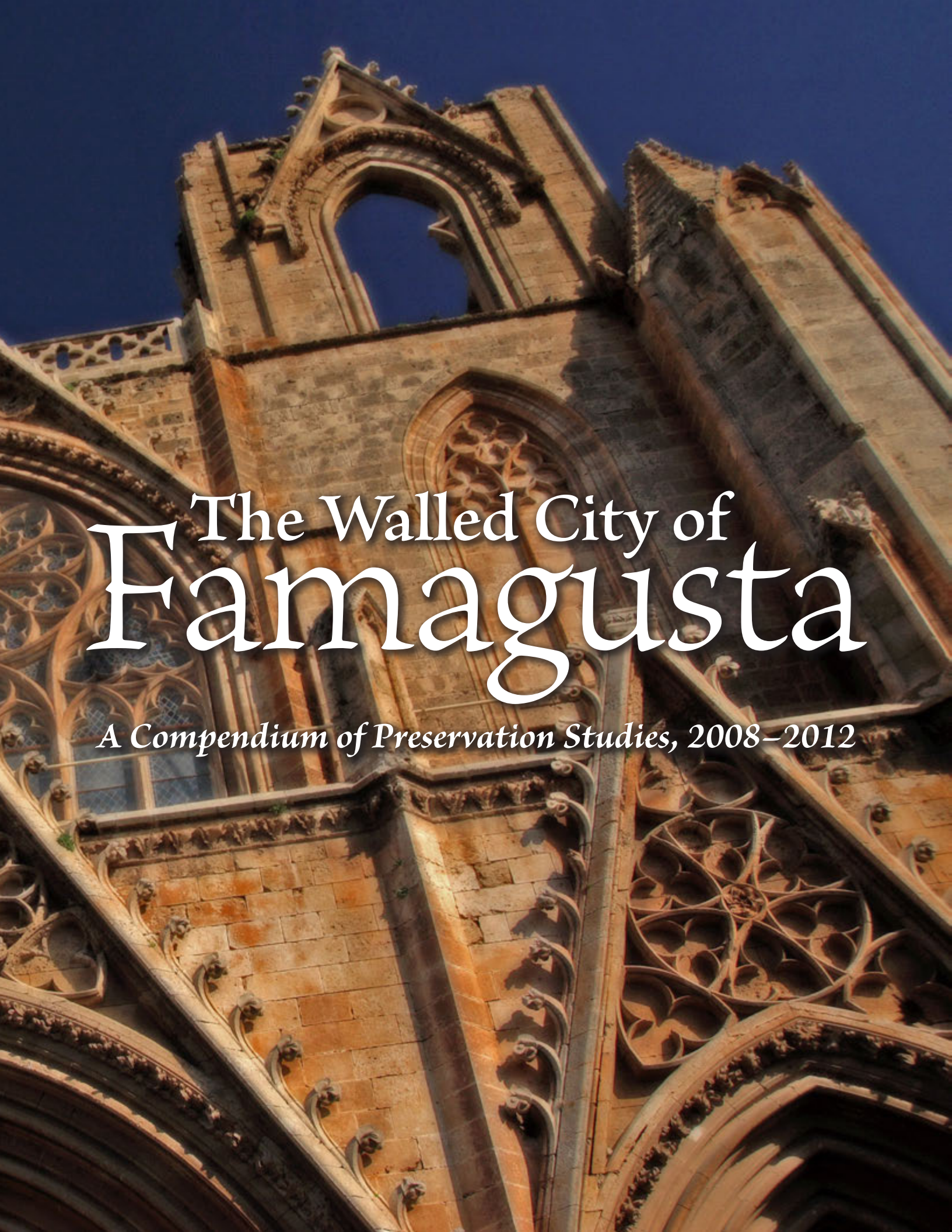

The Walled City of Famagusta

A Compendium of Preservation Studies, 2008–2012

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WORLD MONUMENTS FUND

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Since 1965, World Monuments Fund has worked with local communities, governments, and affinity organizations to preserve cultural heritage around the globe. WMF has engaged in over 600 projects in more than 90 countries, seeking to advance innovation in the field, to forge international collaboration, and to ensure sustainable stewardship of the world's most treasured places.

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Contents

Contents continues on following page

Contents

General Introduction

Famagusta is an intact fortified town on the east coast of Cyprus with a long and fascinating history and deep significance as a heritage place, which faces a number of urgent threats. The Historic Walled City of Famagusta was included on the 2008 and 2010 World Monuments Watch. The present volume collects three reports that were submitted to World Monuments Fund starting in 2008 as part of a continuing effort to effect positive change in Famagusta.

Launched in 1996 and issued every two years, the World Monuments Watch is the flagship advocacy program of World Monuments Fund. The World Monuments Watch calls international attention to cultural heritage around the world that is at risk from the forces of nature and the impact of social, political, and economic change. The Walled City of Famagusta was nominated to the 2008 Watch by Professor Michael Walsh, then with the Department of Archaeology and Art History of Famagusta's Eastern Mediterranean University. The Watch nomination called attention to the challenges and limitations for international collaboration on heritage protection in northern Cyprus. In a 2002 report to the Committee on Culture, Science, and Education of the Parliamentary Assembly of the Council of Europe, the members of a study visit to Cyprus made an appeal for external assistance and cooperation, and even suggested establishing a European mechanism for conservation funding for northern Cyprus, although the team did not visit Famagusta.[1]

In December 2007, shortly after the announcement of the 2008 Watch, and under the auspices of the United Nations, a joint meeting took place at the Ledra Palace Hotel in the UN Buffer Zone in Nicosia. Alexis Galanos and Oktay Kayalp, the representatives of the Greek Cypriot and Turkish Cypriot communities of Famagusta, called for Greek and Turkish Cypriots to join forces to protect the city.[2]

FIGURE 1. The mayors of Famagusta and Michael Walsh made a joint appearance in April 2008, at an event organized in Paris by Europe Nostra. From left to right: Alexis Galanos, Michael Walsh, and Oktay Kayalp.

1 Parliamentary Assembly of the Council of Europe, Committee on Culture, Science and Education, General Rapporteur on the Cultural Heritage: Mrs Vlasta Štěpová, Czech Republic, Socialist Group, *Cultural Heritage of Cyprus: Information Report*, May 7, 2002.

2 Leo Leonidou, "Joining up to save Famagusta heritage," *Cyprus Mail,* December 14, 2007.

A few months later, in April 2008, Europa Nostra organized another joint appearance at the representation office of the European Commission in France. In April, Galanos declared "There is no future without the past, but the past makes no sense without the future. I am therefore here today to give whole-hearted support to our Turkish Cypriot companions in the task of safeguarding the valuable heritage of Famagusta. At the same time we ask for their support to our endeavors to ensure that promoting culture in Famagusta goes hand in hand with the respect for human rights."[3] Oktay Kayalp confirmed a strong desire to "set aside political problems in order to save the heritage of Famagusta as the heritage of Europe which ought to be handed over to future generations."[4] Following the joint event, a two-day international colloquium of scholars on Famagusta took place in Paris, and in the summer of the same year a Europa Nostra working group met in Cyprus. Since then, Europa Nostra has made an important commitment to keeping the Walled City of Famagusta in the forefront of public attention. In October 2011, the new President of Europa Nostra, Plácido Domingo, repeated a call for cooperation to save Famagusta,[5] and in October 2012 the Europa Nostra Board visited the Walled City of Famagusta and urged that conservation work be accelerated in order to gain momentum.[6] A related and long-standing initiative for the study of the architectural heritage of the buffer zone in the walled city of Nicosia was honored with a Europa Nostra award in 2011, in the category of Research.

On the ground in Famagusta, in 2008-09, the SAVE (Supporting Activities that Value the Environment) program of the U.S. Agency for International Development (USAID) conducted an exhaustive assessment of conditions at the Church of Saints Peter and Paul (Sinan Pasha Mosque). Established in 2005, SAVE is a capacity-building program for the protection of natural and cultural heritage in Cyprus, with the goal to facilitate the reunification of the island. With the support of SAVE, important structural repairs were undertaken that addressed issues of water penetration and protected the building against the threat of earthquakes.[7] On the exterior of the building, repairs were made on loose stones and cracks. The restoration project was completed in 2010 (http://cyprus.usembassy.gov/usaid_fam_jan2011.html). Through SAVE, USAID also undertook a project to revitalize historic Desdemona Park, which was reopened in 2010 (http://cyprus.usembassy.gov/usaid_desdemona_may10.html). Famagusta's Eastern Mediterranean University also established a collaboration with the Department of Civil Engineering of the University of Minho, Portugal, to study the structural stability of churches in the Walled City. Several studies and journal articles have resulted from this collaboration.[8]

Meanwhile, in 2008 an island-wide Technical Committee on Cultural Heritage was formed, consisting of Greek Cypriot and Turkish Cypriot members, and having a mandate to undertake confidence-building activities. The committee has spearheaded numerous conservation efforts in northern Cyprus, setting a positive example of successful bi-communal collaboration.[9] Their work has been supported by the European Union and by the United Nations Development Pro-

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3 Europa Nostra, *Agreement reached by Greek and Turkish Cypriots to join forces to save their Historic Town of Famagusta, April 8, 2008. See also Andreas Avgousti, "Optimism after heritage talks on Famagusta," Cyprus Mail, April 9, 2008.*

4 *ibid.*

5 Grand Prix Awards Ceremony in Nicosia, Message by Placido Domingo

6 Europa Nostra, *Denis de Kergorlay, Executive President of Europa Nostra and members of the Executive Board held a Press conference at Famagusta Gate, October 18, 2012, and "Europa Nostra visits monuments in the north," Cyprus Weekly, October 19-25, 2012.*

7 Embassy of the United States to Cyprus, "Critical Conservation Work Completed at Famagusta Landmark," January 13, 2011, http://cyprus.usembassy.gov/usaid_fam_jan2011.html.

8 Paulo B. Lourenço, Luís F. Ramos, and Alejandro Trujillo Rivas, "In Situ Investigation and Stability Analysis of Famagusta Churches," (paper presented at the 8th International Masonry Conference, Dresden, Germany, July 4-7, 2010), and Paulo B. Lourenço, Alejandro Trujillo, Nuno Mendes, and Luís F. Ramos, "Seismic performance of the St. George of the Latins church: Lessons learned from studying masonry ruins" *Engineering Structures 40 (2012): 501-18.*

9 Republic of Cyprus, "Press Statement of the Technical Committee on Cultural Heritage," May 6, 2009, http://www.cyprus.gov.cy/MOI/pio/pio.nsf/All/2AB5C9AACC71F412C22575AE003CBD5E?OpenDocument/

gramme, most recently with the announcement of a €2 million contribution from the European Union in September 2013.[10] An important milestone was the agreement reached in 2013 for the restoration of the Apostolos

Andreas monastery at the tip of the Karpass Peninsula through a multi-donor partnership under the auspices of the United Nations Development Programme and with the support of the Church of Cyprus and the Evkaf, or Pious Foundations Administration of Cyprus. In Famagusta, the conservation and structural stabilization of the Othello Tower is set to take place, also through the United Nations Development Programme and the EU-funded Partnership for the Future.

