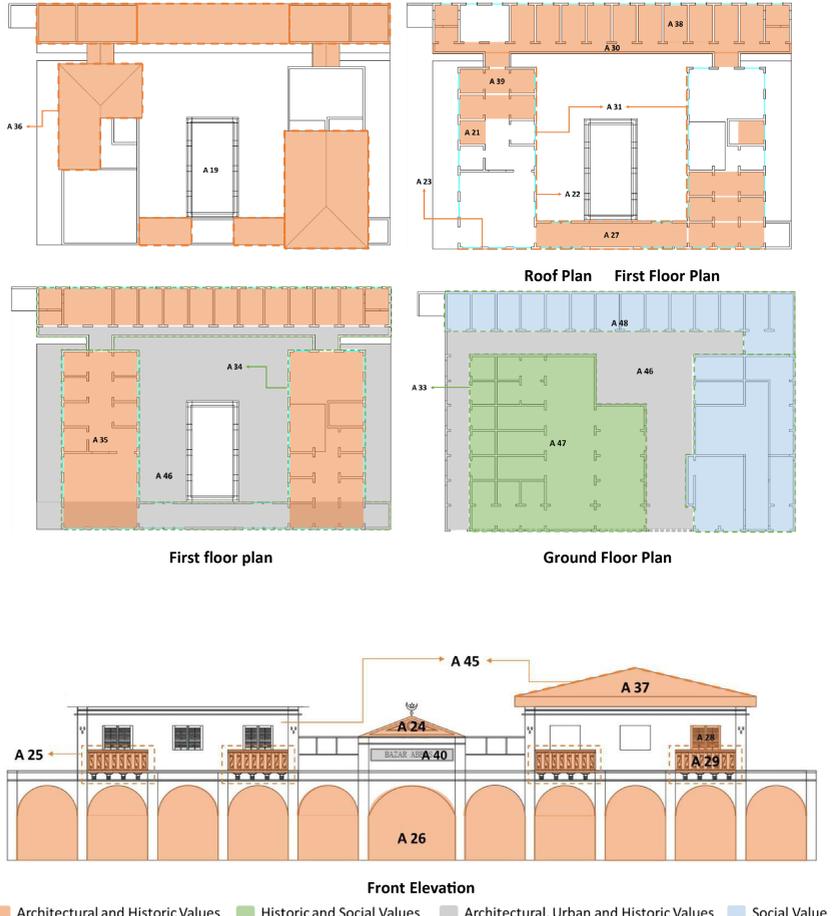


Fig. 10.3 Spatial mapping of heritage values onto the architectural plans and front elevation.

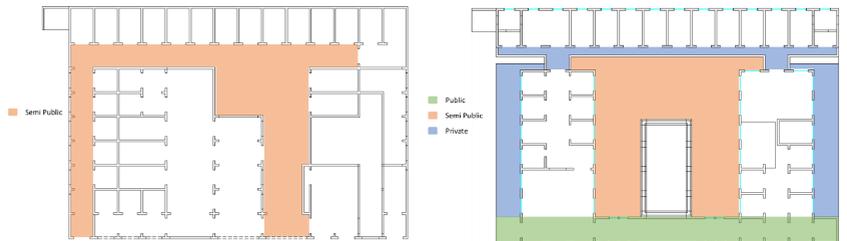


Fig. 10.4 Spaces of various hierarchies related to attribute No. 46.

After studying the condition of the attributes (Fig. 10.5), we find that the majority of the attributes in the building, 26%, are in a critical condition, followed by 23% are in a bad condition, 37%, are in a sound condition, and the remaining percentage is between 9% representing the vanished, and 6% representing the ruins.

| Condition | Attributes | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------|------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | | | | | | | | | | | | | | | | | |
| Critical | | | | | | * | * | | * | | | | | * | | | | | | | | * | * | * | * | * | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bad | | | | | | | | | | * | * | | | | | | | | | | | | * | * | * | * | * | | | | | | | | | | | | | | * | * | * | * | * | * | | | | | | |
| Sound | * | * | * | * | * | | | | | | | | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * |
| Vanished | | | | | | | * | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Ruins | | | | | | | | | | | | | | | * | | * | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Table 10.4 Physical status assessment of individual attributes categorized by their state of survival or decay.

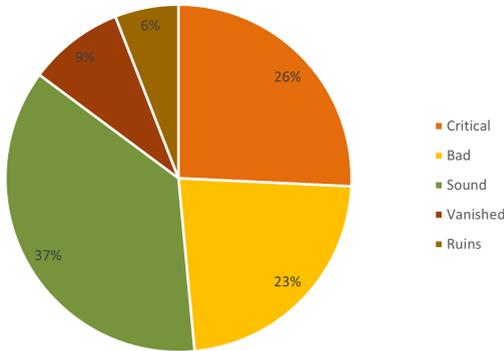


Fig. 10.5 Proportional distribution of the building's attributes across physical condition categories, from sound to vanished.

10.3 Significance and Attributes

To understand the relationship between significance and value, it is also necessary to study the relationship between significance and attributes. This can be achieved by analysing Table 10.5, which shows the extent of importance expressed by each attribute of the bazaar building, and via the graph in Figure 10.6, which illustrates the varying percentages of importance levels. In this graph we can see that the Economical/Future Rehabilitation represents 96% of importance, closely followed by Heritage/Cultural with 91%, then Social with 22%, and finally Environmental with 35%.

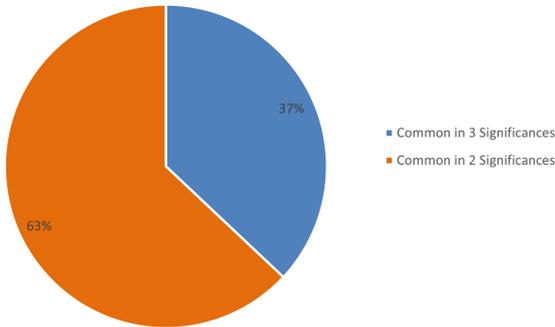


Fig. 10.7 Proportional distribution of attributes expressing two versus three categories of significance.

10.4 Significance and Attributes on Plans

To further clarify the significance and varying proportions of the attributes in the bazaar building, we identified the existing attributes of the building in the architectural drawings (plans and the front elevation) (Fig. 10.8), as well as the significance expressed by each attribute, so what follows is a presentation of these drawings.

10.5 Significance and Tangible Attributes

It represents the largest proportion of the attributes, then it must be included, revived and restored in a way that adds to the building's values. Based on the analysis and study of the values and characteristics present in the building, the following recommendations reformulate them as guiding considerations for carrying out restoration operations on the building's most important parts. This preserves its components and shows their value, while reviving those components that have disappeared and which were once among the building's most important and distinctive features. The following presentation studies the relationship of each consideration to the building's characteristics and values, and how these considerations are important to other institutions or buildings.

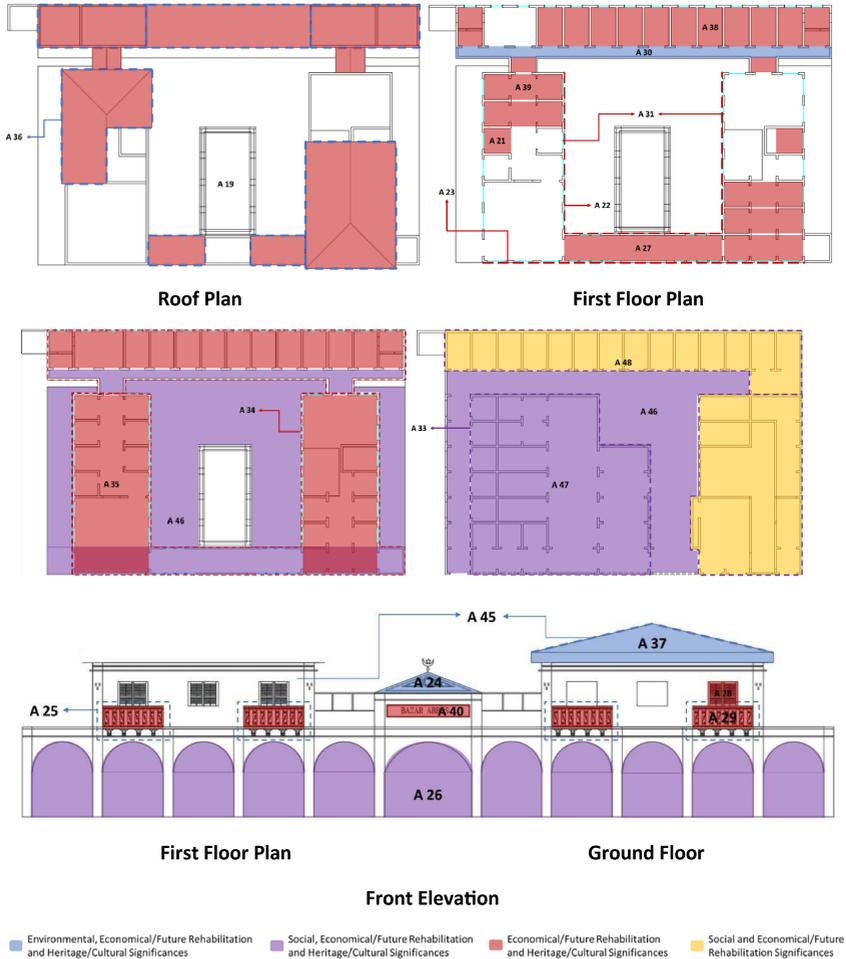


Fig. 10.8 Spatial mapping of significance categories onto architectural plans and elevation to guide restoration.

10.5.1 Attributes with Critical Status

Like the roofs, they can be restored to confirm and increase the building's historical and architectural values. We noticed the presence of the largest flat surface of the original roof in the northern wing of the bazaar building. With the restoration of the damaged or missing parts of the wooden trusses as well as their wooden supports, the rest of the parts can further be reused. The ceilings in the southern and western wings were restored using the original ceramic tiles, which were originally manufactured in Marseille, to resemble the building's original impres-

sion. The rest of the southern and western wing roofs were restored using different materials that match the colour of the original tiles to once again recreate the building's original appearance. The flat roofs in the western wing and parts of the corridor connecting the northern and southern wings were also restored and duly implemented.

The internal walls or partitions of the building are in poor condition, especially in the northern and southern wings. The remains of the internal partitions in the southern and northern wings are in a critical condition, where the loss of a large part of them requires their full restoration in order to bring them back to their original state, while most of the internal partitions in the western wing are relatively in good condition. Removing the internal partitions in the southern and northern wings, would confirm and demonstrate the historical and architectural values apparent in other elements, as well as increasing the artistic value of the space in these two wings. The internal partitions in the western wing could be restored to better showcase their historical value in an appropriate part of the building. Removing them from one part of the building and keeping them and restoring them in another would positively impact on the building's own values as well as future reuse plans.

The fish market platform is one of the most important elements of the bazaar building due to its historical value and social significance, which has been evident since the building's construction and its connection with the historical community. However, the presence of this part on the ground floor of the building and the changes that have occurred make it necessary to reconfigure it to the original build. Initially it was built, using many procedures and interventions, but the roof of the fish market platform can be reconstructed as it was when the building was first constructed, as shown in the original building plans. They would emphasize the value of this element and enhance the values of the building as a whole.

The wooden corridors connecting the building's western wing and its northern and southern wings on the first floor need to be reconfigured, restored and preserved. This is not only to emphasize their historical and architectural value, but also because they are the only point of contact with the western wing. These restorations must be in accordance with the original plan of the building and any remaining items, evidence or traces of the corridors. The restoration process also includes the ceilings of each corridor, and involves the process of restoring and rebuilding them using the remaining original parts,

wooden beams and original ceramic tiles.

The terrace of the western wing must be restored and reconstructed in accordance with the original building plan and any remaining traces of the elements and components of the original balcony. This can be achieved by adding finishing layers to the floor to increase and preserve this element, or by adding an iron course with a modern design that adds to this element, as well as a curtain. It should optimally be wooden, as can be seen from the remaining evidence.

10.5.2 Attributes in Poor or Sound Status

The balconies of the northern wing can be restored and preserved as they were, or in a contemporary form that would retain and preserve this architectural feature. The wooden cables that support these balconies can be restored and repaired, and the wooden flooring can be replaced. Insulating materials and outward slopes can then be added to the floor, and the iron railings can be restored, repaired or completed.

10.5.3 Disappearing Tangible Attributes

It represents some of the basic attributes that distinguish the building. It is necessary to reinstate and revive any attributes that contribute to the building's values, design and reuse plans.

The original stairs of the building can be re-incorporated into both the northern and southern wings, either as wooden stairs as in the original building, or with modern materials. Such a reconstruction should be done in accordance with the original plans and historical details, or possibly retrievable from any architectural evidence or remaining elements of the stairs.

The prominent flap and wooden pendants can be reinserted as a distinctive element in the building's facades. Contemporary installation methods can be formulated to benefit the revival of these elements while preserving and adding to the coherence of the facades, provided that the rebuilding follows the original plan as recovered from the Antiquities Department. This is supported by the remaining evidence that was found.

The middle flap can be re-inserted to provide coverage for the interior corridors on the ground floor, as well as to protect parts of the walls from rain and various weather factors, provided that the reconstruction follows the original plan as recovered from the remaining traces and evidence.

10.6 Conservation Directives

The study and analysis of the features present in the bazaar building, their relationship with each other, and the values and significance they express is one of the most important foundations for the preservation and rehabilitation of historical buildings. Each of these processes consists of a group of restoration or conservation directives, as shown in Table 10.7. This table shows the proposed guiding considerations that are directly related to one of the building's elements that express a characteristic or a set of characteristics. Therefore, the following is identified and studied:

- » The relationship between values and significance.
- » The significance and relationship of each conservation directive, and the attributes they affect or express, confirm and preserve the building's values.

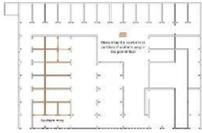
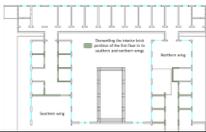
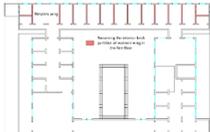
10.7 Logistical Directives

We recommend the following directives for the local community, shop owners and renters of the bazaar area, with the aim of encouraging community cooperation and preserving their heritage and buildings (see Table 10.8).

10.8 Conservation Directives between Significance and Values

Through the previous analysis of the attributes of the building and their relationship to both significance and values, we can study the relationship between them. In the diagram shown below (Fig. 10.9), we notice that the building's attributes express historical, architectural and social values. There are no attributes related to or expressing urban value. The attributes express significance in the following areas: Economical/Future Rehabilitation, Heritage/Cultural, Environmental and Social.

While Table 10.9 outlines the relationship between the attributes and the proposed conservation directives, Table 10.10 provides a more detailed analysis. It indicates several attributes related to each of the proposed conservation directives, the building's values and what each of those attributes express. This helps to determine which values are related to each proposed conservation directive, as well as the overall percentage by which the directives affect each of those values.

| Conservation Directives | | Description & Photos |
|-------------------------|---|--|
| 1 | Reuse the original parts of the southern and western wing roofs, to reconstruct the northern wing roof as a fully authentic feature, considering that it is the most visible part in relation to the surrounding urbanization |  |
| 2 | Reconstruction the rest of the Truss Roofs, according to the original structural design (southern and western wings, and the triangular section of the middle corridor) |  |
| 3 | Implementation of the flat roofs for the western wing and roof of the corridor connecting the southern and northern wings |  |
| 4 | Rehabilitation of the fish market platform by rebuilding the Roof |  |
| 5 | Dismantling the interior brick partition of southern wing in the ground floor |  |
| 6 | Dismantling the interior brick partition of the first floor in both southern and northern wings |  |
| 7 | Preserving the interior brick partition of western wing in the first floor. |  |
| 8 | Replacement of wooden crenellations and their connection to the wooden truss with a transitional stage of precast concrete units. |  |

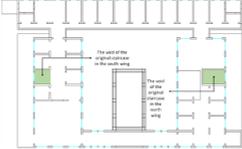
| | |
|--|---|
| <p>9 Rehabilitating the balconies of the northern wing and adding finishing layers that confirm the value and significance of these balconies (as was done in the sample).</p> |  |
| <p>10 Rehabilitating the terrace of the western wing and adding finishing layers that confirm the value and significance of this terrace (as was done in the sample).</p> | |
| <p>11 Rebuilding one of the building's elements, the middle wooden canopy, which was used to protect the interior facades of the building in the northern and southern wings.</p> |  |
| <p>12 Reconnection and access between the northern and southern wings of the building, with the western wing by rebuilding the wooden bridges (Walkways/paths).</p> |  |
| <p>13 Re-inserting the access stairs to the first floor in their original places, using stairs with new concrete materials that increase and support the building's structure and connect with the rest of the building's components and features.</p> |  |

Table 10.7 Proposed conservation and restoration directives for the building's physical components.

All proposed conservation directives are linked to and maintain attributes related to historic value (representing 100%), architectural value (representing 87%), social value (representing 47%) and those related to urban value (representing 20%) (see Fig. 10.9).

Table 10.11 indicates the attributes related to each of the proposed conservation directives. However, to measure the significance of each directive and determine the extent to which it reflects and emphasizes these attributes, further analysis is required.

All proposed conservation directives for associated attributes of significance (Fig. 10.10): Heritage/Cultural and Economic/Future Rehabilitation 100% each, followed by 60% for Environmental significance, and then 47% for social significance.

| Logistical Directives | | Description & Photos |
|-----------------------|---|--|
| 1 | Establishing an "Owners' Union" specializing in shop owners and renters that will supervise the restoration and development fund. This fund will be a percentage of the income of each shop, which will be spent on addressing any problems of the shops, the community and for the restoration and preservation of this historical area. |  |
| 2 | Storytelling Space "Mahka", serves as an exhibition of the succession of generations in each shop, showcasing the story and the history of its owners and their relationship with this historic area. |  |

Table 10.8 Recommended logistical and community-based directives for local heritage management.

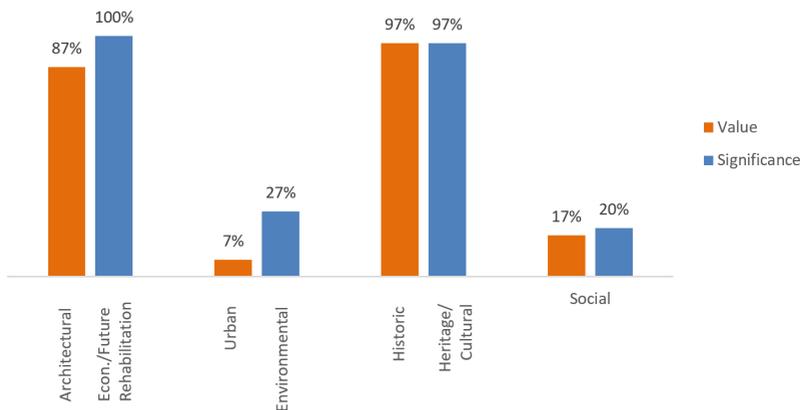


Fig. 10.9 Proportional impact of conservation directives on the preservation of architectural, urban, historic, and social values.

| Attributes | Conservation Directive 1 | Conservation Directive 2 | Conservation Directive 3 | Conservation Directive 4 | Conservation Directive 5 | Conservation Directive 6 | Conservation Directive 7 | Conservation Directive 8 | Conservation Directive 9 | Conservation Directive 10 | Conservation Directive 11 | Conservation Directive 12 | Conservation Directive 13 | Logistical Directive 1 | Logistical Directive 2 |
|------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|---------------------------|---------------------------|---------------------------|---------------------------|------------------------|------------------------|
| 19 | * | * | * | * | | | | * | | | | * | | | |
| 20 | | | | | * | * | * | | | | | | | * | |
| 21 | | | | | | | | | | | | | | * | |
| 22 | | | | | | | | | | | | | | | |
| 23 | * | * | * | * | | | | * | | | * | | | | |
| 24 | | * | | | | | | | | | | | | | |
| 25 | | | | | | | | * | | | | | | | |
| 26 | | | | | | | | | | * | | | | | |
| 27 | | | | | | | | * | | | * | * | | | |
| 28 | | | | | | | | * | | | | | | | |
| 29 | | | | | | | | * | | | * | * | * | | |
| 30 | | | | | | | | | * | * | * | * | * | | |
| 31 | | | | | | | | | | | | | | | |
| 32 | | | | * | | | | | | | | | | | |
| 33 | | | | | * | | | | | | | | | * | |
| 34 | | | | | | * | * | | | | | | | * | |
| 35 | | | | | | | | | * | * | | | | | |
| 36 | * | * | * | * | | | | | | | | | | | |
| 37 | * | | | | | | | * | | | | | | | |
| 38 | | | | | | | * | * | | | | | | | |
| 39 | | | | | | * | | | | | | | | | |
| 40 | | | | | | | | | | | | | | | |
| 41 | * | * | | | | | | * | | | | | | | |
| 42 | | | | | | | | | | | | | | | |
| 43 | | | | | | | | | | | | | | | |
| 44 | | | | | | | | | | | | | * | * | |
| 45 | * | | | | * | | | | | * | * | * | | | |
| 46 | | | | * | | | | | | * | * | * | | | |
| 47 | | | | * | | | | | | | | | | * | * |
| 48 | | | | | * | | | | | | | | | * | * |

Table 10.9 Correlation matrix showing the relationship between specific building attributes and each proposed conservation directive.

| Values | Conservation Directive 1 | | | | Conservation Directive 2 | | | | Conservation Directive 3 | | | | Conservation Directive 4 | | | | Conservation Directive 5 | | | Conservation Directive 6 | | | Conservation Directive 7 | | | | | | |
|--------------------------|--------------------------|----|----|----|---------------------------|----|----|----|---------------------------|----|----|----|---------------------------|----|----|----|---------------------------|----|----|--------------------------|----|------------------------|--------------------------|----|----|----|----|----|----|
| | 19 | 23 | 36 | 37 | 41 | 45 | 19 | 23 | 36 | 41 | 19 | 23 | 36 | 41 | 19 | 23 | 32 | 36 | 46 | 47 | 20 | 33 | 48 | 20 | 34 | 39 | 20 | 34 | 38 |
| Architectural | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * |
| Urban | | | | | | | | | | | | | | | | | * | | | | | | | * | * | * | * | * | |
| Historic | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * |
| Social | | | | | | | | | | | | | | | | | * | * | * | * | * | * | * | * | * | * | * | * | |
| Conservation Directive 8 | Conservation Directive 9 | | | | Conservation Directive 10 | | | | Conservation Directive 11 | | | | Conservation Directive 12 | | | | Conservation Directive 13 | | | Logistical Directive 1 | | Logistical Directive 2 | | | | | | | |
| 19 | 23 | 37 | 41 | 25 | 28 | 29 | 35 | 30 | 35 | 46 | 23 | 26 | 30 | 46 | 19 | 27 | 30 | 45 | 20 | 21 | 33 | 34 | 47 | 48 | 47 | 48 | | | |
| * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | |
| | | | | | | | | | | * | | | | * | | | | | | | | | | | | | | | |
| * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | |
| | | | | | | | | | | | | | | | | | | | | | * | * | * | * | * | * | * | * | |

Table 10.10 Correlation between specific conservation directives and the heritage values they protect.

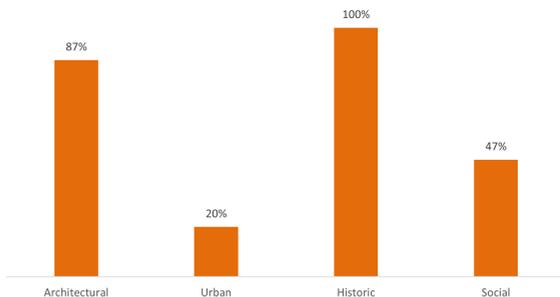


Fig. 10.10 Proportional distribution of conservation directives across heritage values.

| Significance | Conservation Directive 1 | | | | Conservation Directive 2 | | | | Conservation Directive 3 | | | | Conservation Directive 4 | | | | Conservation Directive 5 | | | Conservation Directive 6 | | | Conservation Directive 7 | | | | | | | | |
|----------------------------------|--------------------------|----|----|----|---------------------------|----|----|----|---------------------------|----|----|----|---------------------------|----|----|----|---------------------------|----|----|--------------------------|----|----|--------------------------|----|----|----|----|----|----|---|---|
| | 19 | 23 | 36 | 37 | 41 | 45 | 19 | 23 | 24 | 36 | 41 | 19 | 23 | 36 | 19 | 23 | 32 | 36 | 46 | 47 | 20 | 33 | 48 | 20 | 34 | 39 | 20 | 34 | 38 | | |
| Environmental | | | * | * | * | * | | | | * | * | * | | | | | | | * | | | | * | * | | | | | | | |
| Social | | | | | | | | | | | | | | | | | | * | * | * | | | * | * | | | | | | | |
| Economical/Future Rehabilitation | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * |
| Heritage/Cultural | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * |
| Conservation Directive 8 | Conservation Directive 9 | | | | Conservation Directive 10 | | | | Conservation Directive 11 | | | | Conservation Directive 12 | | | | Conservation Directive 13 | | | Logistical Directive 1 | | | Logistical Directive 2 | | | | | | | | |
| 19 | 23 | 37 | 41 | 25 | 28 | 29 | 35 | 30 | 35 | 46 | 23 | 26 | 30 | 46 | 19 | 27 | 30 | 45 | 20 | 21 | 33 | 34 | 47 | 48 | 47 | 48 | | | | | |
| | | * | * | * | | | | * | | | | | * | | | * | * | | | | * | * | | * | * | * | * | * | | | |
| | | | | | | | | | | * | | * | * | | | * | * | * | | | * | * | * | | * | * | * | * | * | | |

Table 10.11 Mapping of attributes to proposed directives and the significance categories they reflect.

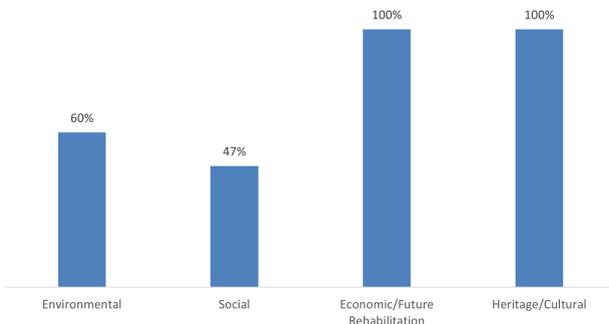


Fig. 10.11 Proportional significance reflected in attributes addressed by all proposed conservation directives.

10.8.1 Solar Panel Station

In addition to the conservation directives we reached, one of the most important points, is how to raise the environmental efficiency of the building and how its different elements can be used for this purpose, especially since the building's environmental significance is not so high. One option is to use the 'non-authentic roofs' of the building to implement a solar panel station, which would raise the building's efficiency. The roof of the southern wing of the building would be best for implementing such a station, as the optimal direction for the solar panels is southwest. Alternatively, the roof of the northern wing could be used, but while using the original roof of the building would increase environmental efficiency, moreover it will negatively affect its historical value (Fig. 10.12).

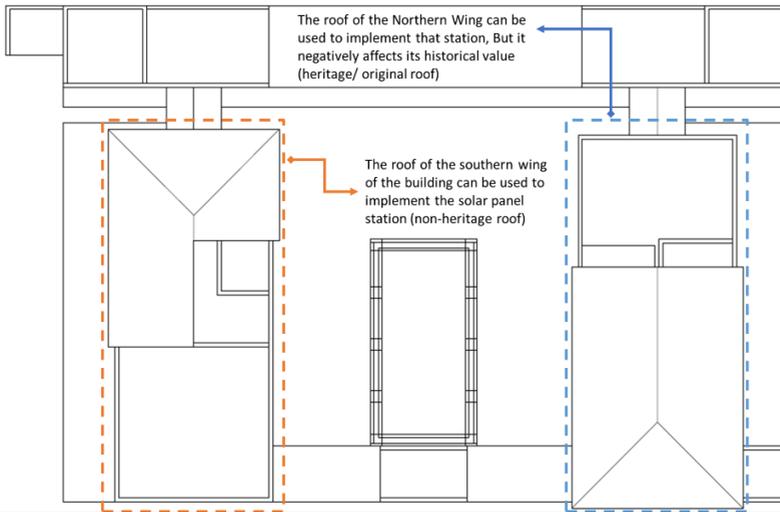


Fig. 10.12 Strategy for solar panel implementation on non-heritage roof surfaces to enhance environmental efficiency.

10.9 Significance and Conservation Directive

Each of the proposed conservation directives, when implemented within the restoration plan, is also reflected in benefit and importance to different tendencies and institutions as shown in the table below (Table 10.12), including:

- » Stakeholders
- » Benefit holders
- » Heritage institutions (associations)

- » District and governorate administration
- » Cultural/Tourism sector
- » Service providers
- » Owners of similar heritage buildings
- » The people of Port Said

| Who signifies that particular directive | Conservation Directive 1 | Conservation Directive 2 | Conservation Directive 3 | Conservation Directive 4 | Conservation Directive 5 | Conservation Directive 6 | Conservation Directive 7 | Conservation Directive 8 | Conservation Directive 9 | Conservation Directive 10 | Conservation Directive 11 | Conservation Directive 12 | Conservation Directive 13 | Logistical Directive 1 | Logistical Directive 2 |
|---|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|---------------------------|---------------------------|---------------------------|---------------------------|------------------------|------------------------|
| | Benefit holders | * | * | * | * | * | * | * | * | * | * | | | | * |
| Stakeholders | * | * | * | | | | | * | * | * | | | | * | |
| Heritage Considerations | * | | | * | * | * | * | * | * | * | * | * | * | | |
| District and governorate administration | | | | | * | * | * | | | | | | * | * | * |
| Cultural/ Tourism | * | * | * | * | | | | | | * | * | * | | | * |
| Services Providers | | | | * | | | | | | | | * | * | | |
| Owners of Similar Heritage Buildings | * | * | * | | * | * | * | * | * | * | * | * | * | | |
| People of Port Said | * | | | * | | | | | | | | | | * | * |

Table 10.12 Identification of beneficiaries and institutional stakeholders for each conservation directive.

The following chart (Fig. 10.13) shows the percentage of benefit achieved or reflected by each guiding consideration for the tendencies and institutions listed above. These range from considerations benefiting all parties to those affecting a smaller number:

- » 80% and 73%: Owners of similar heritage buildings and heritage considerations.
- » 67% and 60%: Benefit-holders and the cultural/tourism sector.
- » 47% and 40%: Stakeholders and the district and governorate administration.
- » 27% and 20%: The people of Port Said and service providers.

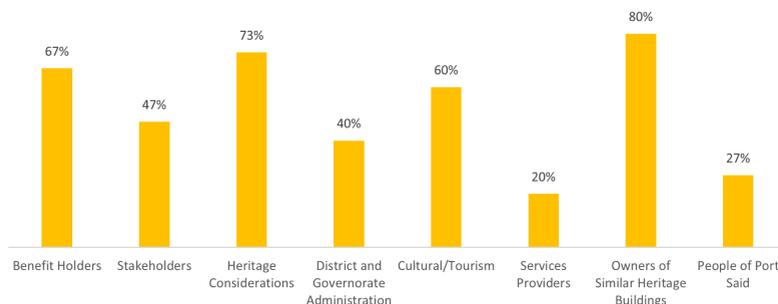


Fig. 10.13 Proportional distribution of benefits achieved for various stakeholder and institutional groups.

11. Prioritising Heritage Conservation through Risk Assessment

Lessons from Bazar Abbas, Port Said

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Sally Ghanem
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Abstract

This paper presents the results of a comprehensive risk assessment of Bazar Abbas in Port Said, conducted as part of the ‘Bazar Abbas: Recovery Lab of Port Said’ project. The study aimed to systematically evaluate the hazards threatening the structural integrity and cultural value of the bazaar, and to propose evidence-based remediation strategies. This study adapts the industrial Failure Mode, Effects and Criticality Analysis (FMECA) methodology for use in the heritage context, utilising likelihood and severity scales to create a spatial risk matrix.

The analysis revealed a highly heterogeneous distribution of hazards, including structural fractures, roof and wall decay, material deterioration and the impact of inappropriate human activity. Notably, certain first-floor spaces were found to be exposed to as many as nineteen hazards. To communicate these findings effectively, the research team generated zone risk maps, which provide a spatially explicit representation of vulnerability. These maps are valuable decision-support tools for conservators and policymakers, showing how quantitative risk management frameworks can be adapted to prioritise interventions in complex heritage environments.

Keywords: heritage risk assessment, FMECA, risk-based management, conservation prioritisation, building deterioration

11.1 Introduction

Historic urban environments in Egypt are undergoing accelerated deterioration due to demographic pressure, climate stressors, a lack of maintenance and unsupervised building alterations (Stovel, 1998). In this context, Bazar Abbas in Port Said is a prime example of a heritage asset of cultural and architectural significance that is exposed to multiple risks. Built in the late 19th century, the bazaar was once a vibrant commercial and social hub. Today, however, its physical fabric has been compromised by prolonged neglect, structural instability, changing patterns of use and environmental factors (AlSadaty, 2022).

As part of the ‘Bazar Abbas: Recovery Lab of Port Said’ project, led by the Brandenburg University of Technology Cottbus–Senftenberg, this study was commissioned to perform a comprehensive risk assessment and management analysis of the bazaar. The objective was not merely to document deterioration but to systematically iden-

tify, quantify and prioritise risks in order to inform decision-making for conservation and restoration.

The study drew on methodologies commonly used in engineering and industrial risk assessment, particularly Failure Mode, Effects and Criticality Analysis (FMECA), adapting them to the heritage management context. By combining hazard identification, exposure and vulnerability analysis, quantitative risk scoring and spatial visualisation, the research provides a structured model applicable to other complex historic sites. Building on the final technical report submitted in August 2024, this paper translates its findings into an academic contribution that integrates risk theory, field data, visual tools, and strategic approaches to conservation planning.

11.2 Background and Context

11.2.1 Heritage Significance of Bazar Abbas

Bazar Abbas represents a transcultural commercial typology in the multicultural urban history of Port Said. Located in one of Egypt's earliest planned port cities, its architecture combines European elements with the spatial logic of a traditional Eastern marketplace (AlSadaty, 2022). The current spatial organisation of the bazaar, comprising 61 commercial spaces on the ground floor and 45 on the first floor, reflects the commercial logic of early 20th century Egyptian bazaars. However, the first floor, which was originally served as a hotel, is now largely unused by the current tenants.

The heritage value of Bazar Abbas stems from a combination of its architectural, urban and cultural features. Architecturally, it is defined by a distinctive hybrid typology characterised by timber flooring and plastered masonry walls. Throughout history, the site has played a pivotal urban role, contributing to the cultural significance rooted in Port Said's identity as a cosmopolitan trading city. This significance is reinforced by the collective memory of its residents (Fouad, 2020). However, the photographic survey (Fig. 11.1) shows that the building's physical condition has deteriorated significantly. Structural cracks, partial floor collapses, timber decay and instances of vandalism are now evident across multiple areas of the building.



Fig. 11.1 Examples of natural and anthropological deterioration in Bazar Abbas. (Photos: Yasser Elshayeb, 2024)

11.2.2 Risk Management and Heritage Conservation

International heritage charters emphasise the importance of preventive methodologies over reactive conservation (UNESCO, 2011; ICCROM, 2016). Consequently, risk-based approaches have become increasingly central, particularly in complex architectural ensembles where resources are limited and intervention priorities must be evidence-based. Within this framework, conservation risk assessment is understood not only as a diagnostic exercise, but also as a strategic decision-making tool for managing heritage assets in situations of uncertainty and limited resources (Waller, 2017).

Applying structured, risk-based frameworks while relying on engineering-derived methodologies, such as FMECA, risk matrices and likelihood-severity scales is in line with contemporary conservation practice and offers several advantages. Notably, these methodologies ensure traceability and transparency in decision-making processes while also transforming qualitative observations into quantifiable data. Furthermore, they facilitate the prioritisation of interventions based on measurable indicators, effectively integrating multidisciplinary expertise from the fields of engineering, architecture, and heritage management.

Bazar Abbas is a clear example of a heritage site where such frameworks are necessary due to its significant complexity. With 106 individual units, an interconnected structural system and a wide range of hazards, the site requires a rigorous approach to navigate the scarcity of resources for intervention. In this context, quantitative risk scoring

becomes essential to determine which architectural zones require immediate attention.

11.3. Methodology

This study employed a multi-stage methodology that integrated fieldwork, engineering analysis, quantitative scoring and spatial visualisation. This approach was adapted from the industrial FMECA procedures and modified to suit the specific requirements of a heritage risk assessment.

11.3.1 Phase I: Documentation and Hazard Identification

The process began with an examination of the bazaar's plans, 3D scans, and architectural drawings in order to establish the site's boundaries. Each of the 61 ground-floor spaces (Gxx) and 45 first-floor spaces (Fxx) was then assigned a unique identifier, as shown in Figures 11.2 and 11.3. This systematic naming scheme enabled the collection of structured data and ensured comparability across the complex.

Through repeated field visits, a wide range of natural, structural, environmental and anthropogenic hazards were identified. These particularly included structural cracks and fractures, timber decay, and partial or total collapse of floors and ceilings. The survey also documented instances of water infiltration, material degradation, fire risks, and cases of vandalism or unauthorised occupation.

11.3.2 Phase II: FMECA and Exposure and Vulnerability Analysis

Failure Mode, Effects and Criticality Analysis (FMECA) was used as the core analytical technique. For each hazard in each space, either present or absent was logged, while likelihood (L), severity (S) and criticality (C) were scored individually. Risk was then computed using the formula $R = L \times S \times C$. This approach enabled the team to identify the most critical hazards in each area, rank units according to their total risk exposure, and compare the intensity of hazards across the different architectural zones of the bazaar. The FMECA table produced in the study included the likelihood and severity scales that were specifically defined for Bazar Abbas based on site knowledge.

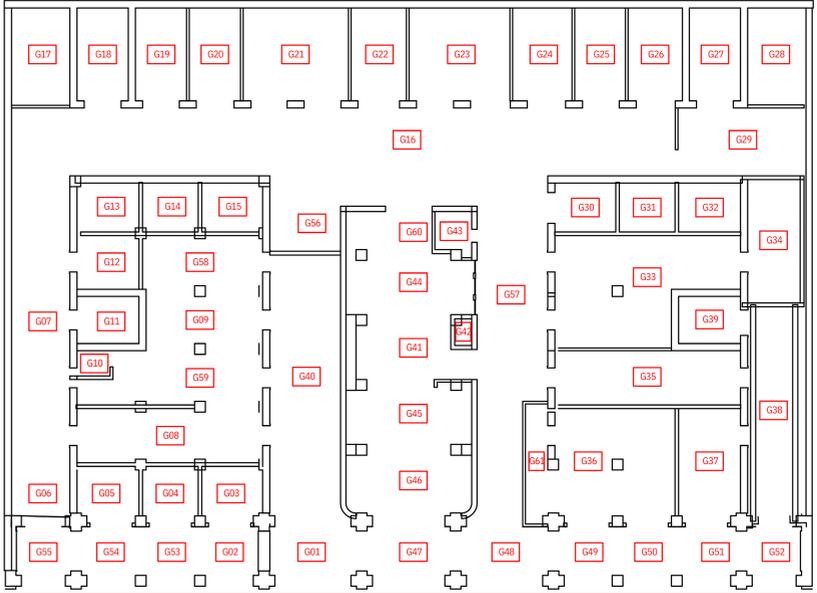


Fig. 11.2 Space identifiers for the ground floor spaces of Bazar Abbas (Gxx). (Survey & Drawing: authors, 2024)

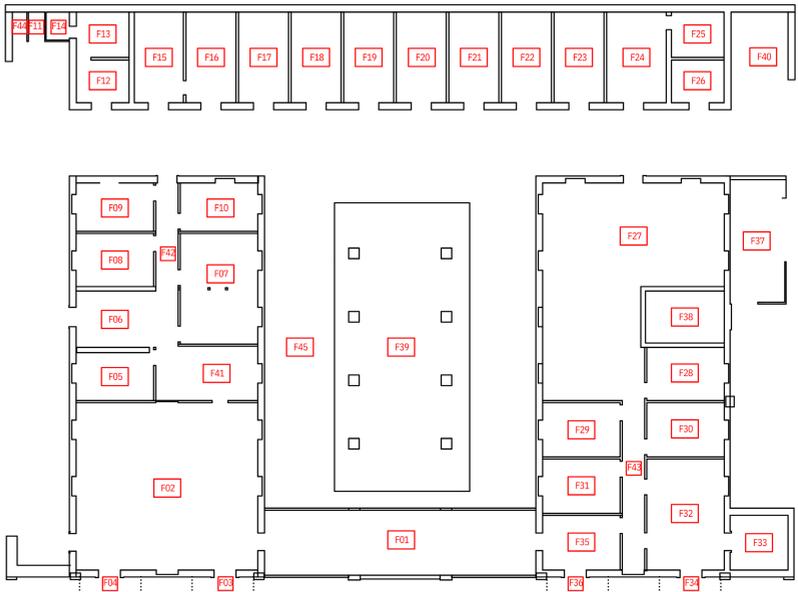


Fig. 11.3 Space identifiers for the first floor spaces of Bazar Abbas (Fxx). (Survey & Drawing: authors, 2024)

11.3.3 Phase III: Likelihood and Severity Scales

To standardise the FMECA process and calibrate the findings during the fieldwork, a four-level scoring scale supported by photographic examples was developed. The likelihood (L) was scored based on the frequency of occurrence: unlikely (level 1, occurring every five years or more); occasional (level 2, occurring yearly); probable (level 3, occurring monthly); and frequent (level 4, occurring weekly). Similarly, severity (S) was measured by its impact on the building’s integrity and classified as minor (level 1), major (level 2), critical (level 3) or catastrophic (level 4). These scales were calibrated on site, and the combination of L and S values formed the mathematical basis of the risk matrix.

11.3.4 Phase IV: Risk Matrix Construction

In line with international engineering practices, such as IEC 60812:2018¹, a matrix map was created to plot the likelihood (vertical axis) against the severity (horizontal axis) as shown in Figure 11.4. The resulting risk levels were categorised into four colour-coded tiers: negligible (green), low (yellow), medium (orange) and high (red). Each of the bazaar’s 106 spaces was plotted within this matrix using its highest $L \times S$ value, and the total number of identified hazards is indicated next to each space code. This configuration enables the immediate identification of the units requiring urgent intervention based on their peak risk score.

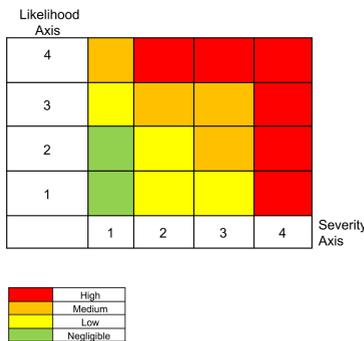


Fig. 11.4 Risk matrix showing likelihood on the vertical axis and severity on the horizontal axis.

1 IEC 60812:2018 is an international technical standard which establishes a systematic procedure for conducting failure analysis and quantifying risk through a consistent and objective scoring process.

11.3.5 Phase V: Spatial Visualisation – Zone Risk Maps

To support decision-makers, the calculated risk levels were mapped onto architectural plans of the bazaar to create Zone Risk Maps (Fig. 11.5). These maps demonstrate the spatial clustering of risks and

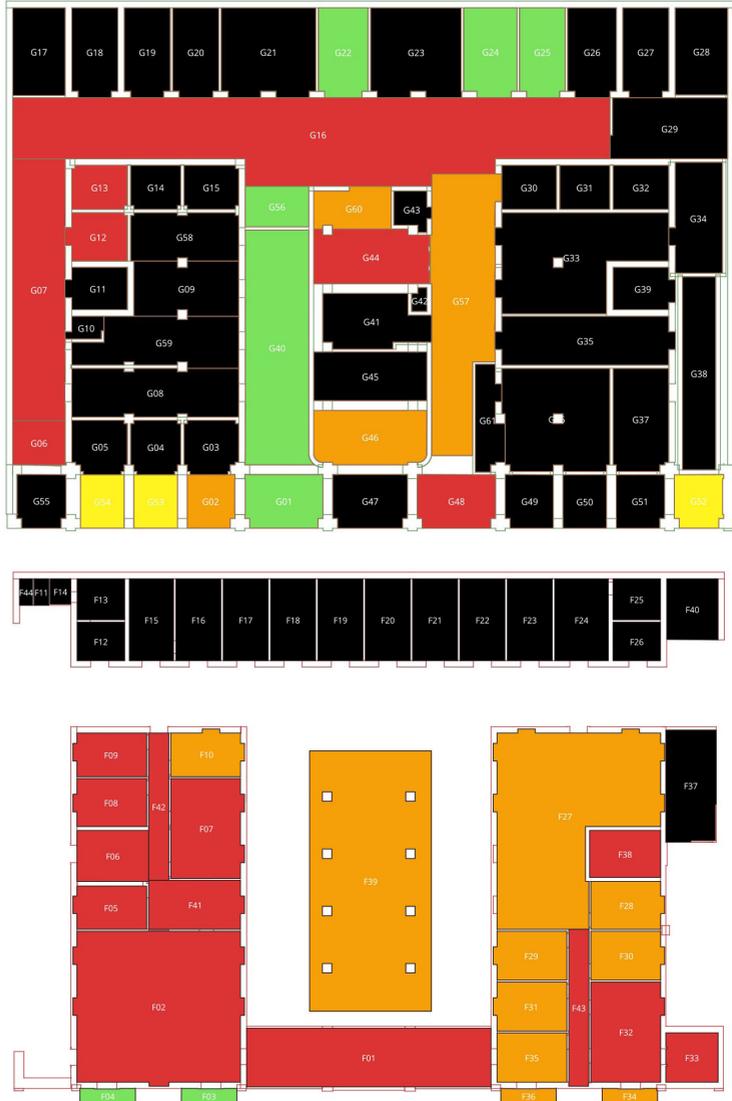


Fig. 11.5 Zone risk map for the ground and first floors of Bazar Abbas. The colour coding represents green for negligible risk, yellow for low risk, orange for medium risk, and red for high risk. (Survey & Drawing: Authors, 2024)

highlight the relationships between the architectural layout and hazard distribution. The risk assessment process produced a multi-layered understanding of the structural, environmental, and anthropogenic vulnerabilities affecting Bazar Abbas. Integrating quantitative scoring via the FMECA matrix, qualitative observations from field visits and spatial visualisation through zone risk mapping provided a holistic view of the conservation requirements of the bazaar.

11.3.6 Overall Risk Distribution Across the Bazar

The analysis revealed a highly heterogeneous distribution of risks across the 106 spaces of the bazaar, with several distinct patterns emerging from the data. The first floor demonstrated significantly more high-risk units than the ground floor. This was due to advanced timber decay in the upper floors and ceilings, greater exposure to water infiltration, the long-term abandonment of first-floor units and structural fractures in the external terraces and roof systems. For instance, spaces such as F01, F02, F06, F08, F09 and F41 fell within the highest risk categories (red zone), often exhibiting between 12 and 19 concurrent hazards.

By contrast, the ground floor contained a wider range of risk categories, with high-risk spaces clustered near peripheral circulation areas and zones of long-term abandonment. Medium-risk spaces were located near major access pathways, while lower-risk spaces were found in areas with heavier footfall and more stable structural elements. The photographic documentation in the report illustrates the following hazards as the most significant contributors to the overall risk across both floors:

- » Structural cracks and fissures
- » Material decay of wooden beams
- » Partial collapse of floors/ceilings
- » Rainwater infiltration
- » Abusive use and vandalism
- » Accumulation of debris
- » Environmental hazards such as humidity and salt exposure

11.3.7 Spatial Pattern Recognition Through Zone Risk Maps

The zone risk maps (Fig. 11.5) reveal significant spatial dynamics. Specifically, there is a peripheral-to-central intensity gradient on the ground floor, which is typical of structures where the units on the edge deteriorate more quickly due to abandonment. The map of first floor

reveals a dominance of orange and red spaces, indicating severe structural and material degradation. Entire clusters of adjacent units face similar hazards, suggesting systemic degradation of interconnected, load-bearing elements. This spatial clustering is an essential foundation for designing phased conservation strategies that prioritise contiguous areas of risk rather than isolated units.

11.4 Risk Reduction Analysis

The risk reduction scenarios indicate how targeted interventions can substantially reduce the level of risk, either by reducing the likelihood of an event occurring (preventive measures) or by mitigating its potential severity (protective measures). This approach improves structural safety and optimises the allocation of resources in situations where full restoration is not immediately feasible. By simulating the impact of remediation, the study shows how specific technical actions can move a unit from a critical risk category to a more manageable one. The following analysis focuses on the high-priority spaces, F41 and F01, to demonstrate the positive effects of these interventions. In the following paragraphs, we illustrate an example of remediation's positive effect on two spaces.

Space F41 has a risk value of 8, with a likelihood of 4 and a severity of 2, involving 16 hazards. The primary identified hazard is timber decay in the ceiling beams, which poses a risk of progressive collapse. Proposed interventions for this space include reinforcing or replacing the decayed beams, restoring the entire roof system and treating the timber to protect it from humidity and fungal decay. These measures will reduce the resulting risk level to a value of 2, representing a significant drop due to decreased likelihood and severity.

Space F01 has been identified as the most critical area of the bazaar. It has a risk value of 16, derived from a likelihood of rating of 4 and a severity rating of 4. The primary hazards are serious structural cracking and roof instability. These create a high probability of cascading collapse. The proposed interventions for this space consist of comprehensive roof reconstruction, primary structural reinforcement, and wall stabilisation. These measures will reduce the resulting risk level to a value of 6, moving the space into a lower risk category.

11.5 Discussion

The Bazar Abbas study demonstrates the value of integrating engineering-based risk assessment methodologies into heritage conservation workflows. Several insights emerge from this application. Firstly, interdisciplinary frameworks improve conservation decision making by providing a transparent and replicable methodology. The FMECA approach, traditionally used in industrial systems, proves highly effective in heritage assessment. This is because it enables systematic hazard identification, assigns quantifiable values to risk components, and allows for the objective prioritisation of interventions.

Secondly, spatial visualisation strengthens strategic planning, as the zone risk maps allow for immediate recognition of patterns that might remain hidden in tabular data. For example, the visual clustering of high-risk zones on the first floor indicated that entire sections required urgent intervention, which is crucial for both technical planning and securing funding. Furthermore, the analysis shows that targeted interventions yield measurable risk reduction. The remediation scenarios for F41 and F01 suggest that even partial interventions can shift spaces from high to moderate risk categories. This is important in contexts where resources are limited and where financing must be justified by measurable impacts.

Finally, this study confirms that risk assessment forms the basis of a management plan. In line with international best practice, this data should be integrated into long-term monitoring strategies, maintenance schedules, and emergency preparedness plans to help ensure the building's long-term survival.

11.6 Conclusion

The risk assessment and management study of Bazar Abbas highlights the urgent need for a structured, science-based conservation approaches at heritage sites at risk of significant deterioration. By applying FMECA, and utilising severity scoring and spatial visualisation tools, the study establishes clear intervention priorities. This methodology significantly reduces risk by implementing targeted remediation scenarios. It also offers a replicable model for similar heritage complexes in Egypt and the wider region. Future steps include developing a comprehensive site management plan, conducting long-term monitoring, and extending the methodological framework to cover the wider historic zone of Port Said.

References

- Alsadaty, A. (2022). Bazaar Abbas, Port Said, Egypt: A nineteenth-century market building and centre of cultural exchange. In N. Hamza (Ed.), *Architecture and urban transformation of historical markets: Cases from the Middle East and North Africa* (pp. 47–58). Routledge. <https://doi.org/10.4324/9781003143208-4>
- Elshayeb, Y. (2024). *Risk assessment and management study of Bazar Abbas: Likelihood and severity scales, risk matrix, zone risk map, and risk remediation* [Unpublished project report]. Brandenburg University of Technology Cottbus–Senftenberg.
- Fouad, S. S. E. (2020). Public perception affecting the significance of urban heritage: A case study of Port Said historic quarters. *Wiadomości Konserwatorskie - Journal of Heritage Conservation*, 61, 22–32.
- ICCROM. (2016). *A guide to risk management of cultural heritage*. <https://www.iccrom.org/publication/guide-risk-management>
- IEC. (2018). *IEC 60812: Failure modes and effects analysis (FMEA and FMECA)*.
- Stovel, H. (1998). *Risk preparedness: A management manual for world cultural heritage*. ICCROM.
- UNESCO. (2011). *Recommendation on the Historic Urban Landscape*. <https://whc.unesco.org/en/hul/>
- Waller, R. (2017). Conservation risk assessment: A strategy for managing collection environments. *Studies in Conservation*, 62(1), 40–46.

12. Conservation Training and Material Analysis

Mortars and Renders for Bazar Abbas Pilot Project

John Stewart

Abstract

This paper outlines the methodological approach and material analysis carried out as part of the Bazar Abbas Recovery Lab to address the decay and repair of historic renders¹. The paper is structured in two complementary sections. The first section outlines the building scale conservation training module, detailing the necessary procedural framework for intervention. This includes historical research and condition assessment (covering the classification of deterioration, threats and risks), as well as the principles of material specification, preparation, and application. This section emphasizes the importance of compatible materials, and showcases practical, on-site demonstrations for analysing historic mortars and determining new mix ratios. The second section provides the essential historical and material context by tracing the international transport and use of hydraulic limes, such as French Teil lime, in major 19th-century infrastructure projects, including the construction of the Suez Canal and the artificial harbour of Port Said. This historical background justifies the material choices and challenges faced during the Bazar Abbas rehabilitation project, linking the micro-scale conservation training to the macro-scale history of Port Said's construction materials.

Keywords: Bazar Abbas, material analysis

12.1 Introduction

The methodology of the Bazar Abbas Recovery Lab was founded upon the premise that successful heritage conservation requires both rigorous scientific training and deep understanding of the historical context. This paper integrates these two elements by detailing the specialised training provided to project participants alongside the critical material history that underpins the intervention. Part One focuses on the training module, laying out the systematic process for mortar and render specification and application, which guided the on-site work. Part Two provides the crucial material context, specifically examining the history of imported hydraulic limes that defined Port Said's early construction

1 Editor's note: The comprehensive conservation training module delivered during the Bazar Abbas Recovery Lab included hands-on components for façade rendering and mortars, as well as balcony conservation. This paper focuses exclusively on the methodology, material analysis and demonstrations related to mortars and renders, as authored by the specialist responsible for that specific training component. The conservation of balconies and the specification of new render materials and their applications are not included in this publication.

and influenced the decay and repair challenges encountered at Bazar Abbas. Together, these sections document the necessary technical foundation and material justification for the rehabilitation strategy.

12.2 Part One: Mortars and Renders for the Project

The lectures and demonstrations summarised below formed the foundation for the course, providing an understanding of: the conservation process; the characteristics of mortar and render materials; the choice of materials; and their preparation and application. Participants gained a broad overview of the application of mortars and renders for historic buildings within the local context.

12.2.1 Conservation Process

The introduction began with a description of the framework for the conservation process, which included: historical research, measured surveys, assessments (significance, condition, threats and risks), strategic planning, design of interventions, implementation, maintenance and monitoring. Isolated decisions, such as mortar specifications, need to be made within this framework.

A) Historical Research

This had been undertaken for the Bazar Abbas at the beginning of the project, and course participants had been given the historical report. The report demonstrated the importance of understanding the original design and function of the building, especially in relation to its characteristics today.

B) Assessments

1. Significance

Historical research provides a means to assess relative significance of a historic building within its local, regional and national contexts. This forms the basis for decision making processes, which is ultimately about the allocation of resources and the development of future management plans.

2. Condition

This essential assessment has as objectives:

- » Document condition at a point in time.
- » Establish a datum to measure change in the future.

- » Identify causes of deterioration.
- » Classify severity of condition.

The generic processes of deterioration were summarised as physical, chemical, and physico-chemical, most of which are driven by unstable environmental conditions. Examples of how these processes manifest in renders were provided, including leaching of a lime binder, pollution, wind abrasion, cracking, and detachment from the substrate. Soluble salts from the ground are a prime driver for erosion of a binder and its masonry substrate. The sequence of a condition survey begins with a desk top survey, which involves reviewing the history of the building's evolution, its building works records, site and building plans. This is followed by an inspection of the natural or urban context, to identify issues that impact the building (and renders). Finally, there is the inspection of the building itself, its materials, their composition, structural design, and then additive functional and decorative surfaces.

Graphic survey standards, showing the location and nature of deterioration in drawings, assists to record the condition with a consistent terminology (ICOMOS, 2008). Further specialist investigations may be needed (e.g. mortar analysis) to understand complex defects.

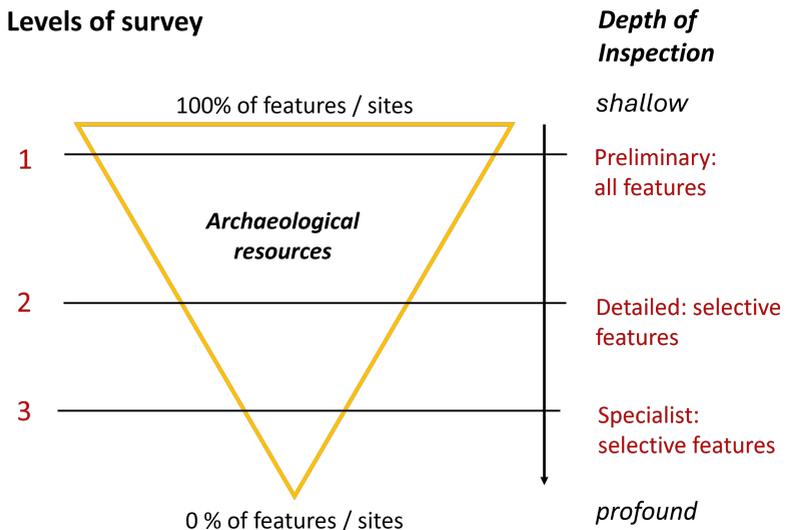


Fig. 12.1 An initial reconnaissance survey should be conducted for all cultural heritage resources, only recording general issues (Level 1). Those of greater significance and at risk are surveyed more thoroughly (Level 2). Where significant buildings / features are at high risk from undetermined deterioration vectors, these require specialist investigations (Level 3).

3. Threats and Risks

The condition of a building and its components helps to identify known threats, such as structural instability. This is then followed by listing associated risks, including those within the building (e.g. collapse or fire) and those from the ambient environment (e.g. flooding). Both can be numerically graded, to create threat and risk ratings, which can then be applied to plans and elevations. Together, threats and risks determine the vulnerability (Fig. 12.2).



Fig. 12.2 An example of a historical apartment building in Port Said, showcasing clear signs of threat in falling timber, posing an ultimate risk to human life and parked cars below. (Photo: Author, 2023)

C) Planning of Interventions

The combined assessments of significance, condition, threats and risks enable interventions to be planned in order of priority. For example, a component that is highly significant, but in poor condition with a highly vulnerability rating would require immediate intervention to save it. Where a repair budget is insufficient to complete all the works, including those of lesser priority, they can be phased over time.

12.2.2 Materials of Renders for Restoration / Conservation

A) Purpose of Renders on Buildings

Traditional renders of lime mortars offer many benefits to traditional

stone and brick buildings:

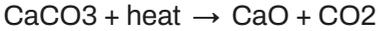
- » They reduce or prevent internal dampness caused by heavy or prolonged rainfall, as they act as a sponge, absorbing moisture and then releasing it in dry conditions.
- » They protect masonry from mechanical erosion in harsh marine or desert climates.
- » If aggressive soluble salts are present, they protect the masonry as the salts crystallise and expand within the render, acting in a sacrificial capacity; when severely eroded, the render can be renewed.
- » They can also be modelled to provide simple or complex decoration.



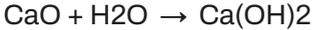
Fig. 12.3 A 19th century granite wall of a ruined building, near the ocean and subject to extreme weather. Even though granite is a very robust stone, in this harsh environment it was historically protected with a render, which has itself eroded away through lack of renewal. (Photo: Author, 1999)

B) Mortars and Renders: Components and Characteristics

Where pure limestone was locally available (calcium carbonate - CaCO_3), this was traditionally burnt in a kiln and used to produce a calcium oxide (CaO) (Fig. 12.4). It was then 'slaked' in water to produce a putty (later mixed with sand); or the burned stone was crushed and mixed with damp sand. Both methods produced calcium hydroxide (Ca(OH)_2). When the mortars were exposed to air, they dried and absorbed carbon dioxide (CO_2), to reform calcium carbonate (CaCO_3), now mixed with sand.



Limestone Calcium oxide (quicklime)



Calcium oxide Calcium hydroxide (slaked lime)



Calcium hydroxide Carbonated lime (calcium carbonate)



Fig. 12.4 Burning (calcining) limestone in a kiln (background). This produces quicklime, which is then 'slaked' in water (foreground), with a vigorous chemical reaction. (Photo: Author, 1993)

Lime mortars are inherently compatible with historic masonry. They are somewhat flexible, and less liable to crack than cement mortars in the event of slight movements in the building; they are porous, absorbing water but freely releasing it in dry conditions.

Limestone that is very pure (e.g. only calcium carbonate) produces non-hydraulic lime. This means that it cannot harden in water and requires a reaction with air to set. When clay impurities are present in limestone, after burning, the clay reacts with water upon slaking to form a hydraulic lime that can set in water, depending on the amount of clay impurities present. This is beneficial for building works that are associated with water (i.e. bridge foundations, sea or ocean breakwaters), or for areas of a building that will be damp (i.e. foundations in an area with high ground water table).

Non-hydraulic lime can gain some hydraulic properties when a set-additive, or pozzolan is added to the aggregate. The term 'pozzolan' derives from the natural volcanic sand, pozzolana, from Italy. These are

natural volcanic aggregates or artificial powders that contain silica and alumina (e.g. low-fired brick dust). They react with calcium hydroxide and moisture to produce a hydraulic set.

C) Renders Through History

Until the Industrial Revolution, lime mortars were used for both building and for renders in areas with geological limestone resources. However, even in lime rich areas, earthen mortars were sometimes used for wall construction. By the late 18th and early 19th centuries in Europe, natural hydraulic and artificial cements had been developed (see Part Two of this paper). Natural cements were produced from limestone with a very high clay content. Artificial cements were created by mixing calcined ground calcined limestone, clay and water, which was then burned in a kiln. This became known in English as Ordinary Portland Cement (OPC). By the late 19th century, OPC had overtaken natural hydraulic lime mortars in new constructions (Henry & Stewart, 2012).

OPC mortars and renders are much stronger and less porous than those of lime. They are also prone to cracking that can admit rainwater, while impeding evaporation. This can result in moisture remaining within the core of a wall or evaporate on the inner side (Fig. 12.5). Over the course of the 20th century, artificial cement became more prevalent in the restoration and conservation of historic buildings and ancient monuments (Figs. 12.6, 12.7). In many cases, this proved disastrous for the historic fabric. Moisture trapped within the wall and soluble salts from the cement were released through the historic fabric, gradually eroding it (Torraca, 2009). By the end of the century this issue had been widely recognised and international norms now recommend the use of compatible (e.g. traditional) materials in historic buildings.

D) Role of Aggregates and Grading

In traditional lime mortars, the aggregate is usually sand, which gives the mortar its colour. If correctly graded (with an even range of particle sizes), it provides bulk and compressive strength to the mortar and reduces shrinkage. Aggregates also create porosity. The proportion of lime binder to sand depends on the grading of the sand. Ideally, the lime binder should fill all of the voids in the sand matrix (Henry & Stewart, 2012). Variable particle sizes should also promote good liquid water transmission by means of capillary action, promoting the drying of a wet render and wall (Fig. 12.8).



Fig. 12.5 A cement render applied to historic brickwork. The inflexible render has cracked with building movement, allowing the ingress of rainwater into the wall, but impeding its drying. (Photo: Author, 2019)



Fig. 12.7 A cement render applied to late 19th century stone masonry, at the base of a wall in a building in Cairo. The area had a high-water table with aggressive soluble salts. The render impeded the drying of the wall, causing deterioration of the stone. Soluble salts were trapped behind the render, where they formed a salt 'sinter', whose growth forced the detachment of the render (left). (Photo: Author, 1992)



Fig. 12.6 Sandstone at Karnak Temple (14th century BC), with a modern cement render infill. The high-water table feeds moisture and soluble salts from the ground into the stone. Moisture and salts are trapped behind the render, so they are transmitted through the ancient sandstone, causing its deterioration. (Photo: Author, 1999)



Fig. 12.8 Samples of renders on a historic wall in Cairo, based on different coloured aggregates, made as exemplars to match the historical render (top, left and right). One will be chosen for the repair of the missing render. (Photo: Author, 1992)

12.2.3 Renders: Specification, Preparation and Application of Materials

The condition survey will usually determine the characteristics (materials and condition) of the masonry substrate, bedding / pointing mortars and surviving render. Specific environmental issues would have also been noted (e.g. endemic dampness from the ground). This information would enable the specifier to identify properties of mortars that are required for different applications more accurately (Scottish Lime Centre, 2003; Historic England, 2017; Henry & Stewart, 2012).

If areas of the historic render are sound, any voids can then be filled with new material. Highly eroded (i.e. powdery) render, however, cannot provide protection to a wall, so it needs to be removed and replaced. Where a historic render is highly significant (e.g. modelled), but is detaching from its substrate, then it should be consolidated in place.

Sacrificial renders are necessary for walls with salts and endemic dampness, as from ground water. These need to be weak and porous and are normally made from non-hydraulic lime, pozzolana and aggregate. This enables the lime to set on a damp substrate and act as a poultice, drawing salts and moisture out of the wall (Henry & Stewart, 2012).



Fig. 12.9 A sacrificial render applied to late 19th century masonry, in a very damp wall of a building in Cairo. The render is successfully absorbing the soluble salts, which are crystallizing on its surface, protecting the masonry behind it. The salts will eventually cause the deterioration of the render, which can then be replaced. (Photo: Author, 1992)

A) Analysis of Historic Mortars

There are several possible objectives of analysis:

- » Determine the chronology of many different historic renders on a wall, applied over a long period.
- » Help to design a new mortar to be used to match and fill missing areas of an unpainted historic render.
- » Provide an understanding of a historic render that has performed well over time (e.g. the type of lime and aggregates used).

If a historic render has largely disappeared, analysis is not strictly necessary. Analysis of powdery, eroded render only provides information about the aggregate, not the binder (Henry & Stewart, 2012). The binder has largely been lost.



Fig. 12.10 A typical simple kit for visual analysis of historic mortars: left: water and HCl for acid disaggregation; centre: a precise scale, right: a sieve set and microscope. (Photo: Author, 1995)

B) Designing the New Mortar

This depends on:

- » Application: render or pointing.
- » Function: to repair a sound historic render, to create a new one, or a sacrificial render.
- » Binder: non-hydraulic or hydraulic (for damp walls or severe exposures).

Choosing the right proportion of lime for a particular aggregate is

achieved by measuring the volume of water that is needed to fill all the pores of the aggregate (see demonstrations below).

C) Conservation of Historic Renders

This is carried out by an architectural conservator, who specialises in historic buildings. The main problem that can be resolved is the detachment of the render from the masonry substrate. This requires injection of a liquid lime grout containing non-hydraulic lime with a pozzolan, and possibly an acrylic emulsion, behind the render (Henry & Stewart, 2012). Historic renders that are powdery are normally impossible to consolidate in the long term.



Fig. 12.11 An ancient render detached from its base coat. This can be re-adhered with an appropriate mortar grout. (Photo: Author, 1998)

D) Substrate / Surface Preparation for a New, or Patch Render

Pointing and rendering mortars can either be mixed by hand, with a shovel or using a paddle mixer, a mortar mill or a cement mixer. Any loose or powdery pointing mortar in the joints must be removed and the surface be thoroughly washed with clean water. An appropriate mortar should be used to repoint the joints. It is then left for several weeks, or more, to allow the mortar to set before the render is applied (Scottish Lime Centre, 2003; Historic England, 2017; Henry & Stewart, 2012).

E) Application of renders

Renders are generally applied in one to three layers, depending on the level of elaboration (plane or modelled). The thickness of multiple coat renders diminishes from the base coat to the finishing coat.



Fig. 12.12 A historic stone wall showing a two-coat system: the base [render] coat (centre), and finishing [setting] coat (right). (Photo: Author, 2000)

12.2.4 Mortar Demonstrations

Several demonstrations were offered to course participants, showing simple methods to help determine the choice of materials and their proportions in the mortar mix (Teutonico, 1988; Borelli, 1999; Henry & Stewart, 2012).

A) Acid Disaggregation of the Original Bazar Abbas Render

A detached sample of the historic render was crushed and dissolved in a 10 – 15% solution of HCl (it should have been oven-dried first, but this was not possible on site). The resulting solution was then poured into a funnel with filter paper; the paper and fines were removed and allowed to dry. This reveals the colour of the aggregate. If a large enough quantity can be obtained, it can be analysed further to determine the grain size distribution.



Fig. 12.13 A sample of the original Bazar Abbas render, with a portion ground for acid dissolution. The density, cohesiveness and thickness of the render (c. 50mm) implies that it is hydraulic in nature. Laboratory analysis proved that its binder is, indeed, a hydraulic lime. (Photo: Author, 2023)

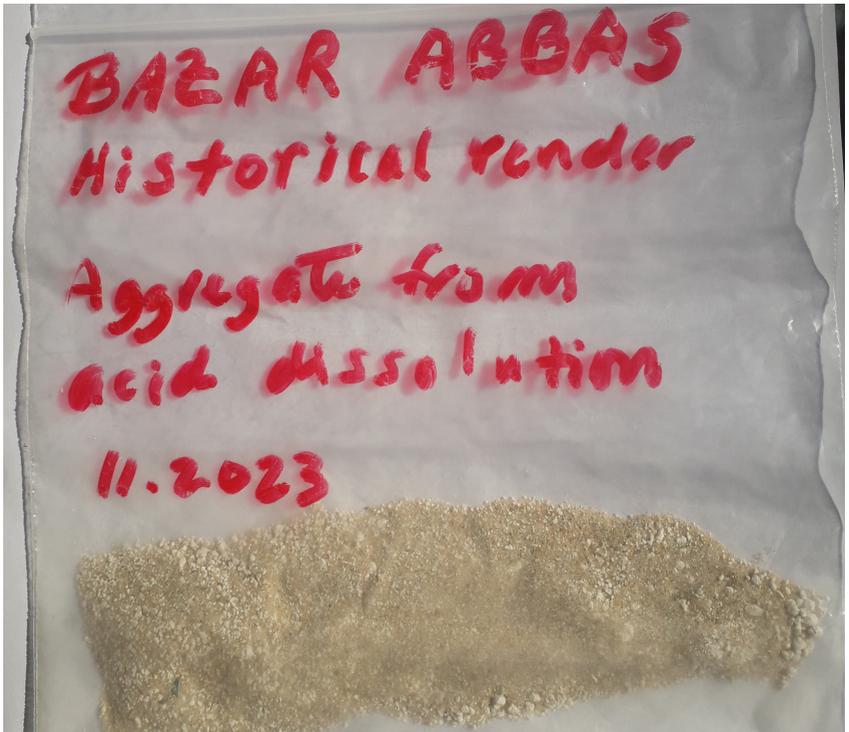


Fig. 12.14 The aggregate of a sample of Bazar Abbas lime render, after dissolution in HCl. (Photo: Author, 2023)

B) Aggregate Grain Size Distribution

This can be determined for different aggregates by means of a stacked sieve analysis. Each sieve has a mesh of an increasingly smaller size. The aggregate retained on each sieve is then placed next to the former one, to show the volume of each different size of grain (Fig. 12.15).



Fig. 12.15 The grain size distribution of a particular sand, after sieve analysis (bottom). (Photo: Author, 2023)

C) Ratio of Lime Binder to a Specific Sand

The volume of lime needed to fill the voids of a specific sand is determined and measured by the volume of water required to achieve this (Fig. 12.16).



Fig. 12.16 Two different sands, A and B, showing that sand A requires more water to fill its pores. This means that it will require more lime binder than sand B. (Photo: Author, 2023)

D) Lime Mortar Colour

The ultimate colour of different mixtures can be demonstrated by means of placing them in cells of a cube box, with each cell measuring 5cm². Once they are thoroughly set, the box can be dismantled and the cubes removed.



Fig. 12.17 Lime putty (left), and sand A (right) before mixing with different proportions of brick dust, serving as a pozzolan (upper centre). The cube boxes are in the upper right, ready to receive the different mortar mix samples. (Photo: Author, 2023)



Fig. 12.18 Each cell of the cube box is lubricated with Vaseline, as a release agent and then filled with one mortar mix. The mortar is compressed with a tin tool. (Photo: Author, 2023)

Cubes can also be tested for the rate of set, or carbonation. Such tests are carried out on hardened mortars, under laboratory conditions, after they had cured in an environmentally controlled room for 60 days. Each cube is cut in half and a 5% solution of the chemical indicator phenolphthalein is applied. If there is no change in colour, the mortar is thoroughly set. If the mortar turns pink, it is not yet set. For logistical reasons, this could not be demonstrated as part of the training.

12.3 Part Two: International Transport of Mortar Materials

Before the Industrial Revolution, builders, architects and engineers sought natural materials that could make hydraulic lime mortars. Where local geological sources of limestone had considerable amounts of clay impurities, it was known from practical experience that these could be used to produce them. However, if only very pure limestone was available, hydraulic mortars were made with reactive pozzolans, as part of the aggregate (see Part One of this paper).

Volcanic Italian pozzolana had been exploited since Roman times. The Romans probably also used volcanic material from Santorini. They may have transported pozzolana from Italy around the Mediterranean,

for harbour constructions (Hohlfelder et al., 2007). In more recent centuries, there are published citations in the late 17th century, and more so in the 18th century, that document the transport of pozzolana by sea in the Mediterranean. The first documented use of the material in Britain was by John Smeaton in the construction of the Eddystone Lighthouse, erected near Plymouth harbour between 1757 – 59. Over the course of his material research for this project, Smeaton discovered the properties of lime that made a hydraulic material, from a clay-rich limestone from the southwest of England. He used this for the mortar of the lighthouse project but still added pozzolana to ensure it was exceptionally strong for the Lighthouse's hostile sea environment.

Another volcanic material exploited as a pozzolan in Europe was trass, which was found in the Rhine Valley in Germany. It was transported up the river to the Netherlands, then by sea to France and Britain (and perhaps elsewhere), where it was used to make mortar. Before the advent of canals and railways, such materials could only be transported efficiently by river or sea, in the latter case they were used as ship ballast.

Smeaton's publication, *A Narrative of the Building and Description of the Construction of the Edystone Lighthouse with Stone* (1791), revealed his discovery of the potential of clay-rich limestone. It revolutionised mortar technology. This meant that if such limestone existed within a country, it could be quarried to make mortars for hydraulic construction, without the need for imported materials. As a result, important deposits of such limestone were identified and exploited in France and Britain. One example was from the quarries at Teil, on the banks of the Rhone [Ardèche], (Beckwith, 1873). These produced hydraulic mortars that became renowned for use in coastal constructions.

In turn, hydraulic limes were then exported to areas where neither impure limestone or natural pozzolans existed or had not yet been identified. By the mid-19th century, there were countless publications on limes and cements in different European languages. The use of French Teil lime around the Mediterranean, including Egypt, and the World, is described by several English language writers (Burnell, 1858; Reid, 1869; Beckwith, 1873; Gillmore, 1879). From the 1830's onwards, it was employed for sea constructions to make a lime concrete or artificial stone blocks, for at least another 40 years.

The European engineers constructing the Suez Canal (1859-69) specified the use of imported French Teil lime for their projects. As a

consequence, European architects designing and building the new city of Port Said also specified its use. For example, analysis of the render of the Bazar Abbas identified its binder as hydraulic lime. This was a commercial building of moderate status, but the use of imported lime was deemed appropriate. Importing materials of known character was simpler than trying to identify and process such material in Egypt. The Egyptian Delta is rather deficient in geological stone suitable for quarrying. The use of imported European materials was also part of the colonial supply chain, further supporting European commerce.