In parallel to these efforts, World Monuments Fund supported a broad range of activities aimed at improving international understanding of the conditions to be found in Famagusta. In the spring of 2008, a fact-finding and conditions assessment visit to Famagusta was undertaken on behalf of World Monuments Fund by Robert Silman (Robert Silman Associates, Structural Engineers, New York and Washington D.C.) and Kent Severson (conservator in private practice, Boston). The results of this mission, during which the conditions of several historic structures were inspected, are reported in the second section of this volume, titled "An Assessment of Conditions in the Walled City." (page 55)

To better understand the conditions of mural paintings in the monuments where they survive, a second technical visit took place in spring of 2010. Surveys were carried out at six monuments on behalf of World Monuments Fund by Werner Schmid (mural painting conservator, private practice, Rome, Italy), in collaboration with Prof. Walsh. The results of this study are presented in the third section of this volume, titled "Assessment of Medieval Mural Paintings in Six Churches." (page 69)

Lastly, during the summer of 2012, Historic Preservation graduate students from the University of Pennsylvania took part in a project to research and analyze the potentials and threats for urban conservation and regeneration at the historic Walled City. The study team, led by Professor Randall Mason (University of Pennsylvania), formulated proposals to balance heritage preservation, economic development, urban design and social sustainability goals at the city. Their analysis and findings are reported in the first section of this volume, titled "The Walled City of Famagusta: A Framework for Urban Conservation and Regeneration." (page 7) The project had the additional goal of providing the opportunity for graduate students to gain experience in diagnosing and documenting urban conservation issues at a unique historic urban environment. The project helped expose participants to the challenges of working in a foreign administrative, economical, and socio-cultural context. Lastly, the project required the production of professional-quality documentation for the presentation of findings.

World Monuments Fund has compiled these reports with the goal of disseminating the knowledge and insight that was gained through these efforts and stimulating an overdue conversation on heritage management in the historic city. At the time of this writing, in the end of 2013, the suggestion that a deal for the return of the precinct of Varosha to its original inhabitants is within reach has led to renewed hope for a resolution of the stalemate that has impacted Famagusta.

10 European Commission, "Cyprus: Renewed EU support to preserve the island's cultural heritage," Brussels, September 4, 2013, http://europa.eu/rapid/press-release_IP-13-814_en.htm.

Part I

The Walled City of Famagusta

A Framework for Urban Conservation and Regeneration

(2012)

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Project Overview

This study examines the urban dimensions of Famagusta's continuing conservation and development. In this report, analysis of current issues is followed by a series of recommendations. The principal finding calls for the implementation of a conservation and development framework to ensure the integrity and vibrancy of the Walled City, which will very likely be buffeted by dramatic political and economic change if, or when, the Cyprus stalemate is resolved in the future.

Famagusta developed as a cultural and trading center over centuries of contact between Islamic and European peoples (see "History and Evolution of the Walled City," page 12). Periods of Venetian, Ottoman, and British control made particularly lasting impacts on Famagusta's architecture and urban form, all quite easily interpreted in the contemporary landscape. The well-defined Walled City remains today, having survived the sixteenth century Ottoman siege, British colonial rule, intercommunal armed conflict in the late twentieth century, and myriad other challenges and fallow periods. Lately, the Walled City has suffered from abandonment and deterioration resulting from a number of factors, including the political stalemate that followed the political conflicts after 1963, the 1974 de facto division of the island, and subsequent economic and development dynamics that have isolated northern Cyprus and Famagusta in particular.

Notwithstanding a tumultuous history, Famagusta is today a richly layered historic urban place of extraordinary cultural and architectural value. The urban fabric of streets, blocks, and squares possesses a fair level of integrity and reflects several periods of development—architectural fabric has, on the whole, seen many modern alterations and additions. Of the town's several religious buildings of great scale and distinction, some are in ruins. The walls, fortifications, and moats are in remarkably good condition and frame the town's overall integrity.

Within the walls, a remarkable collection of religious and vernacular buildings remains in varied states of repair—some of them in ruins, some inhabited, a few already the object of serious conservation efforts. The fate of individual historic resources, though, relies in significant measure on the fate of the entire historic town. Development trends outside and inside the wall (i.e. unplanned growth outside the Walled City, stasis and deterioration within the walls) threaten the viability of the entire urban fabric, and by extension Famagusta's individual landmarks, raising the need for solutions to the urban conservation challenges addressed in this report.

The Walled City needs strengthening—by combining conservation and development—to increase the social and economic well-being of the place and support the continuing conservation of landmark structures and urban fabric. It is disconnected, physically, visually, and socially from important assets: the waterfront, the growing parts of the city, and the off-limits suburb of Varosha. The Walled City therefore finds itself suspended in a state of half-neglect, abeyance, lack of development owing to the decades-long political stalemate defining northern Cyprus, and the consequential reluctance of authorities, owners or investors to make substantial improvements. These conditions are compounded by the political uncertainties and difficult recent history surrounding the north and all of Cyprus, and have led to the devalorization of the Walled City. Understanding the current state of the historic urban fabric in and around the Walled City, how it is valued, and how it could be valued under a holistic development strategy is an urgent next step in planning the future for Famagusta's heritage and for the whole municipality.

Despite continuing political and economic challenges, a conscious heritage movement has arisen to document and preserve the cultural treasures of the city. This has been focused on the charismatic buildings, but also has the potential to help sustain the continuous use and reuse of the town's remarkable stone buildings and urban spaces.

What once defined Famagusta—its role as an entrepôt and crucible of regional mixing and conflict—is very likely to define it once again. When politics fall away as a barrier, new power arrangements and resurgent markets (for tourism, trade, and real-estate development) will threaten the beautifully layered Famagusta landscape, unless change is anticipated and managed. The

urgent question for now is how to prepare Famagusta for the change that will be unleashed when some political solution is reached. Regardless of the particulars of the settlement, the status of Varosha, markets for tourism and real estate development, the influence of shipping and perhaps other sectors (like offshore natural gas) will all become major forces for change. Without plans and institutions in place, these forces are likely to overrun or ignore the Walled City.

In 2008 and 2010, the Historic Walled City of Famagusta was placed on the World Monuments Watch to draw attention to its extraordinary architecture and the important role it played in the economic, social, and maritime history of the region, unfortunately forgotten by much of the world today. This project builds upon and expands these efforts by studying Famagusta holistically, as a complex historic urban landscape, of which its architectural landmarks are an integral part. The project team's research and analysis focus on the potentials for urban conservation and regeneration that support monument conservation efforts and restore social and economic vitality for the Walled City of Famagusta.

In addition, WMF sponsored several technical missions to Famagusta to review the conditions of several structures and assess the condition of wall paintings in key monuments identified by local authorities as possible project sites for further work. The results of these missions are presented elsewhere in this report.

Project Goals

- Research the evolution, current conditions and enabling environment relating to the historic landscape of the Walled City of Famagusta
- Propose strategies to advance the conservation and regeneration of the Walled City of Famagusta and the integration of planning and conservation measures
- Collaborate with international academic colleagues, and other local institutions and partners, in carrying out the research and planning tasks
- Provide meaningful educational experience about the application of preservation planning and urban conservation for graduate students specializing in these areas.
- Prepare a report summarizing the research and recommendations that provides a useful resource to both local authorities and international collaborators, and serves to further the conservation agenda in Famagusta and inform the heritage field at large.

Work plan

The project carried out over the summer of 2012 was organized around the following tasks and work products aimed at applying a holistic, values-centered conservation planning methodology to analyze the potentials and threats of the current situation and form the basis for proposals to balance heritage preservation, economic development, urban design and social sustainability goals:

- Documentation of urban landscape conditions in and adjacent to the Walled City (building condition, vacancy, land use, property values, ethnographic data, natural resources)
- Mapping of these and other, preexisting data (on historical evolution, and other data available from local sources) using GIS
- Analysis of local political, cultural, economic, and development dynamics on the basis of interviews and a literature search
- Assessment of values, threats, and opportunities related to heritage resources, and development needs and opportunities

In preparation for fieldwork, the graduate students read and studied published documentation available for the Walled City and its context, including parts of the 2006 Revitalization Plan (the main text of the plan is in Turkish). Fieldwork was undertaken in the first half of July 2012, and consisted of documentation, interviews and other data collection tasks, as well as initial on-site analyses undertaken collaboratively with PennDesign; students Istanbul Kulture University, Eastern Mediterranean University, and Cyprus International University; and local partners. The project team benefited greatly from a series of lectures by local experts from the municipality and Eastern Mediterranean University. A number of field trips to other significant heritage sites and urban areas in northern Cyprus were also part of the program: Nicosia, Kyrenia, Salamis, and Bellapais. Each of these sites presented different conditions for examining heritage conservation and regeneration activities in northern Cyprus.

Summary of Findings

In brief, the project team concluded the following from its research, fieldwork and analysis:

- Famagusta's heritage assets—landmark religious buildings, the system of walls and defenses, vernacular fabric, and public spaces—are highly significant and retain enough integrity to warrant major conservation efforts.
- A significant amount of the urban fabric and land within the walls is underutilized.
- The waterfront is utilized only for shipping and constitutes an enormous potential resource for urban regeneration.
- The fortifications (a largely intact system of walls, gates, moat, and glacis) function as a barrier, disconnecting the Walled City from the rest of the municipality and the port.
- The presence of Varosha's "no-man's land" is a major hindrance to further development of the Walled City and the whole region—for political, economic, and urbanistic reasons.
- Social changes within the Walled City are serving to further isolate it: those with means to move out to new areas do so. Within the walls, a day-tourist-oriented zone is segregated from housing concentrating those with little feeling of stewardship or least choice, especially new migrants; new migrants are not integrated with existing communities.
- The municipality/regional-national government has exhibited limited capacity to manage urbanistic change, lacking policy tools, political support, and financial resources to implement plans where they exist, including the valuable 2006 Revitalization Plan. The result is sprawling, chaotic development in the greater municipality, and lack of connection between development decisions, in all sectors, and valued resources of the Walled City.
- Institutions with significant influence in the recent stalemate period, in particular, Eastern Mediterranean University and the Republic of Turkey/Turkish military, have invested little in the Walled City.

Strategies for conservation, planning, design, and institutional development must be formulated now and implemented in the short term to stimulate social and economic activity in the Walled City and organize local and multilateral efforts to manage long-term prospects and opportunities. The strategy must balance the **stewardship imperative** (caring for the existing built environment and preventing deterioration, disinvestment or damaging decisions in the current low-investment, inattentive atmosphere) with the **development imperative** (putting in place a future-oriented development plan centered on the conservation and strengthening of the Walled City as the mixed-use core of the region and the main urban and economic connection between northern Cyprus, the Mediterranean trade, and the world). As politics shift and allow Famagusta to regain its function as an entrepôt, regional urban core, and destination resort, the Walled City must be reinforced as the only historical center of the region. A balance of development and conservation measures will be required to achieve this, as will a decision-making and management framework that encompasses and integrates the Walled City, greater Varosha, and the northern and eastern suburbs, including Eastern Mediterranean University.

Understanding the Walled City: History, Description, Condition, and Context

History and Evolution of the Walled City[11]

The city of Famagusta grew around a natural deep harbor facing a generous bay on the eastern Mediterranean. The city was established in antiquity, although the date of its founding is not known. The city's original Greek name, *Ammochostos*, developed into the Latin Famagusta, and later Mağusa in Turkish.

The political and economic prominence of Famagusta and the remarkable form of its architecture and fortifications are rooted in the Lusignan dynasty of French Crusaders who controlled Cyprus from the late twelfth to the fifteenth century. Cyprus was seized from the Byzantine Empire by King Richard I (the Lionheart) of England during the Third Crusade, and was transferred to Guy de Lusignan, who had lost the Kingdom of Jerusalem to Saladin. The Lusignan kings ruled Cyprus from Famagusta, and conducted an active and lucrative trade, making the town an important Christian outpost and entrepôt for the eastern Mediterranean. The city's importance only grew with the demise of the Crusader states after the 1290s. Strategic importance and high-culture luxury characterized this period, reflected in the town's architecture, crafts, and the desire of subsequent regional powers to gain control of Famagusta.

Genoese and Venetian traders prospered in the multicultural city under Lusignan rule, and Genoa and Venice came to control Famagusta in the fourteenth and fifteenth centuries, respectively. In this period, fortifications, churches, and other buildings were constructed, elevating Famagusta's role as a center of mercantile and artistic activity in the Mediterranean. It became a truly cosmopolitan place, marked by prosperity, its strategic trading location, and the growing influence of Western Christianity. The basic urban geography formed in these first major periods—cathedral, square, palace, fortifications, and port—remains quite recognizable today, despite the vast changes that later came to Famagusta. A social geography of quarters reserved for different

FIGURE 2. Famagusta as depicted in Konrad von Grünenberg's *Beschreibung der Reise von Konstanz nach Jerusalem* (1487).