Fig. 12.19 The Jebel Mokattam formation in Cairo which has been quarried since ancient times. It is a limestone of high purity, so it cannot be used to make hydraulic lime. (Photo: Author, 1992)

The quantities of material employed typically indicate the scale of the construction project. The artificial harbour of Port Said was created by building two jetties, measuring 3099 m and 1799 m long respectively, using artificial stone blocks made from Teil lime. Around 122,000 tonnes of Teil lime were used to make 25,000 artificial blocks, at a rate of 900 per month. Desert sands and seawater were also utilized in this process. Similar proportions were used to build the Port Said lighthouse. Standing at 55 metres high, it was constructed of a single mass of concrete, with no joints (Beckwith, 1873:34-5). The Alexandria Harbour breakwater was 2,414 m long, with an inner jetty and quays (enclosing 6070 hectares). Around 177,000 tonnes of Teil lime, or 35,000 blocks, were estimated to have been used in its construction (Beckwith, 1873:36). Forty blocks a day were towed out to sea and dumped onto the side of the breakwater.

Artificial Portland cement, invented in Britain in the second quarter of the 19th century, was not a consistently reliable material. It took many decades to develop a successful production process. It then surpassed natural hydraulic limes. More importantly, it could be produced with materials available in most countries, including Egypt. This effectively ended the international trade in natural hydraulic limes, as used at Port Said.

12.4 Conclusion

This training module on renders complemented the multifaceted components of the training course, through the provision of lectures and practical demonstrations. Participants were actively engaged, and their astute questions illustrated their interest in and understanding of a topic that was entirely new to them. The accessible references provided here offer further detailed information and advice on mortar characteristics, specification and testing.

These practical methodologies, focusing on the conservation process, material characteristics, and on-site analysis, gain essential critical weight when considered in the context of Port Said's construction history. As demonstrated in the second part of this paper, the reliance on internationally transported hydraulic materials, such as Teil lime, key to 19th-century infrastructure projects, led to subsequent repair challenges encountered at Bazar Abbas. Consequently, the integration of robust, applied training with specific material history provides the necessary framework for effective and context-aware urban conservation.

References

- Beckwith, L. F. (1873). *Report on the hydraulic lime of Tell: Fabrication and use in the construction of marine works, canals, aqueducts, sewers, etc.* D. Van Nostrand. [https://archive.org/details/reportonhydraulii00beck/](https://archive.org/details/reportonhydraulii00beck/Borrelli, E. (1999). Conservation of architectural heritage, historic structures and materials. ICCROM. https://www.iccrom.org/publication/conservation-architectural-heritage-historic-structures-and-materials)
- Borrelli, E. (1999). *Conservation of architectural heritage, historic structures and materials.* ICCROM. <https://www.iccrom.org/publication/conservation-architectural-heritage-historic-structures-and-materials>
- Burnell, G. R. (1858, March 13). On the application of hydraulic limes and other cementitious materials to constructive purposes. *The Builder*, 16(788), 172–173.
- Gillmore, Q. A. (1879). *A practical treatise on limes, hydraulic cements, and mortars: Containing the results of numerous experiments* (5th ed.). D. Van Nostrand.
- Henry, A., & Stewart, J. (Eds.). (2012). *Mortars, renders & plasters.* Ashgate.
- Historic England. (2017). *Repointing brick and stone walls: Guidelines for best practice.* <https://historicengland.org.uk/images-books/publications/repainting-brick-and-stone-walls/>
- Hohlfelder, R. L., Brandon, C., & Oleson, J. P. (2007). Constructing the harbour of Caesarea Palaestina, Israel: New evidence from the ROMACONS field campaign of October 2005. *The International Journal of Nautical Archaeology*, 36(2), 409–415. <https://doi.org/10.1111/j.1095-9270.2007.00156.x>
- ICOMOS International Scientific Committee for Stone. (2008). *Illustrated glossary on stone deterioration patterns.* ICOMOS. https://www.icomos.org/public/publications/monuments_and_sites/15/pdf/Monuments_and_Sites_15_ISCS_Glossary_Stone.pdf
- Reid, H. (1879). *A practical treatise on natural and artificial concrete: Its varieties and constructive adaptations.* E. & F. N. Spon. <https://archive.org/details/apracticaltreat00reidgoog/>
- Scottish Lime Centre. (2003). *Preparation and use of lime mortars* (Technical Advice Note 1; Rev. ed.). Historic Scotland. <https://www.historicenvironment.scot/archives-and-research/publications/publication/?publicationid=3d5fbef1-8a1e-4945-a41e-a5c201034e56>
- Smeaton, J. (1791). *A narrative of the building and a description of the construction of the Edystone Lighthouse with stone.* H. Hughs. <https://archive.org/details/narrativeofbuild0000smea/>
- Teutonico, J. M. (1988). *A laboratory manual for architectural conservators.* ICCROM. <https://www.iccrom.org/publication/laboratory-manual-architectural-conservators>
- Torraca, G. (2009). *Lectures on materials science for architectural conservation.* Getty Conservation Institute. https://www.getty.edu/conservation/publications_resources/pdf_publications/pdf/torraca.pdf

13. Community-Centred Rehabilitation of Bazar Abbas

Logaina Fathalla

Abstract

Bazar Abbas is a historically significant and socially vibrant marketplace shaped by informal systems, overlapping uses and diverse user groups. This paper reflects on an internship experience¹ focused on developing a rehabilitation proposal for the bazaar through a participatory, community-centred design process. The approach emphasised direct engagement with users and shop owners in order to gain a better understanding of the bazaar's spatial organisation, and its everyday routines.

To gather data, uncover hidden dynamics and build trust with the community, a combination of site observations, interviews, mapping and a literature review on community participation, as well as small-scale experimentation with locals were conducted. The paper outlines the progression from immersive fieldwork and engagement with the bazaar, to strategic visioning and the development of a conceptual framework. It emphasises the importance of building trust and fostering a sense of shared ownership, while reflecting the complexity, diversity and resilience of the community.

The findings have shaped strategic moves addressing heritage conservation, cross-disciplinary management and financial management. Ultimately, the paper demonstrates how community-centred design can serve simultaneously as a method of analysis and strategy-finding tool, as well as a framework for intervention in the rehabilitation of socially and historically layered urban spaces, with particular focus on Bazar Abbas.

Keywords: user engagement, community-centred design, spatial dynamics, conceptual strategies, marketplace rehabilitation

13.1 Introduction

Bazaars have long been much more than just places to trade; they are centres of culture where people meet, exchange ideas and create shared memories. As AlSayyad (2011) describes, they are 'urban organisms' that evolve with the social, political and economic life of

¹ This paper is based on research conducted from April to December 2024. The team comprised six interns: Logaina Fathalla, Youssef Ragab, Ahmed Nour, Hagar Ibrahim, Basma Seif, and Anan Sayed, as well as project members Samar Abdelaal and Miran Shouman. The team participated in weekly coordination meetings and interim presentations with the BTU faculty at the conclusion of each phase. All figures were developed by the six interns.

the city. Bazar Abbas, also known as the Khedive Abbas Helmi II Marketplace, was built in 1891 and holds particular significance. Its conservation could serve as a catalyst for improvements in the wider urban fabric. However, its condition has deteriorated over the years due to historic events and the absence of adequate laws and regulations, which have led to individual and uncoordinated interventions in the building (Abdelaal, 2021).

The rehabilitation team's involvement with the bazaar began through a six-month internship as part of the Brandenburg University of Technology's (BTU) project for reimagining Bazar Abbas in Port Said. Within this context, the team's work combined two main objectives: documenting the existing situation and exploring rehabilitation and adaptive reuse possibilities. Early site visits revealed that conventional architectural drawings could not capture the full complexity of Bazar Abbas. Direct observations of daily exchanges and interactions between vendors and visitors, listening to the local narratives of shop owners, and experiencing the market's pathways at different times of day offered a more coherent understanding of the bazaar. These experiences highlighted, from the early stages, the importance of community engagement as an active research method rather than a secondary step in the design process.

The outcome of this work resulted in a thorough analysis of the building from multiple perspectives, the identification of a precise problem statement and the formulation of vision strategies for its rehabilitation. These strategies considered not only the physical structure but also its urban context and user dynamics, incorporating factors such as daily activity cycles, economic viability and the interplay between daytime and night-time uses. In the context of conservation and adaptive reuse, this approach aligns with recent strategies in emphasising the integration of intangible cultural heritage into heritage management strategies (Pendlebury, 2013; Pereira Roders, 2019).

This paper therefore outlines the methodological process of the internship as well as testing the community-centred design as a framework for analysis and strategy-making.

13.2 Methodology

The internship methodology was based on community-centred design, used both as an analytical tool and as a framework for developing strategies and proposals. A literature review on community-centred design

in urban rehabilitation and heritage conservation provided the theoretical basis, while fieldwork and participatory engagement ensured its practical application.

The team carried out monthly site visits, complemented by additional individual trips for specific data collection. Activities included mapping the bazaar, documenting the current and original shop functions, recording ownership details, and gathering narratives from shop owners and long-term residents. Structured interviews and informal conversations further revealed community perspectives and aspirations.

This qualitative data was supported by architectural documentation, including detailed zoning and plans of both floors, as well as comparative research into rehabilitation projects that had successfully integrated community participation. The findings were communicated through diagrams, maps, models and presentation boards, which enabled the formulation of a problem statement and the establishment of a vision for the bazaar's rehabilitation.

13.3 Community-Centred Rehabilitation

Community engagement in heritage is more than just the restoration of architectural fabric and heritage buildings. Scholars emphasise that heritage is a cultural process concerned with memory, identity and meaning (Smith, 2006), where communities are active participants co-producing value rather than passive recipients of expert decisions (Waterton & Smith, 2010). At the policy level, UNESCO (2011) reinforces this view, calling for heritage management to integrate conservation with community needs through inclusive participation and local engagement. Moreover, local communities possess knowledge often absent from formal archives, such as oral histories, traditional practices and personal memories. Incorporating this knowledge is essential to producing rehabilitation that is socially rooted and meaningful. Omitting community participation, however, can lead to mistrust, social disconnection and heritage outcomes that fail to serve residents' needs (Sustainability Directory, 2023).

Community participation in heritage rehabilitation can be achieved through a variety of methods. Common approaches include community workshops, cultural mapping, skills training and the formation of local management and advisory committees. This section will analyse case studies of community engagement in local contexts, such as Souq

El-Silah in Cairo, as well as in post-war and conflict regions, such as Aleppo.

Souq El-Silah is one of the case studies entitled ‘How Community Engagement Approach Enhances Heritage Conservation’ (Fahmy, 2025) that illustrates how structured community participatory tools can transform the planning and design processes in historic marketplaces. In the Souq El-Silah project, the process began with detailed surveys of buildings, open spaces and craft shops. Residents participated in workshops addressing issues such as traffic, waste collection and traditional crafts. These workshops were then used to co-develop a conservation plan with facilitators and stakeholders. Participatory mapping allowed local voices to define nodes of activity, such as craft, gastronomy and culture, and incorporate them into planning visions.

The Souq El-Silah project highlights several practices that are highly relevant for community-centred rehabilitation (Fig. 13.1). These include organising multi-stakeholder workshops; combining qualitative tools, such as interviews and participatory mapping with spatial documentation; and identifying existing economic and cultural functions, such as craft workshops and markets as central nodes in the design process (Fahmy, 2025). Practical interventions such as enhanced lighting, paving and shading were paired with capacity-building initiatives for



Fig. 13.1 Celebrations of Iftar in a community centre in Cairo. (Photo: Bayt Yakan)

artisans, as well as awareness-raising activities to safeguard crafts and traditions (UNESCO, n.d.). These measures reinforced the market's role as a vibrant social and economic hub, while ensuring heritage remained relevant to residents' daily lives. This suggests adopting similar tools to Bazar Abbas.

Secondly, the reconstruction project in the Old City of Aleppo focused on restoring traditional courtyard houses as a way to revive the city's residential heritage after years of conflict. As Kousa, Lubelli, and Pottgiesser (2025) explain, the initiative engaged residents through interviews, surveys and on-site consultations, giving them a role in identifying priorities and articulating the cultural values attached to their homes. At the same time, the study highlights several challenges, including limited financial resources and the loss of skilled craftsmen, which restricted residents' ability to realise their visions. To address these gaps, the authors recommend capacity-building for young artisans, providing households with financial and technical support, and establishing mechanisms that embed community voices and input into decision-making processes. For Bazar Abbas, the Aleppo experience suggests that effective rehabilitation should combine resident consultation with investments in local skills and support systems, ensuring that conservation is both socially grounded and practically achievable.

The Souq El-Silah and Aleppo projects demonstrate that heritage rehabilitation is most effective when communities are actively involved in shaping the process and experience direct benefits in their daily lives. However, they also reveal that participation alone is not enough; without training, resources and institutional support, outcomes can remain limited. For Bazar Abbas, this means combining community centred design with capacity-building and small-scale improvements to make sure the project is inclusive, practical and sustainable.

13.4 Analysis and Process

13.4.1 Bazar Abbas at First Glance

The author's first encounter with Bazar Abbas was as a passer-by long before the start of the internship, and working on a project to map Port Said. Passing by the bazaar street, the municipality bazaar at the start of the street appeared larger and more accessible, despite having undergone similar interventions. By contrast, Bazar Abbas was concealed beneath layers of signage, shop advertisements and the 'Alam Al Behar'

logo placed on the entrance pediment. Upon further inquiry, the author discovered that the building was constructed in 1891 and once served as both an open fish market and a hotel. Its arcaded façade blurred into the surrounding buildings, making it difficult to distinguish where the structure began and ended (Abdelaal, 2021).

A couple of years later, the author joined an internship focused on rehabilitating the Bazar. This time, the first impression was shaped by the visible results of the pilot project, which had reconstructed the front balconies and one side of the symmetrical façade. The bazaar's unique architecture became more evident: imported French materials; the remarkable wooden truss supporting the tiled, sloped roof; and layers of paint revealing the passage of time and the shifts in function across the years.

13.4.2 Analysis Layers

Understanding Bazar Abbas required moving beyond any conventional architectural documentation, but rather to adopt an approach that could capture its spatial, social and cultural complexity. The team therefore structured the analysis into distinct yet overlapping layers. During site visits, the team was divided into groups, each focusing on a specific aspect of the building and its users.

A) Spatial Analysis

The spatial analysis layer mapped the architectural plan of the two floors, circulation patterns, and accessibility within the public alleyways. Historically, the ground floor functioned as an open and inviting network of alleyways that led directly to the shops. Today, however, uncoordinated interventions have obstructed this permeability. This layer also documented the original and altered functions of the spaces: which have evolved from fish markets and fruit suppliers to vendors of diverse goods, reflecting the bazaar's adaptive nature over time.

B) Interventions Analysis

Complementing this, the structural condition assessment examined the physical alterations made to the building. These Interventions were categorised as destruction, construction or movable changes, and were further evaluated based on their severity. This revealed the cumulative impact of individual modifications on the integrity of the bazaar.

C) Pollution Impact Analysis

In parallel, an impact analysis documented sensory conditions such as odour, noise and visual pollution, along with drainage issues caused by the misdistribution of functions. For instance, ice-breaking shops produced disruptive sound levels, altering the experience of the space.

D) The Social and Cultural Analysis

This layer focused on collecting narratives from shop owners and long-time users of the bazaar. People recalled the colonial-era bazaar, its use by foreigners, its resilience in the face of attacks on the city, and the cycles of immigration and emigration that have shaped Port Said. Many of the participants expressed deep affection for Bazar Abbas, recalling childhood memories and its transformations during the war. These stories highlighted the bazaar's role as more than just a marketplace; it was also a space of identity, memory, and resilience.

E) Ownership Analysis

Another crucial dimension was the legal and ownership layer, which mapped property rights, rental dynamics, and the distribution of influence among shop owners. This analysis revealed the power relations within the bazaar, ranging from long-standing ownership to tenants with limited control, showing who was willing to adapt, invest or relocate. Understanding these dynamics was essential for assessing the feasibility of the rehabilitation project and for ensuring that the proposals were aligned with the community's views and aspirations.

These layers provided a multidimensional understanding of Bazar Abbas. They revealed how spatial arrangements influenced economic exchanges and how informal systems shaped daily operations. The findings of each layer will be discussed in detail in the following sections, emphasising how a community-centred design approach framed the analysis and guided the development of rehabilitation strategies.

13.4.3 Analysis Findings: Bazar Functions and Interdependencies

The analysis findings can be divided into two main categories. The first is the architectural analysis, which examines the past and present functions of the bazaar, as well as the overlapping uses and interdependencies of the shops and observations of its daytime and night-time dynamics. The second category is social analysis, which focuses on

the users and shop owners, addressing roles and hierarchies within the bazaar, the distribution of power, decision-making processes and community events, as recounted through narratives.

A) Spatial Analysis

Ground Floor and First Floor Uses: Bazar Abbas is organised over two levels. The ground floor functions as a commercial space, arranged around an open central courtyard lined with shops and accessed via a main entrance marked by arcades (Fig. 13.2). The upper floor was originally intended to operate as a motel, providing accommodation for merchants, visitors, and foreigners, with rooms and wings connected to two communal bathrooms (Abdelaal, 2021).

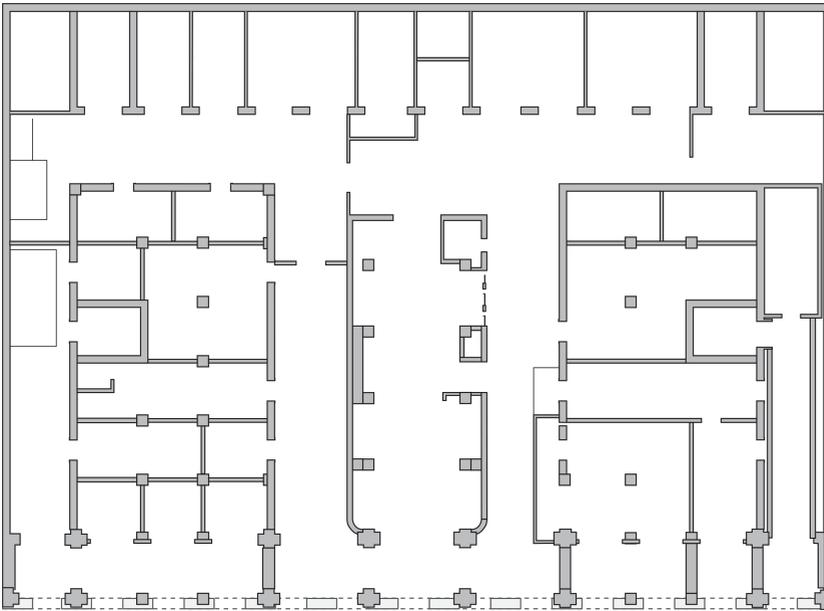


Fig. 13.2 Current ground floor plan of Bazar Abbas.

Interviews with shop owners reveal that around 60% of the ground floor of the bazaar was once dedicated to fish trading, much like the traditional fish markets of Port Said. The central area, marked by a half-floor-height balustrade, was the main space for selling the fish. The surrounding shops were either used for selling fish, for producing ice or for selling fruits and vegetables to supply the trade ships passing through the Suez Canal. Foreign merchants would often stop in Port

Said to rest and sell their goods before continuing with their journey. Today, many of the shop owners are descendants of the original owners, while others rent the shops or have changed their original use.

Wooden spiral staircases on both sides of the bazaar provided access to the upper floor, which was originally designed as standardised hotel rooms constructed with imported French bricks. Following the end of colonisation and the return of Port Said's residents - people who had lost their homes - along with some bazaar shop owners, took up residence in the upper-floor hotel rooms. Layers of paint on the walls remain as traces of their occupation of the space. The government eventually evacuated the upper floor in 1980 due to structural damage and the risk of collapse. In addition, wartime explosions destroyed parts of the wooden truss roof (Abdelaal, 2021).

B) Intervention Analysis

Figures 13.3 and 13.4 represent a study of the uses and activity in the bazaar as of June 2024. One of the most significant interventions is

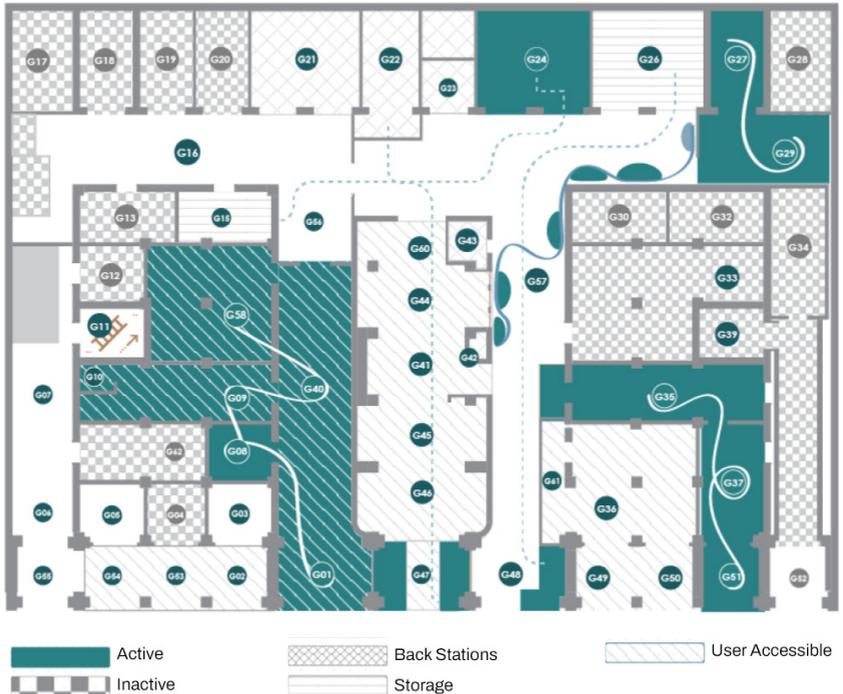


Fig. 13.3 Ground floor activity map of Bazar Abbas.

The northern wing is occupied by various commercial outlets, including fishmongers, storage shops, a juice bae, an ice-breaking shop and a carpenter's workshop. However, many of the remaining units are either inactive or locked, signalling partial abandonment and uneven activity within the bazaar.

As shown in Figure 13.5 and Table 13.1, the signage system appears highly uncoordinated, with a mix of styles, colours and placements scattered across the market. In many cases, signs overlap or obstruct significant historic features, such as balconies, columns and arcades, thereby diminishing the architectural character of the space (Abdelaal, 2021).

The physical interventions observed within the space can be classified into three main categories: detachable, constructed and movable (Fig.13.5). The detachable interventions primarily consist of additions that can be removed without permanently altering the bazaar's original materiality. These include wooden screens that create a sense of enclosure or privacy, extra brick walls and partitions functioning as dividers between different shops, as well as lightweight shading devices and ornamental ceiling decorations.

The constructed interventions, on the other hand, involve permanent changes to the structural and material character of the space. Notable examples include the pouring of concrete over the original wooden flooring of the bazaar's first floor and introduction of a concrete vault in the eastern wing.

Finally, the movable interventions are those elements that can be easily shifted, rearranged or temporarily installed according to daily needs. These range from fish-selling carts placed along the street to attract passers-by to portable fridges, storage units and small cabins.

The rehabilitation of the bazaar would essentially require the removal of most interventions in order to clear the alleyways and reopen the space to the public.

C) Day and Night Observations

Studying the bazaar's daily rhythms revealed distinct temporal dynamics. Fish shops receive deliveries from fishermen early in the morning, though most shop owners begin operating around 11 a.m. By midday, coffee shops and surrounding vendors are busy with passing trade, while specialised shops, such as those of butter and oil shops, operate primarily at night. Ice-breaking activities generate significant noise

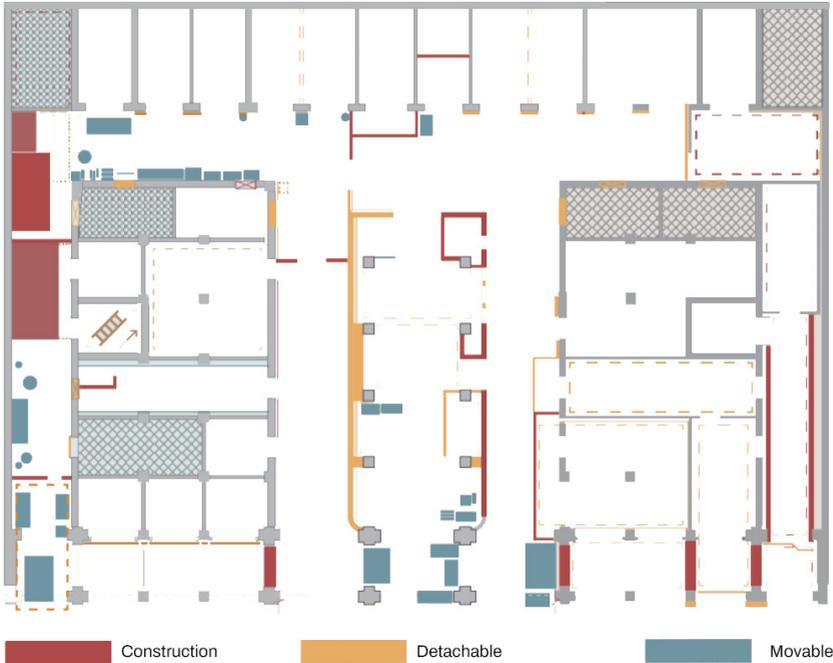
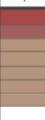
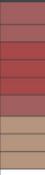


Fig. 13.5 Classification of interventions on the Bazar Abbas ground floor plan.

| | Category | Impact | purpose | Material | |
|--|---------------------|---|---------------------------------|----------------------|---|
| wall  | damaged ext wall |  | Extend the space | stone |  |
| | masonry wall | | enclose the space | brick | |
| | banner | | advertisement | cardboard, paper | |
| | cladding | | cover the old deterioration | chipboard | |
| | partition | | enclose the space | wood, acrylic | |
| | signage | | advertisement | steel, wood, plastic | |
| steel mesh | cover up the space | steel | | | |
| ceiling  | false ceiling |  | cover the old deterioration | gypsum |  |
| | armstrong ceiling | | cover the old deterioration | | |
| | concrete vault | | block the sun rays | concrete | |
| | flat concrete | | block the sun rays | concrete | |
| | mezzanine | | add another floor | steel, wood, bricks | |
| | wooden ceiling | | cover the old deterioration | wooden beams | |
| | gypsum board | | renovation | gypsum | |
| | corrugated sheet | | isolation | stainless steel | |
| wicker shading | block the sun rays | wicker | | | |
| floor  | removed steps |  | extend the height | wood plank |  |
| | added steps | | reducing the height | concrete, brick | |
| | brick step | | accessibility | brick, cement | |
| | steel pod | | manufacturing | steel, concrete | |
| | | | | | |
| openings  | Blocked-up openings |  | to be used for another activity | brick |  |
| | removed doors | | to be used for another activity | wood | |
| | added doors | | to be used for another activity | steel, wood | |

 Severe Impact
  Medium Impact
  Low Impact

Table 13.1 Assessment of architectural interventions and impact levels.

around midday. The fish restaurant opens at noon but reaches peak activity by late afternoon, around 4 p.m. Meanwhile, the first floor remains inaccessible and several shops function solely as storage, remaining closed throughout the day and night.

13.4.4 Analysis Findings: The People and Community Dynamics

Interviews revealed that the bazaar community has a deep and strong sense of identity and collective memory. Many shop owners act as living archives, recalling moments from the colonial era through to times of war. Most have inherited their shops from their fathers or other close relatives, and decades of working within the bazaar have fostered a strong sense of loyalty and belonging. While they have witnessed the gradual deterioration of the structure, they consistently expressed a desire to see the bazaar restored and revived to its former vitality.

A community-centred design approach was adopted, recognising the people of the bazaar as a vital asset to the project's success. Without acknowledging the local users and the existing conditions, any rehabilitation effort would be at risk of failure. Thus, actively engaging these shop owners and stakeholders in discussions and decision-making process was therefore a crucial step in both the analytical process and the development of future proposals.

A) Roles and Hierarchies

The analysis of the bazaar community revealed a clear hierarchy among its users. Certain individuals hold greater influence over decision-making, often because they own multiple shops or larger properties, such as the fish restaurant owner, whose participation is critical in the rehabilitation process. Others, such as the tenants of the herb and caviar shops, operate as renters and must refer to the original property owners when making decisions. At the other end of the spectrum are those who own only movable carts along the front arcades. Their situation is particularly sensitive, as any compromise to their location would directly affect their business and income.

Levels of appreciation and willingness to engage with the project also varied. Some stakeholders, including the fish restaurant owner, expressed openness to change and agreed to relocate within the bazaar if required. Others showed flexibility in renovating their shops or adapting their trade to suit contemporary demands. However, a portion of the community responded with resistance, fearing potential

business losses. For these groups, trust-building emerged as a critical component of the process.

B) Community Events

Narratives collected from users revealed the bazaar’s rich tradition of communal gatherings, highlighting its role as an important site of intangible cultural heritage. The central ground-floor space once hosted large communal meals during religious and festive occasions, such as the Prophet’s birthday or at times of the Eid. Long tables were set up, and each participant contributed food according to their means, creating events characterised by generosity and inclusivity that extended beyond the shop owners to the entire street and the wider community. Even minor occasions related to the bazaar community were celebrated collectively, affirming the space as a cultural and social hub rather than merely a marketplace. Today, however, Egypt’s ongoing financial challenges have made it difficult to sustain such practices, and large communal gatherings now occur only rarely. Nevertheless, the bazaar continues to serve as a stage for cultural expression, with *Semsemia* performances regularly hosted in the central courtyard.



Fig. 13.6 Visual summary of shop owner interviews.

C) Collective Memory

As shown in Figure 13.6, when asked about ‘the value of Bazar Abbas’ and its personal significance to them, shop owners consistently described it as being much more than just a workplace, emphasising its role as a source of identity, memory and belonging. Many referred to the bazaar as their home, life, and soul, recalling how they grew up within its walls and inherited both shops and traditions from their families. Others spoke of it as a treasure that holds collective history, a spirit in need of revival, and a symbol of generosity and resilience.

13.4.5 Key Analysis Insights and Reflections

A) Summary of Critical Takeaways

To sum up, the analysis of Bazar Abbas revealed a variety of challenges and opportunities (Table 13.2), highlighting the interaction between its architectural fabric, social dynamics and urban context. Bazar Abbas demonstrates many noteworthy strengths, primarily in its heritage value, historical background, and skilled community. These attributes position the bazaar as a site of cultural and spatial significance within Port Said.

CONSTRAINTS

The Bazaar is overwhelmed by its crowded surroundings, compromising its visibility and functionality.

The individual elements of the Bazaar are disconnected from its overall structure, resulting in a fragmented and incoherent layout.

Resources and spaces within the Bazaar are poorly allocated, reducing its operational efficiency.

The absence of a dedicated management body hinders the maintenance and regulation of the Bazar.

POTENTIALS

Enhance the Bazar’s visibility and accessibility through urban design improvements, positioning it as a cultural catalyst to preserve Port Said’s intangible heritage.

Adopting a conservation approach that restores the Bazar’s original design and circulation, re-establishing its historical coherence and functional integrity.

reconfiguring the allocation of resources and spaces to enhance operational efficiency, ensuring the Bazar meets the needs of its users effectively.

establishing a dedicated management body that collaborates with the tenants

Table 13.2 Synthesis of constraints and potentials for Bazar Abbas.

However, its weaknesses include the deteriorating building conditions, inadequate utilities and inaccessible public spaces. At the same time, opportunities are evident in the potential to reactivate unused spaces, integrate renewable technologies, and enrich visitor experiences through storytelling and cultural events. The most critical threats lie in the ongoing structural deterioration and unresolved legal disputes related to ownership documentation, both of which jeopardise long-term rehabilitation.

B) Urban Scale

Within the broader urban fabric, the bazaar appears increasingly isolated, 'swallowed' by the surrounding congested context and disconnected from the city's dynamics. Its limited visibility from the street and lack of integration have reduced its significance in the area. Addressing these challenges requires re-situating the bazaar as an integral urban component, both physically and symbolically, by enhancing connectivity and ensuring its role is reflected in the city's identity.

C) Architectural Building and Infrastructure Scale

At the architectural and infrastructural levels, deficiencies were observed, including inadequate water and drainage systems, high energy consumption, absence of gas lines, lack of fire safety measures and unresolved structural vulnerabilities. These issues exist alongside interventions that lack coherence, such as overloaded signage and the misuse of spaces.

D) Social Scale

The social analysis reveals a divided user base with differing views. The heirs of the original shop owners feel a strong cultural connection to the bazaar and often want it restored to its historic role. In contrast, renting tenants see it mainly as a business opportunity, with little focus on its heritage value. This division makes it difficult to balance stakeholder interests. The lack of public services and communal areas, as well as a lack of awareness of the bazaar's value, further contributes to its decline. Proposed strategies would include supporting shop owners, updating business practices and improving public spaces, with the aim of making the bazaar more inclusive and resilient.

E) Trust Building

Since the bazaar community is a key factor in the success of the rehabilitation plan, it was crucial to better engage stakeholders through pilot projects and involve them in the initial decision-making process in order to establish trust among the shop owners. One of the main challenges encountered during this process was the varying levels of compromise that each stakeholder was willing or able to make.

Some of the more established and powerful shop owners could afford to take risks and temporarily sacrifice parts of their businesses for the greater good of the rehabilitation project. For example, the owner of the well-known fish restaurant Alam Al Behar agreed to clear the public corridor and relocate his main dining hall to the upper floor. Similarly, other owners expressed a willingness to rent out their spaces for cultural events and workshops.

By contrast, small business owners and cart vendors situated beneath the arcades posed a greater challenge. Their businesses depend heavily on visibility from passing pedestrians, which made relocating their carts inside the bazaar impractical. Although moving the carts into the inner alleyways might have seemed like an ideal solution, discussions with the community revealed that such a measure would severely harm their livelihoods. To address this, a middle ground was pursued. In collaboration with designers, a prototype cart was developed for Youssef, one of the fishmongers (Figs. 13.7, 13.8). This cart was designed to be sustainable and fully functional, while also aligning with the bazaar's identity. It incorporates a water recycling system and an embedded fridge. Initially, it could remain beneath the arcade, but in the longer term, it could be relocated inside the bazaar once the rehabilitation process advances, thus freeing up the front arcade.

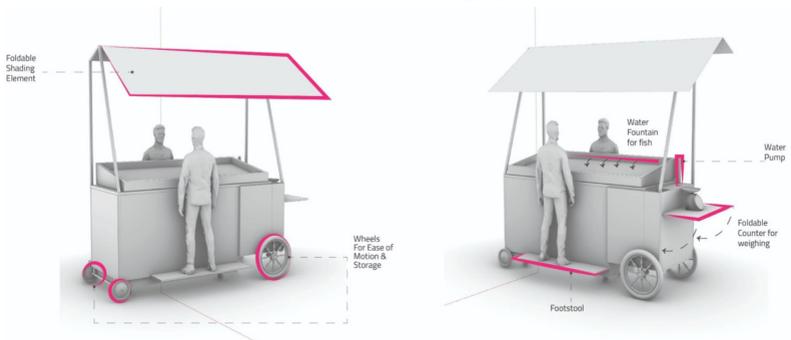


Fig. 13.7 Design scheme for the fish selling unit prototype.



Fig. 13.8 Fish selling unit prototype in use at Bazar Abbas. (Photo: Samar Abdelaal, 2024)

This gesture demonstrated to the shop owners that the rehabilitation plan places the community at its core, recognizing them as the heart and soul of the bazaar. Building this trust was essential to ensure their cooperation and long-term commitment and reinforced the belief that the project prioritizes the community's interests and benefit above all else.

13.5 From Analysis to Vision

13.5.1 Problem and Vision Statements

Following a detailed analysis of the current conditions, we formulated a problem statement to guide us towards a clear vision.

A) Problem Statement

Bazar Abbas has been neglected and encroached upon by its urban context, leading to deterioration due to the absence of conservation strategies, laws, regulations, ownership and management. This has resulted in interventions by non-experts that fail to respect the historic values of the site.

B) Values of Bazar Abbas

We then identified three main values of Bazar Abbas: its historic, its architectural and its living heritage values. These values will guide the main strategies for the rehabilitation plan. Bazar Abbas serves as a historic landmark, embodying the cultural and functional essence of Port Said throughout its history. The Bazaar's significance as a heritage market, standing as a living testament to Port Said's history, having evolved through various eras while retaining its original purpose. The unique architectural and aesthetic qualities of Bazar Abbas are accentuated by its functionality, adaptability and the use of French Haussmann-style arcades. The materials, likely imported from Marseille, complement the craftsmanship of the timber roof joinery and the innovative design of the thin yet stable interior walls. The intangible cultural value is represented by the local community, whose enduring practices and activities have sustained Bazar Abbas as a vibrant hub for traditional and modern functions, such as the seafood trade and other local industries.

C) Vision Statement

Seamlessly integrating Bazar Abbas as a dynamic cultural node within Port Said's historic fabric by revitalizing its historical significance, with the aim of promoting cultural heritage and empowering the local community through their active engagement in sustainable interventions, to meet contemporary needs. We envisage Bazar Abbas as a cultural hub that would maintain most of its current functions while integrating them into our plan. In our vision, the bazaar showcases its tangible heritage

and conserves its intangible heritage – such as the *Semsemia* – hosts cultural activities and empowers the locals, all the while preserving the fish industry, which represents the origins of the bazaar. All of this is carried out while ensuring the public corridors of the bazaar are restored.

13.5.2 Strategy Moves

A) Conservation Strategy Guidelines

To guide the rehabilitation of Bazar Abbas, we established a set of conservation strategy guidelines with the main objective of preserving the historical integrity of the bazaar while ensuring its functionality and cultural relevance through minimal intervention and restoring its original layout. These strategies can be summarized in four key actions; historical integrity, minimal intervention, adaptive reuse and community engagement, which emphasizes sustaining and empowering local practices to preserve the intangible heritage associated with the bazaar.

1. Historical Integrity

The first strategy focuses on restoring Bazar Abbas to its original state while preserving its architectural and historical significance. This includes two main aspects:

- » *Restoration and Preservation of Authenticity and Integrity:* Maintaining the historical character of the bazaar through the careful restoration of original layouts and architectural details.
- » *Accessible Public Alleys:* Removing obstructions that block circulation within the public corridors of the bazaar and reinstating the main staircases and utilities, as illustrated in Figure 13.9.

2. Minimal Intervention

The second strategy adopts a 'do no harm' approach by avoiding unnecessary changes and prioritizing the preservation of original materials. This strategy emphasizes the following:

- » *Limited Ownership Interventions:* Minimizing changes to the existing ownership of shops in order to avoid conflicts (Fig. 13.10).
- » *Minimal Structural and Interior Changes:* Ensuring that interventions to the bazaar's structure and interior remain as limited as possible.
- » *Reversibility:* Guaranteeing that any interventions can be undone without causing damage to the original fabric of the bazaar.