11 This brief history of Famagusta draws on a number of published sources, noted in the bibliography.

ethnic populations also took form. Excellent architectural works survive from this period, as well as the street plan, though some of them only in ruins. During the fourteenth century, St. Nicholas Cathedral was constructed, and it remains Famagusta's most prominent landmark.

After a riot in 1372, Genoa mounted a fleet and took Famagusta, and held it for almost a century. James II Lusignan won control of Famagusta back from the Genoese briefly in 1464, before the Republic of Venice took control in 1489. Meanwhile, Ottoman power was growing in the region and in 1570 the Ottomans invaded Cyprus under Lala Mustafa Pasha. Famagusta fell in 1571, after a year-long siege by land and sea. The walls, greatly strengthened by the Venetians, remained largely intact after the end of the siege, but many buildings were damaged. While the Ottomans adapted some of the town's architectural monuments—notably, St. Nicholas Cathedral and other prominent churches were converted into mosques—the new rulers largely disinvested in the urban fabric, and the town within the walls contracted. Cyprus and Famagusta stayed on the margins of the Ottoman Empire. Trade dwindled, partly as new Atlantic markets surpassed the Mediterranean basin in importance, the population dropped dramatically, and areas of the north, south, and east ends within the Walled City began to be devoted to agricultural uses.

During the nineteenth century the Ottoman Empire had to contend with increasing antagonism from Russia, and after the end of the Russo-Turkish War (1877-78) the Porte agreed to allow Britain to occupy and administer Cyprus. In exchange, Britain agreed to help the Ottoman state resist future Russian advances. During this period, British colonial authorities upgraded some elements of Famagusta—improving the port and building a railway, erecting warehouses, residences, and some new streets—and began to articulate and activate some of the heritage values of the town's fabric through conservation work. In this period, the social geography of greater Famagusta settled into a pattern of Turkish Cypriots inhabiting the Walled City and Greek Cypriots living in Varosha, a community south of the walls, along the coast. An important contribution to the city's architectural historiography was also made during this period, with the publication of *L'art gothique et la Renaissance en île de Chypre* (1899) by French archaeologist and art historian Camille Enlart (1862–1927), today an important source of information about many monumental buildings in Famagusta and their condition at the end of the nineteenth century.

Following World War I and the demise of the Ottoman state, Cyprus became a colony of Britain. A Department of Antiquities was established in Cyprus in 1935. In the twentieth century, the postwar period brought the rapid contraction of the British Empire, and an anti-colonial movement led to the creation of an independent Republic of Cyprus in 1960. Between independence and the violence that erupted in Cyprus in the years before 1974, tourism to Cyprus increased and Famagusta fairly thrived. Within the Walled City buildings were modernized, while outside the walls Varosha developed as a seaside resort with tall, modern buildings.

Meanwhile, the constitutional structure established to balance the interests of Greek and Turkish Cypriots in the new state proved hard to administer. When Greek and Greek Cypriot military forces attempted to oust Archbishop Makarios, the President of the Republic of Cyprus, in July 1974, the Turkish military invaded Cyprus from the north. Turkish intervention was based on the 1960 Treaty of Guarantee, according to which Britain, Greece, and Turkey became the guarantor powers that would safeguard the sovereignty, territorial integrity, and independence of the Republic of Cyprus.

Following violent outbreaks in the 1960s and the partition in 1974, the Walled City, like much of what later became the "Turkish Republic of Northern Cyprus," was thrown into violence, dislocation, then a strange suspension of normalcy. Suburbs of the Walled City were subject to attacks by the Turkish military. The Greek Cypriot population fled Famagusta toward the south. Turks from hinterland villages moved into the Walled City, more than doubling its population and causing overcrowding and damage to historic buildings. Varosha became the "ghost town" it remains to this day, largely empty, entombed, and patrolled by Turkish military. This, too, put pressure on the Walled City, which became the main commercial center of greater Famagusta.

In 1983, with a unilateral declaration, the "Turkish Republic of Northern Cyprus" was established. Nevertheless, this declaration was condemned by the international community, and to this day, Turkey is the only country that has recognized the TRNC as an independent state.

Architecturally and urbanistically, these recent decades brought many unsympathetic additions to heritage buildings, vernacular housing, and the urban pattern. This erosion of built heritage was due to the use of cheap replacement materials and additions, new modern infill buildings, the creation of wider roads and parking lots, and closing off the port and some lands inside and outside the walls from everyday access for military use.

The Current Situation

Today, after years of failed attempts at political solutions to the stalemate that was reached in 1974, a new normalcy seems to have descended. The displaced are now at home, however uneasily, in their places of resettlement, while Varosha remains a void. Memories of previous landscapes persist, but they seem to lack potency. Power remains in the hands of the Republic of Turkey (including its military). The center of Famagusta remains intact and functioning, but devalorized. The Walled City is no longer the urban center in terms of development, circulation, and social activity—rather, multiple centers exist in the sprawling development to the west and north of the old center.

Political pessimism has led to economic and development stagnation in the Walled City and of course in the still-closed parts of Varosha. Nascent conservation efforts aimed at some of the extraordinary churches in the Walled City are pushing against the neglect and the seemingly interminable wait for some national political solution that will free the way to a local development solution. The stasis was recently worsened by the failure of the Annan plan in 2004—a negotiated solution working out territorial and resettlement issues that was turned down in the public referendum (voted down by Greek Cypriots, but approved by Turkish Cypriots). Shortly thereafter, the Republic of Cyprus was admitted to the European Union, further isolating northern Cyprus. Since then, more talks between the two communities have taken place, in which the general principles for a resolution have been reaffirmed. The future of Varosha is still likely to form a key part in any future settlement.

In terms of the Famagusta municipality, other developments have greatly reshaped the region in the last few decades. Eastern Mediterranean University developed a large campus north of the Walled City. Founded in 1979, Eastern Mediterranean University grew dramatically in 1990s and 2000s, reaching 13,000 students from 68 countries. The growth of Eastern Mediterranean University has pulled the economic center of the municipality farther north, away from the Walled City. A scattering of apartment, commercial, and suburban developments along roads radiating outward from the Walled City has progressively weakened it as the center of activity of the region.

Descriptive Analysis of the Walled City

Famagusta is located on the edge of a bay, and a small port occupies the thin margin of land between the sea and the town walls (figure 4). The Walled City is still quite recognizable in satellite images. The contemporary municipality sprawls in all three landward directions around the Walled City, loosely organized around modern roads radiating outward. After Eastern Mediterranean University was established, it stimulated urbanization in the area north of the Walled City, which today is characterized by modern development. In addition to the suburbs west and north of the Walled City, the character of the larger municipality is strongly influenced by the port facilities and military lands on the coast north of the Walled City, and by the striking "no-man's-land" of Varosha—a Greek Cypriot suburb located on the Mediterranean coast immediately south of the Walled City that was vacated in 1974 and remains closed to all by the Turkish military (figure 3).

FIGURE 3. The Greek Cypriot precinct of Varosha was vacated in 1974 and remains closed to all by the Turkish military.

FIGURE 4. Panoramic view of the port and bay of Famagusta from the top of St. Nicholas Cathedral (Lala Mustafa Pasha Mosque).

FIGURES 5 AND 6. The Canbulat Gate, seen from outside, and the Land Gate, seen from inside, are two of the three ways to access the Walled City. A third gate exists in the north.

The fortifications consist of Venetian-era masonry walls, more than 10 meters high, continuously surrounding the settlement. A few gates punctuate the walls, three of them used by modern roads—the only ways in and out of the Walled City (figures 5 and 6). The Land Gate, on the southwest, is an intervention of the Ottoman period, and is near the fortifications' original land gate. To the southeast is the Arsenal Gate of the Lusignan period (turned into a land gate by development of the port in 1933). The North Gate was opened in 1965b by the Turkish Municipality of Famagusta. Three other openings, in the sea wall, gave access to the newly developed port expanded by the British in 1903—these are now closed. The original Sea Gate, dating from 1310 and updated by the Venetians in 1496, is being restored with funds from the UNDP and the Municipality of Famagusta. Spaces atop the walls are accessible to pedestrians in several locations, and the Othello Castle includes a complex of rooms integrated into the fortifications. Looking outward, the walls are surrounded by a moat of varying width, averaging perhaps 20 meters. It is now dry, containing a dirt path and thick vegetation. Forming the outer edge of the moat, a grass-topped glacis remains on the western and southern rims of the town. On the east, the modern waterfront abuts the wall. On the north, modern development and a road have encroached on the glacis.

Historical maps clearly delineate the historic center, port and fortifications, representing the geographic and military logic of the settlement—it was located according to deep-water access, constructed to be defensible, and structured internally around a public, political and religious center, and local hubs, each associated with a place of worship. These historical patterns and relationships are still quite evident in the contemporary landscape, though on a regional scale the walled center is obscured by sprawling, generally low-quality, disorganized urbanization to the north and west. The dearth of public access to the waterfront and port, as well as to the areas along the coast to the north and south, precludes an easy awareness of the significance of the waterfront location for the structure of the settlement. (It is discernible only from the elevated view on top of the wall.)

Looking inward from the walls, a tightly clustered settlement of densely situated buildings, historic and modern, occupies the center of the enclosed land—about 600m x 900m—while the ground south and especially north and northwest of the built-up town is more or less open, with a scattering of buildings (some of them smaller, very old churches). The built-up area can be understood as comprising four character areas:

- Two areas in the historic core, on either side, north and south, of the main commercial street and squares that connect the Land Gate and the Sea Gate. For each of these areas, more open lots are found to the eastern, or seaward side.
- A third area is the northern "neighborhood," which comprises mainly British period and more recent social housing built by the Turkish Municipality of Famagusta.

- A fourth area is the stretch of almost entirely open land stretching from the Martinengo Bastion in the northwest to the Diamante Bastion in the northeast, and across to the Othello Tower, and continuing along the eastern and southern inside margins of the wall.

The core is organized more or less along lines of medieval urbanism—modestly sized blocks defined by a hierarchical but irregular set of streets and lanes. The streets are packed with low-rise buildings along the street wall, with little or no space between party walls (figure 7). Though many historic buildings remain, built of local brown and yellow limestone in a variety of styles, modern buildings and alterations are present everywhere (figure 8). The overall aspect of Famagusta's Walled City is a historic settlement little disturbed by time—though on closer inspection, the disruptions and modern interventions are many (figure 9).

The central organizing feature of the built-up settlement in the Walled City is the procession along the main commercial streets that connect the Land Gate and the Sea Gate. The procession is punctuated by one major public space, Namık Kemal Square, in front of St. Nicholas Cathedral (Lala Mustafa Pasha Mosque), and one minor square, east of the Church of Sts. Peter and Paul (Sinan Pasha Mosque) and the remains of the Venetian Palace. The commercial streets are lined with cafés and shops, many of them oriented to tourists. The complex but still orderly main

FIGURE 7. Typical streetscape in the Walled City, characterized by low-rise buildings along the street wall, with little or no space between party walls.

FIGURE 8. It is very common for streets in the Walled City to mix traditional and later twentieth-century structures, all inhabiting the medieval urban tissue of lanes and streets.

FIGURE 9. Juxtaposition of modern and traditional built fabric within the Walled City, demonstrating some of the pressures created by the need for automobile accessibility and parking.

FIGURE 10. Namık Kemal Square, in front of St. Nicholas Cathedral (Lala Mustafa Pasha Mosque), is the primary public space in the Walled City.

FIGURE 11. A row of British warehouses lines the street between Namık Kemal Square and the Sea Gate.