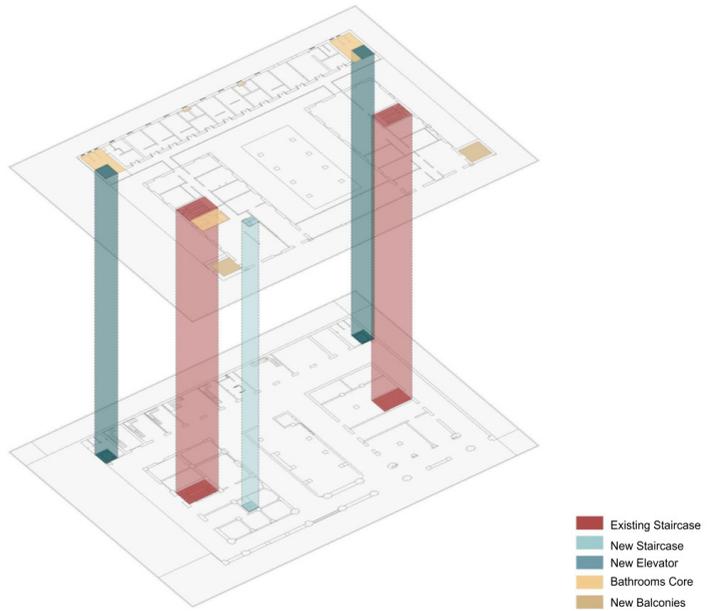


Fig. 13.9 Diagram showing the restoration of the original circulation and utilities.



Fig. 13.10 Ground floor plan illustrating spaces with no change in ownership.

3. Adaptive Reuse

The third strategy focuses on reconfiguring spaces to meet contemporary needs while preserving the bazaar's character and heritage value. This includes:

- » *Reusing Spaces:* Activating empty shops by adapting them to accommodate contemporary functions and needs (Fig. 13.11).
- » *Compatibility:* Applying materials and construction methods that are compatible with the original fabric of the bazaar to prevent long-term damage.



Fig. 13.11 Adaptive reuse proposal for ground and first floors.

4. Community Engagement

The fourth strategy emphasizes sustaining and empowering local practices to preserve the intangible heritage associated with the bazaar. This strategy focuses on:

- » *Preserving Intangible Heritage:* Using Bazar Abbas as a catalyst to safeguard traditions such as the Semsemeya, the fish trade and cultural memory through history and archives exhibitions.
- » *Enhancing Local Businesses:* Supporting the crafts and trades within the bazaar to strengthen their role while aligning with its heritage values.
- » *Empowering the Local Community:* Educating people about traditional crafts and cultural heritage to ensure their continuation.

B) Cross-disciplinary Management Strategy

The rehabilitation team initially proposed a cross-disciplinary management model to ensure that the bazaar's revival is not only architectural but also social, economic and cultural. The model was designed as a hybrid structure, bringing together three key committees:

- » *The Tenant Committee (non-paid),* representing shopkeepers and

long-standing users of the space.

- » *The Owner Committee (paid)*, serving as the formal representative and decision-making body.
- » *The Expertise Committee (paid)*, composed of external specialists in conservation, design and cultural programming.

This structure was intended to balance local knowledge with that of technical expertise. Within this model, responsibilities were distributed across stakeholders to create a system of shared governance. Owners were tasked with overseeing progress, monitoring performance indicators and ensuring alignment with project goals. Old tenants, who hold in-depth knowledge of the bazaar's daily operations, were assigned to handle routine maintenance, stocking and minor management tasks that ensure the space functions on a day-to-day basis. Meanwhile, external experts were responsible for larger-scale interventions, such as structural conservation, building maintenance and the integration of new technologies. They were also tasked with designing cultural programmes and activities to re-establish the bazaar as a vibrant community hub.

Although this proposal represents a structured starting point, it is not finalised. Workshops and collaborative sessions are being conducted with stakeholders to refine the model, test its applicability and address unresolved questions of authority and accountability.

C) Financial Management Strategy

The financial management framework for Bazar Abbas (Table 13.3) seeks to strike a balance between commercial viability and cultural preservation by diversifying income streams. Proposed activities that can generate revenue include rentable artist stalls, handicraft shops and cultural event spaces, all of which provide opportunities for both local entrepreneurship and attract visitors alike. A key component of the proposal is the reactivation of the upper floor as a motel, designed with traditional architectural features to offer accommodation for visitors while ensuring a steady income that could directly support ongoing maintenance and conservation.

In addition to commercial initiatives, the framework highlights the importance of intangible heritage and community engagement as sources of both cultural and financial value. Spaces dedicated to performances, workshops and community interactions will reinforce the bazaar's identity as a cultural hub, while capacity-building facil-

ities such as training rooms, resource hubs and co-working spaces will support long-term development. Restoration works may also be funded through grants, with donor acknowledgements incorporated as part of the rehabilitation narrative. In combination, these strategies create a sustainable financial model where profit generation, cultural vitality and preservation are interdependent, ensuring the resilience and longevity of Bazar Abbas. This financial framework, however, remains an initial proposal and will be further refined through ongoing studies and expert consultation.

| Pillar | Key Highlight on Spaces |
|--|--|
| Revenue-Generating Activities | Rentable artist stalls, cultural event spaces, handicraft shops. Establish a motel to accommodate visitors, integrating traditional architectural elements. |
| Intangible Heritage and Community Engagement | Spaces for performances, workshops, and community interactions. |
| Public-Private Partnerships (PPPs) | Sponsor-branded infrastructure (e.g., solar panels, utilities). |
| Capacity Building | Rooms for training, resource hubs, and co-working spaces. |
| Blended Finance | Spaces restored through grants with donor acknowledgments. |



Table 13.3 Financial Management strategy.

13.6 Discussion: Is community-centred design effective in the context of Bazar Abbas?

The study of Bazar Abbas demonstrates that community-centred design is both necessary and effective in contexts where heritage and daily life are inseparable and inextricably linked. The bazaar’s identity is strongly tied to its shop owners and users, whose memories, practices and traditions shape its character. Engaging with these groups have highlighted different capacities for adaptation: while some established owners were open to relocation or renovation, other smaller vendors resisted change due to their reliance on visibility and street access. Pilot interventions, such as the prototype cart for a fishmonger, proved that small, context-sensitive solutions can foster trust and encourage col-

laborations. This finding is consistent with similar experiences in Souq El-Silah in Cairo and the historic bazaars of Aleppo, where incremental interventions and strong stakeholder participation proved decisive for successful rehabilitation.

At the same time, the study makes clear that community participation alone cannot resolve all challenges. Structural deterioration, legal disputes over ownership and infrastructural deficiencies extend beyond the community's capacity to address them. These issues emphasize the need for technical expertise and regulatory frameworks to complement grassroots involvement. In this sense, community-centred design should not be understood as a stand-alone solution but as one component of a broader, cross-disciplinary approach that combines architectural conservation, legal clarity and financial planning.

The case of Bazar Abbas also raises questions about balancing heritage preservation with modern demands. While protecting authenticity is essential, the bazaar must also adapt to contemporary needs if it is to remain relevant and economically sustainable. The proposed introduction of new tenants, cultural event spaces and even a motel illustrates this tension: such additions could revitalise the space, but they could also undermine its historic atmosphere if they are not carefully managed.

13.7 Conclusion and Recommendations

The study of Bazar Abbas revealed that it embodies architectural value, social and economic networks, and cultural memory. Despite facing problems such as structural deterioration, poor management and inconsistent stakeholder involvement, the bazaar continues to demonstrate resilience, identity and a rich intangible heritage. The community-centred design approach has proved effective here, as it grounded the rehabilitation efforts in the local community's needs and values rather than relying on external solutions.

The research process, however, faced certain limitations. Observations were conducted over a short period, and as the research team were not residents of Port Said, their ability to fully capture the bazaar's rhythms and informal practices was constrained as a result. Furthermore, while initial management and financial frameworks were proposed, these require further exploration by experts in order to develop into a coherent long-term strategy.

Looking ahead, the rehabilitation of the Bazar Abbas should prior-

itise the following: (1) strengthening cross-disciplinary management structures, (2) establishing sustainable financial models that balance community benefit with economic viability, (3) formalising rules and regulations to reduce uncoordinated interventions, (4) enhancing cultural programming that celebrates intangible heritage, and (5) expanding stakeholder engagement through workshops and pilot projects.

References

- Abdelaal, S. (2021). *Historic buildings rehabilitation as a catalyst to reconcile urban segregation: A colonial narrative of Port Said's historic districts* [Unpublished Master's thesis, Alexandria University & Brandenburg University of Technology].
- AlSayyad, N. (2011). *Cairo: Histories of a city*. Harvard University Press. <https://doi.org/10.2307/j.ctt24hgpb8>
- Fahmy, K. (2025). How community engagement approach enhances heritage conservation: The case of Historic Cairo. *Sustainability*, 17(10), 4565. <https://doi.org/10.3390/su17104565>
- Kousa, C., Lubelli, B., & Pottgiesser, U. (2025). Enhancing community participation for the reconstruction of residential heritage in the Old City of Aleppo. *Heritage*, 8(8), 319. <https://doi.org/10.3390/heritage8080319>
- Pendlebury, J. (2013). Conservation values, the authorised heritage discourse and the conservation-planning assemblage. *International Journal of Heritage Studies*, 19(7), 709–727. <https://doi.org/10.1080/13527258.2012.700282>
- Pereira Roders, A. (2019). The historic urban landscape approach in action: Eight years later. In A. Pereira Roders & F. Bandarin (Eds.), *Reshaping urban conservation: Creativity, heritage and the city* (Vol. 2, pp. 21–61). Springer. https://doi.org/10.1007/978-981-10-8887-2_2
- Smith, L. (2006). *Uses of heritage*. Routledge.
- Sustainability Directory. (2025, November 11). *Why is community engagement important in heritage preservation?* Lifestyle & Sustainability Directory. <https://lifestyle.sustainability-directory.com/question/why-is-community-engagement-important-in-heritage-preservation/>
- UNESCO. (2011). *Recommendation on the historic urban landscape*. United Nations Educational, Scientific and Cultural Organization. <https://whc.unesco.org/en/hul>
- UNESCO. (n.d.). *Community-centred revitalisation of Souq al-Silah in Cairo*. UNESCO World Heritage Canopy. <https://whc.unesco.org/en/canopy/cairo/>
- United Cities and Local Governments. (2021). *Darb Al-Ahmar, Cairo: Revitalising heritage for community development*. https://uclg-cisdp.org/sites/default/files/observatory/files/2021-06/Cairo_EN.pdf
- Waterton, E., & Smith, L. (2010). The recognition and misrecognition of community heritage. *International Journal of Heritage Studies*, 16(1–2), 4–15. <https://doi.org/10.1080/13527250903441671>

Part IV

Beyond the Project

Broader Urban Futures

14. Reconnecting Port Said's Historic Core with the Waterfront

Cultural Continuity and Heritage-Led Regeneration

Raneem Saleh

Abstract

Port Said, a historic Mediterranean port city, embodies rich cultural and architectural values shaped by trade, migration and a cosmopolitan identity. However, decades of neglect, unplanned urban expansion and socio-economic decline have eroded both its physical and cultural fabric. One of the city's most pressing challenges is the growing disconnection between the historic core and the Mediterranean waterfront, which once served as Port Said's social heart and economic lifeline.

This study explores strategies to reintegrate Port Said's waterfront into the contemporary urban experience through cultural continuity, heritage preservation, and sustainable regeneration. Adopting a multi-scalar approach, the research identifies the city's tangible and intangible assets, analyses its urban morphology and examines the socio-cultural dynamics that shape its identity. Comparative insights from international case studies of successful waterfront revitalisation are used to inform best practices for reconnecting heritage cities with their maritime edges.

The proposed framework prioritises the activation of public-spaces, adaptive reuse of heritage structures and design interventions that respect historical authenticity while accommodating modern needs. Based on field research and participatory workshops conducted through the Bazar Abbas Recovery Lab both prior to and following the thesis research period, the framework reflects community aspirations for cultural reactivation and inclusive urban transformation. By positioning heritage as a catalyst for creative clusters, public spaces, and sustainable tourism, the study proposes a regeneration model that reimagines Port Said as a resilient and culturally vibrant Mediterranean city where history, culture and creativity converge along its waterfront.

Keywords: Port Said, cultural integrity, waterfront regeneration, heritage preservation, urban continuity

14.1 Problem Statement

- » Physical and cultural deterioration: The historic core of Port Said has suffered due to neglect, unplanned interventions and inconsistent conservation policies.
- » Disconnection from the waterfront: The Mediterranean coastline – once central to the city's identity – is now separated from the urban core by traffic-heavy infrastructure, privatisation and limited pedes-

trian access.

- » Loss of daily maritime interaction: The diminishing relationship between residents and the sea has weakened traditional practices such as fishing, crafts, and open public gatherings.
- » Threat to cultural continuity: Both tangible and intangible heritage are at risk, undermining prospects for sustainable and culturally rooted urban development.

14.2 Aim

To develop a strategic framework for reconnecting Port Said's historic core and waterfront while safeguarding its cultural integrity and promoting sustainable urban revitalisation.

14.3 Methodology

The study adopts a mixed-method qualitative approach, integrating spatial, social and cultural analysis to capture the multi-layered character of Port Said. Key methods include:

- » Field Surveys: Detailed mapping and photographic documentation of the historic core and waterfront were undertaken to assess morphological patterns, accessibility, and the condition of heritage assets.
- » Stakeholder Interviews: Semi-structured interviews with residents, shop owners, municipal representatives, and cultural practitioners provided insights into perceptions of identity, challenges, and aspirations.
- » Participatory Workshops: Conducted through the Bazar Abbas Recovery Lab, these workshops encouraged co-design, dialogue, and collaborative reflection between community members and researchers.
- » Cultural Asset Mapping: Tangible and intangible heritage elements such as architectural typologies, public spaces, cultural practices and social rituals – were catalogued to inform a holistic understanding of cultural integrity.
- » Case Study Analysis: International examples of waterfront regeneration were reviewed to extract adaptable lessons relevant to Port Said's context.

Together, these methods establish a comprehensive, participatory and interdisciplinary foundation for proposing a sustainable reconnection strategy between the historic core and the waterfront.

14.4 Introduction

Port Said occupies a strategic and symbolic position at the Mediterranean entrance of the Suez Canal, and its history reflects more than a century of cultural exchange, mobility and reinvention (Crosnier-Leconte et al., 2006; ElKerdany, 2017). From its emergence in the mid-19th century as a cosmopolitan settlement shaped by international labour and maritime trade, the city has continually adapted to cycles of expansion, conflict, reconstruction and shifting economic priorities (Ahmed, 2014). These transformations produced an urban landscape where global influences intersect with local traditions, creating a distinctive cultural and architectural identity (Crosnier-Leconte et al., 2006). Together, these tangible forms and intangible practices constitute what can be described as Port Said's cultural integrity: a blend of built fabric, social rituals, memories and everyday life patterns.

Despite this richness, the city today faces growing challenges. Accelerated development pressures, changing waterfront land uses and the decline of sea-related livelihoods have weakened the relationship between the historic centre and the Mediterranean coastline (Ahmed, 2014; Saleh, 2023). The waterfront, once a lively interface of movement, public life, and cultural expression, is increasingly detached from the daily rhythms of the inner city. This spatial separation has also produced a cultural one: many traditional activities – such as fishing practices, small-scale crafts, *Semsemia* music and open public gathering spaces – are at risk of marginalisation or transformation. As shown in Figure 14.1, Port Said's location at the intersection of the Suez Canal and the Mediterranean Sea underscores its historical significance as a global port city.

This paper builds on the author's master's thesis, which investigated how Port Said's cultural identity could inform efforts to revitalise the city. That research combined archival work, morphological analysis, participatory observation and community engagement to explore and understand how heritage – both tangible and intangible – continues to shape urban life. Collaboration with the Bazar Abbas Recovery Lab deepened this engagement by facilitating direct conversations with residents, shop owners, municipal officials and cultural practitioners (BTU Cottbus-Senftenberg, 2023; Saleh, 2023). These interactions provided insight into evolving aspirations, local challenges and the potential for the historic centre to become a catalyst for community-based regeneration.



Fig. 14.1 View of the Port Said Canal and the Mediterranean Sea. (Source: Khalid Abdel Rahman Facebook Page, 2020)

The core objective of the study is to explore how the historic core and the waterfront can be reconnected through a framework that places cultural integrity, public-space revitalisation and sustainable development at its centre. Instead of proposing a singular design solution, the study presents a multi-scalar vision – at the macro, mezzo and micro levels – that positions heritage as a driver of economic, social and cultural resilience. Ultimately, the objective is to restore continuity between Port Said’s historic core and its Mediterranean coastline while strengthening the city as a place where history, culture and urban life intersect.

14.5 Cultural Integrity and the Historic Core of Port Said

The identity of Port Said is inextricably linked to the interplay of its morphology, architectural heritage and living cultural practices. Understanding these layers is essential for framing a regeneration approach that protects, rather than erases, the city’s character. Each layer reveals how Port Said evolved through periods of cosmopolitan growth, conflict, reconstruction and economic transformation, all of which have shaped the lived experiences of its citizens (Crosnier-Leconte et al., 2006; ElKerdany, 2017; Sims, 2014). This section outlines the foundations of cultural integrity in Port Said, focusing on three interrelated

dimensions: urban morphology, architectural typologies and intangible heritage, along with the specific significance of the waterfront.

14.5.1 Urban Morphology

Port Said's urban form has been shaped by its strategic location on the Mediterranean and its role as the northern gateway to the Suez Canal. Since its foundation in 1859, the city developed on reclaimed land according to a structured grid, expanding incrementally as new waves of labourers, traders and foreign communities arrived.

By the mid-20th century, the city's spatial organisation clearly differentiated between its European core – defined by timber-framed buildings with decorative wooden façades and projecting balconies – and the denser Arab district with narrower streets and more vernacular building forms. The waterfront functioned as Port Said's social hub and spine, and its centre of leisure. Following the wars of 1956 and 1967, large portions of the city (particularly in the Al-Manakh district) were damaged. Reconstruction in the post-war era introduced new concrete building typologies that gradually altered the historic skyline and modified the relationship between the urban fabric and the sea.

The resulting morphology is a city where colonial-era orthogonal grids, post-war renewal zones and rapidly modernising waterfront strips coexist, yet often without any coherent integration. This fragmentation lies at the heart of the spatial and cultural disconnection addressed later in the paper.

14.5.2 Architectural Typologies

Port Said's architectural heritage reflects its hybrid cultural history. Early European quarters were characterised by timber-framed buildings with decorative wooden façades and projecting balconies, a typology that is also rare in Egypt today (Piaton, 2017). These structures, which are documented in historic photographs and fieldwork materials, embody the influences of the French, Italian, Greek, and Levantine communities that once shaped the local identity.

In parallel, the older Arab district features vernacular wooden houses, compact residential blocks and traditional commercial streets. Several surviving structures still offer a glimpse into Port Said's multi-cultural composition. However, the deterioration of the historic wooden buildings, combined with development pressures and limited preservation mechanisms, has accelerated the loss of this architectural

richness.

- » The thesis identified several typological clusters, including:
- » Mediterranean-front structures: Chalets, kiosks, cafés and promenades (Fig. 14.2 and 14.3).
- » Historic commercial cores: Bazar Abbas, the Old Fish Market and the adjacent streets.
- » Civic landmarks: Mosques, cultural houses and administrative buildings.
- » Residential typologies: Post-war concrete blocks that replaced destroyed wooden homes.

Understanding these typologies is critical to safeguarding the city's cultural and architectural integrity, as each one represents a specific historical layer tied to community memory.



Fig. 14.2 Port Said's beach in the 1950s. (Source: Khalid Abdel Rahman Facebook Page, published in 2017)



Fig. 14.3 Port Said's beach with the floating casino in the early 1950s. (Source: Khalid Abdel Rahman Facebook Page, published in 2017)

14.5.3 Intangible Dimensions

Beyond its physical form, Port Said's cultural integrity is shaped by its intangible heritage, including festivals, music, maritime traditions and everyday economic activities that sustain the city's identity.

Maritime and fishing practices have long been important to the local population. Photographs documenting fishermen repairing nets, *Bamboutia* boats, and seasonal fishing rituals illustrate how maritime culture continues to influence collective routines of the community along the waterfront (Abdelrahman, 2021). *Semsemia* music, another key cultural expression, echoes through community gatherings, performances and local narratives, as shown in Figures 14.4, 14.5 and 14.6. This music and its foretold stories serve as a carrier of memory and identity, linking generations and reinforcing a sense of belonging.

Public celebrations, including Sham El-Nessim and other annual festivities, have historically framed the streets, squares and beaches of Port Said. These occasions, alongside everyday interactions in markets, cafés and small workshops, anchor social life in shared rituals. Street markets such as the Old Fish Market, Bazar Street and various waterfront cafés form vital components of the socio-economic fabric. Operating not only as commercial hubs but also as spaces of social interaction and storytelling, where urban memory is continuously renewed.



Fig. 14.4 (Left) *Bamboutia* ships in 1996. (Source: Khalid Abdelrahman Facebook Page, 2021)



Fig. 14.5 (Middle) Fishing men at work. (Photo: Waleed Montasser, 2009)



Fig. 14.6 (Right) *Semsemia* mock-ups. (Source: Al Toratheya Cultural centre Facebook Page, 2020)

14.5.4 Significance of the Waterfront

The waterfront has always been central to Port Said's cultural narrative. Historically, it functioned as the city's interface with the wider world – a place where traders arrived, communities socialised. Photographs from the 1950s and 1960s depict lively beaches, floating chalets, recreational plots, and public events that reinforced the city's Mediterranean identity.

Today, this role is under pressure. Privatisation trends, fragmented access points and infrastructural barriers have weakened the connection between people and the sea. As a result, cultural practices which were once closely tied to the waterfront are now becoming less visible in everyday life. Reconnecting the waterfront to the historic core is therefore not only a spatial objective but also a cultural imperative.

An aerial view (Fig. 14.7) illustrates how Port Said's city fabric evolved along its waterfront.



Fig. 14.7 An aerial view showing the evolution of Port Said. (Source: Adapted by Author from Egyptianstreets.com, 2023)

14.6 Conditions and Challenges: Disconnection Between the Waterfront and Historic Core

Despite its rich cultural layers and strong local identity, Port Said's urban fabric is marked by fragmentation. The disconnection between the historic core and the Mediterranean waterfront has become one of the city's key challenges. Today, that relationship is strained by infrastructural barriers, changing land uses and socio-economic shifts.

This section analyses the conditions that have produced this disconnect at both macro and mezzo scales, summarising the main challenges affecting Port Said's cultural integrity. The analysis is based on maps, surveys and field observations carried out during the study.

14.6.1 Macro-Scale: Morphology, Mobility Barriers, and Urban Expansion

At the macro scale, Port Said's original waterfront was once physically and visually accessible, functioning as a direct extension of the historic grid. Several factors have disrupted this continuity:

- » Infrastructure acts as a physical barrier: Major roadways now act as vehicular barriers that are severing pedestrian access to the sea. While these corridors facilitate movement, their scale and level of traffic intensity create a hard edge between the city and its waterfront.
- » Post-war reconstruction and infill development: Following the destruction of large districts during the conflicts of the 1950s and 1960s, reconstruction replaced many older, permeable urban forms

with concrete block buildings. These interventions altered the urban morphology that had once seamlessly connected the city to its shoreline.

- » Privatisation of coastal segments: Beach concessions, fenced resorts and restricted-access recreation zones occupy long stretches of the waterfront, limiting public access and weakening the socio-cultural rituals that are traditionally associated with the Mediterranean coast.

The result is a waterfront that is geographically close to the city centre yet is still very distant from the everyday life of the city's historic core.

14.6.2 Mezzo-Scale: Neighbourhood Structure, Public Realm, and Heritage Values

At the neighbourhood (mezzo) scale, the research highlights disparities in land use, public space quality and heritage conditions along three main urban trails that run from the city to the sea:

- » Trail 1: Mansheya Square (in the historic core) to the waterfront.
- » Trail 2: Mohamed Aly Street to the waterfront.
- » Trail 3: The Old Fish Market area to the waterfront.

These trails reveal several issues:

- » Fragmented land-use patterns: Commercial activities remain concentrated in the historic core, while recreational functions are clustered near the waterfront. Cultural assets exist in both areas, but they are not linked in a way that encourages movement between them, which limits the potential for cross-visitations.
- » Weak pedestrian connectivity: Streets leading from the inner city to the sea often lack clear signage, shading or continuous sidewalks. Interruptions in the urban fabric – such as vacant lots or fenced properties – discourage walkability and make the route to the waterfront less legible.
- » Deteriorating heritage buildings: Numerous wooden structures and historical houses, especially those near the waterfront edge, are in decline. Their deterioration contributes to disinvestment in adjacent areas and diminishes the vibrancy of the transitional zone between the city and the sea.
- » Underutilised public spaces: Plazas, small gardens, and sections of the seaside promenade are disconnected from one another, resulting in isolated pockets of activity rather than a continuous network

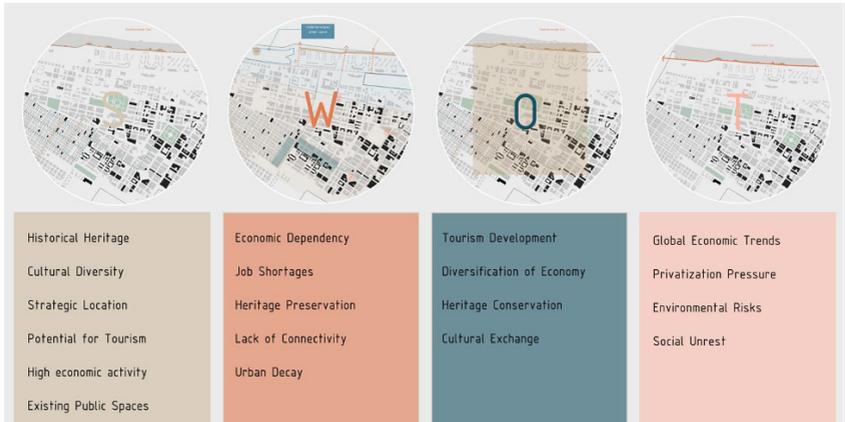


Fig. 14.9 SWOT analysis. (Source: Author, 2023)

defined the city's relationship with the sea. Drawing from the thesis's proposed revitalisation plan (with its multi-scalar goals and design guidelines), the projected framework positions heritage as a catalyst for creativity, public engagement and sustainable development. It also incorporates insights gained through fieldwork, stakeholder interviews and collaborative work with the Bazar Abbas Recovery Lab.

This section presents the vision and the four key pillars of the framework – addressing macro, mezzo and micro, as well as governance aspects – and sets out a range of strategies that together form a holistic approach to reconnecting Port Said's spatial fabric with its cultural identity.

14.7.1 Vision

The vision is to re-establish the waterfront as a cultural and public spine that links the historic urban fabric, commercial corridors and neighbourhood trails. The waterfront will become an anchor where heritage, creativity, and community life converge. This vision aims to:

- » Celebrate Port Said's Mediterranean identity, cosmopolitan history and everyday social rituals.
- » Create a continuous cultural and touristic path connecting markets, heritage buildings and public spaces to the sea.
- » Activate the waterfront as a space of inclusion, cultural expression and local economic opportunity.
- » Strengthen public–private collaboration in ways that sustain revitalisation efforts while safeguarding public access and cultural values

The intention is not to give the city a physical facelift, but rather to carefully initiate a cultural reactivation based on Port Said's histories, memories and living practices.

14.7.2 Pillar 1 – Macro-Scale Strategies: Reconnecting the Historic Core to the Mediterranean Front

At the macro scale, the objective is to restore both structural and visual continuity between the city grid and the Mediterranean waterfront. This requires overcoming mobility barriers, improving public accessibility and reimagining the waterfront as a seamless extension and an integral part of the urban core.

A) Improve Physical Connectivity

- » Create visual corridors from major streets towards the sea, re-opening important sight lines.
- » Introduce safe, continuous pedestrian and cycling routes, including pedestrian-priority streets, to encourage active movement between the core and the waterfront.
- » Enhance sidewalks and crossings along key routes by improving pavement quality, adding shade and street furniture, installing clear signage and providing safe road crossings. These measures make the journey to the waterfront more accessible and inviting for all users.

B) Ensure Environmental and Climate Resilience

- » Incorporate soft coastal edges with ecological buffers, salt-tolerant landscaping, and other nature-based solutions to protect against erosion and enhance the waterfront's natural appeal.
- » Plan for climate adaptation: Develop design responses against sea-level rise and seasonal flooding to ensure the long-term resilience of the waterfront infrastructure.

These strategies align with the macro-scale guidelines of the thesis, which prioritises an accessible, resilient and culturally focused waterfront.

14.7.3 Pillar 2 – Mezzo-Scale Strategies: Interconnected Urban Trails and Cultural Nodes

At the mezzo scale, the framework proposes a network of intercon-

nected cultural trails, each highlighting the noteworthy urban nodes, historic landmarks and socio-cultural sites in Port Said. These trails bring together related activities and create pathways that reveal the city's layered identity. They are intended to:

- » Showcase architectural diversity and cultural hotspots.
- » Link traditional markets and civic spaces with the waterfront.
- » Enhance neighbourhood walkability through better wayfinding and amenities.
- » Support cultural tourism and local engagement by guiding visitors through authentic urban experiences.

Together, the trails reinforce the identity of the historic centre while improving the everyday life for residents.

A) Historical and Cultural Trail

This trail links key heritage buildings to corresponding points along the waterfront. Its objectives are:

- » Highlight the city's architectural diversity and historical layers through restored facades and informative boards.
- » Introduce interpretive signage and storytelling elements that share the history of each landmark and its role in Port Said's development.
- » Encourage walking tours and educational programmes that engage both locals and visitors with the city's heritage.

Figures 14.10 and 14.11 provide a collage and a guideline map illustrating the proposed interventions along the trail.

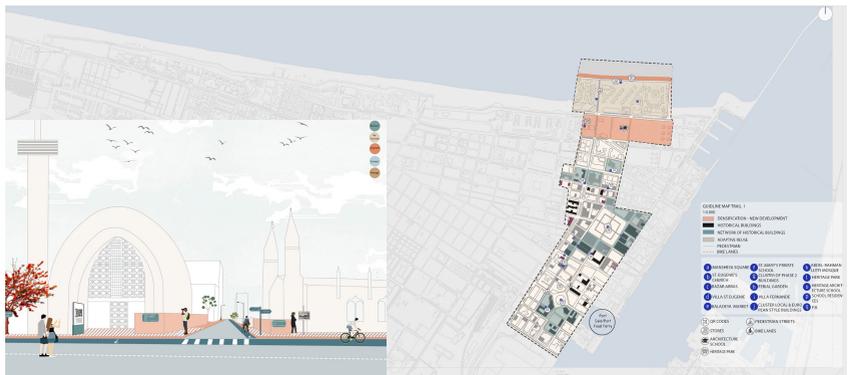


Fig. 14.10 Collage in front of historical buildings. **Fig. 14.11** Trail 1 guideline map. (Source: Author, 2023)
(Source: Author, 2023)

B) Commerce and Culture Trail

This trail connects the bustling Mohamed Aly Street and the other commercial streets in the historic city core directly to the Mediterranean waterfront. Its objectives are:

- » Strengthen local economic activity by improving the link between marketplace districts and waterfront visitors.
- » Implement coherent shopfront design guidelines and streetscape improvements to enhance the aesthetic continuity from the bazaar to the sea.
- » Support crafts, small businesses and street vendors by providing them with dedicated spaces or periodic markets along the route, blending commercial vitality with cultural exchange.
- » Revitalising existing shops through new proposed activities instead of letting them fall into disuse due to economic decline.

Figure 14.12 provides a visualisation of the proposed revitalisation of shops on Mohamed Aly Street, while Figure 14.13 shows the guideline map for Trail 2.



Fig. 14.12 After collage of shops in Mohamed Aly Street. (Source: Author, 2023)

Fig. 14.13 Trail 2 guideline map. (Source: Author, 2023)

C) Fishing and Maritime Culture Trail

This trail runs from the fishermen's harbour and the Old Fish Market. It then passes through adjacent historic streets before reaching a section of the waterfront that showcases *Bamboutia* (local fishing boat) traditions. Its objectives are:

- » Highlight maritime practices and their spatial settings, for instance by creating small open-air exhibits of fishing boats, net-mending stations, or storytelling signage about fishing lore and its traditions.

- » Improved wayfinding and visual cues to guide people from inland streets towards the sea (e.g. signage, art installations, or sightline markers).
- » Removal of unnecessary fences or barriers that restrict movement or views, thereby opening up blocked waterfront sections for public use.
- » Greening of connector routes, along with providing shaded resting points and seating, to make the walk to the waterfront more comfortable.
- » Adaptive reuse projects that convert underused or historic buildings along the waterfront into cultural cafés, craft workshops, community exhibition spaces, or other creative hubs – bringing neglected structures back to life and attracting people to these areas.

These interventions support the broader ‘Recover – Connect – Refunction – Upgrade – Manage’ strategy, ensuring that changes are incremental yet meaningful, and demonstrating tangible success early in the process of revitalisation.

B) Introducing Mixed-Use Development for Economic Viability

Alongside public-space improvements, carefully located mixed-use developments along selected waterfront areas can help to diversify and strengthen the local economy. By sensitively integrating residential, commercial, recreational and educational functions in a sensitive way, these developments can support long-term urban vibrancy and economic sustainability. Notably, any new development must remain compatible with heritage conservation and public-access goals – for example, new buildings should respect historic scale and character and incorporate public services or cultural venues at ground level. Such mixed-use nodes can generate foot traffic and provide the funding or services needed to maintain adjacent public spaces.

14.7.5 Pillar 4 – Governance and Community Participation

Lasting urban regeneration depends on supportive institutions, community ownership, and sustainable financing. The thesis emphasises that Port Said’s revitalisation must extend beyond physical design to encompass governance reform and participatory planning. Key approaches include:

- » Multi-stakeholder governance: Establish a collaborative management model involving local government authorities, cultural

institutions, shopkeepers, fishermen's associations, youth groups and heritage experts in shared decision-making. This diverse representation helps ensure that multiple perspectives guide the project.

- » Public–Private Partnerships (PPPs): Leverage responsible PPPs to provide resources for heritage rehabilitation, waterfront maintenance, cultural programming and small business support. These partnerships should operate under clear safeguards to preserve public access and cultural values, avoiding exclusionary or purely profit-driven outcomes.
- » Community-centred development: Actively involve residents in defining priorities through participatory mapping, co-design workshops, public forums and cultural events. This approach allows Local knowledge and feedback to direct efforts towards projects that reinforce community identity and address on-the-ground local needs.

The sustainable revitalisation of Port Said is far more likely to succeed if it is community-led rather than driven solely by top-down decisions or external investors.

14.8 Conclusion

This study had set out to explore how Port Said's cultural integrity could support and underpin efforts to reconnect the historic core with its Mediterranean waterfront. Adopting a multi-scalar approach, the research demonstrates that the city's tangible and intangible heritage can provide a living framework for sustainable regeneration. The waterfront – once the city's social and cultural spine – has become increasingly detached from everyday life due to physical barriers, fragmented development and the decline of traditional practices linked to the sea. Restoring this connection requires more than physical redesign; it demands a holistic strategy that recognises the city's layered identity, strengthens cultural continuity and puts the community's experience at the centre.

The proposed framework, which encompasses macro, mezzo, micro and governance dimensions, offers an integrated approach to revitalisation. By positioning the waterfront as a cultural public realm, introducing thematic urban trails, reactivating historic structures and promoting inclusive governance, the strategy aims to generate a sustained impact. This approach aligns with the objectives of the Bazar Abbas Recovery Lab, providing methodological tools, cultural insights

and strategic directions to complement the ongoing work in Port Said's historic centre.

Ultimately, this study argues that heritage can serve as a catalyst for creative, inclusive, and economically viable urban futures. Engaging with maritime traditions, architectural diversity, local industries, and cultural expressions, can help Port Said to reinforce its position as a Mediterranean city where historical layers and contemporary life coexist. The framework presented here is a step towards this vision – one that is rooted in authenticity, community empowerment and the enduring spirit of Port Said.

14. 9 Limitations and Future Research

This research was conducted within a six-month timeframe, which limited the depth of the field data collected. While the interviews, surveys and observational studies provided valuable insights, the sample of participants does not reflect the full diversity of Port Said's communities. The findings therefore reflect the perspectives of these participants and cannot be considered representative of all residents. Future research can address these limitations and broaden the scope of investigation in several directions:

- » Equity and social inclusion analysis: A focused assessment is needed to understand the impact of revitalisation efforts on different socio-economic groups, in order to prevent cultural displacement and ensure a fair distribution of benefits.
- » Economic viability studies: Further work should evaluate the long-term financial sustainability of proposed projects, their job-creation potential, and their broader economic impact, particularly with regard to cultural tourism and creative industries.
- » Cultural and historical documentation: Continued documentation of architectural heritage, maritime traditions, and folkloric practices is important. Interactive public platforms (such as digital archives, story maps, or oral history projects) could help engage the community and disseminate this cultural knowledge.
- » Public–Private Partnership (PPP) frameworks: Development of legal and financial guidelines is necessary to support the effective and equitable implementation of PPPs. Such frameworks must prioritise public access, cultural protection and transparent governance to be successful.
- » Environmental impact assessment: Given Port Said's coastal loca-

tion, climate resilience must remain a central concern. Research into projected sea-level rise, coastal erosion and ecological sustainability in relation to waterfront development will be particularly relevant for long-term planning.

- » Cultural exchange and education programmes: Initiatives that foster cultural dialogue, support creative industries and integrate heritage education (especially for youth) can reinforce local identity while building international connections.
- » Expansion of pilot corridors: Integrating Palestine Road and the Suez Canal Promenade into future regeneration plans is crucial, given their strategic roles in mobility, public access and cultural activation. These corridors could significantly extend the reach and impact of the proposed trail network in connecting the city's fabric to its waterfront.

References

- Ahmed, N. I. (2014, August 13). *Port Said: Egypt's forgotten treasure*. Egyptian Streets. <https://egyptianstreets.com/2014/08/13/port-said-egypts-forgotten-treasure/>
- BTU Cottbus-Senftenberg. (2023). *Bazar Abbas: Recovery Lab of Port Said*. Middle East Cooperation Unit. <https://www.b-tu.de/middle-east-cooperation/joint-activities/cooperation-projects/bazar-abbas-2023-25>
- Crosnier-Leconte, M.-L., Ghitani, G., & Amin, N. (2006). *Port-Saïd architectures XIXe—XXe siècles*. IFAO.
- ElKerdany, D. (2017). Port Said: A cosmopolitan heritage under threat. In H. Abouelfadl, D. ElKerdany, & O. Wanas (Eds.), *Revitalizing city districts: Transformation partnership for urban design and architecture in historic city districts* (pp. 15–33). Springer. https://doi.org/10.1007/978-3-319-46289-9_2
- Piaton, C. (2017). Port Said: Cosmopolitan urban rules and architecture (1858–1930). In H. Abouelfadl, D. ElKerdany, & O. Wanas (Eds.), *Revitalizing city districts: Transformation partnership for urban design and architecture in historic city districts* (pp. 3–14). Springer. https://doi.org/10.1007/978-3-319-46289-9_1
- Saleh, R. (2023). *Port Said's cultural integrity: Weaving history, culture, and creativity along the Mediterranean front* [Unpublished Master's thesis, Alexandria University & Brandenburg University of Technology].
- Sims, D. (2014). *Egypt's desert dreams: Development or disaster?* The American University in Cairo Press.

15. Port Said's World Heritage Potential

An Approach to Holistic Urban Rehabilitation

Toka Abufarag

Abstract

This paper explores the potential of Port Said, Egypt, for inscription as a UNESCO World Heritage property by taking a holistic approach towards its urban rehabilitation. The research focuses on integrating the city's historical essence with contemporary urban planning and sustainable development principles. The study employs a qualitative methodology, utilising semi-structured interviews, focus groups and case studies to collect data. The findings reveal that Port Said's rich history of cultural exchange and its layered urban fabric present a unique opportunity for urban rehabilitation that honours its heritage while fostering modern growth. The result is a proposed framework inspired by UNESCO's three-step operational guidelines, which emphasises heritage identification, analysis and management. This framework aims to revitalise Port Said by blending its historic identity with functional modernisation and leveraging its maritime past for sustainable urban development. However, this research further identifies key challenges such as time constraints, access limitations and the absence of a comprehensive management plan, which may impact the implementation of the proposed strategies. Nevertheless, this study contributes to the broader discourse on urban heritage preservation and provides actionable insights for the revitalisation of Port Said and potentially guiding its future development and recognition as a World Heritage Site.

Keywords: Port Said, UNESCO World Heritage List, urban rehabilitation, sustainable development, cultural heritage preservation

15.1 Introduction

Port Said is a nineteenth-century canal city founded in 1859, whose identity has been shaped by continuous maritime exchange and cross-cultural encounters. Its urban character is expressed through the canal-facing infrastructure, the planned grid, and a layered urban fabric that records successive phases of growth, alongside living cultural practices and collective memory. However, in recent decades, development pressures and physical deterioration have reduced the visibility of this historic character, raising concerns about the gradual weakening of the city's distinct identity within contemporary planning. This study therefore treats Port Said's modern heritage as a resource for development rather than a constraint. This approach is especially relevant in Egypt, where heritage recognition often focuses on ancient

or medieval contexts, leaving nineteenth- and early twentieth-century urban histories less systematically addressed. The recent expansion of the Suez Canal has further exacerbated this issue. The study is grounded in the understanding that Port Said's heritage value does not reside only in its physical fabric. It is also shaped by intangible cultural patterns, collective memory, and long-standing social practices that have evolved over decades of exchange, leading to the longer-term ambition of achieving World Heritage status. Following UNESCO's operational guidelines, the research aims to identify attributes that could support a future Statement of Outstanding Universal Value, assess current conditions by taking a holistic reading of the tangible and intangible layers, and propose structured guidelines to inform a wider rehabilitation masterplan and subsequent in-depth studies.

15.2 Methodology

This study takes a qualitative approach, adopting an inductive logic that aligns with the three-step operational sequence set out by UNESCO. The work focuses on steps one and two, providing a brief set of intervention guidelines. The analysis draws on secondary materials, such as previously documented interviews and focus groups, as well as existing case studies, cartography, and literature on historical and urban heritage. The findings are synthesised through maps, diagrams, and photographs, which are supported by concise interpretations that connect spatial patterns with cultural meaning. Limitations include time constraints, restricted access to certain areas, limited engagement with governance structures, and the absence of fully participatory processes. Rather than producing a nomination file or a complete management plan, this study is intended to lay the groundwork for more participatory work in the future.

15.3 Theoretical Foundation

Urban heritage rehabilitation is framed by the notion of the city as a layered cultural and spatial construct, in which urbanity links social life, historical development, spatial form, and political conditions (Baum, 2008). Perception of the city and its sense of coherence are shaped by paths, edges, districts, nodes, and landmarks (Lynch, 1960). In this context, heritage is considered to be both tangible and intangible, comprising monuments and ensembles that interact with the practices, expressions, and knowledge transmitted by communities over

time (UNESCO, 1972; UNESCO, 2003). Historic urban landscapes expand upon this concept by also including natural features, topography, and environmental context alongside the built fabric (UNESCO, 1976; UNESCO, 2011).

Rehabilitation addresses how historic areas can remain liveable and functional without erasing their significance. It combines repair and adaptation with careful change of use where appropriate (Petzet, 2009). It is also shaped by the fact that historic districts are inhabited, and economically active places, where the continuity of use and social life is as important as physical conservation (Steinberg, 1996; Smith, 2006; Rodwell, 2007).

To operationalise a holistic diagnosis, Wladika's characterisation framework distinguishes between four dimensions: tangible, intangible, combined and governance-related. These dimensions are then linked to urbanisation and social, economic, functional, cultural, identity, stakeholder and legal elements (Wladika, 2015). UNESCO's operational guidelines emphasise the identification, protection and management of attributes, integrity and authenticity ((UNESCO World Heritage Centre 2023), which are supported by conservation principles and debates surrounding authenticity in key charters (ICOMOS, 1964; 1994). Holistic urban analysis also draws on systems thinking, multidisciplinary evidence and case study logic (Batty, 2013; Denzin & Lincoln, 2011; Longley et al., 2015; Yin, 2009). In practice, rehabilitation strategies may combine adaptive reuse, façade improvement, legal protection, public-private partnerships and culture-led regeneration in order to align conservation with contemporary development (Cantell, 2005; Pickard, 2001; Rypkema, 2005; Radoine, 2008; Macdonald & Cheong, 2014; Aksoy & Robins, 2011).

15.4 Overview of Port Said

Situated at the northern entrance of the Suez Canal on Egypt's north-eastern Mediterranean coast, Port Said is a compact maritime gateway where canal traffic, logistics and urban life are tightly intertwined (Sims, 2012). Along with Port Fouad, it constitutes an urban governorate that has developed outward from the waterfront and canal interface rather than from an inland core (Fahmy & Urban Regeneration for Historic Cairo (URHC) Team, 2013; Sims, 2012).

The city's built fabric records successive phases of construction. Early development relied heavily on imported materials and lightweight

structures adapted to the sandy ground. These were supported by technical innovations that were used for port infrastructure and landmark buildings (Baedeker, 1914; Balle, 2017; Crosnier-Leconte et al., 2006; ElKerdany, 2017). As canal activity expanded, the grid expanded too, with mixed residential and commercial blocks adopting masonry bases with timber verandas, galleries and distinctive carpentry, which together shaped a recognisable Mediterranean architectural style (Crosnier-Leconte et al., 2006; ElKerdany, 2017; Wladika, 2015). Conflicts in the mid-twentieth century introduced loss and piecemeal rebuilding, followed by post-war policies and free zone dynamics that accelerated construction using reinforced concrete and allowing for greater height variation (ElKady, 2002; Wladika, 2015). More recent high-rise development has intensified the contrast between streetscapes featuring early timber balconies and newer concrete forms (ElKady, 2002; Wladika, 2015).

Port Said's identity is sustained by cultural practices that operate as a form of social memory and everyday solidarity. These include Sem-semia music, the *Allenby* Show and informal street gatherings (El Kady, 2002). However, governance and decision-making involve overlapping municipal, governorate, national, canal-related, heritage, private and civic actors, and fragmented mandates and legal and administrative complexity can hinder coordinated rehabilitation (Elsorady, 2011; Fahmy & URHC Team, 2013; Wladika, 2015).

15.5 Step 1: Identification of Urban Heritage

The identification phase establishes what constitutes as the urban heritage of Port Said and Port Fouad and why it may be eligible for global recognition. Following UNESCO's first operational steps, this phase defines the serial heritage components, sets out a potential statement of Outstanding Universal Value and assesses the authenticity and integrity of the property. This phase also lays the groundwork for the subsequent state of conservation analysis by clarifying the spatial boundaries of the area under consideration.

15.5.1 Heritage Components of Port Said and Port Fouad

This study conceives the heritage property as a serial ensemble (Fig. 15.1), comprising several urban components in both Port Said and Port Fouad. In Port Said, the focus is placed on the historic Al-Afrang district and its interface with Al-Arab, including the ferry area, Misr Plaza, Ferial

Garden, the markets and the transition zone between the Al-Afrang and Al-Arab districts. In Port Fouad, the identified components include parts of the remaining historic residential fabric and the historic Suez Canal Authority workshops along the waterfront. These areas were selected because they concentrate historic buildings, characteristic urban spaces and cultural practices which, together, express the city's maritime and cosmopolitan identity.

The boundaries of the serial heritage sites and their buffer zone were first delineated through a holistic analysis, which is further elaborated on in the state of conservation maps, in addition to the historic attributes that have been studied in the earlier chapters. The buffer zone follows the administrative districts of Al-Afrang, Al-Arab and Al-Manakh, as well as the city of Port Fouad, recognising that the value of the core components depends on their relationship to the wider urban context. In Port Said, the heritage area is defined by major streets such as El Shabab, Mustafa Kamel, Palestine, Tarh El Bahr and 23rd of July, as well as the long-standing internal boundaries between Al-Afrang, Al-Arab and Al-Manakh. Similarly, in Port Fouad, the harbour and workshop area are defined by key streets marking the historic edge of the canal front. Within this broader framework, Port Said is treated as the primary focus for rehabilitation because of the complexity of ownership and use of land parcels, while Port Fouad's heritage is considered in a more targeted manner, given that much of it remains under the Suez Canal Authority.

| Id n° | Name of the component | District | Coordinates of the Central Point | Area of Heritage Property (ha) |
|-------------------|-----------------------------------|---------------------|---|--------------------------------|
| 01 | Port Said Ferry Site | Al-Afrang | Latitude: 31° 15' 31.50" Longitude: 32° 18' 31.60" | 13.79 |
| 02 | Port Said Saha Misr (Misr Plaza) | Al-Afrang | Latitude: 31° 15' 54.79" Longitude: 32° 18' 48.76" | 9.17 |
| 03 | Port Fouad Ferry | Port Fouad | Latitude: 31° 15' 9.39" Longitude: 32° 18' 50.68" | 23.67 |
| 04 | Port Said Ferial Garden & Markets | Al-Afrang | Latitude: 31° 15' 51.15" Longitude: 32° 18' 31.77" | 23.89 |
| 05 | Port Said Arab - Afrang | Al-Arab & Al-Afrang | Latitude: 31° 15' 49.50" Longitude: 32° 18' 2.61" | 4.94 |
| 06 | Port Fouad Historic Workshops | Port Fouad | Latitude: 31° 15' 29.34" Longitude: 32° 19' 16.24" | 40.06 |
| Total Area | | | | 115.52 |

Table 15.1 Heritage components of Port Said and Port Fouad. (Source: Author, 2025, based on Google Earth data)

On this spatial basis, the research moves to articulate a potential Outstanding Universal Value that reflects the role of Port Said and Port Fouad as canal cities, which were shaped by cross-continental exchange and colonial-era planning.

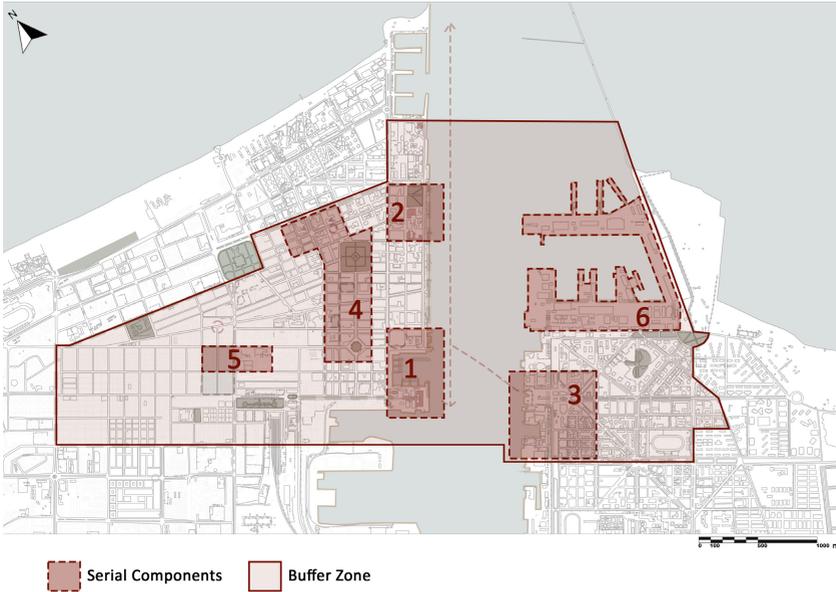


Fig. 15.1 Heritage components in Port Said. (Drawing: Author, 2025)

15.5.2 Outstanding Universal Value (OUV)

The urban heritage of Port Said and Port Fouad forms a coherent ensemble of building groups whose significance is inseparable from the distinctive landscape created by the Suez Canal (UNESCO, 2023). Together, the two canal cities demonstrate how colonial planning, port infrastructure, and sustained flows of people and goods generated an urban environment shaped by early modern global maritime networks. Their nineteenth and early twentieth century development records a formative period when the eastern Mediterranean was reconfigured through intensified connections between Europe, Africa, and Asia.

The proposed OUV is grounded in the exceptional capacity of Port Said and Port Fouad to document this early phase of cross continental exchange through a man-made navigation route. Few comparable urban centres reveal such a direct intersection of layered cultural influences, maritime functionality, and a spatial structure conditioned by

the canal. Beyond enabling shipping, the canal acted as a medium of continuous cultural interaction, with visible effects on urban layout, architectural expression, and the everyday practices through which residents negotiated and localised global influences. In this light, the heritage may relate principally to:

- » Criterion ii: The historic centre of Port Said offers an outstanding example of an urban landscape shaped by cultural interaction and the early patterns of global maritime trade between Europe, Africa, and Asia. These transformations became possible through the construction of the Suez Canal, which introduced new planning ideas, new populations and new forms of commercial activity. The city's layout reflects the influence of French urban design in the local Al-Afrang and Al-Arab contexts, while its buildings demonstrate how imported architectural ideas were adapted to the climate, material availability, and social life. The canal itself functions as both a physical boundary and a cultural link between continents, embodying the broader networks of exchange that shaped the city's identity.
- » Criterion vi: The endurance of Port Said's cultural traditions provides living testimony to the resilience and collective memory of its inhabitants. Folkloric practices such as *Semsemia* music, the annual *Allenby* performance, and local street football gatherings remain deeply embedded in the city's social life. These expressions are not merely cultural activities; they document historic experiences, articulate forms of resistance and sustain communal identity across generations. Their continued presence in the public realm underscores the city's long standing engagement with political events and its ability to transform them into locally meaningful cultural forms.

Together, these criteria emphasise the combined significance of the built fabric, the canal setting, and living cultural practices as an integrated heritage system.

15.5.3 Authenticity

Port Said retains a high degree of authenticity in terms of both its urban form and architectural character. Founded alongside Ismailia and Suez during the colonial period, the city clearly shows the influence of European planning models on its early development (El Amrousi, 2012). Its orthogonal grid, waterfront gardens and organised street hierarchy reflect 19th-century urbanism and the functional principles associated with the Beaux-Arts tradition. These features have been adapted to

suit local needs, climate and construction methods, rather than being transplanted wholesale.

This authenticity is reinforced by a distinctive architectural style in which European and Mediterranean architectural elements were reinterpreted within an Egyptian coastal context. Multi-storey buildings with wooden verandas (*taracinas*), projecting balconies and Mediterranean motifs remain widespread in the historic districts, enabling the physical environment to convey the layered cultural influences that shaped the city's development (Piaton, 2011; Crosnier Leconte, 2006). The persistence of the urban grid and the characteristic wooden verandas and residential blocks, as well as their continued capacity to convey a sense of hybrid identity, demonstrate the authenticity of the canal city landscape.

15.5.4 Integrity

The integrity of Port Said's urban heritage has been safeguarded by long-standing planning regulations governing building height, form and land use. These regulations have helped to maintain a consistent streetscape and architectural rhythm (Crosnier Leconte, 2006). This has enabled the historic districts of Al-Afrang and Al-Arab to retain their coherence despite incorporating varied influences from Greek, Italian and local Egyptian builders (Khaled, 2012; El Amrousi, 2012). Integrity is also evident in the chronological layering of the urban fabric, which remains legible as a record of major historical events with regional and international implications.

At the same time, integrity is increasingly being challenged by deterioration, redevelopment pressures and environmental risks. These vulnerabilities underscore the need for timely protection and rehabilitation measures to maintain the character and continuity of the historic environment, and ensure its architectural, cultural and historical values remain legible. Accordingly, the identification phase recommends a detailed assessment of conservation conditions within the defined areas, linking heritage significance to a future rehabilitation strategy.

15.6 Step 2: State of Conservation and Analysis

This step represents the core analytical stage of the UNESCO operational sequence and forms the foundation for defining appropriate intervention zones. The approach relies on layering multiple scales of analysis to identify where Port Said's heritage values, vulnerabilities

and opportunities converge. These layered evaluations lead to a set of potential intervention zones, which are then subject to focused, in-depth assessments that outline the specific qualities each zone can offer to a future rehabilitation and management plan. The analysis begins with a set of city-scale maps examining Port Said's physical, historical, and functional structure. These maps are then complemented by a cultural exchange layer that highlights elements of tangible and intangible significance. Together, these layers will inform the selection of potential zones. The final section consolidates the findings into a summary of site qualities that can guide future design and management strategies.

15.6.1 City Scale Analysis

A) Building Age

Figure 15.2 summarises the key phases of architectural development. The earliest concentration occurred in Al-Afrang and Al-Arab from 1891 to 1919. In Al-Afrang, multi-storey masonry and timber buildings often featured elevated bases and detailed interior finishes. In contrast, Al-Arab developed a denser fabric with strong climatic adaptations, such as enclosed balconies and layered timber façades (Crosnier Leconte, 2006; Piaton, 2011). Reinforced concrete became more common in the 1920s and 1930s, during which time Art Deco expression appeared. This was later complemented by forms that referenced Islamic motifs (Crosnier Leconte, 2006; Megahed, 2014). Of the 620 heritage buildings identified, most date to the period from 1891 to 1919 and the 1920s, with a smaller number dating to the 1930s (Crosnier Leconte, 2006).

B) Morphology

Figure 15.3 shows the morphology of Port Said, which is characterised by a structured grid shaped by the canal gateway and key streets that define coastal and heritage precincts. Palestine Street forms a historic boundary and is anchored by the lighthouse, which is a primary landmark (Wladika, 2015). Al-Afrang offers a clearer sequence of public spaces and monumental buildings, whereas the market streets of Al-Arab create denser circulation patterns that are less formally legible (Wladika, 2015).

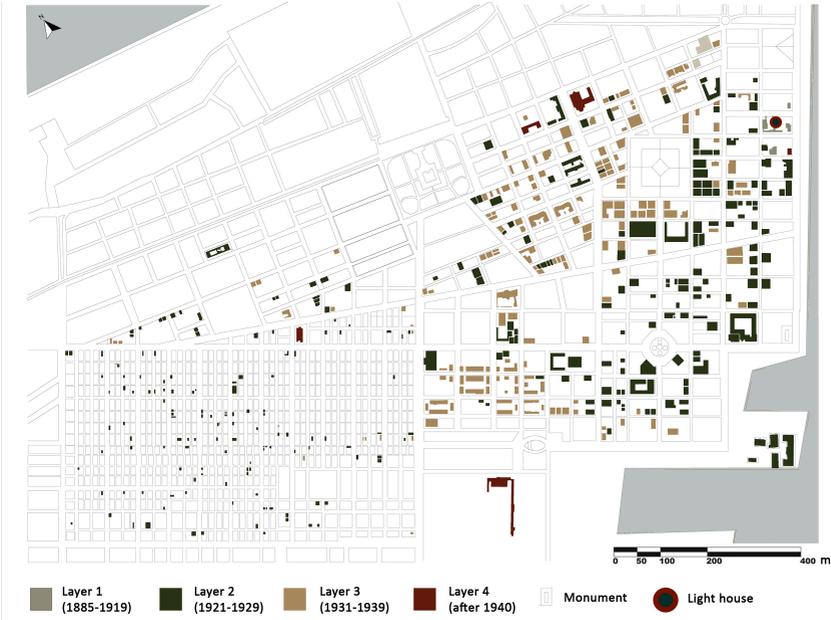


Fig. 15.2 Building age map. (Drawing: Author, 2025, adapted from Wladika, 2015)



Fig. 15.3 Morphology map. (Drawing: Author, 2025, adapted from Wladika, 2015)

The ferry at the southern end of Palestine Street remains a critical link to Port Fouad, but the resulting traffic has reduced pedestrian comfort through the removal of sidewalks and trees (Wladika, 2015).

C) Building Heights and Urban Tissue

Figure 15.4 illustrates a generally coherent height pattern, featuring larger plots and four- to five-storey buildings in Al-Afrang, and smaller plots and predominantly three-storey structures in Al-Arab. However, this coherence is increasingly being disrupted by unauthorised vertical additions and newer high buildings permitted under national height rules tied to street width. These alterations to historic proportions and material logic are especially visible at district edges and along key streets.

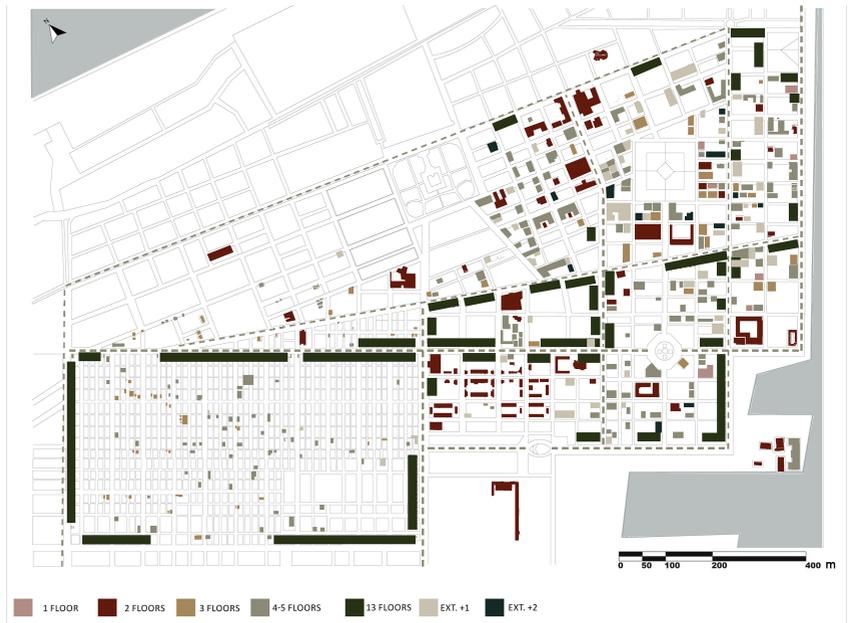


Fig. 15.4 Building heights and urban tissue map. (Drawing: Author, 2025, adapted from Wladika, 2015)

D) Ownership

As shown in Figure 15.5, ownership within the heritage area is fragmented across private individuals, public bodies, religious institutions and the Suez Canal Authority, which operates with a distinct degree of autonomy (Wladika, 2015). Most historic buildings are privately owned, increasing the complexity of rehabilitation delivery and making coordi-

nated incentives, governance alignment and partnership models central to future implementation.

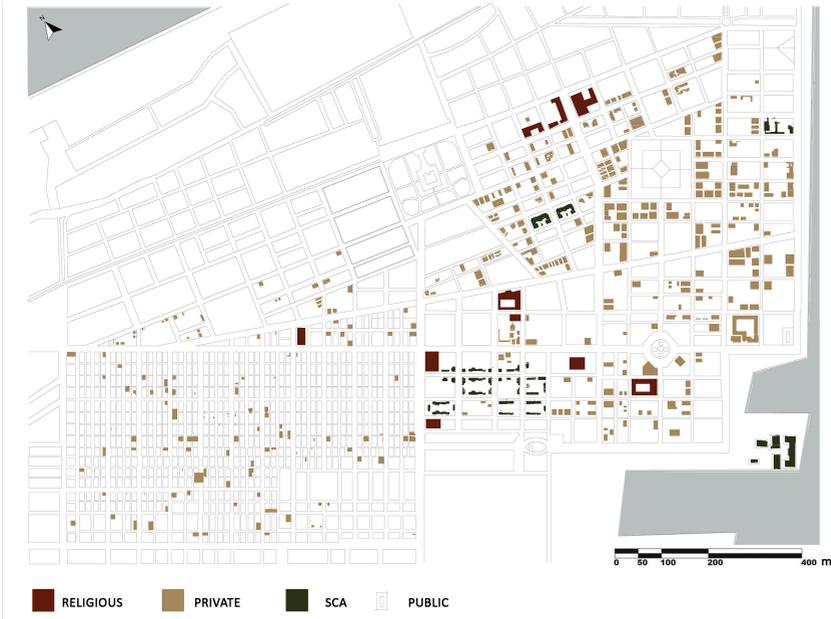


Fig. 15.5 Ownership map. (Drawing: Author, 2025, adapted from Wladika, 2025)

E) Cultural Exchange

The cultural exchange map in Figure 15.6, consolidates the primary tangible and intangible elements relevant to future interventions. It includes open spaces, monuments, religious institutions, markets, ports, ferry routes and cultural hotspots with opportunities for adaptive reuse. The Ferial Garden and its associated roundabout represent major open spaces of historical significance, linked to the inauguration of the Suez Canal. Key monuments include the lighthouse, the Italian House, the Suez Canal Authority Building and the base of the de Lesseps statue. Markets such as Bazar Abbas, Marche Municipal and Togary demonstrate the city's diverse commercial heritage and traditions. Cultural hotspots include the Bellevue hotels and the historic Palestine Street skyline. Adaptive reuse potentials were identified for buildings such as the Italian church and Villa Fernande.



Fig. 15.6 Cultural exchange map. (Drawing: Author, 2025)

15.6.2 Potential Zones

The selection of potential zones was based on clusters of cultural and historical significance. These areas hold strong potential to generate citywide impact if rehabilitated strategically. The numbering of zones serves only as an internal reference and does not dictate any implementation order (Fig. 15.7). To evaluate these selections, a series of maps was developed. The idea behind these maps is to provide a method of analysis that offers a quick overview of all the different tangible and intangible layers present at a specific intervention site, highlighting each site's attributes.

A) Zone 1: Port Said Ferry Area

The Port Said Ferry Site zone, shown in Figure 15.8, includes the ferry terminal, the Bellevue hotel complex and the SCA building. The ferry terminal is a major point of exchange between Port Said and Port Fouad and plays a key role in fostering dense social connections as well as facilitating economic interactions. The Bellevue structures are historically significant, though they are visually obscured by metal shading installations. The SCA building remains fenced off and inaccessible. The surrounding circulation patterns highlight both opportunities and constraints in managing flows and enhancing the public experience.

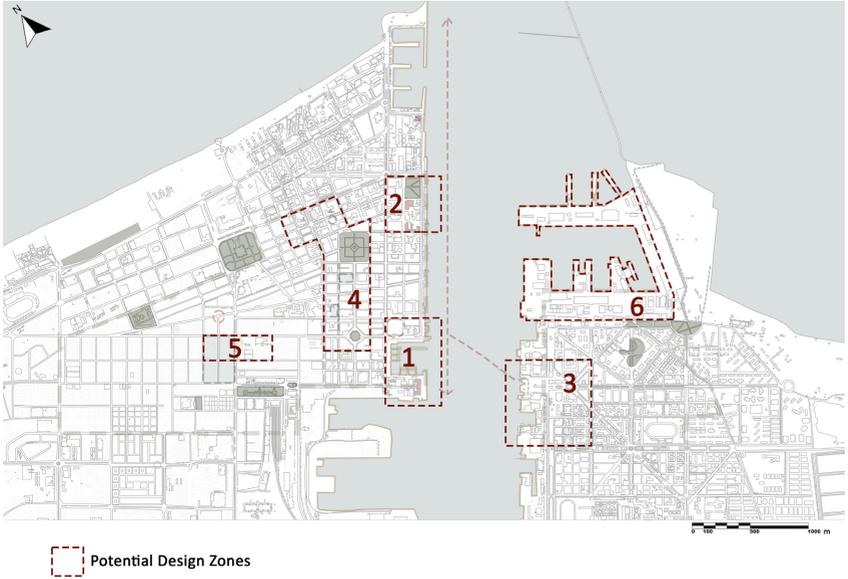


Fig. 15.7 Potential zones. (Drawing: Author, 2025)

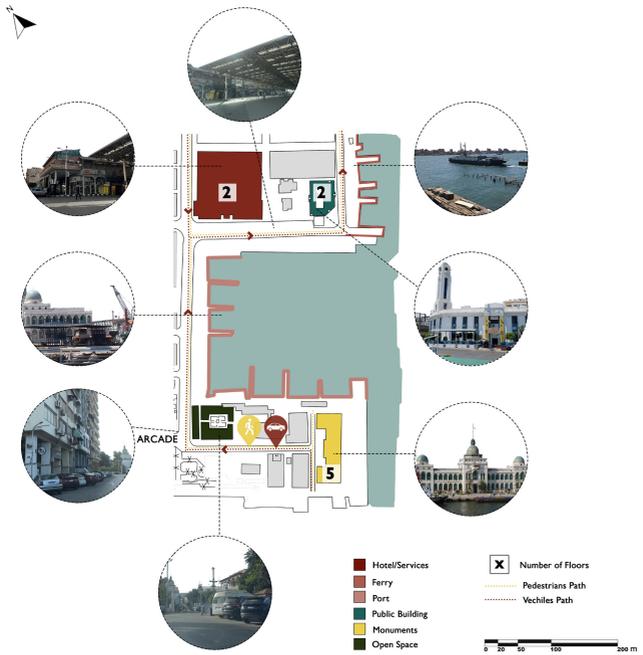


Fig. 15.8 Zone 1: Port Said Ferry Area. (Drawing: Author, 2025)

B) Zone 2: Port Said Saha Misr

Recent upgrades have transformed the plaza into a touristic walkway, however the placement of metal fencing along the canal has severely disrupted its openness and visual connection to the port and the canal. The lighthouse and Italian house reinforce the area's heritage value, while nearby postmodern high-rises create visual tension. The historic access road is under rehabilitation, and the area is facing the challenge of balancing new development against the preservation of its identity; as shown in Figure 15.9.

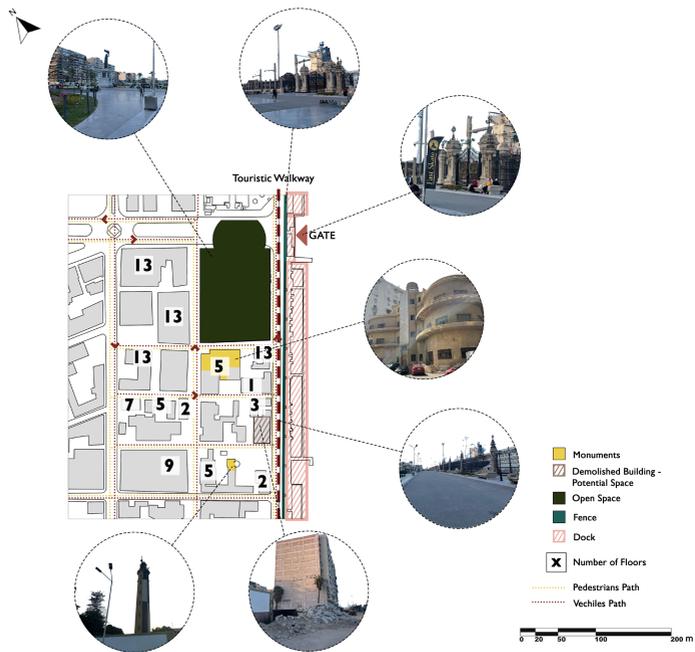


Fig. 15.9 Zone 2: Port Said Ferry Area. (Drawing: Author, 2025)

C) Zone 3: Port Fouad Ferry Area

As shown in Figure 15.10, this zone is characterised by a sense of openness, strong visual corridors, and opportunities for cultural programming. SCA housing with Moorish architectural features, as well as buildings with wooden *taracinas* and introverted courtyards contribute to its main character. The area offers great potential for community-oriented cultural interventions.

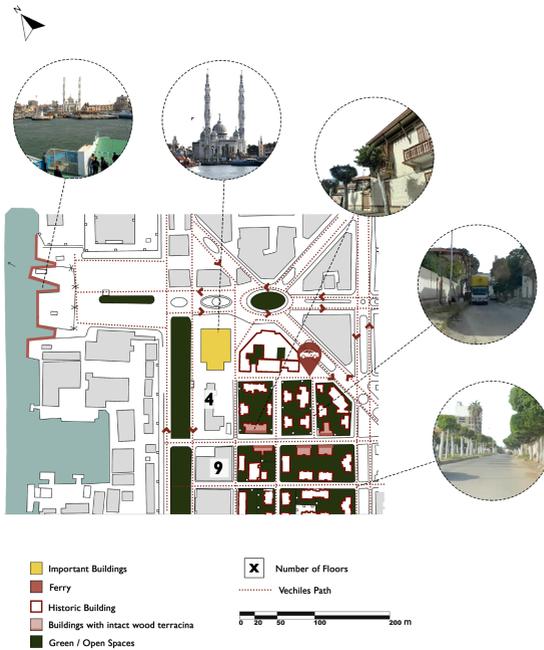


Fig. 15.10 Zone 3: Port Fouad Ferry Area. (Drawing: Author, 2025)

D) Zone 4: Port Said Ferial Garden and Markets

This dense and active zone, shown in Figure 15.11, includes the Ferial Garden, its central roundabout, the surrounding markets and significant religious institutions. While the markets are undergoing rehabilitation, the garden would benefit from a more context sensitive design. High rise buildings threaten the scale of the heritage in the area. The site is also home to the StaBene, an active cultural hub that supports local and community initiatives.

E) Zone 5: Port Said Al-Arab and Al-Afrang Districts

This strip, shown in Figure 15.12, highlights the differences between the two districts, with a lack of public spaces in Al-Arab and an abundance of them in Al-Afrang neighbourhood. The Togary Market contributes to an active street life. The zone presents opportunities for introducing bike mobility and creating semi-public communal spaces, even though it is rather threatened by the surrounding high-rise structures.

F) Zone 6: Port Fouad Historic Workshop Site

These SCA owned workshops lie along the northeastern canal edge.

Their industrial heritage is documented in photographs from the early twentieth century showing the truss systems and equipment layouts. Access restrictions in place for this zone means that the site is beyond the scope of this research.

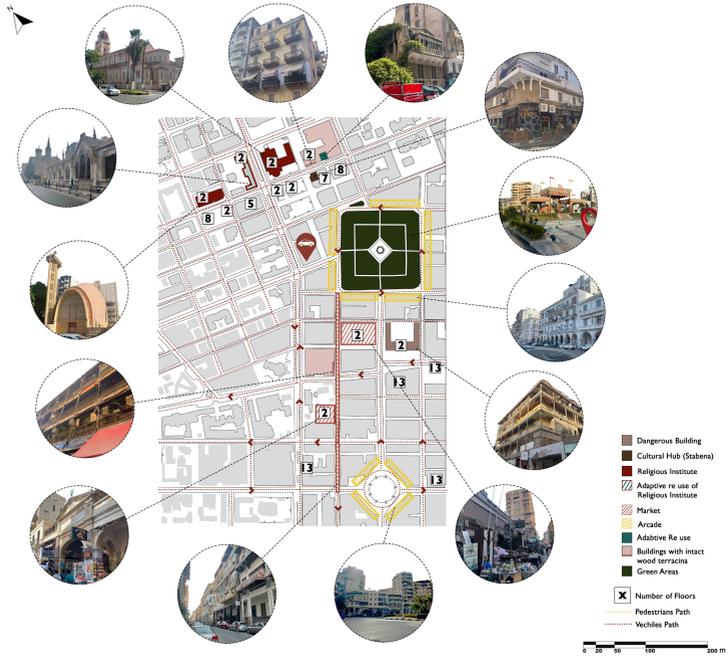


Fig. 15.11 Zone 4: Port Said Ferial Garden and Markets. (Drawing: Author, 2025)

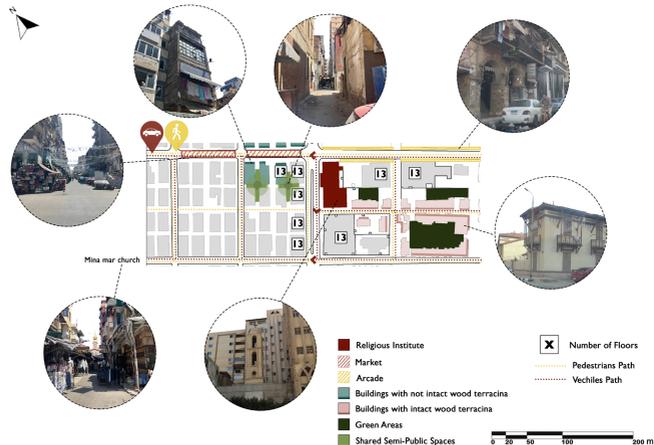


Fig. 15.12 Zone 5: Port Said Al-Arab and Al-Afrang quarters. (Drawing: Author, 2025)

15.6.3 Identifying Urban Qualities

A consolidated qualities map (Fig. 15.13) distills the in-depth findings into a set of transferable attributes. Each zone offers distinct strengths, such as openness, market vibrancy, cultural activity or architectural character, as well as its own challenges, such as congestion, poor design, abandoned monuments, weak entrances, or scale conflicts. Together, these qualities form a flexible toolkit for shaping future interventions and guiding a phased heritage management strategy for Port Said.