FIGURE 12.THE imposing ruins of the Church of St. George of the Greeks are located to the south of Namık Kemal Square.

square is commanded by the cathedral/mosque, and partly inhabited by the tables of surrounding cafés. The square was widened by conservationists in the twentieth century, and several intrusive modern buildings were added later.

Nevertheless, the grandness of the cathedral/mosque complex is undiminished by the modern bank and other buildings, so the main square reigns as the primary public space of the town (figure 10). The main commercial street continues on toward the east and the Sea Gate. The Bandabuliya and former British warehouses reused as shops and restaurants line the street almost continuously (figure 11). At the intersection of the main commercial street and the interior ring road, the British-built Desdemona Park (restored by USAID funds in 2010) fills the ground fronting the Sea Gate and the wall.

The small, tightly packed streets in the blocks south, west, and immediately north of the center are the epitome of organic, medieval urbanism. Away from the larger commercial streets, historic buildings predominate—though numbers of them are uninhabited—and small shops give way to houses (many of them in a traditional Cypriot style, or a British Colonial style). Smaller churches and mosques punctuate this urban fabric, and at the edges of the settlement give way to some extraordinary ruins of very old churches—notably, St. George of the Greeks, to

the south of the main square (figure 12), and St. George of the Latins, near the Othello Tower, north of the center (figure 13). These large, striking remains—against the backdrop of the city's dense residential blocks—speak to the former grandeur, wealth, and great density of Famagusta.

The northern reaches of the city were emptied in Ottoman times, and used for agriculture, including orange groves. Some British-era buildings can be seen here, as well as very recent social housing, built after 1974 (figure 14). The farthest northern reaches of the Walled City, controlled by the Turkish military, are largely empty(figure 15). A modern football field, home of Famagusta's "Türk Gücü" ("Turkish Power") professional team is also found in these northern margins.

From the air, the Walled City gives the impression of having shrunk from its original size to its current extent, and this is true of its population as well: once as high as 15,000, it is now about 2,000, with 36,000 in the whole municipality beyond the walls. On the ground, the historic character of the urban pattern and the fortifications is strongly felt—despite an abundance of modern buildings and unsympathetic additions to historic buildings.

FIGURE 13. The ruins of the Church of St. George of the Latins are located to the north.

FIGURE 14. Social housing was constructed in the late twentieth century in the northern edge of the Walled City.

FIGURE 15. The farthest northern reaches of the Walled City contain empty land, controlled by the military.

Existing Conditions of the Walled City

The project team undertook several kinds of data collection to document and understand the city's existing conditions. They are briefly described here, and the results appear throughout the report.

Photographic survey:
In the course of visiting and surveying the city and its buildings and landscapes, project team members captured many photographs. A small selection of these is used in this report. Each student selected key images to represent character-defining elements of the city and elements of its social life.

Mapping:
Extensive data collection and mapping of the Walled City was carried out as part of the 2006 Revitalization Plan. The planners represented data on land use, building conditions, listed buildings, urban landscape character. The project team had access to printed versions of these maps (with text translated by team member Ayşem Kılınç-Ünlü), though not to digital versions or underlying GIS data.

In the limited time available for our fieldwork and analysis, the project team recreated a few, key maps from the 2006 plan: **land use, vacancy, architectural value,** and **structural integrity**. Project team members formed mixed groups, drawn from different universities. The student teams collected data by hand on base maps that were created in the field from a base map of lot lines provided in AutoCAD by Eastern Mediterranean University, and entered data in a spreadsheet (figure 16). The data were collected according to a glossary provided to each group, defining data categories based as closely as possible on those used in the 2006 Revitalization Plan. As each lot of land was surveyed, a project team also photographed the site, allowing rechecking of the data and creating a total archive of building photographs. Following the fieldwork, PennDesign research assistants generated updated maps using ArcGIS—these are included as an appendix on page 51.

FIGURE 16. Student teams surveyed areas of the city and collected information about land use, vacancy, architectural value, and structural integrity.

Land use: The land use map shows the retail core along the main streets and squares; the distribution of religious buildings (mosques, churches converted to mosques, and ruins); and larger/more open properties to the north and south of the core. The northern "neighborhood" is revealed as quite separate, and this is borne out in building character (more recent structures), and in the social demographics.

Vacancy: The vacancy map presents a striking pattern of a city that has shrunk. There is a high level of vacancy in the housing south of the commercial core, the north and south peripheral areas, and even behind the street-facing buildings in the core.

Architectural evaluation: The architectural evaluation map shows the real mixing of significant buildings and more recent structures. While there are few disruptive buildings in the area of the historic core, modern infill buildings and additions abound. The monumental resources also include all the elements of the fortifications, though they are not mapped here (they have been well characterized in other reports—see bibliography).

Structural integrity: The structural integrity map shows that conditions are thoroughly mixed throughout the town. In the older, denser areas of housing surrounding the core, the middle of blocks is often in the poorest condition. Even in the areas where newer housing is prevalent to the north, poor conditions are common.

Summary of current conditions

- The Walled City is distinct and largely intact, but **no longer functions as the unrivaled center of the municipality**, let alone the region. The Walled City is increasingly isolated from other parts of the region and is "lost" amid the mosaic of uncontrolled development and restricted zones surrounding it (the port and Varosha).
- There is an **abundance of heritage assets, and a strong sense of place** defining the Walled City. The urban fabric has frayed, but remains highly "imageable." A substantial collection of vernacular and monumental works of architecture with high integrity outweigh the damage that has been effected by the recent lack of prosperity and social upheavals. Inappropriate additions and modifications to individual buildings and disinvestment threaten the holistic sense of the town.
- **Tourism is limited largely** to one-day visits. The infrastructure for overnight stays is lacking: there are only a few hotels, and none in the center. Restaurants and shops are plentiful and the local cuisine is excellent, but shops offer few truly local goods.
- The **population makeup of the Walled City has changed** dramatically in the last several generations: between 1963 and 1974, the Walled City became completely Turkish—it had been largely Turkish before. For 15 years, it was a vibrant commercial center. In the last two decades, the population has grown significantly older, less prosperous, more dominated by Turkish immigrants, and generally regarded as having the lower social status of people who are not there by their own choice.
- The **fortifications function as a barrier**, not as an asset—for residents or for tourists—yet they are remarkable works and should be more heavily used, visited, and interpreted.
- Within the walls, there is significant **vacancy and underutilization of land and buildings.** (The 2006 Revitalization Plan found a 16% vacancy rate for residences.) Outside the walls, **the waterfront and moat are vastly underutilized**. Urban connections between the Walled City and the rest of the urbanized region are difficult. Mobility in and out of the Walled City is limited and visual connections are absent, unless one climbs onto the walls.
- Significant swaths of land surrounding the Walled City, of great strategic and potential economic value, are **off-limits or empty**. These include Varosha and the port directly adjacent to, and north of, the Walled City.
- **Underinvestment** of all kinds—in heritage, infrastructure, economic development (tourism and otherwise), and social capital—characterize the current situation.

Political context

- **The international stalemate remains the most salient fact of political life in Famagusta.** For nearly 40 years, the division of Cyprus, and the lack of political recognition for the Turkish Republic of Northern Cyprus outside of Turkey, have tainted opportunities for conservation and development. The stalemate continues to cast a shadow over the future as well. The indeterminate nature of Cypriot politics and governance is a major brake on positive change. It

hampers current management, by injecting uncertainty and a pervasive cynicism in local politics, and by limiting the scope of external assistance available to Famagusta.

- **The regional development pattern that has emerged over the past 15 years privileges sprawl over strengthening the historic center.** Recent investment is evident to the north and west: not only in the Eastern Mediterranean University area, but stretching well past the outskirts of the Walled City and the Famagusta Municipality, north, up the coast past Salamis, and nearly back west to Ercan Airport on the edge of Nicosia. The lack of investment in the Walled City creates a backlog that at some point in the future will prove difficult to overcome via renovation. The newer developments are quite disorganized, generally low-quality construction. The high value and excellent location of the restricted military land on the coast, at the port and within the Walled City further prevents any optimistic discussion of a changed future.
- **The Walled City is isolated in multiple ways.** The population has waned and is more marginal, and businesses and jobs have suffered. The fortifications, physically and visually, isolate the center from other parts of the municipality, where there is growth and activity, while military lands inside and outside the Walled City are significant obstacles to economic development, better urban design, and utilization of heritage assets.
- **The political and related development stasis feeds negatively into a largely pessimistic attitude about the value of heritage.** From inside Famagusta, the values elaborated in this report are difficult to see because of the lowered expectations of the politically difficult and violent recent past—and, consequently, the lowered horizons of northern Cypriots in general.

The resources to lead regeneration and conservation efforts are unlikely, at present, to be marshaled by either the government or the NGO sector. Political uncertainty, lack of confidence, and institutional weakness are simply too much to overcome at the moment—this was the consensus analysis that the project team heard from multiple sources. There are regulations in place, at the national and municipal level, to control development, guide conservation measures, and stimulate economic growth. Nevertheless, these policies either remain unimplemented or are bypassed. The result is the relatively chaotic pattern of development—chaotic in space, because development of varying quality is permitted to take place across the municipality, and chaotic in time, in that investment follows its own logic, driven by Turkish government policies, or by the vagaries of risks taken by entrepreneurs (as with the upsurge in the property market leading up to the Annan plan referendum in 2004).

Despite the general lack of capacity to follow through on planning and conservation regimes, it is important to note the excellent 2006 Revitalization Plan for the Walled City. The plan was designed by local planners and designers working for the Famagusta municipality, with the support of the European Union and the United Nations Development Programme. The text of the plan is written in Turkish, but the project team had access to the Executive Summary in English and heard lectures from planners responsible for the work during the fieldwork. Backed by solid research and analysis, the plan presents a sensible and balanced set of principles and concludes with a clear and well-conceived set of priority projects.

The main problem faced by the Revitalization Plan is the lack of political will and financial resources to implement it. The real and perceived barriers of the political impasse are to blame, as well as the culture of complacency and inaction that seems to have crept into the last two generations of residents and leadership. The project team heard this sentiment repeated from many sources, formally and informally. Deep disappointment was felt in the community after the Annan Plan failed in 2004. The optimism that remained deteriorated more with the passing of long-time Turkish Cypriot leader Rauf Denktaş in 2012. This disaffection and disappointment is difficult to overcome. Looking ahead, nevertheless, the mixture of euphoria and conflict that will likely surround a future settlement may give Famagusta new energy to break these impasses.

Analysis/Assessment

The Analysis section of this report contains four sections. First, it documents a workshop and discussion of values and the cultural significance of the Walled City conducted among the whole project team. Second, it presents a statement of significance, representing those values in a compact text. The third part of this section reports on a Strengths, Weaknesses, Opportunities, and Threats (SWOT) analysis undertaken in the field by the workshop participants, including students and faculty. The purpose of the SWOT analysis is to begin the process of analyzing and integrating different sorts of conditions and values, debating their urgency and connections between them, and forming them into an actionable set of proposals. The fourth and final piece of this section moves specifically to assess the urban regeneration potentials of Famagusta based on our work. This is structured around a regeneration model positing that successful outcomes require the presence and integration of heritage assets, viable markets, strong governance, and a vibrant framework of public space and infrastructure.

Assessment of Values and Significance of the Walled City

The project team conducted a half-day workshop elaborating the values of the Walled City, yielding the following typology and breakdown of values related to Famagusta's urban heritage, as well as the subsequent statement of significance synthesizing the findings:

Historical Values

The historical values of Famagusta are extremely significant. Its strategic location, centuries of changing control over the town, and associated campaigns of building have resulted in a complex yet clear expression of dramatically different cultures—Lusignan, Genoese, Venetian, Ottoman, British, and modern Cypriot—layered in succession. Each layer represents Famagusta's role in the geopolitical conflicts that have been the mainspring of the history of the Eastern Mediterranean, and a pivot of world history, since the Crusades.