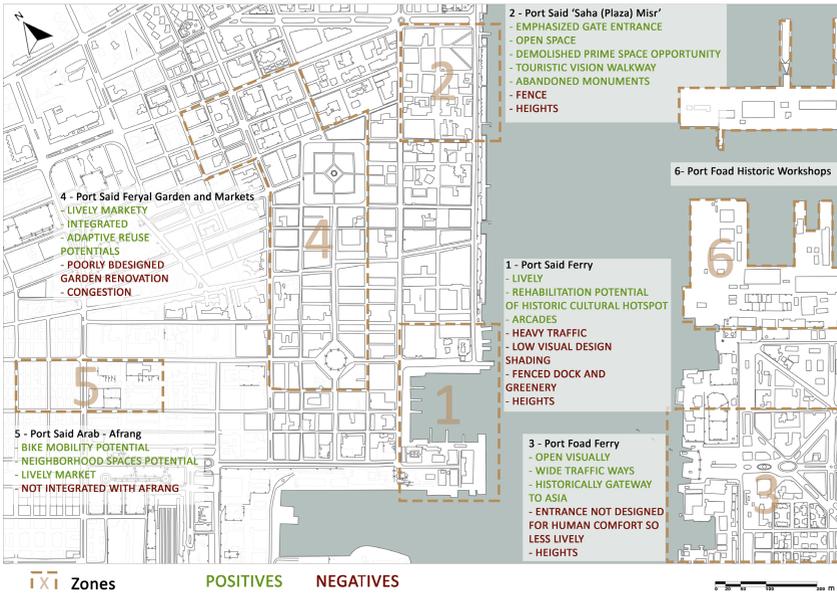


Fig. 15.13 Identifying site qualities. (Drawing: Author,2025)

15.7 Guidelines and Interventions

15.7.1 Guidelines: Dimensions, Elements, and Goals

The intervention strategy is structured around five guiding dimensions: economic, spatial, cultural, tourist and heritage. These dimensions address the multifaceted nature of Port Said’s rehabilitation needs and reflect integrative, tourism-supported regeneration approaches discussed in urban heritage literature. Each dimension is defined by a guiding element and translated into goals that inform specific project directions.

The economic dimension strengthens public and private dynamics in order to boost the city's economic gains. The goals prioritise the rehabilitation of income-generating private buildings, particularly historic hotels, and the enabling of adaptive reuse through public-private partnerships. Cultural and religious institutes are rehabilitated and then reused via third-party agreements that attract investment and support profitable activities. Meanwhile, the strategy improves the profitability of surrounding open markets so that local economic cycles can sustain the outcomes of the rehabilitation programme over time.

The spatial dimension aims to rehabilitate strategic zones to improve human comfort and reinforce Port Said's tangible identity. The goals focus on redesigning public open spaces to enhance the everyday experience and strengthen the character of places, as well as on creating semi-private neighbourhood spaces that support daily social life. Connectivity and comfort are addressed by providing bike lanes to link districts, adding shading elements to improve microclimatic conditions and rehabilitating key road infrastructure. The strategy also involves restoring arcades while preserving their function as pedestrian walkways and rehabilitating façades by repairing historic *taracina* finishes. Addressing traffic congestion is also an essential objective in supporting wider liveability and accessibility.

The cultural dimension is defined by the need to establish a dialogue between districts and institutions in order to strengthen the city's intangible heritage. It proposes repurposing the legacy of foreign presence and encouraging heritage stakeholders to contribute to constructive cultural exchange, including language- and practice-related initiatives. The aim is to increase cultural vibrancy by strengthening exchange between districts, supporting community-based organisations that safeguard tangible and intangible heritage, and creating communal spaces where residents can meet and maintain everyday cultural interaction.

The touristic dimension views sustainable tourism as a tool for preservation and long-term benefits to the city. Goals include the rehabilitation of historic hotels to serve as anchors for heritage-sensitive tourism, the improvement of ferry services and their design to strengthen connections and attract visitors, and the introduction of cultural design interventions, such as murals, to reinforce a distinctive experience linked to the exchange between Port Said and Port Fouad. Additional actions focus on improving roads and outdoor spaces in key

tourist areas to ensure a coherent, accessible visitor experience that is aligned with the local identity.

Finally, the heritage dimension is grounded in heritage-sensitive design interventions that preserve significance while accommodating contemporary use. When intervening in heritage buildings and public structures, goals must be aligned with UNESCO-related design charters and international standards. This process begins with a careful investigation of the previous and current conditions of deteriorating buildings, in order to determine intervention strategies that maintain integrity and authenticity.

Together, these dimensions and goals form a unified framework that will guide all proposed interventions. The aim is to improve the quality of life for residents, support the city's cultural vitality and reinforce its position as a place of historic and contemporary significance.

15.7.2 Projects: Measures, Sites, and Outcomes

Projects are introduced through a zone based framework that aligns with the potential sites identified earlier in the analysis. As shown in Figure 15.14, each project is associated with the expected architectural, planning or policy level outcomes. For example, Zone 1 addresses two architectural interventions, involving the rehabilitation of the historic Bellevue hotels, and the redesign of the shading structure that currently obscures their visibility. Together, these projects are located at a critical urban intersection and have the potential to shift the dynamics of movement, tourism, and heritage appreciation. Zone 1 also connects to Zones 2 and 3 through shared interventions that support site integration.

Zone 2 centres on the redesign of Misr Plaza and the adaptive reuse of the Italian House. The proposal envisions transforming the Italian House into a cultural centre through a partnership model, blending national and foreign sponsorships. Rehabilitation in this zone follows a structured module in which third party heritage management offices prepare the building for handover to investors, who must align with the strategic reuse goals. Building on this, Zone 3 is conceived as a cultural endpoint for site integration. Tactical urban solutions are proposed here, including flexible spaces capable of hosting cultural activities such as *Semsemeia* music nights. These interventions support the vision of strengthening cultural exchange between Port Said and Port Fouad.

Zone 4 stands as a comprehensive rehabilitation site with a

sequence of interconnected actions. These include the redesign of Ferial Garden, the rehabilitation of arcades and the initiation of adaptive reuse projects within the surrounding markets and religious institutes. Each measure is intended to trigger a broader wave of improvement that extends beyond the site itself. Lastly, Zone 5 focuses on integrating the Al-Arab and Al-Afrang districts by testing the feasibility of creating new communal pockets and extension of bike lanes. The zone aims to bridge differences in public space typologies and examine how qualities can be exchanged between districts to enhance the user experience.

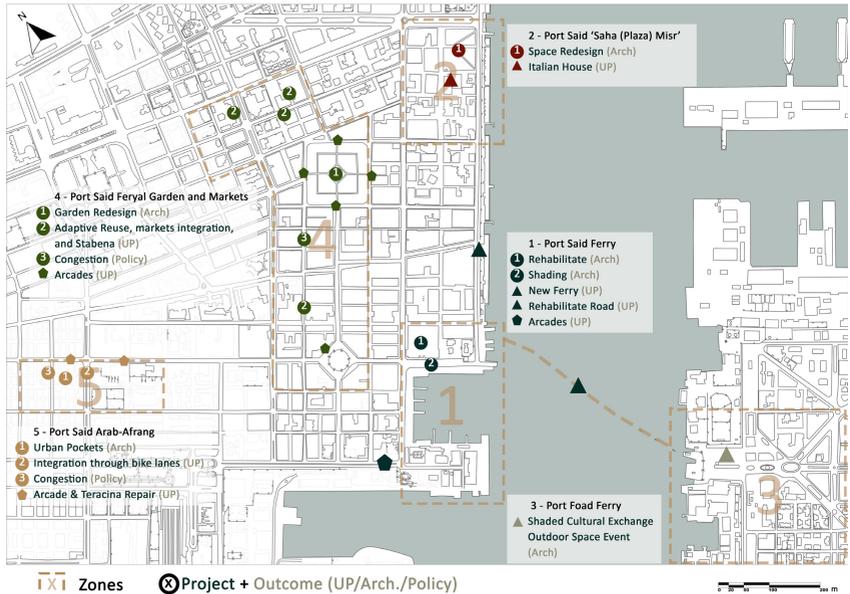


Fig. 15.14 Measures, sites, outcomes and approach. (Drawing: Author, 2025)

To highlight the link between the proposed projects and the urban dimensions established earlier, the measures are categorised in Figure 15.15. Spatial and cultural aspects dominate the strategy since they form the core of Port Said's rehabilitation needs. Interventions with a strong cultural impact include the Italian House, enhancements to StaBene, and the development of new communal urban pockets. Tourist-oriented projects are concentrated in Zones 1 and 3, where the focus is on hotel rehabilitation and road improvements. Economic goals are closely tied to adaptive reuse and the revitalisation of heritage hotels, ensuring that the strategy remains financially sustainable and capable of long-term impact.

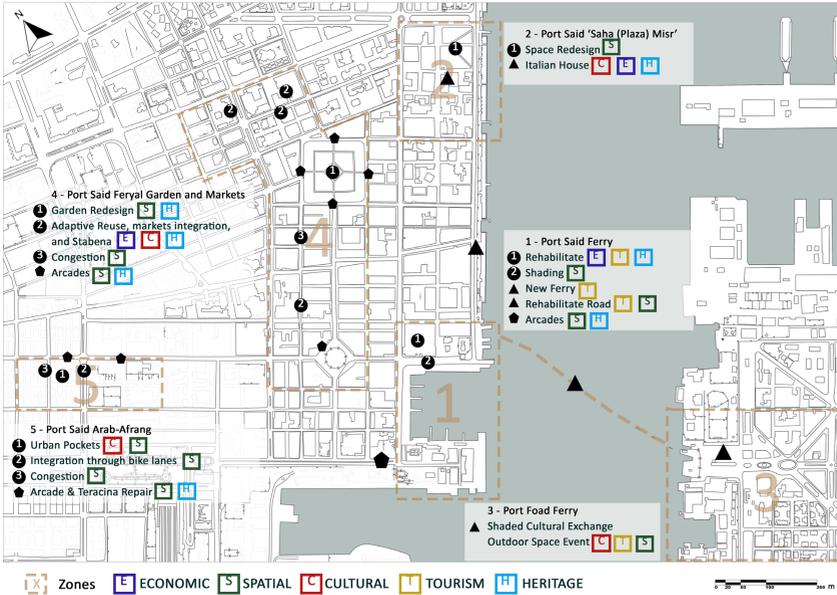


Fig. 15.15 Projects vis-à-vis the proposed urban dimensions. (Drawing: Author, 2025)

15.8 Conclusion

This publication argues that Port Said’s canal city origins, layered built fabric, and living cultural practices provide a credible basis for heritage-led rehabilitation and for exploring future World Heritage potential. Using UNESCO operational logic, the study identifies serial heritage components, diagnoses conditions through layered mapping, and defines intervention zones that connect heritage value with practical priorities. The proposed guidelines integrate economic, spatial, cultural, touristic, and heritage dimensions to support adaptive reuse, improved public space and mobility, and strengthened cultural exchange. At the same time, unregulated development, fragmented ownership, and limited management capacity remain critical risks. Future work should advance legal protection, coordination mechanisms, funding models, monitoring, and participatory engagement to sustain long term impact.

This paper positions Port Said as a city whose cultural depth, architectural evolution and longstanding patterns of exchange provide a strong foundation for UNESCO World Heritage recognition. Its development since 1859 reveals the profound impact of international interaction on its physical form and social fabric, producing a layered urban landscape that continuously negotiates between global influ-

ences and local identity.

The study demonstrates that Port Said's heritage value lies in the combination of its tangible and intangible attributes. The architectural progression from early masonry and timber structures to reinforced concrete and Art Deco expressions illustrates a city that adapted to shifting historical and economic circumstances. Parallel to these physical transformations, cultural practices such as *Semsemia*, seasonal gatherings and neighbourhood based social rituals continue to maintain a sense of collective memory and reinforce the city's identity.

Using UNESCO's operational framework, the research progressed from identifying heritage significance, to analysing the state of conservation and outlining the foundations of a future management approach. The analytical mappings revealed the richness of surviving historic districts while also highlighting threats related to unregulated development, fragmented ownership, and the absence of a comprehensive conservation strategy. By synthesising data on building age, morphology, urban tissue and cultural exchange patterns, the study established key intervention zones, each carrying distinct qualities that could guide heritage-led regeneration.

The guidelines and interventions proposed in this publication establish a strategic framework for rehabilitation. By integrating economic, spatial, cultural, touristic and heritage dimensions, the structure supports adaptive reuse, enhanced public space, improved mobility and strengthened cultural exchange. These measures collectively aim to reinforce the city's identity while improving quality of life and supporting sustainable development.

To successfully implement these strategies, the study underscores the need for stronger legal protection, coordinated institutional structures, diversified funding and robust monitoring mechanisms. Community engagement remains essential to this long-term preservation, as local stakeholders play a pivotal role in maintaining Port Said's sense of place.

References

- Aksoy, A., & Robins, K. (2011). *Changing urban cultural governance in Istanbul: The Beyoğlu Plan* (Istanbul Bilgi University/KPY Working Paper).
- Baedeker, K. (1914). *Indien: Handbuch für Reisende*. Baedeker.
- Baller, I. (2017). Strategies for the preservation of the heritage of the Suez region and Port Said as World Heritage Site. In H. Abouelfadl, D. ElKerdany, & O. Wanas (Eds.), *Revitalizing city districts: Transformation partnership for urban design and architecture in historic city districts* (pp. 35–51). Springer. https://doi.org/10.1007/978-3-319-46289-9_3
- Batty, M. (2013). *The new science of cities*. MIT Press.
- Baum, M. B. (2008). *Urbane Orte: Ein Urbanitätskonzept und seine Anwendung zur Untersuchung transformierter Industrieareale* [Doctoral dissertation, Karlsruhe Institute of Technology]. KITopen. <https://doi.org/10.5445/KSP/1000009114>
- Cantell, S. F. (2005). *The adaptive reuse of historic industrial buildings: Regulation barriers, best practices, and case studies*. [Master's thesis, Virginia Polytechnic Institute and State University]. https://sig.urbanismosevilla.org/Sevilla.art/SevLab/r001US3_files/r001_US_1.pdf
- Crosnier-Leconte, M.-L., Ghitani, G., & Amin, N. (2006). *Port-Said: Architectures XIXe–XXe siècles*. Institut français d'archéologie orientale.
- Denzin, N. K., & Lincoln, Y. S. (2011). *The SAGE handbook of qualitative research*. SAGE.
- El Amrousi, M. (2012). Imperial sanctuaries: Arab urban enclaves on the East African coast. In F. Demissie (Ed.), *Colonial architecture and urbanism in Africa: Intertwined and contested histories* (pp. 67–83). Ashgate Publishing Limited.
- ElKady, D. A. (2002). *Mawsu'at tarikh Bur Sa'id* [Encyclopedia of Port Said history]. Dar al-Ma'araf.
- ElKerdany, D. (2017). Port Said: A cosmopolitan heritage under threat. In H. Abouelfadl, D. ElKerdany, & O. Wanas (Eds.), *Revitalizing city districts: Transformation partnership for urban design and architecture in historic city districts* (pp. 15–33). Springer. https://doi.org/10.1007/978-3-319-46289-9_2
- Elsorady, D. A. (2011). Heritage conservation in Rosetta (Rashid): A tool for community improvement and development. *Cities*, 29, 379–388.
- Fahmy, H., & Urban Regeneration for Historic Cairo (URHC) Team. (2013, July). *Egyptian legislations in relation to the rehabilitation of historic Cairo*. UNESCO World Heritage Centre. https://www.urhcproject.org/Content/studies/12_fahmy_legal.pdf
- ICOMOS. (1964). *International charter for the conservation and restoration of monuments and sites* (The Venice Charter 1964). https://www.icomos.org/images/DOCUMENTS/Charters/venice_e.pdf
- ICOMOS. (1994). *The Nara document on authenticity*. <https://landscapes.icomos.org/wp-content/uploads/1994-NARA-document-on-authenticity-International-Council-on-Monuments-and-Sites-1.pdf>
- Khaled, R. (2012, September 21). *NGOs and activists protest to save the architecture of Port Said*. Egypt Independent. <https://www.egyptindependent.com/ngos-and-activists-protest-save-architecture-port-said/>
- Longley, P. A., Goodchild, M. F., Maguire, D. J., & Rhind, D. W. (2015). *Geographic information systems and science*. John Wiley & Sons.
- Lynch, K. (1960). *The image of the city*. MIT Press.
- Macdonald, S., & Cheong, C. (Eds.). (2014). *The role of public-private partnerships and the third sector in conserving heritage buildings, sites, and historic urban areas*. Getty Conservation Institute. http://hdl.handle.net/10020/gci_pubs/public_private_partnerships
- Megahed, N. A. (2014). Heritage-based sustainability in Port Said: Classification of styles and future development. *Archnet-IJAR*, 8(1), 94–107.
- Petzet, M. (2009). *International principles of preservation* (Monuments and Sites, No. 20). Hendrik Bäbler Verlag. <https://www.icomos.de/data/pdf/xx-0421-1300-25.pdf>
- Piaton, C. (2011). Decaying wooden verandas tell the story of a city. *Rawi*, (3). <https://rawi-publishing.com/articles/port-said?lang=en>
- Pickard, R. (2001). *Management of historic centres*. Taylor & Francis.
- Radoine, H. (2008). Urban conservation of Fez-Medina: A post-impact appraisal. *Global Urban Development Magazine*, 4(1).
- Rodwell, D. (2007). *Conservation and sustainability in historic cities*. Blackwell.
- Rypkema, D. D. (2005). *The economics of historic preservation: A community leader's guide*. National Trust for Historic Preservation in the United States
- Sims, D. (2012). *Understanding Cairo: The logic of a city out of control*. Oxford University Press
- Smith, L. (2006). *The uses of heritage*. Routledge.
- Steinberg, F. (1996). Conservation and rehabilitation of urban heritage in developing countries. *Habitat International*, 20(3), 463–475. [https://doi.org/10.1016/0197-3975\(96\)00012-4](https://doi.org/10.1016/0197-3975(96)00012-4)
- UNESCO. (1972). *Convention concerning the protection of the world cultural and natural heritage*. <https://whc.unesco.org/en/conventiontext/>
- UNESCO. (1976). *Recommendation concerning the safeguarding and contemporary role of historic areas*. <https://www.unesco.org/en/legal-affairs/recommendation-concerning-safeguarding-and-contemporary-role-historic-areas>
- UNESCO. (2003). *Convention for the safeguarding of the intangible cultural heritage*. <https://ich.unesco.org/en/convention>
- UNESCO. (2011). *Recommendation on the historic urban landscape*. <https://whc.unesco.org/en/hul>
- UNESCO World Heritage Centre. (2023). *Operational guidelines for the implementation of the World Heritage Convention*. <https://whc.unesco.org/en/guidelines/>
- Wladicka, S. A. M. (2015). *Port Said—No future without the past: Integrated rehabilitation concept for the urban heritage* [Master's thesis, University of Stuttgart and Ain Shams University]. Integrated Urbanism and Sustainable Design (IUSD). https://iUSD.asu.edu.eg/?page_id=1747&id=1021
- Yin, R. K. (2009). *Case study research: Design and methods* (4th ed.). SAGE Publications.

Part V

Appendices

A. Catalogue of Listed Buildings in Port Said

Prepared by Dina
Elmazzahi

Introduction

Port Said boasts a rich architectural heritage that reflects its diverse influences and significance as a vital trade hub. The city's buildings showcase a variety of styles, illustrating the evolution of architectural design over time. The city's built environment is a testament to the interplay between history, culture and architecture, as evidenced by its numerous purpose-built structures. The old city's architectural identity has been shaped by local climatic conditions and diverse socio-cultural contexts. This is reflected in a typology that includes homes, schools, religious buildings, and covered markets.

In 2011, an inventory of 505 heritage properties in Port Said was compiled. These sites are protected under Law No. 144 of 2006, which pertains to the protection of heritage properties and structures (NOUH, 2011). This list of heritage properties is officially recognised and legally protected due to their unique architectural or historic significance. The following catalogue, prepared by the Historic Port Said Association¹, presents a selection of most of the heritage buildings identified. Founded in 2017, this registered association aims to document the city's heritage for future generations.

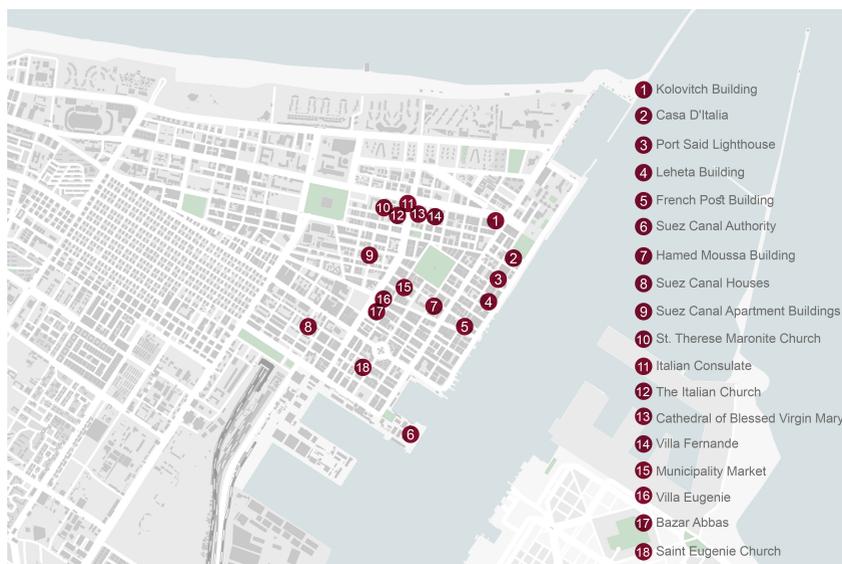


Fig. A.1 Listed and significant structures in Port Said. (Drawing: Author, 2025, based on list of Historic Port Said Association)

1 See: <https://historicportsaid.com/heritage/>

1. Kolovitch Building

Al-Goumhouriyya Street

The Verivo building, commonly known as the Kolovitch Building, is named after its architect, Louis Kolovitch. This magnificent building has housed consulates, police stations, and shipping company offices (Crosnier-Leconte et al., 2006). A prominent five-storey Art Deco structure, the Verivo building dominates the beginning of Al-Goumhouriyya Street and was built in the 1930s. It features rich ornamentation and intricate details, including stained-glass windows in the stairwell, decorative spiral railings on the stairs, ornate exterior architectural details and a circular gallery at the top. The eastern façade is defined by remarkable arcades topped by extended balconies with geometric iron railings.



Fig. A.2 A perspective view of Kolovitch building. (Photo: Author, 2025)

2. Casa d'Italia

Al-Salam Street

Casa d'Italia refers to an Italian social community centre built overseas. These centres were designed to serve Italian emigrants and promote

Italian culture. They played a significant role in Italy's foreign policy and were often funded by the Italian community through donations. During the 1920s and 1930s, they were crucial for the fascist regime in Italy, aiming to strengthen ties between Italians in Egypt and their homeland while associating fascist ideology with a new spirit of national identity (El-Akkad, 2022). They were typically identified by distinctive architectural features and monumental façades that represented Italy's image abroad. Similarly, the Casa d'Italia in Port Said was designed by Clemente Busiri, built in 1936 before the Second World War, and inaugurated by Benito Mussolini on 28 October 1938. This three-storey building was a focal point of Italian life and is considered a fine example of Fascist architecture (Crosnier-Leconte et al., 2006; Giorgi & Saulle, n.d.). Originally, this building was the residence of the Italian representative and a centre for fascism in the Middle East. During the war, Britain seized it and converted it for military purposes, as well as for use as a hospital for Allied soldiers. The last stone inscribed during the Mussolini era is located on the façade of the Italian House. After the war, it was converted into a cultural centre featuring a library and cinema (Port Said Governorate, 2025).



Fig. A.3 Front elevation of Casa D'Italia. (Photo: Author, 2023)

3. Port Said Lighthouse

Palestine Street

Port Said originally had a wooden lighthouse, constructed in 1857. A new lighthouse was built in 1869 to replace it. This new structure is a precast concrete tower, designed based on experiments conducted by François Coignet in Saint-Denis, a suburb of Paris. The first precast block construction was commissioned in 1864 by Lavelley, a subcontractor working on the canal, for his own home in Port Said. Despite the innovative nature of this technique, however, it did not lead to the development of new architectural styles. Coignet's lighthouse was modelled on a structure created twenty years earlier by Léonce Reynaud, who renovated the Phare des Baleines at the tip of the Île de Ré. However, the Port Said lighthouse underwent minor modifications: the thickness of the interior masonry was reduced by 0.20 metres and the consoles supporting the cornices were removed. This reduction in thickness was justified by the composition of the masonry, which featured seamless, superimposed monolithic rings. This design achieved a uniformity of mass unmatched by traditional masonry, including cut stone. Thus,



Fig. A.4 Port Said lighthouse overlooking the Suez Canal. (Photo: Author, 2023)

while Coignet's 56-metre-high lighthouse from 1869 demonstrated significant technical progress in experimenting with large-scale precast concrete, its shape was derived from earlier models (Piaton, 2012; Crosnier-Leconte et al., 2006).

4. Leheta Building

Palestine Street

The Leheta Building is a three-storey block of twin apartment buildings overlooking the Suez Canal. It was built in the late 19th century. The two buildings are separated by an entranceway leading to a courtyard. Each building has a symmetrical layout, with two apartments per floor surrounding a central staircase, and the doors of the apartments face each other. The buildings have high ceilings, creating a spacious and functional environment. A portico defined by wooden poles supporting the extended balconies along the façade precedes the higher ground floor. The rhythm of the openings follows the building's overall modular design and proportions. The ground floor has semi-circular openings, while the upper levels have segmental ones. There are also two wing



Fig. A.5 Perspective and façade views of Leheta building. (Photo: Author, 2025)

windows with shutters that open onto balconies. The walls are primarily made of burnt brick and covered with thick, matt lime mortar, which is often painted yellow. The verandas feature distinctive elements such as iron angle braces, railings and lambrequins, which contribute to the buildings' overall character.

5. French Post Building

Safeya Zaghloul street

The French Post Office in Port Said was one of several post offices established in Egypt to support French commercial interests. Until 1931, these offices were located in Port Said, Alexandria, Cairo and Suez. A notable example of 19th-century colonial architecture, the building showcases the French neoclassical style common to European consular and institutional structures along the Suez Canal during that period. The French Post Office is located at the intersection of Safeya Zaghloul and Memphis Streets, where a collection of French stamps was produced. It operated in Port Said from 1867 until 1899, having been constructed roughly two years before the canal opened to navi-



Fig. A.6 The French Post building in a deteriorated condition. (Photo: Author, 2025)

gation. It was built by Jean-Baptiste Pierre, a French national known as Al-Khawaja (Abou El-Ezz, 2024). Architecturally, the building blends European rational planning with adaptations to the Egyptian climate, featuring high ceilings and shaded porticos. The façade is characterised by classical proportions, defined by pilasters, decorative lambrequins and arched openings.

6. Suez Canal Authority

South Mole of the Commercial Basin

Built in 1893 by the French company Edmond Konier, this building served as the headquarters of the Suez Canal Company and the port authority (Crosnier-Leconte et al., 2006). During the 17th century and the first half of the 20th century, Europe generally saw a trend towards reviving classical architectural styles. This movement is also considered a revival of Islamic architecture. The structure features a block rising from a basement to two main floors, with a secondary third floor incorporating multiple primary and subsidiary entrances. Its lines are characterised by vertical simplicity. A landmark of Port Said, the



Fig. A.7 The dominance of the Suez Canal Authority. (Photo: Author, 2014)

pseudo-Moorish building incorporates Islamic architectural elements, including three green domes of equal diameter – the central dome is the tallest. Its decorative façades and inscriptions further enhance its appeal. The building's façade features a clear, symmetrical layout, with the central section being the tallest to create architectural distinction and balance. The building has a U-shaped, right-angled layout based on a load-bearing wall system. Traditional materials such as limestone and bricks were used in its construction, while the introduction of cement and iron represented a significant advancement in construction techniques. Reinforced concrete was explicitly utilised for the Authority building's roofs (Suleiman et al., 2018).

7. Hamed Moussa Building

Al-Geish street

The house located at 47 Al-Geish Street is a unique example of a wooden veranda building with a second-skin design in Port Said, organised around an interior courtyard. It is not a typical residential structure; according to residents, it served as a boarding house associated with

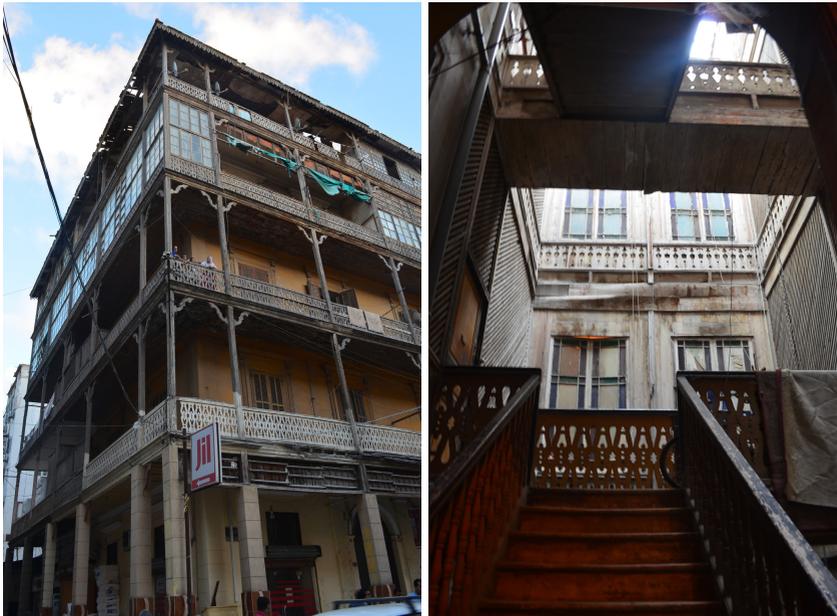


Fig. A.8 A significant residential building with wooden balconies and interior courtyard. (Photo: Author, 2014)

the French school situated across the street. Many people recall the beautiful garden that once surrounded the house, featuring mango and palm trees (BTU, 2014). A few years ago, only a limited number of apartments were occupied; most were either empty or used for storage. Although the building is currently in poor condition, it still showcases its valuable design. This four-storey structure features linear windows framed by prominent cornices. Additionally, the facade is highlighted by distinctive elements, including wooden angle braces and poles, decorative patterned railings, and lambrequins, all of which contribute to the building's overall significance.

8. Suez Canal Houses

Ahmed Maher Street

Built as a housing zone for Port Authority employees, the traditional stone houses built for European workers between 1921 and 1923 were generally inspired by pre-World War I French industrial models, as evidenced by their decorated brickwork. Enclosed green spaces are consistent across different types of housing for Suez Company



Fig. A.9 Houses built for Port Authority employees. (Photo: Author, 2025)

employees. These houses, characterised by their pseudo-Moorish style, differed: European single-family homes, mostly occupied by foreigners, and semi-detached houses, designated for lower-ranking workers. These styles maintain a precise balance and symmetry. Notable architectural elements include high, four-panelled wooden windows on the ground floor, crenellation along the rooftops, and wooden balconies (Piaton, 2012). The elevations are defined by rows of coloured bricks, topped by a repetitive pattern of rectangular outlines made from rotated coloured bricks. The homes feature pitched roofs covering either single or double units of semi-detached houses. The slanted roofs extend over the balconies, serving as sunshades and are supported by wooden struts.

9. Suez Canal Apartment Buildings

Mahfouz Al-Agroudi Street

Between 1921 and 1922, Lanari and Dessberg built two U-shaped, multi-storey apartment buildings to accommodate canal pilots, who were considered to be highly skilled employees (Crosnier-Leconte et



Fig. A.10 Apartment building for Canal Pilots. (Photo: Author, 2025)

al., 2006; Piaton, 2012). Each building contains 16 units. The façade design emphasises balance and symmetry, featuring tall, four-winged windows topped with linear cornices, as well as decorative balconies running along the buildings' length. The buildings also feature scarab-shaped details bearing the initials of the Suez Canal Company.

10. St. Therese Maronite Church

Abd Al-Salam Aref Street

In 1948, Naoum Shebib, an Egyptian architect recognised as one of the pioneers of modernist architecture in Egypt, designed and built Saint Thérèse's Church for the Maronite Christian community. This warm and inviting church features a reinforced concrete vault that serves as both the roof and the walls, giving it a distinctive architectural style. The curvature of the vault seamlessly connects the walls and the roof, creating unhindered harmony throughout the building. The main façade showcases a wide opening covered by an arcade adorned with geometric decorations. Large lattice windows on either side of the church let light in, bringing the interior to life. In contrast to the rounded shape of

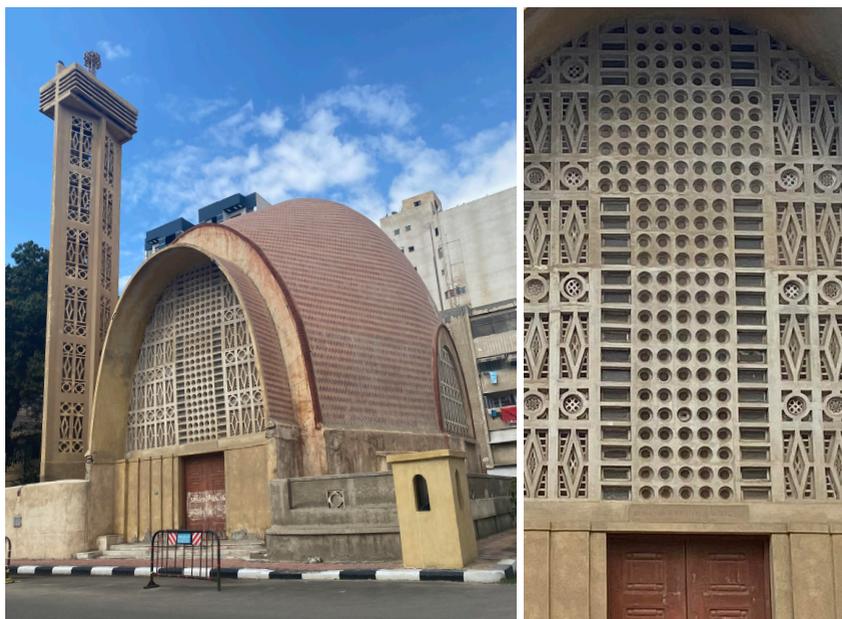


Fig. A.11 A perspective view of Saint Thérèse's Church showing the concrete vault and detailed latticework. (Photo: Author, 2023)

the building, the straight bell tower also features the same geometric patterns and is topped with a delicate cross. The geometric decorations on the tower echo the latticework found on the main façade. Inside, the walls mirror the exterior's curved shape, creating a warm atmosphere that fills the entire church. The construction of this building presented a significant technical challenge at the time, as it was built using a wooden casing made of thousands of planks (Abdullatif, 2023; Naoum Shebib, n.d.).

11. Italian Consulate

Salah Salem Street

The Italian Consulate in Port Said, designed by architect Errico Bovio, was built in 1903. Bovio served as chief engineer of the Civil Engineering Department, which was seconded to the Ministry of Foreign Affairs. He worked on the designs for several Italian state-owned offices abroad, including the Italian Consulates in Port Said and Alexandria (in collaboration with the Italian construction company Lanari), as well as the Regie Scuole Italiane in Alexandria (Italia coloniale, 2016; Giorgi & Saulle,



Fig. A.12 View of the Italian Consulate building attached to the Italian Church. (Photo: Author, 2023)

n.d.). Both consulates served a sizeable and diverse Italian community for several decades. However, since the end of World War II, the number of Italian immigrants in Egypt has gradually declined. By 1936, the Italian community served by the Port Said consulate numbered around 6,000 individuals. The consulate closed in the early 2000s, although the building remains the property of the Italian state (Giorgi & Saulle, n.d.).

12. Italian Church

Abd Al-Salam Aref Street

Built in 1910, the Italian church is attached to the Italian Consulate in Port Said and serves the Italian Catholic community. It was constructed in honour of the renowned Italian saint, Giovanni Bosco, whose name is inscribed on the building. Designed in the shape of a Latin cross, the church follows the basilica plan, extending from east to west. It features two similar neo-Gothic stone towers positioned at the north-western and south-western corners of the western façade. Each tower has a square base topped by a pyramidal transition zone supporting an octagonal storey and a conical top (Hemeda & Marie, 2022).



Fig. A.13 A perspective view of the Italian Church showing its Neo-Gothic towers. (Photo: Author, 2025)

13. Cathedral of Blessed Virgin Mary

23 July Street

The Roman Catholic Cathedral of Saint Michael and the Virgin Mary is located along the route that the Holy Family is believed to have taken during their time in Egypt. The cathedral was built during the reign of King Fouad I, who issued a royal decree ordering its construction for Latin Catholics in Port Said. Construction took place between 1934 and 1937. Designed by the renowned French architect Louis-Jean Hulot, the cathedral is shaped like a Latin cross extending from north to south, following a basilica plan. The longer side of the cross culminates in a semicircular chapel. A prominent Baroque-style tower featuring various decorative elements, including shields, cogs, circles, horns, birds, animals and other European motifs, is located at the centre of the northern façade. The tower has a square base with two storeys on top. The base is adorned on all four sides with a large, open semicircular niche. Above this sits a tall rectangular shaft supported by hexagonal piers at its four corners. This storey is crowned by a hexagonal gallery supported by stone columns, featuring a balustrade with pierced decorations in the



Fig. A.14 A perspective view of Blessed Virgin Mary Cathedral. (Photo: Author, 2023)

form of semicircular arches. Finally, the gallery is topped with a cross (Hemeda & Marie, 2022).