Famagusta epitomizes the palimpsest metaphor frequently invoked to describe richly layered historic places wherein the layers are built up, partially erased and partially preserved, built up again, eroded, and so on, enabling a vivid reading of multiple layers instead of a single dominant building campaign.

Episodes of war, siege, and conflict punctuate the history of Famagusta for the last 1,000 years. As an urban settlement, Famagusta was first shaped by its important role in the Crusades, serving as the center for Lusignan kingdoms amassing significant power and wealth from this Mediterranean base. This French dynasty built a remarkable series of Gothic churches, elaborate in detail and rich in decoration. The mercantile statism of the medieval period—especially the ascendance of Venice—gave the Walled City its abiding shape, defined by the impressive system of fortifications (walls, bastions, gates, moat and glacis).

The Ottoman conquests in Asia Minor and Europe dramatically changed the fate of Famagusta. The Ottoman siege to take control of the town from the Venetians in 1570–71 inaugurated a long period of decline and disuse. Britain's colonial empire assumed control in 1878 and began a process of modernization, though the twentieth century geopolitics in the aftermath of British rule resulted in the partition of Cyprus and the current political stalemate.

Throughout these centuries of dramatic change, Famagusta functioned as a trading center and active Mediterranean port, a home to shifting and transient populations changing with each conquest and regional conflict. Famagusta's strategic location as a hinge between Europe and the Levant has ensured its continuing status as a crossroads, transit point, and mixing place of Mediterranean cultures. The result is a once-cosmopolitan urban place bearing vivid evidence of significant historical periods of prosperity and change, now in an uncertain, ebbing state.

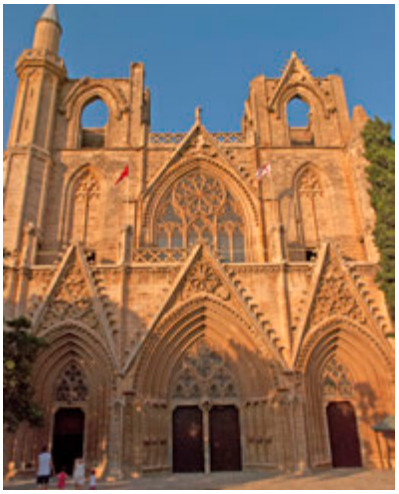
The variety of architectural types, styles, and urban forms found in the Walled City represent these several distinct periods of development. Each cultural group clearly imprinted their

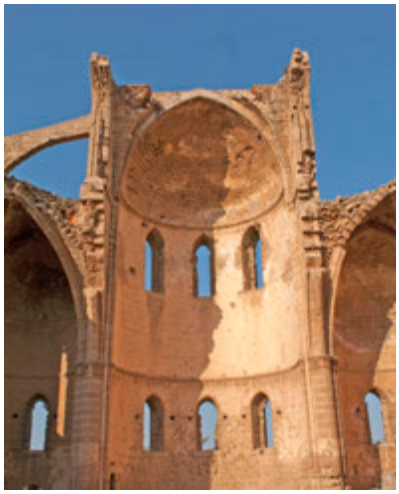
FIGURES 17 AND 18. Typical masonry construction can be seen across a variety of structures in Famagusta.

command and reshaping of the Walled City. The grand Lusignan churches, some converted to mosques, others in ruin; Venetian fortifications; the still-evident destruction of the Ottoman siege; the hierarchy of medieval squares, streets, and lanes; British infrastructure improvements, and even the siting of the town on this bay of the Mediterranean, all speak to Famagusta's long, continuous urban history. Distinctive urban patterns, architectural forms, and works of individual design contribute to a historic urban landscape of abiding integrity and historical value.

Aesthetic Values

The aesthetic qualities and character of Famagusta are quite distinctive and contribute strongly to its character as a significant heritage place. The built environment is characterized by the remarkable consistency of materials, especially local stone (figures 17 and 18). This consistency of material and masonry construction does not diminish the distinctiveness of the city's different historical architectural forms, from Lusignan Gothic churches, to Venetian fortifications and civic architecture, and to vernacular Cypriot and British colonial houses. Other aesthetic qualities include the ornament and detail of the architecture, the immediately recognizable consistency of the stone in color and texture, the neutral color palette, and the detailed ornamentation on walls and overhangs (figures 19, 20, and 21).





FIGURES 19, 20, AND 21. examples of the aesthetic qualities and character of Famagusta.

Other aspects of the cultural landscape reflect the significance of Famagusta's history and culture, including: the physical geography of the coastal environment, with consequently moderate climate and rich vegetation; the calls to prayer as a reminder of Islamic heritage; traditional cuisine of *meze*, featured in many local restaurants; and horticultural materials all lend another layer of aesthetic and historical depth. Gardens and palm, cypress, fig, and olive trees bespeak Mediterranean cultivation and relate to cuisine. Eucalyptus trees planted by the British to help dry poorly drained areas of the town remain today. Orange groves were once common in and around Famagusta, but they have largely disappeared since 1974.

FIGURE 22. Visible from many parts of the city, the form of St. Nicholas Cathedral (Lala Mustafa Pasha Mosque) helps provide quick orientation.

FIGURE 23. St. Nicholas Cathedral (Lala Mustafa Pasha Mosque) seen across Namık Kemal Square is one of the most iconic views in Famagusta.

FIGURE 24. Views of the fortifications, like this view of the Canbulat (foreground) and Camposanto Bastions (background), are iconic in Famagusta.

FIGURE 25. The port of Famagusta and other distant vistas of the city can be seen from the tops of the fortifications.

Distinctive views and vistas represent another aspect of aesthetic value in Famagusta. From many places on the streets of the city, the towers of St. Nicholas Cathedral (Lala Mustafa Pasha Mosque) are visible and provide quick orientation (figure 22). Other large but ruined churches serve this function for smaller areas of the town. The most iconic urban view has become that of the cathedral viewed across Namık Kemal Square (figure 23). Likewise, views of the dramatic fortifications are enabled by the empty spaces surrounding them at ground level (figure 24). Distant, aerial views of the sea, the port, and the urban fabric are accessible from wall tops (figure 25). Conversely, the intimacy, immediacy, and accessibility of historic sites and dense urban streets in the Walled City give a strong sense of enclosure, contrasting with the grandeur and openness described elsewhere. Likewise, the medieval hierarchy of streets and squares still evident in the center of the walled settlement is distinctive—and is magnified by its total absence in the contemporary development outside the walls.

Social Values

The historic environment is valued for a range of contemporary reasons as well. These social values center on the continuing use of the Walled City for everyday life—it remains a functioning urban place, even if it is not the unrivaled center of the municipality any longer. The life of propinquity enabled by dense, traditional urbanism is still valued by some Cypriots—even those who were raised inside the walls but have moved outside. The intactness of the historic town fabric, in combination with the climate and traditions of Cypriot architecture and cosmopolitan urbanism, lends an openness to its social life. People live inside, outside, and between their dwellings, inhabiting the town and not simply the house. This takes the form of richly planted domestic gardens and porches, or simply moving chairs and tables into the small shaded streets (figure 26). The historic built environment bears other kinds of social value, such as a high level of local ownership of businesses, the cafés, restaurants, and bars that draw the local population into the Walled City, and active religious life, evident not only in the routine calls to prayer, but through the use of mosques and the main square for funerals and festivals.

FIGURE 26. This small lane of traditional houses was recently restored with funding from international organizations as a demonstration project. Its scale enables a way of intimate social interaction for the residents of the Walled City.

On the other hand, several aspects of negative social value are associated with the Walled City. It has become associated with segregation—first, during the armed conflict of the 1970s, when Turkish Cypriots sought refuge and the remaining Greek Cypriots fled, and later, when development outside the walls attracted those with resources to move out to new housing, leaving behind a population that is poorer, older, and contains more immigrants. Choosing to live in an older environment instead of the newer suburbs is a waning, but still present value. Many residents have abandoned living in the Walled City in favor of newly built suburban apartments and villas. Immigration from Turkey has brought residents of quite different culture, mostly from rural origins. The resulting segregation and lack of mixing between older residents and newer immigrants now characterizes the population of the Walled City. The social fabric is fraying: older residents complain that things are not as closely knit as they used to be, and they feel insecure amongst newer residents.

Economic/Use Values

The traditional generators of economic value for Famagusta—shipping, the trade of a market town and entrepôt, agriculture, and, more recently, seaside tourism—have all been undermined by the political stalemate. Today, there remains some economic value to the tourism market, even though it is weak and only partially realized. Tourism is almost entirely a day trade. Small, locally owned businesses, and restaurants and bars, are present but limited. There are no accommodations on offer inside the Walled City. The potential economic value of Famagusta for tourism uses is substantial—the assets to attract tourists exist in the form of charismatic historic resources and a strong sense of place—but the facilities to realize the economic value of tourism are mostly absent. The list of deficiencies includes easy travel access, a sufficient mix and quality of businesses including accommodations, restaurants, and shopping, and active as well as passive recreation opportunities. Though tourism retail development was stimulated by policy changes several years ago, resulting in "suitcase" tourism of shoppers from Turkey, this has dried up. The potential economic value of tourism is enormous—for heritage as well as seaside markets—and the realization of tourism development value will surely be one of the most influential aspects of Famagusta's future.

Statement of Significance

The urban landscape of the Walled City of Famagusta is a **remarkable palimpsest** of historical settlement layers. The town's monuments, fortifications, and urban fabric represent centuries of conquest, trade, cosmopolitanism, conflict, and decline wrought by a procession of different cultures from around the region—a thousand-year-thick document of the tumultuous history of the Eastern Mediterranean. The stories in this document include war and siege, cultural and religious conflict, prosperity and poverty, and dramatic, often violent social change—stretching from the Crusades through waves of empire-building to the contemporary struggles dividing the island of Cyprus.

The architecture, fortifications, and urbanism of multiple cultures, built over many centuries, lend the Walled City **a richness of surviving assets rivaled in few places**. The existing built environment projects a vivid combination of medieval urbanism wrapped by intact Renaissance fortifications, all situated on a beautiful and strategic stretch of Mediterranean coast. Monumental buildings—principally the medieval Gothic churches either ruined or reused after the end of the Ottoman siege of 1570-71—of great artistic significance, distinguish Famagusta as once a truly prosperous seat of power. The wholeness of the Walled City in these three aspects—fabric, fortification, and site—is remarkable. The city's centrality as a port, entrepôt, and cultural center distinguish it in the history of the Eastern Mediterranean. The Walled City's site and situation, and the legibility of its remaining historical layers, render it extraordinarily valuable as a heritage site—a once-prosperous place, later conquered and left as a backwater.

Individual monuments bear a great deal of significance in themselves, and take greater meaning from their geographical and urban context as part of a strategically located, intact walled city. These include the churches as well as the fortifications. The religious buildings—particularly the major monuments of St. Nicholas Cathedral (Lala Mustafa Pasha Mosque), the Church of St. George of the Greeks, the Church of St. George of the Latins, and other Gothic churches—represent a highly significant tradition of high art and architecture bridging European and Mediterranean cultures and establishing Cyprus as once a center of culture, politics, and art. Soaring towers, complex structures, intricate decoration, faded but marvelous wall paintings, are all in evidence. The fortifications are extraordinary in their extent and completeness—the walls, gates, moat, and glacis are intact and readily experienced.

Famagusta is extraordinary with regard to the significance and integrity as a multi-layered walled city.

SWOT Analysis of the Walled City

SWOT analysis is intended to summarize the Strengths, Weaknesses, Opportunities, and Threats attending a particular situation. It is a method for connecting analysis of current conditions with appraisal of future potentials. And it is a method of frankly acknowledging both negative and positive factors at play. Strengths and weaknesses are meant to account for present-day conditions, while opportunities and threats look towards the future. The process behind the analysis is one of group brainstorming, followed by discussion of the points raised, and by a ranking and voting process that adds a layer of discernment and preliminary decision-making to the work.

The SWOT workshop was conducted on-site by the project team and combined the views of students and faculty to synthesize knowledge of assets, contexts, and conditions. It was scheduled late in the field visit, in order to take advantage of being immersed in the setting and the knowledge imparted by speaking to local stakeholders, experts, and citizens. Team members discussed and prioritized ideas to take fullest advantage of the different perspectives, different strains of research, and different types of expertise represented in the diverse group. The geographical frame of the analysis was confined to the Walled City and only secondarily to its regional context. Temporally, a ten-year horizon was considered for future opportunities and threats. The following lists are the highest-priority items in each of the four categories. By representing the

group's collective thinking about Famagusta's heritage assets and regeneration opportunities, the lists helped propel the group toward an actionable set of recommendations described in the final section of the report.

Strengths
- The stock of heritage buildings
- The organic urbanism of the Walled City, and its walkability
- The port and seaside
- Landmark buildings/monuments

Weaknesses
- The closed area of Varosha
- Political instability and stalemate
- Lack of governmental capacity for urban planning (of all kinds) and implementation

Opportunities
- Reuse of historic buildings
- Active use of the fortifications
- Greater university involvement in the Walled City
- Development of the port and public connections to the sea

Threats
- Uncontrolled development
- Political stalemate
- Lack of explicit, proactive preservation planning
- Gentrification

Assessment of Urban Regeneration Possibilities

Successful urban regeneration depends on the existence of four basic factors, as well as the means for integrating them. These four factors are: the existence and integrity of **heritage assets**; the existence of **markets** (for real-estate, tourism, industry, etc.); **governance** capacity, in all its senses (guaranteeing public safety and welfare, planning and regulation, marshaling resources through economic development and taxation); and the existence of well-functioning **public spaces** and shared infrastructure. Integrating these four factors in practice relates to the many models of sustainability or sustainable urbanism that have been discussed in the professional literature and popular press in recent decades, all of which endeavor to somehow balance positive economic, environmental, and social outcomes. The regeneration model used here, though, is additionally explicit about the role of heritage assets and the cultural values they specifically contribute to urbanism. The following assessments relate specifically to Famagusta, and conclude that the Walled City has some of the ingredients for urban regeneration in place—but by no means all of them:

- Heritage assets: Famagusta enjoys substantial and excellent heritage resources, urbanistic and architectural, monumental and vernacular. The impressive fortification system is intact but inactive, and it can form an exciting base for developing more urban activities. The rich urban network within the walls has strong character, yet needs significant upgrading. Vacant land and other discontinuities in the urban fabric weaken the sense of a viable urban place. This includes extensive areas north and south of the Walled City, which are available for sympathetic new development. Conditions of the built heritage are fair to poor—while many assets remain

in use, several of the most charismatic, monumental structures are stabilized ruins (Venetian Palace, St. George of the Greeks, St. George of the Latins).

- **Markets:** There are weak markets for tourism, real-estate development, business and industrial development. All are hindered by the political impasse, which limits international markets to Turkish exposure. This disadvantage and isolation was heightened in the aftermath of the failed Annan plan and the accession of the Republic of Cyprus to the European Union. Significant potential for economic development drawing on international markets remains—somewhat for heritage tourism, certainly for "sun, sand, and sea" tourism (Varosha was once very popular), and certainly for goods trans-shipment through the eastern part of the island. Regarding the local economy within the walls, daily needs are not easily met by existing retail. The relative vibrancy of extra-mural Famagusta siphons energy and demand from the Walled City.[12]

- **Governance:** Public agencies, under the wing of the Turkish state, continue to develop in the gray area of sovereignty in northern Cyprus. In general, governance systems (locally and nationally) are present but weak and underfunded. This also pertains specifically to governance in the heritage sector. Political leadership seems constrained in its ability to innovate or form progressive policies under such conditions of compromised sovereignty (as the Republic of Cyprus still claims sovereignty over Famagusta) and a weak economy (unable to take advantage of the international market because of the political stalemate, and now more isolated since the Republic of Cyprus joined the European Union in 2004). Some notable multilateral NGO contributions have been made in northern Cyprus, predominantly in northern Nicosia, and also in Famagusta (including the creation of Desdemona Park and the development of the Famagusta Walled City Revitalization Plan), but there is little indigenous NGO capacity. MASDER (Mağusa Suriçi Derneği), or the Famagusta Walled City Association, was the only one the project team was made aware of. Their contribution is mostly producing a heritage tourism map. On the positive side, capacity for leadership resides in the substantial assets of the universities (Eastern Mediterranean University, and, potentially, a new campus of Istanbul Technical University), but they mostly focused attention away from the Walled City, for reasons mostly unexplored during this study.

- **Public space:** There is a generous supply of public space in Famagusta—squares, streets, open lands, and the fortifications. By contrast, outside the walls there are few public spaces aside from a couple of small beaches. Urban squares, streets, rooms at the Othello Tower, and some other wall-top viewing areas are publicly accessible, but the moats, glacis, and the waterfront are quite inaccessible. As a result, there could well be a massive expansion and activation of a more extensive public-space network that would make the heritage assets of the city more accessible, better-used, and better-integrated into everyday life and economic development. Most public spaces are in fine condition, though not without issues such as too much clearing, intrusive modern buildings, and parking encroachment. The peri-urban spaces, at the verges inside the walls and on the southern and northern margins of the built-up area, are generally of poor quality. These vacant lands represent great unrealized potential for economic development or public-space development of some kind. In all, these different public-space assets have substantial unrealized potential in themselves—even more if they could be connected to one another.

12 As an example, when a member of the project team tried to buy stationery supplies, the only choice of pen within the walls was a 200-euro fountain pen. Instead, one had to drive several blocks into the suburbs to buy a cheap plastic pen, tape, and pad of paper.

Proposals & Recommended Interventions

These recommendations are the result of faculty-guided student workshops organized on-site with the aim of generating a comprehensive and long-term set of principles and proposals to integrate conservation of heritage assets with the economic and social regeneration of the Walled City.

Some laudable efforts have been made toward these ends in recent years, and should be acknowledged. These include the exterior restoration of the Church of Saints Peter and Paul (Sinan Pasha Mosque) as well as the revitalization of a park near the Sea Gate, located in the margin between the built-up area and the walls (figure 27). Other efforts include reconstruction projects (proposed and underway) at the Othello Tower and the Sea Gate, the efforts of the Famagusta Walled City Association (MASDER), a local NGO that produces online and print tourist maps, and, of course, the 2006 Famagusta Walled City Revitalization Plan, produced with the support of the European Union and the United Nations Development Programme. The proposals in this report are regarded as building on this base of positive regeneration and conservation work.

FIGURE 27. Desdemona Park, stretching between the Othello Tower and the Sea Gate, was recently revitalized with the help of the U.S. Agency for International Development. The landscaping of the park was designed to make efficient use of natural resources.

General Principles

These principles proceed from the basic goal of conserving the heritage values and physical integrity of Famagusta's heritage while activating this urban, architectural, and artistic heritage to advance a range of social goals benefiting multiple populations. They are presented here from the more general to the more specific—together creating a framework for the specific proposals that follow:

- Put strategic plans in place now to prepare for the dramatic changes that will come with any resolution of the political stalemate. These changes are inevitable, and will bring a powerful combination of threats and opportunities. It is essential that Famagusta get and stay ahead of the curve. Corollary to this, there are a number of specific measures to be undertaken in the short term, in advance of any political settlement, to achieve small regeneration steps and prepare for larger changes.
- Embrace, conserve, and present the complex, layered history of the city to a variety of audiences. Acknowledge and incorporate the histories of all cultures that have contributed to Famagusta's evolution. More encompassing interpretation, honestly presenting the conflicts as well as the achievements of history, is more beneficial for the contemporary society as a whole.
- Adopt an ethic of conservation aimed at (1) advancing the ordinary preservation of monuments, conservation of artworks, and stabilization of ruins, and (2) using heritage conservation as a means to pursue other social goals, such as economic development, social stability, and political reconciliation.
- Attract a new generation of residents to the Walled City by producing or encouraging a greater range of residential options, cultivating appropriate amenities, and improving accessibility through thoughtful urban design.
- Address the problems of vacancy (land and buildings) with a more dynamic, multi-faceted strategy so that reoccupation can be done intelligently and creatively, responding to the historical, environmental, and contemporary context of each individual site. New buildings, and new uses for old buildings, can be approached creatively and are not necessarily opposed to conservation goals, whether those are considered at the level of a single building or at the scale of the city and landscape.
- Improve the tourism experience so that the Walled City becomes a marketable heritage destination for a broader range of visitors.
- Involve the local community in the process of the Walled City's evolution. Be cautious not to alienate residents by over-accommodating tourism or private development interests. A balance of these different interests will yield the most sustainable results.
- Develop stronger relationships between the Walled City and the urban fabric, environment, institutions, and society beyond the walls. Removal of all types of barriers to greater integration of the Walled City—physical, visual, social—should be pursued, while of course preserving the presence and integrity of Famagusta's defenses and the image of the Walled City.

Specific Proposals

The specific proposals devised by the graduate students address the variety of values, threats, and potentials of Famagusta as an urban place with great heritage assets. Some proposals are centered around projects, and some are centered around institutions. They are presented in four groups—**Economic and Social Redevelopment, Physical Planning/Urban Design, Interpretation and Wayfinding,** and **Political Involvement/Capacity Building.** Proposals within each group often relate or depend on proposals within another group, so it is difficult to draw hard lines between them. The groups are not presented in order of priority. Rather, these proposals should be regarded as mutually supportive and integrated. This project was too short to produce a fully realized implementation plan with phasing and costs. The question of early, priority actions, however, is taken up at the end of this section.

Economic and Social Redevelopment

Re-inhabit the Walled City

Fewer people now live in the Walled City—too few—so that those living within the walls are increasingly the populations with less choice in the matter. The population is currently reported at about 2,250, while according to historical sources, in the sixteenth century, at the time of the Ottoman siege, 7,000 inhabitants stayed within the walls. Turkish Cypriots moved in to the safe confines of the Walled City during the civil conflict of the 1970s. Very recently, elderly, poor, and new migrants from the Turkish mainland have moved in. Families with the means to relocate to new suburban development have largely done so. The vitality of the town and the sustainability of any development and conservation program will be advanced by attracting a larger and more diverse population living within the walls.

Other populations need to be drawn in to grow and balance the population socially, economically, and culturally. This will be difficult to manage under any circumstances, as populations are in continual flux and it is very difficult to manage where people choose to live. Nevertheless, it is a key ingredient for long-term, sustainable regeneration, which is defined in part by serving the interests of local residents and those already invested in Famagusta, and not only the interests of outsiders like distant government officials, owners of second homes, or tourists. Managing this process will be slow and difficult; gentrification is a danger, as is conflict between populations. Gentrification may remain a risk, but at first it will be a remote one as long as foreign ownership is not invited or enticed without limit. There seems to be a sufficient stock of vacant houses so that displacement would be unlikely in the short term. And the different quarters of the town are sufficiently distinct and the town is of sufficient scale so that different types of populations can be cultivated and occupy distinct niches (younger/older, poorer/wealthier, renters/owners, as well as populations with different ethnic origins).

One short-term possibility is encouraging university students to rent houses or apartments in the Walled City. This is already a quite mobile population, and universities are in a good position to influence where students live—for instance, by providing some incentives such as shuttle buses between intramural student housing and the university campus, or a "Semester Within the Walls" program. The experience of other cities suggests that a market for dense, urban living can be stimulated, and university-age citizens are often among the early adopters.

In the long term, greater ownership should be stimulated. Families should also be attracted—taking advantage of the several schools in the Walled City. Slowly raising homeownership rates would help build a tax base funding improvements, grow a stronger political constituency pushing for improvements while checking the advancement of tourism, and start a positive feedback loop of raising property values.