14. Villa Fernande

Abd Al-Salam Aref Street

Constructed in the 1920s, this villa is commonly referred to as De Lesseps' villa, but this is a misnomer. The confusion arises from the similarity between Ferdinand de Lesseps' first name and the villa's name, Fernande. The villa consists of a main building and a separate four-storey structure that serves as accommodation for staff. Designed by an Italian architect, the villa showcases Gothic architecture influenced by Venetian palaces. Interestingly, it features fleurs-de-lis, a symbol traditionally associated with French royalty. There are two prevailing theories about the villa's origins: it was either a gift for the wife or daughter of a Frenchman (Alliance française de Port-Saïd, 2017; Crosnier-Leconte et al., 2006).



Fig. A.15 View of Villa Fernande showcasing Gothic architecture. (Photo: Author, 2025)

15. Municipality Market

Al-Bazar Street

The Municipality Market or Marché Municipal is one of two historic covered markets in the European Quarter, built in 1930 by Gustave Alberti. Spanning 3,000 square metres, it resembles the Attaba Market in Cairo, albeit on a much smaller scale. The single-storey building is organised along one main corridor and four secondary alleys. The entire structure is paved and features a pitched metallic roof and wooden elements. The shops within the market, however, have flat concrete roofs. The building's original design allowed for easy access from the surrounding streets, providing 11 entrances in total. Some of these entrances have since been narrowed or blocked by fixed obstacles. The remaining operational shops offer a variety of goods and services, including restaurants, cafés, fruit and vegetable stalls, and bakeries (Alsadaty, 2020).



Fig. A.16 A front view of Municipality Market. (Photo: Author, 2023)

16. Villa Eugenie

Safeya Zaghloul street

The Suez Canal Authority Museum, also known as the Villa of Eugénie, is located in a historic building which dates back to 1866 and originally served as the French consulate in Port Said. Intended for the French community, the building was designated as a resting place for Empress Eugénie during the inauguration of the Suez Canal in 1869. Consequently, the building became popularly known as the Villa of Eugénie, and the nearby main street was named after her. Part of the Suez Canal inauguration celebrations were held in the building's courtyard. After operating as a consulate until 1956, the building was repurposed for various uses, including as a storehouse for artefacts and maps related to the Suez Canal. In 1998, it was transformed into a museum. Architecturally, it is a unique masterpiece designed in a European style. It was built on solid stone foundations and is supported exclusively by stone walls rather than reinforced concrete. An adjoining single-storey structure, which once served as stables, now houses administrative offices and restrooms. The main building comprises two floors: the



Fig. A.17 A front view of Villa Eugenie. (Photo: Sara Medhat, 2025)

ground floor and the first floor. The main entrance is located on the north-eastern side of the building, facing onto Safia Zaghloul Street. This entrance features two wooden panels framed with grey marble and leads up to a first-floor balcony. The balcony's façade is adorned with four green faience flowers and long wooden terraces on either side (Seddik & Fouad, 2021).

17. Bazar Abbas

Al-Bazar Street

Established in 1891 and named after Khedive Abbas Helmi II, Bazar Abbas is the first historic covered market in the European quarter. Its design showcases various multicultural influences, and its layout resembles that of Eastern caravanserais, which are typically rectangular structures with a central courtyard. The lower level was used for shops and storage, while the upper level provided accommodation for traders and travellers. The architectural style and façades reflect European influences, particularly those of the French Renaissance. The main façade is symmetrical and divided into three sections. The central



Fig. A.18 Front view of Bazar Abbas. (Photo: Sepideh Zarrin Ghalam, 2022)

section contains the entrance, which features three wider arcades compared to those on either side. Additional entrances at both ends lead to side corridors. Above the entrance is a French-style classical pediment bearing the name 'Bazar Abbas', adorned with a metallic crescent and star – symbols commonly associated with the Ottoman Empire in the late 18th century (Alsadaty, 2022). Since the 1980s, the residential area has been closed off and evacuated by the local authorities due to extensive damage to the wooden flooring and ceiling. Significant alterations have taken place on the ground floor, with many of the originally small sales units being merged to create larger spaces for individual shops, thereby changing the building's character (Alsadaty, 2020).

18. Saint Eugenie Church

Ahmed Chawqi Street

Originally built from wood in 1867, the church was named after Saint Eugenie and dedicated to the Catholic community in Port Said. It was later rebuilt in stone in 1890. Its architecture showcases a blend of European styles, combining classical and neo-Renaissance design



Fig. A.19 A front view of Saint Eugenie Church. (Photo: Sara Medhat, 2025)

elements. The façade features classical orders, a pediment and decorative cornices that define the building's different levels. The exterior is made of stone, while the floors are adorned with marble. The walls are decorated with foliage and geometric motifs. The church follows the basilica plan and consists of a rectangular area divided into three aisles by two arcades supported by square piers. An attached tower featuring a square base and a rectangular shaft crowned with a conical top is located at the northwestern corner of the façade. (El-Aref, 2015; Hemeda & Marie, 2022).

References

- Abdullatif, K. (2023). Saint Therese Church: 1948 avant-garde design in Port Said. *SceneHome*. <https://scenehome.com/Architecture/Saint-Therese-Church-1948-Avant-Garde-Design-in-Port-Said>
- Abou El-Ezz, A. (2024, January 19). *La poste française: Une carte envoyée de Port-Said vers la France [The French Post: A card sent from Port Said to France]*. *Le Progrès Egyptien*. <https://www.progres.net.eg/la-poste-francaise-une-carte-envoyee-de-port-said-vers-la-france/>
- Alliance française de Port-Said. (2017, October). *Villa Fernande*. Facebook. <https://acesse.one/ZTSbS>
- AlSadaty, A. (2020). Port Said historic markets: A tool for urban revitalization. *Archnet-IJAR: International Journal of Architectural Research*, 14(3), 543–557. <https://doi.org/10.1108/ARCH-02-2020-0022>
- Alsadaty, A. (2022). Bazaar Abbas, Port Said, Egypt: A nineteenth-century market building and centre of cultural exchange. In N. Hamza (Ed.), *Architecture and urban transformation of historical markets: Cases from the Middle East and North Africa* (pp. 47–58). Routledge. <https://doi.org/10.4324/9781003143208-4>
- BTU Cottbus—Senftenberg. (2014). *The second skin: Rehabilitation strategies and adaptive re-use of timber balcony buildings*. Middle East Cooperation Unit. https://www-docs.b-tu.de/middle-east-cooperation/public/Workshops/Report_2014_JADW_Port-Said.pdf
- Crosnier-Leconte, M.-L., Ghitani, G., & Amin, N. (2006). *Port-Said architectures XIXe—XXe siècles*. IFAO.
- El-Akkad, F. (2022, October 1). *Memories of Italian Alexandria*. Ahram Online. <https://english.ahram.org.eg/News/367738.aspx>
- El-Aref, N. (2015, July 12). St Eugene Church in Port Said put on heritage list. *Ahram Online*. <https://web.archive.org/web/20220314201446/https://english.ahram.org.eg/News/134594.aspx>
- Giorgi, C., & Saulle, C. (n.d.). *Historical notes on the Italian communities of Alexandria and Port Said*. The Embassy of Italy in Egypt. https://baldi.diplomacy.edu/diplo/texts/Cortese_II_Cairo_Parte_2_UK.pdf
- Hemeda, H. H., & Marie, M. A. (2022). *The Architectural Development of Church Tower in East Delta during the Era of Muhammed Ali Dynasty*. 6.
- Hemeda, H. H., & Marie, M. A. (2022). The architectural development of church tower in East Delta during the era of Muhammed Ali dynasty. *Journal of the Faculty of Tourism and Hotels-University of Sadat City*, 21(2), 310–342.
- Historic Port Said. (2025). *List of heritage buildings*. <https://historicportsaid.com/about/>
- Italia Coloniale. (2016, July 13). *Regeni, gli F-16 e la vendita del consolato italiano a Port Said* [Regeni, the F-16s and the sale of the Italian consulate in Port Said]. <https://italiacoloniale.com/2016/07/13/regeni-gli-f-16-e-la-vendita-del-consolato-italiano-a-port-said/>
- Naoum Shebib. (n.d.). *Saint Thérèse Church, Port-Said*. Retrieved https://naoumshebib.com/pages_en/sainte_therese_en.html
- NOUH. (2011, September 25). *Approval of the inventory of heritage buildings in Port Said Governorate*. National Organization for Urban Harmony. <http://www.urbanharmony.org>
- Piaton, C. (2012). European construction companies in the towns along the Suez Canal. In *Building beyond the Mediterranean* (Vol. 1, pp. 92–103). Éditions de l'Institut national d'histoire de l'art. <https://doi.org/10.4000/books.inha.12729>
- Port Said Governorate. (2025). *Casa d'Italia*. <https://e3rafportsaid.port-said.gov.eg/olds/Details?Hotelid=134>
- Seddik, R., & Fouad, R. (2021). A neglected built heritage: The museum of the Suez Canal Authority in Port Said. *Journal of Association of Arab Universities for Tourism and Hospitality*, 21(5), 48–78. <https://doi.org/10.21608/jaauth.2021.106687.1267>
- Suleiman, M. A., Al-Rashidi, M. S. A.-H., Al-Rab, H. G., & Mohamed, A.-S. (2018). Building of International Company of the Suez Canal, Port Said city. *Architectural Innovation Design of 19th Century*, 1(1).

B. Record of Workshop Methodologies and Results

Prepared By Lara A.
Awad

1. Purpose and Scope

This document systematically categorises the methodologies and results of three workshops held within the framework of Project Bazar Abbas, Recovery Lab of Port Said in 2023 and 2024. The aim is to support the analytical findings presented in Part II of this publication, specifically in Paper 5, titled *Between Conservation and Transformation: Addressing the Challenges of Port Said's Inner City*. While the paper focuses on interpretation, synthesis and analytical framing through the integrated urban conservation and development (IUCD) approach, this appendix provides a complementary repository of primary material. It organises the themes, methodological structures, priority zones and group-based outputs of the workshops that informed the meso-scale analysis of Port Said's inner city.

The appendix aims to enhance transparency and replicability by explicitly detailing the workshop processes, tools and intermediate results synthesised in the paper.

2. Overview of Workshop Structure and Methodological Framework

Although each workshop had a distinct thematic focus, they all followed the same structured approach, combining inputs, excursions, group work, discussions, colloquia and roundtables. This structure was intentionally designed to provide a sense of continuity across the different project phases, creating a stable foundation that allowed the work to evolve in terms of its thematic depth over time.

2.1 Workshop 1: Urban (Heritage) Narratives: Every Taracina has a Story (March 2023)

Inputs: Lectures on the history, heritage and experiences of local NGOs in Port Said.

Fieldwork: Walking tours of Port Said and Port Fouad, featuring *Sem-semia* musical storytelling.

Tools: Interviews with locals, narrative mapping, cinema and architecture documentation, collective memory mapping.

Structure: Alternation between lectures, city tours, free surveys, interviews with locals and group discussions, culminating in pre-final and final presentations attended by local representatives.

2.2 Workshop 2: Exploring Urban Recovery Scenarios: Reimagining Bazar Abbas (September 2023)

Inputs: Expert lectures on heritage-led regeneration, experimental design, climate adaptation, and socio-economic recovery.

Fieldwork: Excursions to Cairo's historic districts (Al-Darb Al-Ahmar and Al-Khalifa) and Port Said's Arab and European quarters, Bazar Abbas and Marché Municipal.

Tools: Scenario building, typology mapping and stakeholder mapping analysis.

Structure: Start with three days in Cairo to provide context and comparative cases, followed by seven days in Port Said for field surveys, group work, an interim colloquium and a final roundtable.

2.3 Workshop 3: Urban Rehabilitation and Cultural Tourism: Heritage for Tomorrow (July 2024)

Inputs: Lectures on integrated urban development planning, heritage preservation, cultural tourism, and sustainable mobility.

Fieldwork: Guided tours of the Arab and European quarters, *Sem-semia* tours, and site mapping of Bazar Abbas.

Tools: Vision formulation, scenario building, project proposals, design concepts and socio-economic assessments.

Structure: Preparatory online sessions drawing attention to similar case studies, and on-site workshop days structured into a kick-off session, built-up inputs, deep-dive exercises and wrap-up reflections.

3. Identification of Priority Zones and Thematic Focuses

The methodology adopted a parallel rather than linear approach, pairing spatial priority zones with specific thematic lenses. As detailed in Table B.1, these zones, which span the Arab and European Quarters, Bazar Abbas and wider public spaces, formed the spatial framework for the development of strategies ranging from heritage documentation to socio-economic regeneration and cultural tourism.

4. Detailed Workshop Outputs and Group-Based Contributions

Based on the above framework, the workshops produced a series of targeted outputs to address the challenges facing Port Said's inner city at the meso scale. Each group translated the aforementioned themes into conceptual or spatial proposals or guidelines, with a primary focus on the Bazar Abbas area and its immediate surroundings.

| Focus | Priority Zones | Themes |
|---|---|--|
| Workshop 1 Narrative & Documentation | Bazar Abbas Ferial Garden Palestine Street Muhammad Ali Street Arab Quarter | Collective memory; Oral history; Cinema and architecture; Children and youth heritage education. |
| Workshop 2 Recovery Scenarios | Bazar Abbas MarchéMunicipal Connecting Street | Critical Reconstruction: Guidelines for market typologies and rebuilding strategies. Public Space & Climate Adaptation: Climate-responsive pedestrianisation, shading, and ecological interventions. Heritage-led Regeneration: Values-based conservation with Burra Charter principles. Experimental Urban Design: Tactical interventions, pilot Semsemya parade. Socio-economic Regeneration: Stakeholder mapping, contradiction dynamics, multi-dimensional vision. |
| Workshop 3 Rehabilitation & Cultural Tourism | Bazar Abbas MarchéMunicipal Ferial & Elwan parks Ferry area | Infrastructure & Mobility: Sustainable transport, pedestrian pathways, youth engagement with apps. Built Heritage & Adaptive Reuse: Revitalisation of Marché Municipal into a cultural hub. Intangible Heritage & Rebranding: Integrating Semsemya, crafts, culinary heritage into branding. Public Space & Sustainability: Climate-adaptive green and blue infrastructure. Cultural Tourism & Socioeconomic Regeneration: Canal Walkway and Ferry as immersive cultural tourism projects. |

Table B.1 Themes and zones addressed in each workshop.

4.1 Workshop 1 Outputs

The workshop outputs centred on narrative-building, memory documentation, and youth engagement (Table B.2).

| Group Theme | Contribution |
|--------------------------------|--|
| Narratives & Collective Memory | Documenting oral histories and personal recollections connected to the Arab and European Quarters; Using interviews and memory-mapping to uncover relations between local communities and <i>taracinas</i> ; Highlighting memory as a form of intangible heritage and emphasizing its role in shaping recovery narratives. |
| Architecture & Cinema | Documenting urban heritage through the lens of cinema; Filming everyday life in historic streets, showing how spatial patterns reflect both continuity and rupture across generations. |
| Youth & Heritage Education | Experimenting with educational tools for children and youth; Developing playful activities to introduce younger generations to Port Said's multicultural heritage; Underlining the need for intergenerational transmission of heritage values. |

Table B.2 Outputs of workshop 1, Urban Heritage Narratives: Every *Taracina* has a Story.

4.2 Workshop 2 Outputs

Each of the five groups produced concrete guidelines, frameworks, or pilot actions, ranging from architectural reconstruction to socio-economic regeneration (Table B.3).

4.3 Workshop 3 Outputs

The outputs of this workshop leaned towards rehabilitation strategies with a cultural tourism dimension and were again split by thematic group (Table B.4).

| Group Theme | Contribution |
|-----------------------------------|--|
| Critical Reconstruction | <p>Developing architectural and functional guidelines for markets (Bazar Abbas, Marché Municipal, and street markets);</p> <p>Studying typologies through historical maps and proposed reconstruction strategies sensitive to social and morphological contexts;</p> <p>Including height regulations, signage unification, and adaptive rules for shading and circulation.</p> |
| Public Space & Climate Adaptation | <p>Mapping open space typologies and proposed a toolbox of interventions (trees, pergolas, water features, traffic calming);</p> <p>Reframing Bazar Abbas as a climate-adaptive pedestrian hub integrated with community life.</p> |
| Heritage-led Regeneration | <p>Assessing the values and intactness of Bazar Abbas and its surroundings;</p> <p>Prioritizing interventions into three categories: restoration, reinstatement, and addition;</p> <p>Establishing a conservation matrix linking material integrity to socio-cultural value.</p> |
| Experimental Urban Design | <p>Testing tactical interventions such as the Semsemya music parade leading people through urban nodes;</p> <p>Connecting cultural performance with physical space, and showing how temporary actions can shift perceptions of neglected areas.</p> |
| Socio-economic Regeneration | <p>Carrying out stakeholder mapping and economic chain analysis;</p> <p>Documenting contradictions (e.g., between shop owners and vendors);</p> <p>Translating them into a multi-dimensional vision (economic, cultural, social, spatial);</p> <p>Proposing phased implementation with indicators for success.</p> |

Table B.3 Outputs of workshop 2, Exploring Urban Recovery Scenarios: Reimagining Bazar Abbas.

| Group Theme | Contribution |
|---|---|
| Infrastructure & Sustainable Mobility | Proposing pedestrian-friendly pathways, bicycles, and e-scooters to reduce traffic around Bazar Abbas; Suggesting using mobile apps for youth engagement, linking heritage mobility to digital participation. |
| Built Heritage & Adaptive Reuse | Proposing adaptive reuse of the Marché Municipal into a cultural hub for maritime heritage; Merging conservation with economic revival by reintegrating abandoned spaces into Port Said's daily life. |
| Intangible Heritage & City Rebranding | Mapping intangible heritage (Semsemya music, crafts, food traditions) and proposed integrating it into city branding; Their strategy was to transform Port Said into a multisensory experience, reconnecting local identity with cultural tourism. |
| Public Spaces & Environmental Sustainability | Combining green infrastructure with heritage-sensitive design for Ferial and Elwan Parks; Their interventions ranged from shaded pedestrian corridors to cultural hubs that tied the Arab and European Quarters together. |
| Cultural Tourism & Socioeconomic Regeneration | Proposing immersive cultural tourism nodes with shaded cafés, storytelling stations, and skating routes for the Ferry area and Canal Walkway; Their aim was to merge cultural tourism with everyday life to regenerate Port Said's waterfront identity. |

Table B.4 Outputs of workshop, 3 Urban Rehabilitation and Cultural Tourism: Heritage for Tomorrow.

References

- BTU Cottbus–Senftenberg. (2023). *Urban (heritage) narrative workshop: Every taracina has a story, March 2023*. Middle East Cooperation Unit. https://www-docs.b-tu.de/middle-east-cooperation/public/Bazar_Abbas/Report_2023_UHNW_PortSaid.pdf
- BTU Cottbus–Senftenberg. (2024). *Reimagining Bazar Abbas: Workshop on exploring urban recovery scenarios, September 2023*. Middle East Cooperation Unit. https://www-docs.b-tu.de/middle-east-cooperation/public/Bazar_Abbas/Report_2023_URW_PortSaid.pdf
- BTU Cottbus–Senftenberg. (2025). *Heritage for tomorrow: Workshop on integrated urban rehabilitation, July 2024*. Middle East Cooperation Unit. https://www-docs.b-tu.de/middle-east-cooperation/public/Bazar_Abbas/Report_2024_URW_PortSaid.pdf

C. Selected Drawings of Restoration and Conservation Training (2023)

Prepared by Logaina
Fathalla

Introduction

This appendix presents technical drawings and illustrations¹ related to the restoration of wooden elements in Bazar Abbas, including the wooden roof trusses, doors, balconies, and windows. While the conservation of plaster and mortar is discussed separately in Paper 12, this appendix focuses on timber components as part of a training-led conservation programme, which was developed as the first step in the rehabilitation process. Given that the ground floor of the bazaar remains in active use despite its deteriorated condition, restoration activities prioritised the second level of the entrance façade to minimise disruption to daily commercial activities.

The training programme was designed to equip members of the local community in Port Said with practical conservation skills and a foundational understanding of conservation principles, technical terminology, processes, and ethics. Particular emphasis was placed on the restoration of the roof trusses and the timber balconies, known locally as *taracina*, which are among the most distinctive architectural features of the city. The drawings in this appendix support hands-on training by illustrating appropriate restoration techniques, material treatments, and construction details for wooden elements before intervening and proposals of interventions.

1. Timber Truss: Original Design and Design Intervention

1.1 Original Timber Roof Truss

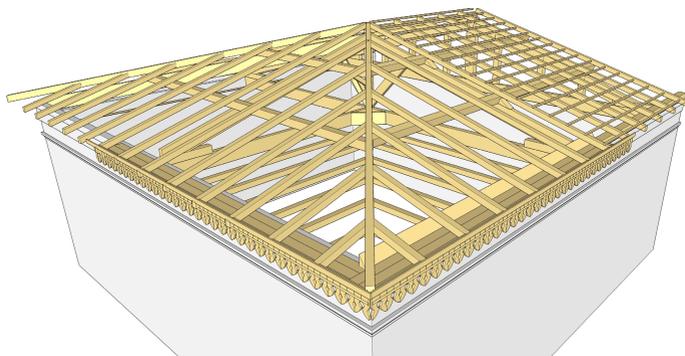


Fig. C.1 Original timber roof truss.

1. All of the illustrations in this appendix were produced by trainees on the Bazar Abbas Restoration and Conservation Training course, which took place in November and December 2023

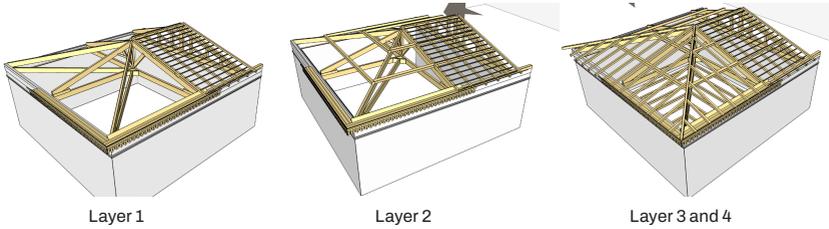


Fig. C.2 Layers of the timber roof truss.

1.2 Fascia Fixation

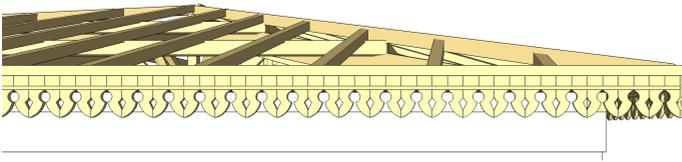


Fig. C.3 Original timber roof truss elevation view.

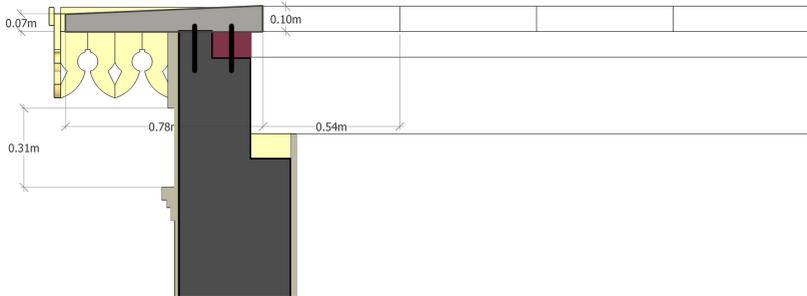


Fig. C.4 Fascia fixation after intervention.

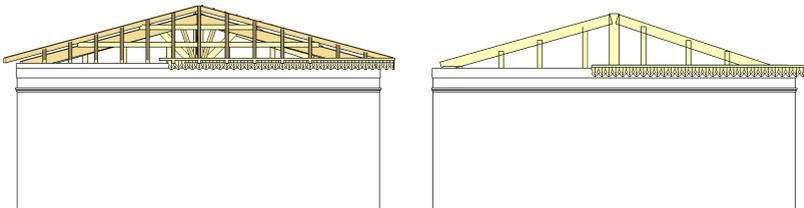


Fig. C.5 Fascia level- north elevation and east elevation.

1.3 Tree Truss Connections

The truss connections are examined here. Based on the existing condition (Figs. C.6 to C.9), the structure of the truss is interpreted, and the corresponding details and connections are extracted accordingly.

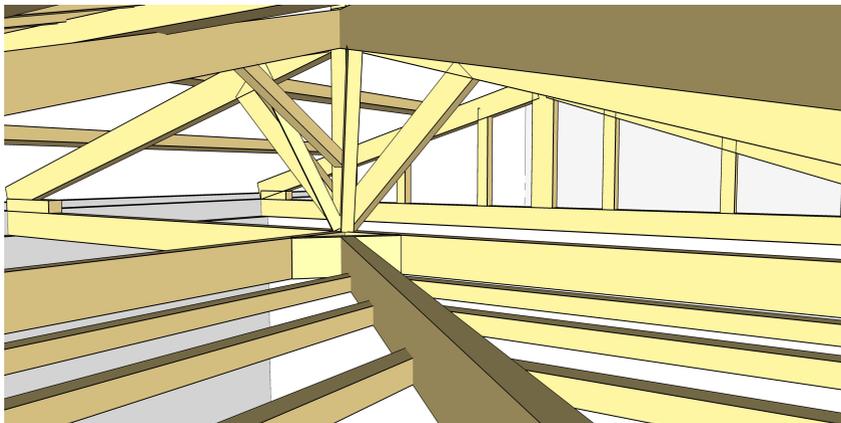


Fig. C.6 Tree truss connection.

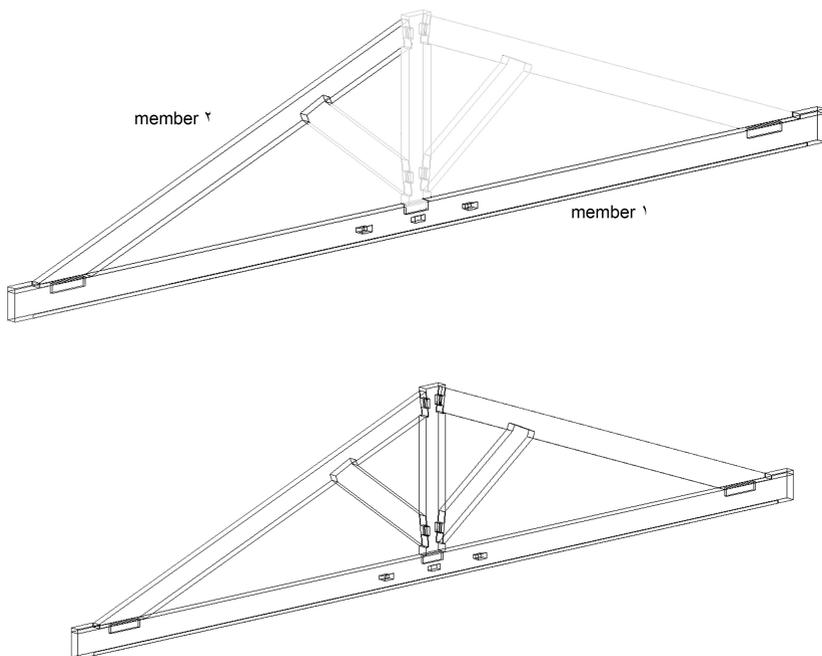


Fig. C.7 Truss timber members existing condition.

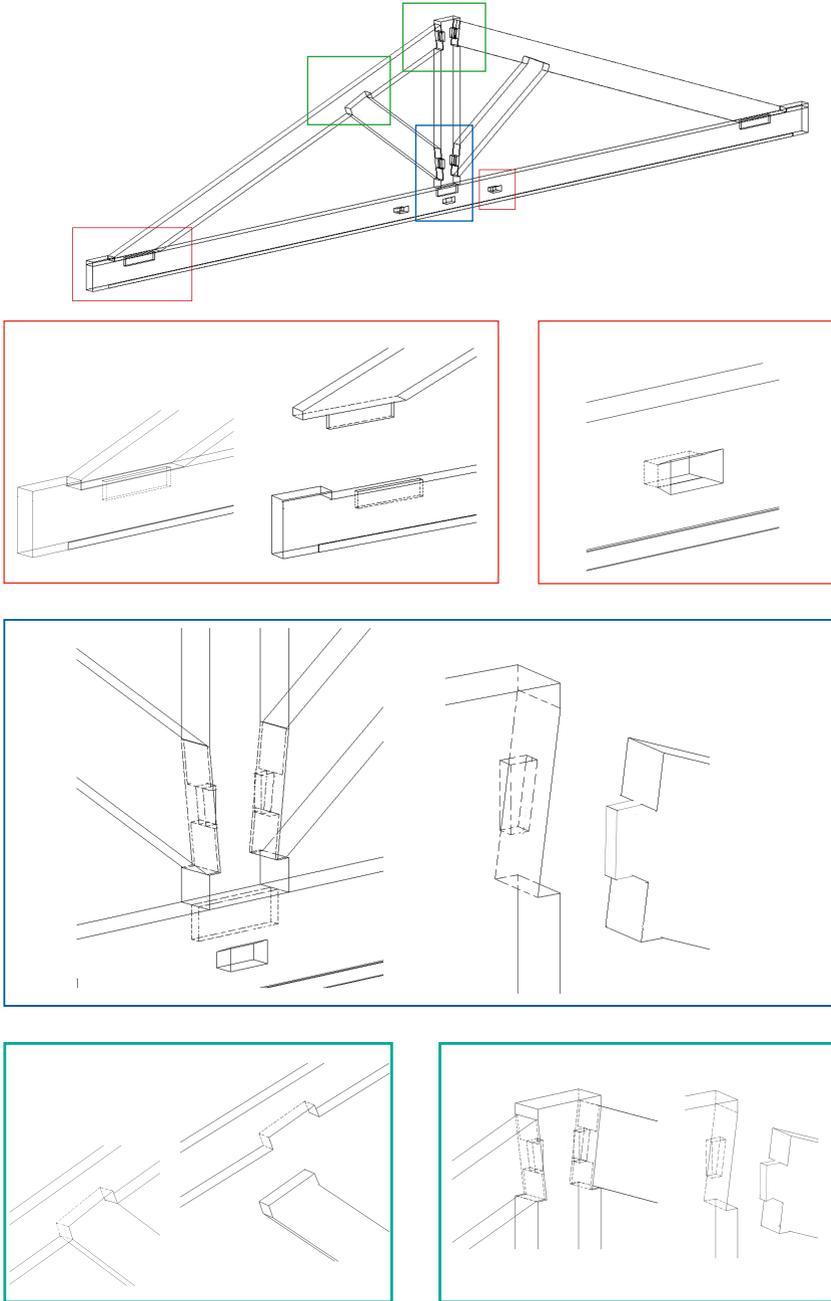


Fig. C.8 Tree Truss Connections.

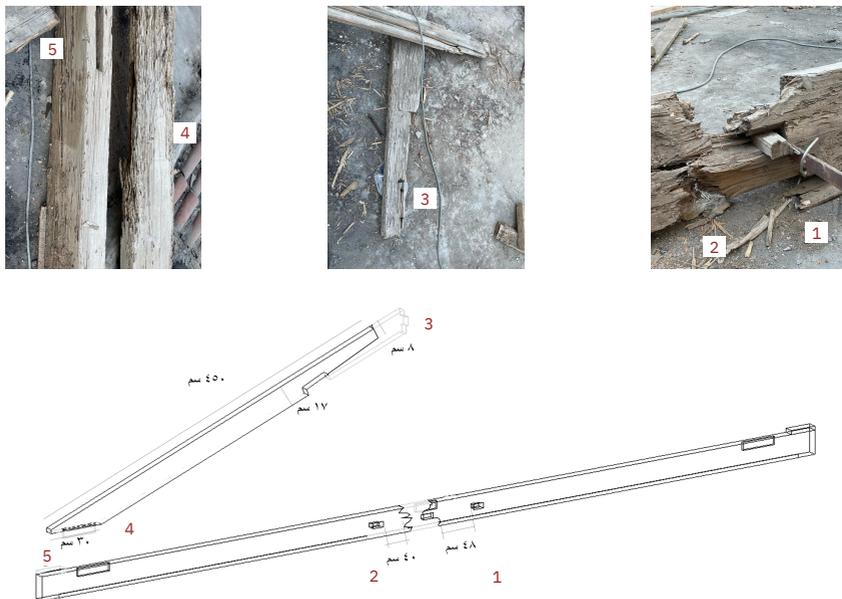


Fig. C.9 Existing condition of the timber truss.

2. Doors

Analysis of the balcony doors involved examining the existing condition to deduce and implement the original design.

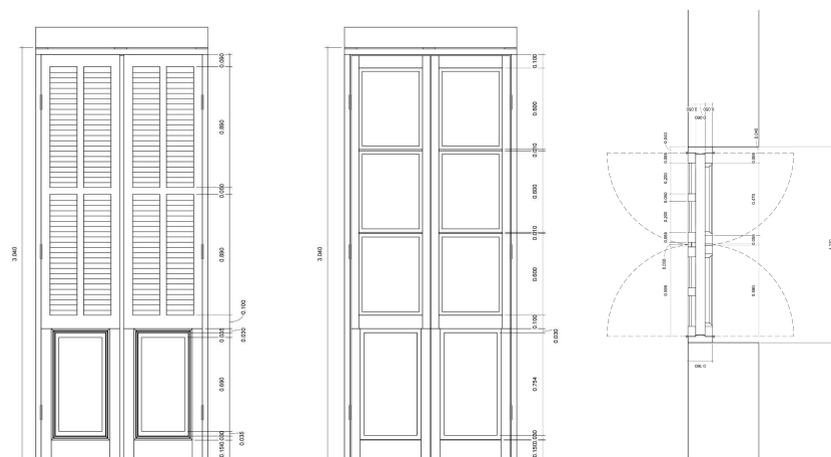


Fig. C.10 Original doors drawings.

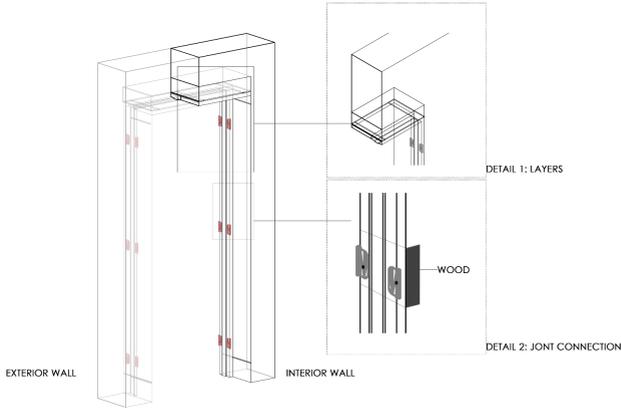


Fig. C.11 Original door interior details.

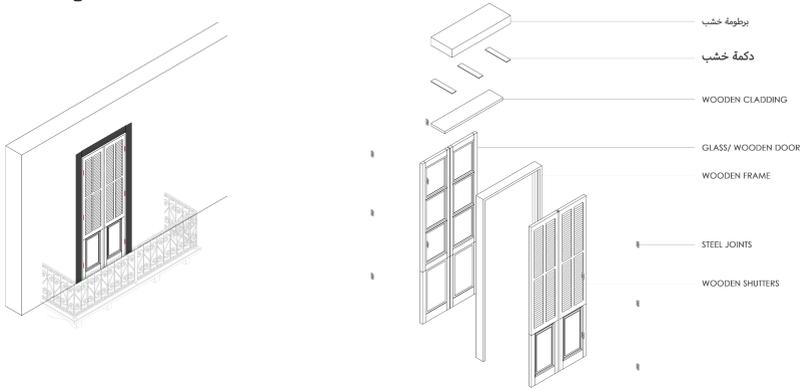


Fig. C.12 Original door components.



Fig. C.13 Left: Existing conditions. Right: Proposed Design.

3. Balconies

Dealing with termite infestation in the wooden structure of the balconies required a change in materiality to ensure durability under such conditions.

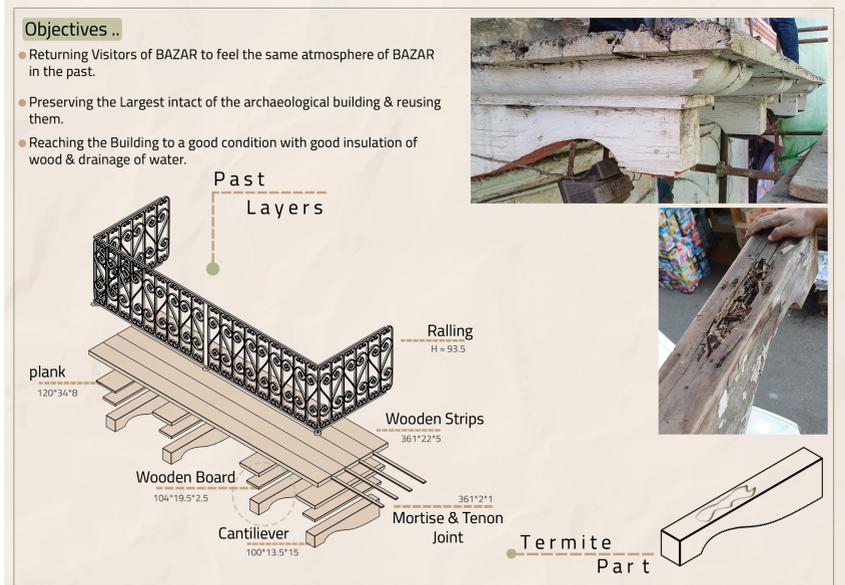


Fig. C.14 Original balcony details.

The proposed restoration included moisture insulation as well as sloping concrete for the flooring.

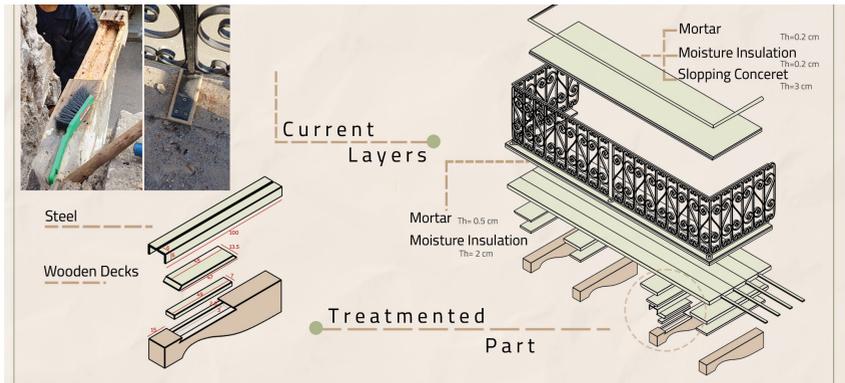


Fig. C.15 Restored balcony details.