Neighborhood associations might organize or facilitate workshops, informational pamphlets, or even a "revolving fund" aimed at helping fuel home renovation. Some renovation activity

was evident during our fieldwork, although it was not apparent that regulations were effectively shaping the quality of renovations so that historic character is protected.

There is and will be conflict between new and existing populations, and these realities must not be ignored. But neither should discrimination against those living within the walls be abided. There is room for families with long-standing ties to the Walled City to remain in place or move within the walls, as well as room for new residents (most of whom, we understand, have recently been migrants from Turkey). Zoning and implementation of incentives will have to be done carefully and with an eye toward allowing clusters of like-minded inhabitants to thrive without hardening them in to segregated zones. This is a matter for local planners, advocates, and politicians to manage.

Increase Economic Vitality

Another important aspect of making it easier to live in the Walled City is creating and taking advantage of economic opportunity. Most of the economic activities in the municipality are happening outside the walls. Most economic activity within the Walled City is concentrated in the core/central square, around tourism.

Economic development efforts within the Walled City should focus, in the short term, on small enterprises. The scale of the Walled City is such that fully separate tourism-oriented and resident-oriented business communities would be difficult to sustain. Retail, services, lodging, and some small manufacturing are the likely sectors of growth. There is little room for office development or large enterprises. Accommodating them would likely undermine the Walled City's historic character. Possible sites for larger development exist on or around the waterfront (see the section "Activate the waterfront," page 39).

Though the market for overnight stays has been limited by the political situation, an increase in small lodging enterprises seems quite feasible. The economic development strategy should certainly include the development of tourism lodging enterprises: small hotels, pensions, bed-and-breakfasts, and rental apartments. Contacting developers or officials in Kyrenia to understand the thriving tourism lodging markets there would be helpful (see also the sidebar "Learning from Kyrenia,"page 36). A detailed market study would likely find that several kinds of small, "hinge" enterprises could serve both tourist and resident markets—for instance, more and larger food shops, stores with hardware and household goods, and stores selling and renting recreation gear (such as outfitters, suppliers of sporting goods, or bicycle rentals).

A stronger retail sector is needed to support any growth in the residential population. Locally owned businesses are many, and there now exists a shopkeepers' organization, although we were unable to study its effectiveness for this report. The typical activities of successful business associations—including joint marketing, business attraction and retention, upkeep of public spaces, signage standards, and organization of events—are a necessary complement to any public-sector-led economic development program.

Several types of economic development policy seem appropriate to the challenges and opportunities facing the Walled City. These include incentives for businesses to locate, or relocate, within the walls; incentives for businesses to occupy buildings that are currently vacant; businesses strengthening existing retail clusters; and start-up businesses for the production of local crafts, food, and other products. This last goal is perhaps the only manufacturing/production sector that seems appropriate to the Walled City. The availability of locally produced food and authentic local cuisine is a major asset in tourism marketing, and the cultural significance of Cypriot cuisine is notable. This could even extend to re-starting the cultivation of oranges, which was an important aspect of local horticulture and exports before 1974. Devoting some of the open lands within the walls to orange groves would be welcome and perhaps part of a financially viable re-launching of the citrus industry, even though the feasibility of trade is limited because of the political situation (see also the sidebar "The Citrus Industry,"page 37).

FIGURE 28. Signs demarcating land that is controlled by the military are ubiquitous in Famagusta.

The vacant land and buildings in the Walled City present a barrier to further economic development, yet also a future opportunity. Ownership by the Turkish military, particularly in the northern reaches of the city, and absentee landlords elsewhere are obstacles to reuse, redevelopment, or regeneration (figure 28.) Other types of economic development and planning policy to be considered are forms of land banking, land trusts, or other alternate ownership vehicles to speed the conversion of land to productive use (publically or privately) and, in advance of any market resurgence, to prevent quick, low-quality, or overscaled development from dramatically changing the character of the northern and southern margins of the city. The properties associated with the fortifications could be included in this as well.

Learning from Kyrenia

The historic town of Kyrenia, on the northern coast of northern Cyprus, has a well-developed tourism district centered on its harbor (figure 29). Kyrenia's path to becoming a successful tourist destination for Cypriots as well as international visitors—and the opportunities and issues this has brought—may well be instructive in guiding Famagusta's future.

The study team traveled to Kyrenia and briefly toured the center as well as some of the town's surrounding villages and attractions. Like Famagusta, Kyrenia is visually arresting and deeply historic. Occupying a striking site on the north shore of Cyprus, about an hour's drive from both Nicosia and Famagusta, Kyrenia's core is the semi-circular harbor, flanked on the east by impressive Venetian fortifications and surrounded by continuous historic fabric on the land side. The harbor precinct is intimately scaled and crowded with restaurants, shops, hotels, docks. The roots of the town stretch back to antiquity, and it was shaped through a progression of historical periods similar to those having shaped Famagusta (Lusignian, Venetian, Ottoman, British), resulting in a collection of heritage buildings from different periods populating a somewhat modernized yet medieval core of streets. The fortifications of Kyrenia likewise played a large role in the town's history and are historically and aesthetically very valuable. The massive Venetian tower and walls visually anchor and distinguish the tourist-oriented harbor, while exhibits inside the fort interpret several aspects of the town's development.

The highly imageable site and beautiful natural setting have helped Kyrenia's successful tourist development despite being located in northern Cyprus, where economic stagnation after 1974 dealt a blow to tourism and most other economic sectors. Once a regional trade hub, as well as a seaside resort in the early twentieth century, under British rule, Kyrenia attracted both Cypriot and international travel, and tourism development intensified after WWII. In contrast to Famagusta, Kyrenia seems to have been very consciously focused on developing its waterfront precinct around tourism, allowing the town to attract and retain visitors. Significant day-trip opportunities include other heritage attractions in the vicinity, such as the beautiful medieval abbey at Bellapais, and

FIGURE 29. General view of the harbor of Kyrenia, on the northern coast of the island.

make Kyrenia the center of the tourism region. A robust second-home market in the pleasant surrounding villages (catering particularly to citizens of the United Kingdom), and resorts along nearby beaches give Kyrenia a number of markets on which to develop the collection and density of businesses making up this regional center.

Kyrenia certainly has a much more vibrant tourism economy than Famagusta, but such could be possible in and around Famagusta—even though the mix of historic center and surrounding attractions is somewhat different. There may be fewer charming villages around Famagusta, and the natural landscape may be less dramatic, but there are first-rate beaches and waterfront views, and the impressive archaeological site of Salamis is not far away. The experience of Kyrenia developing a lively tourism economy provides a glimpse of what could happen to post-reconciliation Famagusta. Intense waterfront development, where the balancing of the historic and natural character of the landscape with the economic and urban projects that allow locals to take advantage of tourism traffic, is a key factor. As with all other conservation and development issues, forethought, well-integrated design and planning, and effective implementation of plans and regulations will be key elements of the framework that should be put in place. Active exchanges between tourism and planning professionals in both towns—and others in Cyprus—could materially help sharpen the focus on best practices and encourage Famagustan businesses to pursue tourism activities in the future.

The Citrus Industry

Citrus has long been an important crop and export commodity of Cyprus—since at least the fifteenth century. Due to the mild climate of the island, oranges, lemons, grapefruit, and other citrus varieties have been part of the island's agriculture for a very long time, but the production notably increased in the early twentieth century and peaked in the second half of the century as a significant export product. This once-thriving industry suffered a great downturn in recent decades, due to irrigation problems (commercial citrus cultivation is dependent on irrigation), rising urbanization, the introduction of other economic opportunities such as tourism and real estate, and of course the tumult of 1974 and its aftermath.

Famagusta was one of the major citrus-producing areas of the island before 1974 with orchards located south and southwest of the Walled City. The Varosha area was mostly agricultural land before tourism facilities replaced the citrus orchards and potato fields in the post-World War II era. Famagusta was well organized for citrus export: produce was transported to the port (by train in the British period) and shipped overseas. An annual Orange Festival was celebrated in Famagusta for 39 years (from 1935 until 1974), during which Famagusta streets were decorated with oranges and orange branches, and signs touting the health benefits of orange consumption. Citrus was a point of local pride, economic strength, and heritage.

After 1974, citrus production shifted dramatically: embargo and irrigation problems resulted in a decrease in citrus cultivation. With the closing of Varosha, agricultural lands of Famagusta shrunk and Morphou (Güzelyurt) became the main citrus producer in the north of the island. Morphou received large investments from Asil Nadir, a Turkish Cypriot businessman, in late 1970s and 1980s and developed into a very important center for citrus production and import until the bankruptcy of the company in 1990. This bankruptcy and ongoing irrigation issues (limited water resources and high salinity) resulted in the collapse of the citrus industry for the second time.

FIGURE 30. Oranges in a Famagusta market.

Citrus remains one of the two main export commodities of northern Cyprus, even though restrictions are in place (after a 1994 ruling of the European Court of Justice on the "Anastasiou Case," EU member states may not accept export certificates for citrus fruit and potatoes from Cyprus that have not been issued by the authorities of the Republic of Cyprus). Three citrus-producing areas of northern Cyprus are Morphou, Kyrenia, and, though much reduced, Famagusta: recent numbers indicate that citrus cultivation in 2010 was 115,000 tons in Morphou, followed by 1,100 tons in Kyrenia, and 670 tons in Famagusta.

Given the history of citrus production in the area, and the appeal of local, fresh food to contemporary consumers and travelers, the revival of some aspects of the industry might have economic appeal both as an export sector and as an enhancement to the tourist experience. Like many economic opportunities, it will likely remain more a potential until resolution of the political situation, which will continue to limit the export markets for Famagusta-area products.

But such sustainable industries should be factored into future development plans for the Famagusta region—tourism alone will not be as economically sustainable. Local foods and other authentic products are an important part of tourism development, so reinvestment in citrus cultivation could have positive resonance for both tourism offerings and straight export.

Adaptively reuse historic buildings and sites

Rehabilitation and adaptive re-use is generally desirable for all but the most culturally valuable and architecturally iconic heritage buildings. For urban regeneration to succeed, rehabilitation and re-use are essential.

Existing and historic uses should be retained when possible. Nevertheless, for many buildings, repurposing them with a new use is the best means of retaining cultural significance while satisfying contemporary social and economic values for owners and for the public. Decision-makers, investors, and residents should share the belief that historic buildings and sites should be actively used, rather than accept the presumption that passive, museum treatment is the ideal.

The two topics discussed above—greater residential population and increased economic activity—can directly support the reuse of historic sites. Giving heritage buildings an economic use helps stabilize them and fund basic maintenance and repairs. The generally small buildings of the Walled City, excluding the large and charismatic religious buildings, are ideal for housing small enterprises or small groups of families. Modern housing requirements can often be accommodated well within historic structures of varied historic use.

FIGURE 31. With greater economic strengthening of the city, the Bandabuliya might find a market use again.

FIGURE 32. The courtyard of the Venetian, or "Chimney" House, a conserved historic house.

FIGURE 33. The existing theater at the Othello Tower could be used as an open-air cinema.

The Bandabuliya was, and should be, a market, but this reuse strategy was recently tried and failed. With greater economic strengthening of the Walled City (more residents, renters and owners/students and families), a market use would likely be viable. It is central and has enough space for a grocery store and an emporium of smaller specialized stores (figure 31).

Government incentives have proved very effective under a variety of governmental systems, and the use of incentives will be necessary in Famagusta in the short term due to the weakness of existing markets for the Walled City. Incentives can be designed to target, prioritize, and otherwise encourage reuse, while restrictions on the type of renovations should be attached as conditions to the incentives. Historic buildings and ruins should be open, rather than closed to the public. A priority should be placed on buildings whose reuse will strengthen street life. Focus should first be aimed at buildings around and near public spaces (squares and fortifications).