4. Windows

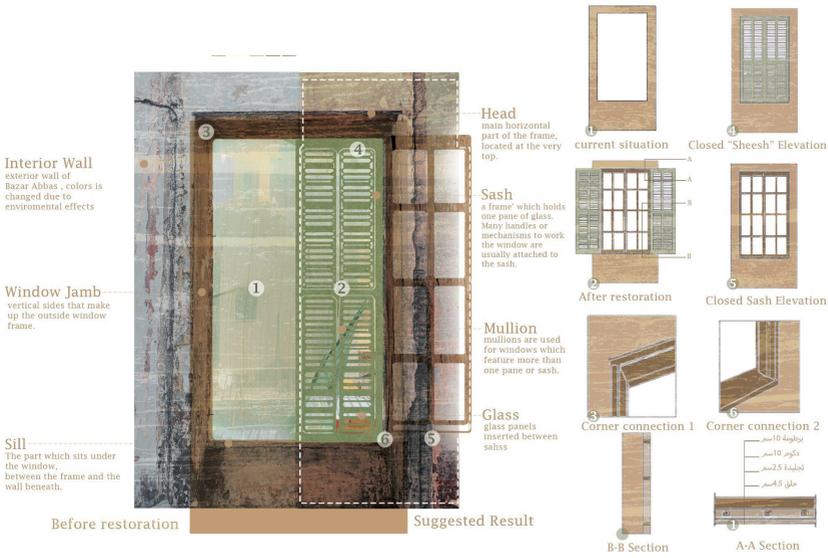


Fig. C.16 Windows details before restoration and suggested design.

D. Perception, Significance, Relevance

Bazar Abbas Baseline Survey (2023)

Prepared by Basma El-
Assar

Aim and Context

This survey, conducted between May and June 2023, aimed to gather information on Port Said residents' perceptions of the bazaar in general and Bazar Abbas and its surroundings in particular. It was carried out as part of the preparation for the second workshop of the project, the Urban Recovery Workshop. Seventy-one interviewees of different genders, ages and professional backgrounds were targeted across various locations in the inner city, with the aim of providing a diverse reflection of the community's views on the bazaar. The collected responses provided preliminary insights into how residents perceive, remember and engage with Bazar Abbas and its surroundings as a commercial and cultural landmark in the city.

Methodology

The survey took a qualitative approach, as emphasised by a list of 20 questions, comprising 11 open-ended and 9 multiple-choice questions. The sample was random and based on convenience. Questions were asked face-to-face of passers-by, shopkeepers and customers in public spaces in the city. The questions addressed seven main themes:

- A) Perception and Meaning of 'bazaar'
- B) Awareness of and Identification with Bazar Abbas
- C) Everyday Use and Economic Function
- D) Historical Significance of Bazar Abbas
- E) Perceived Significance and Value Dimensions
- F) Perceived Change and Transformation
- G) Future Vision and Adaptive Potential

The responses were transcribed and translated into English, and then coded thematically. This enabled both qualitative interpretation and simple quantitative visualisation.



Fig. D.2a Word cloud for question 2.

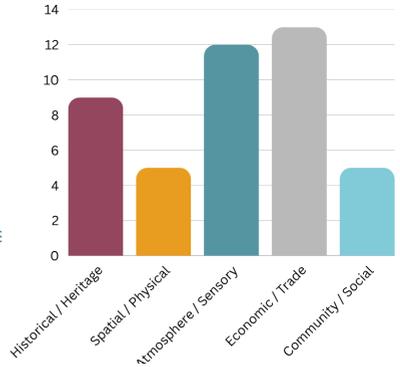


Fig. D.2b Column chart for question 2.

B) Awareness of and Identification with Bazar Abbas

This section explores how familiar residents are with the location and identity of Bazar Abbas. Most respondents were aware of Bazar Abbas’s existence and location. However, a smaller group of younger residents (under 18 years old) either attributed the word Bazar to the new bazaar or were unaware of its existence.

Q. 3: Where is the bazar in Port Said?

Q. 4: Do you know Bazar Abbas?

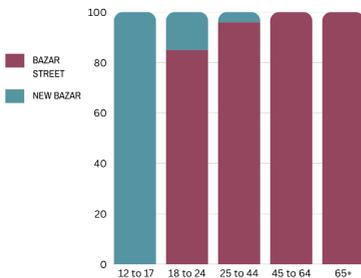


Fig. D.3 Stacked bar chart for question 3.

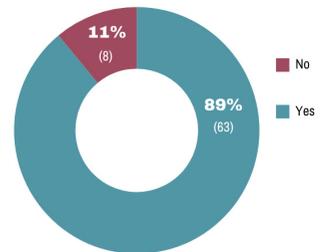


Fig. D.4 Pie chart for question 4.

C) Everyday Use and Economic Function

The survey examined how residents incorporate Bazar Abbas and the surrounding area into their daily shopping routines. The results showed that many respondents depend on Bazar Street and its markets, either through Bazar Abbas or the Municipality Bazaar, for their regular shop-

ping. Respondents indicated a strong preference for Bazar Abbas for their daily, weekly and monthly shopping needs, reflecting its continued position as a vital commercial and retail hub. However, the survey also mentioned an array of markets in the Arab and European quarters and Port Fouad, albeit less frequently than Bazar Street and its markets.

Q. 5: Where do you usually go to buy food and groceries?

Q. 6: Do you go to Bazar Abbas for any kind of shopping?

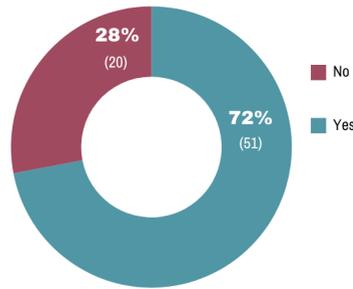
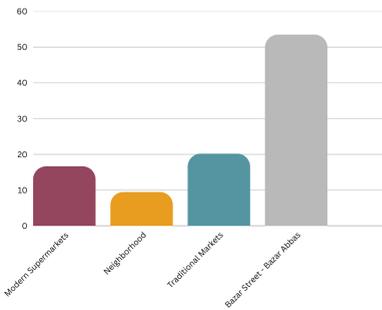


Fig. D.5 Column chart for question 5.

Fig. D.6 Pie chart for question 6.

Q. 7: How often do you go to Bazar Abbas?

To facilitate a clearer interpretation of shopping intensity and distinguish between regular engagement with Bazar Abbas and sporadic or absent use, individual frequency responses were consolidated into four categories:

- **Frequent Users:** every day to once a week.
- **Occasional Users:** once to three times a month.
- **Rare Users:** once every three months or rarely.
- **Non-Users:** never.

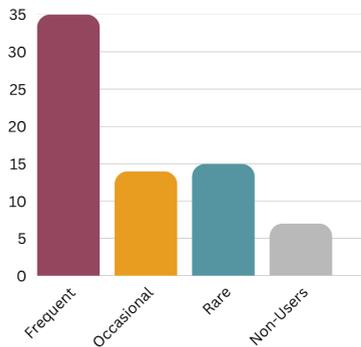


Fig. D.7 Column chart for question 7.

Q. 8: Why do you go to Bazar Abbas?

Motivations for visiting Bazar Abbas, when grouped into five categories, both positive and negative responses, show that everyday needs, habits, and location remain the primary drivers shaping public use of the bazaar.

- Proximity Factors
- Price-Related Factors
- Habitual Factors
- Goods Variety
- Quality Factors

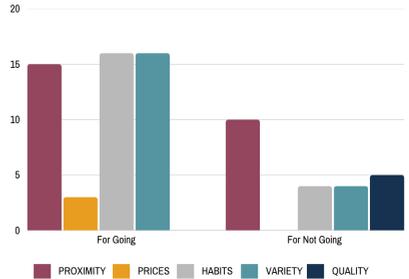


Fig. D.8 Column chart for Question 8.

D) Historical Significance of Bazar Abbas

This section examines residents' historical awareness of Bazar Abbas and how knowledge of the bazaar has been passed down through the generations. The responses reveal that understanding of the bazaar's history is largely shaped by oral narratives, family memories and personal experience, rather than formal documentation. This reliance on collective memory suggests a growing generational distance and diminishing awareness of the bazaar's history.

Q. 9: Do you know about the history of Bazar Abbas?

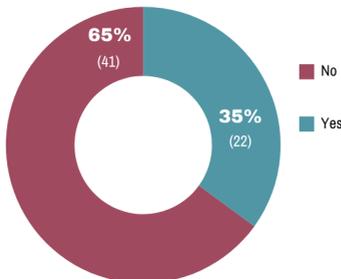


Fig. D.9 Pie chart for question 9.

Q. 10: What do you know about Bazar Abbas?



Fig. D.10 Word cloud for question 10.

Q. 11: What are your sources of information about Bazar Abbas?

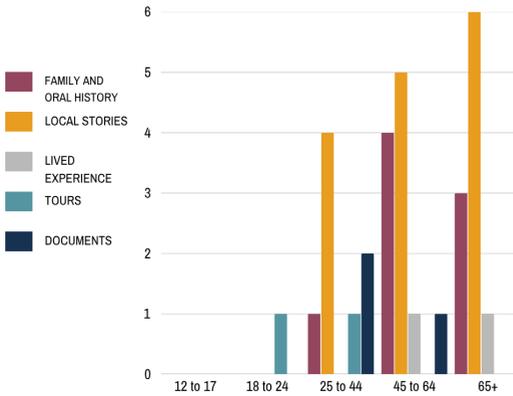


Fig. D.11 Column chart for question 11.

E) Perceived Significance and Value Dimensions

Residents described Bazar Abbas as valuable for its historical role and social significance. However, the younger generations viewed it as less important due to the rise of newer markets. To understand the reasons behind the respondents' stated importance of Bazar Abbas, all open-ended answers were qualitatively coded into six categories: historical value, identity value, social value, architectural value, functional/economic value and perceptions of decline. This allowed us to convert qualitative statements into a comparable numerical scale (1: not at all important to 5: very important). A sample of the answers and the chosen categories is provided below:

- Historical value: historic place, cosmopolitan era, oldest market, witnessed events, etc.
- Identity value: represents Port Said identity, original city, authentic place, etc.
- Social value and atmosphere: vibes, Ramadan atmosphere, social interaction, bustle, etc.
- Architectural value: old architectural style, unique structure, European influence, etc.
- Functional value: goods, prices, variety, meeting everyday needs, etc.

Question 12: How important is Bazar Abbas?

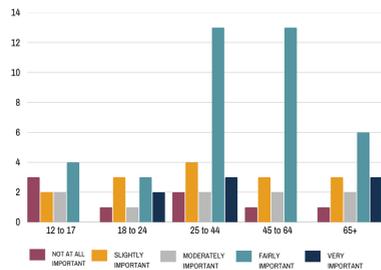


Fig. D.12 Column chart for question 12.

Q. 13: Explain the reasons behind your answer.

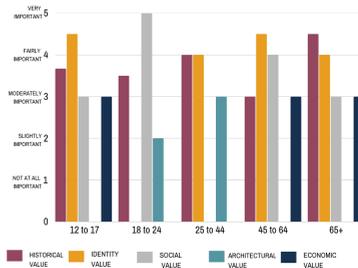


Fig. D.13 Column chart for question 13.

F) Perceived Change and Transformation

This section examines how residents perceive the changes that Bazar Abbas has undergone over time, with a focus on shifts in its physical condition, commercial role and social relevance. The responses reveal the transformations that have shaped the bazaar and the factors that have contributed to its current state.

Q. 14: Has Bazar Abbas changed since the wartime? If yes, how and in what has it changed?

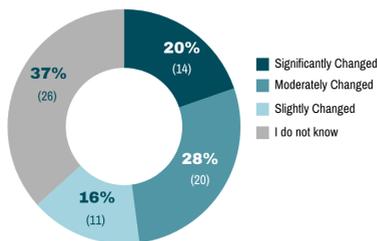


Fig. D.14a Pie chart for question 14.

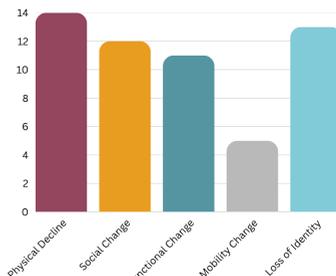


Fig. D.14b Column chart for question 14.

Residents describe the transformation of Bazar Abbas as comprising five major perceived changes. These highlight how the bazaar’s transformation is experienced as a physical and socio-cultural shift across

generations.

- Physical decline: It is dirtier, messier and more unkempt, with vendors everywhere and poor upkeep.
- Social and behavioural change: Shift in manners, social relations, crowd composition and youth behaviour.
- Functional change: Change in market role, trade zone effects and new uses replacing old ones.
- Spatial and mobility changes: Loss of pedestrian character and increased congestion.
- Loss of original identity: Loss of cosmopolitan character and erasure of earlier identity.

G) Future Vision and Adaptive Potential

This section explores how residents envision the future of Bazar Abbas and the forms of adaptive reuse they believe could restore its relevance. The responses highlight a strong desire for revitalisation that balances heritage preservation with improved functionality. This suggests that the bazaar has significant potential to evolve into a cleaner, more organised and culturally active space that can serve contemporary community needs.

Q. 15: In case of repair, do you think that the function of Bazar Abbas should change?

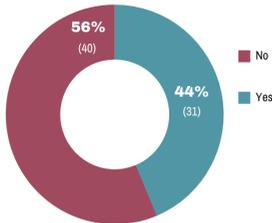


Fig. D-15a Pie chart for question 15.

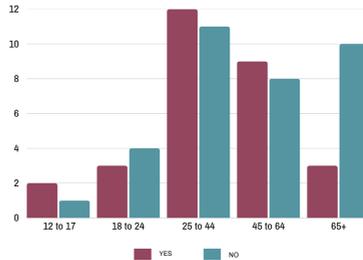


Fig. D-15b Column chart for question 15.

Q. 16: Explain the reasons behind your answers.

YES (arguments for functional change)

- Infrastructure viability: The current structure is perceived as either obsolete or underused. Respondents suggest that renewal would be a more efficient use of resources than maintenance.
- Market modernisation: The existing retail mix is considered outdated and the space should be reprogrammed to meet contemporary market demands and consumer needs.
- Environmental rehabilitation: Change is necessary to address chronic issues regarding sanitation, odour and the presence of dilapidated or demolished areas.
- Tourism and Revitalisation: A functional shift is required to breathe new life into the area and transform it into a landmark that will attract visitors.
- Urban Mobility: The current layout does not support a pedestrian-friendly environment, so functional changes should prioritise walkable public spaces.

NO (Arguments Against Functional Change)

- Heritage and identity preservation: There are concerns that altering the bazaar's function would erode its historical essence and cultural significance.
- Maintenance priority: The focus should be on physical restoration and hygiene, such as repairs and cleaning, rather than changing the building's intended use.
- Functional continuity: The belief that the current shops and services are relevant and sufficient for the community's needs.
- Socio-economic stability: Changing the function poses a risk to the livelihoods of existing merchants and the established social fabric of the marketplace.
- Institutional distrust: Fear that modern interventions will either fail to respect the site's aesthetic value or lead to negative unintended consequences.

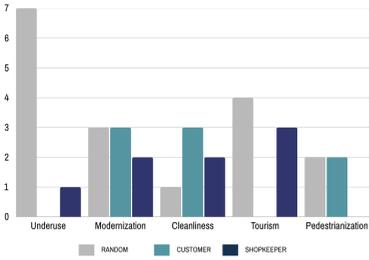


Fig. D.16a Column chart for question 16, those who answered YES to question 15.

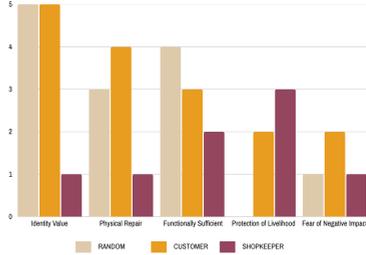


Fig. D.16b Column chart for question 16, those who answered NO to question 15.

Q. 17: If you wish to change Bazar Abbas' function, which function would you choose?

Q. 18: In case of repair, how should the second floor of the Bazar be used?

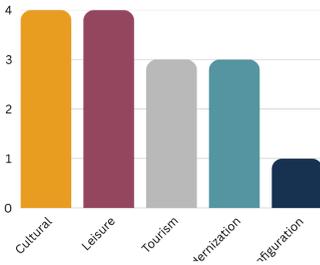


Fig. D.17 Column chart for question 17.

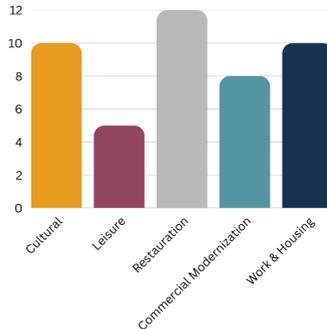


Fig. D.18 Column chart for question 18.

E. Awareness, Visibility, Impact

Bazar Abbas Evaluative Survey (2025)

Prepared by Basma El-
Assar

Aim and context

This evaluative survey was conducted in January 2025, immediately after the first phase of the Bazar Abbas Project came to a close. The primary objective was to capture the community's immediate feedback on the pilot intervention, with a particular focus on the façade treatment and associated cultural activities. Unlike the earlier exploratory survey, this one responded to concrete, visible changes to the building and the street. The survey aimed to document levels of public awareness, the visibility of the restoration and the perceived impact of these changes on the bazaar's architectural and symbolic value. The intervention was intended as a small-scale, people-centred action to catalyse the site's long-term rehabilitation.

Methodology

The survey targeted 52 people, including passers-by, shopkeepers and customers from Bazar Street and the surrounding area. Of these, 55% were male and 45% were female. Participants spanned all age groups, though those aged 25–44 were the most highly represented. The questionnaire used a combination of multiple-choice and open-ended questions to gather quantitative data and qualitative insights. For analysis, the questions were grouped into three distinct categories:

- A) Façade Intervention,
- B) Rehabilitation,
- C) Cultural Activation.

Key Findings

A) Façade Intervention: Awareness and Perception

There was high public engagement with the restoration, with 67% of respondents aware of the façade treatment. This awareness was largely driven by direct observation, with 33% of the total group reporting that they had seen the restoration work in progress or after completion. The aesthetic results were generally viewed as successful: the majority of respondents who were aware of the restoration rated it positively, describing the refurbished sections as 'cleaner', 'brighter' and more 'authentic'. However, a significant theme in the feedback was the limited scale of the pilot project. Many locals noted that the work covered only a small part of the building, which limited its impact on the streetscape.

Questions were also raised about the use of two different colours and the need for ongoing maintenance to prevent the new surfaces from becoming dirty again. (See answers to questions 1, 3 and 5.)

B) Rehabilitation: Support and Challenges

There is a strong mandate for continued work, with 33 respondents expressing their full support for further restoration and rehabilitation. Supporters of the project view it as a means of preserving the city's identity and revitalising the local economy. However, the survey also highlighted deep-seated concerns regarding feasibility. The community identified 'shopkeepers and vendors' resistance' (13 responses) and 'structural and technical issues' (12 responses) as the most significant hurdles. Qualitative comments revealed fears that the fragile wooden structure might not survive a full restoration, as well as significant concerns that the process could lead to higher rents or the displacement of traditional businesses (see answers to questions 4, 6, 8 and 10).

C) Cultural Activation: Awareness, Impact and Future Steps

The cultural programming, which included *Semsemia* parties and workshops, reached 62% of the respondents. These events were highly praised for breaking the fear barrier, making the building feel safe and habitable. While these events successfully attracted new people to the area, respondents noted that more targeted marketing is needed to engage local young people, who often prefer modern shopping centres. The community's priority moving forward is to complete the visual transformation. Twenty-five respondents urged that the next logical step is to complete the full elevation and remaining balconies, ensuring the building serves as a true landmark (see answers to questions 7, 10, 12 and 15).

Q. 1: Do you know about the façade restoration of Bazar Abbas?

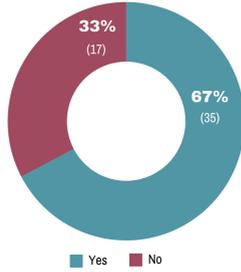


Fig. E.1 Pie chart for question 1.

Q. 2: If yes, how did you know about it?

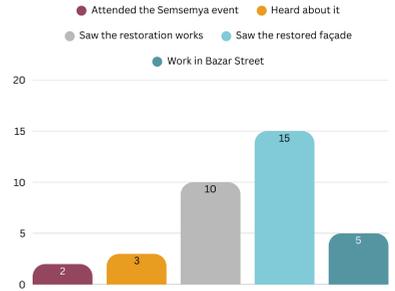


Fig. E.2 Column chart for question 2.

Q. 3: What are your thoughts on the recent refurbishment of the façade and taracinas of Bazar Abbas?

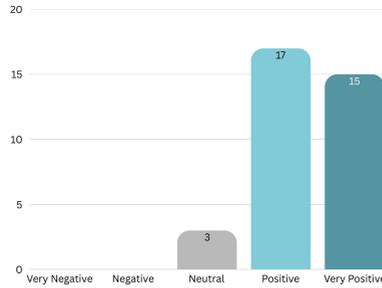


Fig. E.3 Column chart for question 3.

Q. 4: How important is it to preserve and rehabilitate Bazar Abbas?

10 out of 17 respondents who were previously unaware of the project and had not observed its activities selected a neutral response to this question.

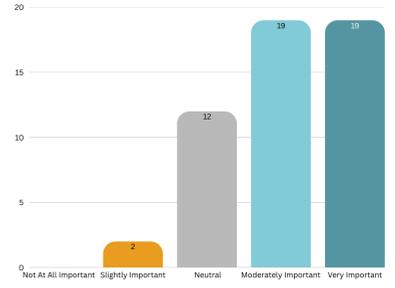


Fig. E.4 Column chart for question 4.

Q. 5: Do you think that the project has improved the appearance of the area?

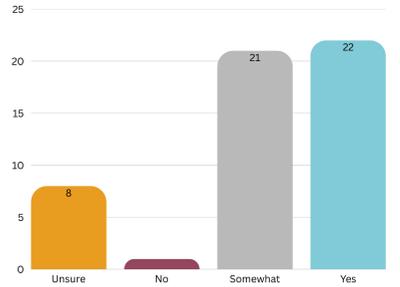


Fig. E.5 Column chart for question 5.

| Yes | Somewhat |
|---|---|
| <p>Yes, it reminds me how beautiful the building was.</p> <p>Yes, it looks better and cleaner now. Not the whole area, but it looks better now.</p> <p>The place will attract everyone once the restoration is finished.</p> <p>I'm happy people now see the building's importance.</p> <p>We are waiting for them to finish the rest of the building.</p> <p>It looks much better; it was demolished and ugly before.</p> <p>I'm excited to see the whole building finished.</p> <p>It is more liveable now.</p> <p>The balconies look very good and authentic.</p> <p>This part looks better than it was.</p> <p>It looks better and cleaner now.</p> <p>The renovated part attracts people because its brighter.</p> <p>It gives us hope that the place will be beautiful again.</p> <p>It makes the street looks better</p> <p>The balconies with the ornaments look very authentic.</p> <p>This part looks very good and I hope they will complete the whole building.</p> | <p>I think this is a very small part. It is only 20% of the elevation.</p> <p>I don't know why there are two different colours.</p> <p>It is a very small part; I don't know why they stopped.</p> <p>I heard they will restore the whole building, but nothing happened yet. Maybe after full restoration the place will look good.</p> <p>I haven't heard any reviews about the place.</p> <p>Only those involved in the project recognize its importance.</p> <p>It depends on whether those people keep visiting.</p> <p>With more funding and real work, the impact would be better.</p> <p>The part became dirty again.</p> <p>It is not very noticeable, a small part</p> <p>The recoloured part looks much better now.</p> <p>I did not see it yet.</p> <p>I think it will look good.</p> <p>It is less than half of the elevation.</p> |
| Unsure | No |
| <p>I did not see it yet.</p> <p>This street is always crowded and full of vendors.</p> <p>This place is full of vendors and has a bad smell.</p> <p>I don't see it to give feedback</p> <p>Without full restoration, the building's importance remains unclear to the public.</p> <p>I did not see it yet.</p> <p>I know it is a very old building.</p> | <p>I didn't hear about the project or the importance of this place.</p> |

Table E.1 Question 5 responses.

Q. 6: Do you think the pilot project has improved the importance of Bazar Abbas?

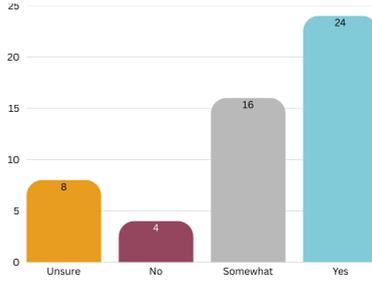


Fig. E.6 Column chart for question 6.

Q. 7: Do you think the pilot project has helped make Bazar Abbas better known, especially to the younger generation?

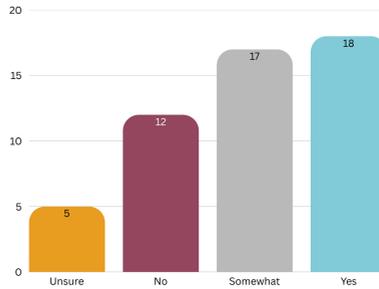


Fig. E.7 Column chart for question 7.

| Yes | Somewhat |
|---|--|
| <p>The place was very dirty and partly demolished.</p> <p>This part is cleaner, and we hope the whole building draws tourists.</p> <p>Not exactly, but it brings some new people.</p> <p>More tourists come after hearing about the project.</p> <p>Its importance will grow once the whole building is restored.</p> <p>People feel safer entering now.</p> <p>More people now know about the bazar.</p> <p>You brought new people from abroad, and visitors are returning. It improves the place's reputation.</p> <p>New people are coming now.</p> <p>Marketing matters, but the bazar has always been important.</p> <p>It simply attracts more visitors.</p> <p>It feels safer, and the events encouraged us to enter again.</p> <p>Brighter colours changed how people see the bazar.</p> <p>People now come in the morning</p> <p>Restoration highlighted its historical significance. People now visit more often.</p> <p>It gives the building new purpose while preserving heritage.</p> <p>The restored section shows old buildings can still work.</p> | <p>The place was already known and used as a market.</p> <p>The Bazar is already known and visited daily.</p> <p>The place is already considered as one of the most important streets in the city.</p> <p>It may not have changed its importance, but it makes the street look better.</p> <p>The place is safer now, especially for younger generations.</p> <p>The place was always important, the project just attracts new people to it.</p> <p>It was already important and after restoration, more people want to learn about the building.</p> <p>Awareness has somehow increased, but not sufficiently.</p> <p>The difference is present but not on a city-wide scale.</p> <p>Shopkeepers might appreciate the effort but otherwise people are indifferent.</p> <p>The site will continue to deteriorate without further improvements.</p> <p>The project needs governmental support to reach a better impact.</p> |
| Unsure | No |
| <p>I think it is too old and it should be demolished.</p> <p>It is known as a food market.</p> <p>I did not see it.</p> <p>It has a bad reputation.</p> <p>It is widely known as old</p> <p>I have not seen it.</p> <p>I don't see it as a restoration priority.</p> <p>It needs to be fully restored.</p> | <p>People prioritize business over heritage and there is no business there.</p> <p>The only known place in this area is Alam El Behar Restaurant.</p> <p>Restoration alone is not enough, the site needs active promotion.</p> <p>Many locals are still unaware of these restorations.</p> |

Table E. 2 Question 6 responses.

| Yes | Somewhat |
|---|---|
| <p>You attracted youth through workshops, and they still come. I see more young people coming now. Yes, they come with you, Misho, and Mossad.</p> <p>The project highlighted Bazar Abbas on social media and attracted new people.</p> <p>The project sparked curiosity and brought new faces exploring the place. It introduced the building to many who had never noticed it before.</p> <p>Workshops and parties were held inside the building for the first time in decades.</p> <p>Some university projects now use Bazar Abbas as a case study, and students come to visit.</p> <p>More people now see the market as a historic site, not a demolished one.</p> <p>The project sparked new interest in local history among youth.</p> <p>Social media highlighted Bazar Abbas and attracted new visitors.</p> <p>Artists now come to make documentaries and short films about the building.</p> <p>Some people stay in the coffee-shop because they feel safer now.</p> <p>Workshops brought people from different areas and made a difference. I see more young people coming to the bazar now.</p> <p>My daughter attended a workshop.</p> <p>Cultural tours bring new people to Bazar Street.</p> | <p>In my opinion, it is the same as before. The market still looks outdated and unappealing to youth.</p> <p>Social media helped a bit, but youth don't visit regularly.</p> <p>Only architecture, urban, and history students visit the place.</p> <p>Youth engagement depends on continued efforts.</p> <p>It is not a modern attraction for younger people.</p> <p>Many have heard of the place but haven't visited.</p> <p>There haven't been enough youth-focused events.</p> <p>Younger generations prefer modern, open spaces.</p> <p>The project is still early and needs time.</p> <p>The project didn't offer real youth participation.</p> <p>Maybe the project wasn't promoted well.</p> <p>It is still unknown to about 80% of citizens.</p> <p>New faces are now asking about the project and events.</p> <p>Engagement remains limited.</p> <p>Salsabila is much more known.</p> <p>Younger people are not interested in visiting this area.</p> |
| Unsure | No |
| <p>Older generations are still the primary visitors.</p> <p>More people know the name, but it's unclear if they visit.</p> | <p>Most young people still don't know about the bazar despite the project.</p> <p>The building is not widely promoted beyond the German University area.</p> <p>Young people are more interested in malls and modern spaces.</p> |

| Unsure | No |
|--|---|
| <p>Many young people still don't see it as a place for them.</p> <p>Many people know nothing about it except that it's a market.</p> <p>They are more interested in modern buildings like malls.</p> | <p>New generations prefer newer, modern places.</p> <p>Young people only come when guided by a tour.</p> <p>The restoration was too limited to attract attention.</p> <p>Without interactive activities, young people will not come.</p> <p>Traditional markets don't appeal to youth without modern elements.</p> <p>Younger people are more interested in malls and modern spaces.</p> <p>I rarely see young people here.</p> |

Table E.3 Question 7 responses.

Q. 8: Would you support further restoration and rehabilitation work on Bazar Abbas?

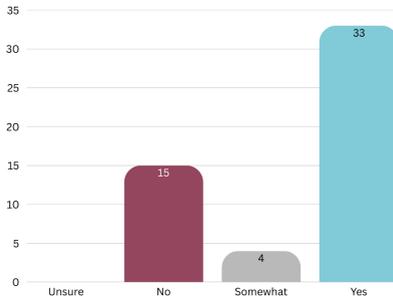


Fig. E.8 Column chart for question 8.

Q. 9: What do you think is the biggest challenge in rehabilitating Bazar?



Fig. E.9 Column chart for question 9.

| Yes | Somewhat |
|---|--|
| <p>We are all waiting for the restoration to be completed.</p> <p>It will improve the place and attract tourists again.</p> <p>It will make the area better for everyone.</p> <p>It will preserve our heritage for future generations.</p> <p>It will boost tourism and the local economy.</p> <p>Rehabilitation will revive the market's function.</p> <p>It can create new business opportunities.</p> <p>The place's history and memories deserve preservation.</p> <p>It can become a city landmark.</p> <p>It can protect this unique architecture</p> <p>Restoration can help new shops open.</p> <p>It will revive the building's activity.</p> <p>It will benefit future generations.</p> <p>The successful pilot should continue.</p> <p>It will prevent further deterioration.</p> <p>It will preserve local traditions and stories.</p> <p>It could be reused as a museum.</p> <p>It can help youth find employment.</p> <p>It could offer a new shopping experience.</p> <p>It could become a landmark instead of the new bazaar.</p> | <p>It is preserving the city's identity in a way.</p> <p>It can attract visitors and revive the area.</p> <p>Similar buildings are no longer built now</p> <p>It can boost the local economy.</p> |
| | No |
| | <p>The building's value is too low for such costs.</p> <p>It is better to focus on modern development.</p> <p>It will not be effective on the long term.</p> <p>It is better to demolish it and build a new one.</p> <p>Building's low functionality cannot justify these investments.</p> <p>The building is not worth the effort nor the money.</p> <p>People within do not want to change its current state.</p> <p>Living conditions throughout the city are in more need of improvement.</p> <p>Improvements will not restore its old purposes.</p> <p>It is better to built a new mall in its place.</p> <p>It is a waste of money.</p> <p>It is better to invest somewhere else.</p> <p>A new modern building would be better.</p> <p>You would better focus on modern development.</p> |

Table E.4 Question 8 responses.

| Structural & Technical | Economic & Logistical |
|--|---|
| <p>I am concerned about its stability. The old structure may need major reinforcement.</p> <p>The structure cannot bear restoration. The building is dilapidated, especially the wooden parts.</p> <p>The building is fragile and may collapse during restoration.</p> <p>The building's stability is a concern. The structure cannot withstand the restoration process.</p> <p>It is difficult to adapt the building to humidity and rain.</p> | <p>Money and shopkeepers remain major obstacles.</p> <p>Long-term maintenance may be unsustainable.</p> <p>Rent becomes high after restoration. The restored market may be too expensive to rent.</p> <p>Keeping rent affordable will be difficult. Finding a sustainable long-term use is challenging.</p> <p>Electrical and plumbing systems need upgrading.</p> <p>Restoration will take years.</p> |
| Shopkeepers & Vendors' Resistance | Governmental & Legal Issues |
| <p>Some shopkeepers do not support the restoration.</p> <p>Shop owners may not agree to the project.</p> <p>Some owners prefer keeping the building as it is.</p> <p>Vendors and owners do not want others to benefit from the building.</p> <p>Vendors will refuse to leave their workplaces.</p> <p>Shopkeepers and vendors will not support the restoration.</p> <p>Shopkeepers and vendors will refuse to vacate their spaces.</p> <p>People fear new rental rates.</p> <p>They prefer retaining original residents to attracting new investors.</p> | <p>Government procedures are complicated.</p> <p>Permits will be difficult to secure. Government approval may delay the project.</p> <p>People fear the government might take over the building.</p> <p>Conflicts between owners and authorities will hinder progress.</p> <p>Legal issues between stakeholders will slow restoration.</p> <p>Government bureaucracy will make restoration difficult.</p> <p>Unclear ownership complicates any intervention.</p> <p>Government processes can stop the restoration at any point.</p> |
| Social & Managerial Challenges | |
| <p>Public awareness remains very low.</p> <p>The place risks becoming over-commercialized.</p> <p>Managing people during restoration will be difficult.</p> <p>There is no clear plan for where workers would stay.</p> <p>Using the upper floors remains unclear.</p> <p>Balancing residents' and vendors' needs is challenging.</p> <p>Crowding and informal vending make management hard.</p> <p>The area needs better organisation during the project.</p> <p>Without proper management, the restoration will fail.</p> | |

Table E.5 Question 9 responses.

Q. 10: Do you know about the *Semsemia* parties and workshops that were held at Bazar Abbas?

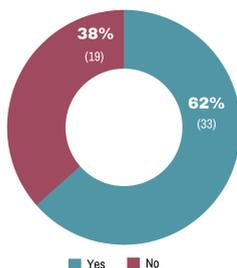


Fig. E.10 Pie chart for question 10.

Q. 11: If yes, how did you know about it?

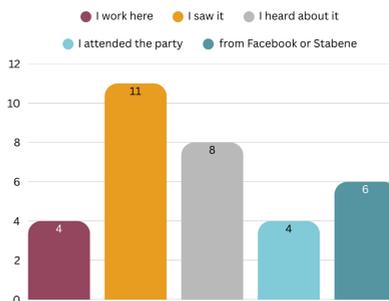


Fig. E.11 Column chart for question 11.

Q. 12: If yes, do you think these events benefited the neighbourhood?

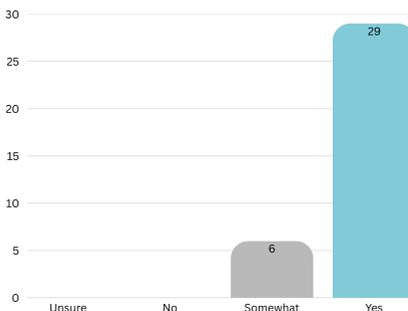


Fig. E.12 Column chart for question 12.

Q. 13: If yes, how would you say they benefited the neighbourhood ; If not, what improvement would you suggest?

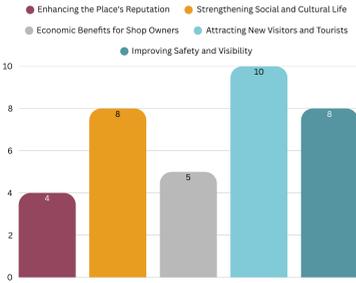


Fig. E.13a Column chart for question 13 - YES.

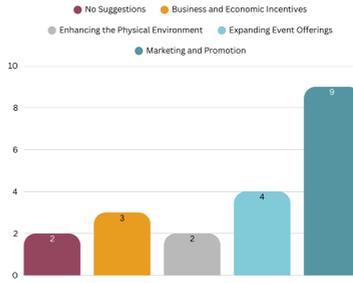


Fig. E.13b Column chart for question 13 - NO.

Q. 14: Do you think such events can help bring more attention to the building and its restoration?

13 out of 20 respondents who were unaware of the Semsermia events selected 'unsure, no opinion' or 'no' in response to this question.

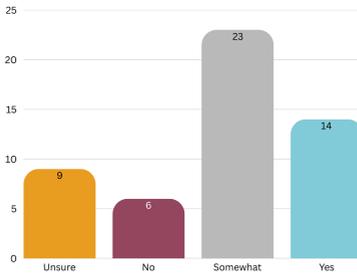


Fig. E.14 Column chart for question 14.

Q. 15: What would you suggest as the next steps of the project?

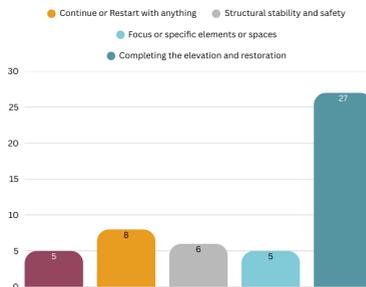


Fig. E.15 Column chart for question 15.

Bazar Abbas: Ein Erneuerungslabor für Port Said

Gebautes Erbe,
kollektives Gedächtnis,
und Stadtsanierung

Sepideh Zarrin Ghalam
(Hrsg.)