Specific possibilities abound for marrying conservation-sensitive architectural transformations with viable businesses. These projects could yield positive conservation outcomes as well as economic and social benefits, bringing investment and street activity within the walls:

- The Venetian House / "Chimney" House (figure 32), which is already conserved but failed as an ethnographic museum, could be used as a day spa or a venue for traditional cooking. The success of this would be supported by funneling activity not just into the small street from which one enters Chimney House, but by connecting it with the street just to the east which is already animated by several businesses and the elementary school.
- Small hotels, pensions, or bed-and-breakfasts could be placed within any number of heritage building types. The same flexibility applies to university student housing.
- The theater at the Othello Tower (figure 33) or one of the church ruins could be utilized, with temporary structures, as an open-air cinema.
- Health facilities or a senior center might be appropriate uses for buildings with larger footprints—historic or contemporary, perhaps in the area immediately north of Namık Kemal Square.
- A public library would be a welcome public facility, and perhaps a relatively easy fundraising idea. There are no libraries within the walls at present, and these multifaceted community facilities are a boon to residential growth. A public library could partner with the schools, for use by teachers and students, and with heritage authorities, who could help develop a community archive, organize heritage-related events, or host lectures and classes.
- Finally, we strongly encourage universities to locate some of their teaching or event facilities within the Walled City. Ideally, these uses could take advantage of historic buildings—Eastern Mediterranean University already owns a cultural center in the Armenian Church, although it is seldom used—or in new buildings sensitively designed in some of the vacant areas in the northern and southeastern parts of the Walled City.

Physical Planning/Urban Design

Activate the waterfront

Urbanistically, the hidden waterfront and port represent the most glaring issues—the connection between the Walled City and its seaside territory must be prioritized as an urban design issue and as an economic development opportunity. A development framework that integrates development opportunities, the provision of public space, and support of conservation goals (urban and environmental) is essential.

Currently, the waterfront is isolated; a forbidden zone. Physically, it is only accessible by ferry passengers, while visually, it is only accessible from the top of the wall or from outside the Walled City (figure 34). It will be difficult, if not impossible, to revitalize the Walled City and the whole municipality without taking advantage of the waterfront.

Waterfront development is a linchpin issue on urbanistic, economic, heritage, and environmental grounds. It is, or will be, the site of larger-scale economic development efforts. The opportunity will exist (post-political change) for commercial and probably residential development of waterfront property. How development sites, public spaces, and conservation measures are designed and planned will be critical: positive connections must be made between the Walled City and any new development. The danger is that new development will be totally isolated from the Walled City, instead of spinning off economic and other benefits, or that it will siphon energy away from existing economic assets in the Walled City, such as restaurants, shops, and other businesses. For this reason, there must be a plan in place to take advantage of economic opportunities while making them complementary—so that when the port or the military move, the city's economic development apparatus is prepared to frame and pursue the opportunities.

"Big ideas" about the waterfront can, and should, reinforce what the 2006 Revitalization Plan calls for—reinforcing the center—but if the waterfront is badly developed instead, economic, urbanistic, and conservation prospects for the Walled City could be ruined for generations. Sensible waterfront development that strengthens the Walled City is an important long-term strategy for the health and prosperity of the whole municipality.

FIGURE 34. The port is a forbidden zone lying outside the Walled City. Visually, it is only accessible from the top of the wall, as in this view taken looking north from the Sea Gate.

FIGURE 35. This gate, created in the British era of port improvements, stays closed but would otherwise provide direct connection between the center of the Walled City and the port.

The waterfront will provide great development opportunities, but the plans must also create public space and access to the waterfront, in the form of promenades, if not a public park. Public space projects can build from what exists—mostly visual access from the top of the wall, and limited waterside roads south of the city, on the way to the small Varosha beach.

Changing the waterfront and creating access is not practical at present, due to the military presence, an outgrowth of the political stalemate. Moving the shipping/military port is important, but it will take convincing the government/Turkish military. This has happened elsewhere in the world and there are precedents to draw on, including Barcelona, New York, and Nassau. Closer to Famagusta, one need only look to Kyrenia for evidence that development in waterfront locations is a great opportunity for tourism, as well as urban functions. If it has not already taken place, a design competition or architecture studio could help raise waterfront development as a long-term aspiration by visualizing what a developed waterfront could be and how it could support development in the Walled City.

The question of allowing cruise ships at the port will need to be confronted in the future—it is not practical in the short term, so it is not discussed here. As any development proposals are contemplated, they should be carefully planned and designed to ensure development benefits for the Walled City—not just for the waterfront properties themselves as enclaves. Development should be directly adjacent to the walls, not focused up or down the coast, and should accommodate complementary businesses, such as hotels, instead of duplicating what already exists in town.

In the short term, small-scale ideas can be implemented to bring people to the waterfront. This will increase enthusiasm and interest for revitalization. Visual access is already available from the Sea Gate, Othello Tower, and the Canbulat Gate. Some recreational points (even for passive recreation) nearer to the Walled City would be ideal—for instance, exploring the re-opening of the British-made arched opening in the wall between the Sea Gate and the Othello Tower (figure 35). This opening is currently closed, and opens on to the working port, but advocating for access would be a helpful medium-term priority. Some area of the port may already be available for recreation, small boats and yachts—this was unclear to the team—but it would be a desirable use, for both residents and tourists.

Strengthen the public space infrastructure of the Walled City

A system of public spaces is essential to the healthy functioning of the Walled City—enabling social life, economic vitality, and welcoming towards visitors and new residents. "Public," necessarily, means "shared." There is already a strong collection of public spaces in Famagusta. They would be greatly enriched by creating more places designed for public use, and connecting these to constitute a multi-use network.

The preferred means of doing this is using Famagusta's heritage assets—historic buildings, squares, and streets—and the process of conservation to generate social benefits, create opportunities for lively street life, and build community facilities

Informed and intelligent urban design should result in the conservation, creation, and maintenance of public squares, parks, gardens, and other shared spaces for comfortable use (at different times of day and the year), and orient them to support other civic and economic uses (space for cafés, art exhibits, worship and celebration, circulation, even parking). The fieldwork for this report yielded ample evidence that Famagusta already enjoys some multi-use public spaces—Namık Kemal Square (pedestrianized in 1997), the interior of the ruined Venetian Palace, and Desdemona Park, near the Sea Gate. They reflect the careful balance of public and private uses. They create pedestrian-friendly urbanism, where walkers are safe from vehicle traffic and can shop, travel, and rest. This works quite well for the most part: faster automobile traffic is pushed to the margins of the Walled City, while interior streets have cars, but relatively few. In other places, the condition, design and maintenance of public space needs attention:

- The small square at the east end of the Church of Sts. Peter and Paul (Sinan Pasha Mosque) is a cramped confusion of parking, businesses and roadway (it should be expanded and made pedestrian-dominant).
- The large paved parking lot east of the Venetian Palace is an unfriendly sink of pedestrian activity, unshaded and overscaled (figure 36). It can be redesigned and vastly improved without diminishing its function as one of the few centralized parking lots.
- Similarly, the parking lot west of the Church of Sts. Peter and Paul (Sinan Pasha Mosque) can benefit from improvement (figure 37).
- The verges of land on the inside of the walls themselves are partly and haphazardly occupied by a variety of uses—to the east they are more public and commercial, to the north and south of the center more or less abandoned.
- In the shopping street west of the main square (Sinan Paşa Sokak), stores extend their displays too far, leaving a small path (figure 38).

A public space/urban design plan for the system of Famagusta's open spaces should be carried out to identify improvements small and large, near- and longer-term.

FIGURE 36. A parking lot is tucked into part of the Venetian palace complex in the commercial core.

FIGURE 37. The parking lot west of the Church of Sts. Peter and Paul (Sinan Pasha Mosque), in a 2008 photograph.

FIGURE 38. Stores extend their displays too far, leaving only a small path for shoppers.

FIGURE 39. The space inside the ruins of the late-thirteenth-century Church of St. Francis could be reused for public seating.

FIGURE 40. The parking lot in front of the Church of St. George of the Greeks could be reimagined as a playground with new landscaping.

Several dramatic ruins give Famagusta a wonderful character. In particular, the Churches of St. George of the Greeks and St. George of the Latins (refer to pictures in section "Descriptive Analysis of the Walled City," page 17) are vivid reminders of Famagusta's Lusignan period of wealth, influence, and centrality. They provide ways to experience the vagaries of history, the fate of heritage and the depredations of time in everyday life and literally on the street—not in a museum. Efforts should be mounted to fully stabilize them where they are structurally unstable, and to celebrate their accessibility as everyday ruins—think of them as public park assets, not just dead heritage. Simple, inexpensive uses could be found for some ruined sites. For instance, clear some of the interior space in the ruins of St. Francis (bordering the main square) and place public seating with shade. It would make an excellent meeting point and put visitors and citizens in closer contact with a heritage building (figure 39). At both St. George of the Greek and St. George of the Latins, the design and interpretation of the ruins should be integrated with the redesign of surrounding spaces to make them social magnets as parks—currently, they seem merely cast aside and mostly neglected vestiges of a prosperous time that has inexplicably passed. The parking lot at St. George of the Greeks, for instance, could be reimagined as a playground and grove of trees—very appropriate for its location in the midst of a residential zone (figure 40).

If the Walled City is to be more fully inhabited by a diversity of residents, it will need to have services, such as schools, libraries, and health care facilities. Such public-sector investments should be used as catalysts, leveraging private development by individuals and institutions. Schools already exist, even though they may need improvement. A library, as part of a school, and health care facilities are sensible, desirable areas for government investment. Universities may be partners in these projects, which could serve as outposts and practical arms (for example, a health care facility could be a part of the Eastern Mediterranean University medical faculty). The point here is that all such public facilities can and should reuse existing structures wherever possible.

Another important principal to be followed in reconceptualizing and remaking public spaces is accessibility for those with disabilities. Public space should be fully accessible, as mandated by a new law.

The final aspect of public-space planning that must be addressed relates to the moat and glacis—parts of the Venetian fortification system. It is discussed in the next section, but connects directly to the public-space issues raised in this section.

Utilize the fortifications

The fortifications—the whole system of walls, gates, moat, and glacis—rival the great religious buildings as the most charismatic and striking element of Famagusta's built heritage. Built, shaped, and added to over the centuries, the massive and extensive defenses represent an astounding measure to protect the precious buildings, streets, lives, and livelihoods and define Famagusta as a prosperous trading place. The first part of this measure, therefore, is formulating clear conservation plans to ensure the stability, integrity, maintenance, and interpretation of the fortifications system as a whole. Our initial impression is that the conditions of the whole system are good. Even so, periodic and comprehensive assessments should be carried out. The moat is treated largely as fallow, unused space, and likewise the glacis. Locals reported that some of these spaces are unused because they are unsafe—particularly the moat.

Today, the walls stand mute, largely ignored or regarded as blank unfortunate backdrops. The walls define the historic city but also divide it from the rest of Famagusta. Utilizing them by creating greater access should be a key part of regeneration. Of course, access must fit within management guidelines guaranteeing safety and conservation. The overall goal is to make the fortifications less of a barrier and more of a public space.

The fortifications are formally accessible in several places—at the Othello Tower, Sea Gate, Canbulat Gate, and near the Land Gate: steps and railings are built in these places (figure 41). In other locations the walls are informally accessible. The moats are zones largely empty of people and buildings, taken over by invasive vegetation, although a path is discernible all the way around (figure 41). Local contacts advised our team not to go in the moat, as a safety precaution.

Uses of the fortifications should be oriented to both tourists and locals. Provisional uses can be established to test ideas. For instance, an existing café might be invited to use a spot on top of the wall on a trial basis, using temporary furniture and utilities.

Some intriguing ideas for reuse are framed by our assumptions that any use should be equally accessible and attractive to residents and visitors, should not damage the built or landscape heritage, and should be largely reversible:

- Create signage indicating and interpreting vista viewpoints from atop the walls, as well as the pedestrian paths for getting there. Currently, it is a random process of discovery.
- Create more and safer access points from inside and outside the walls. Options might include bridging over the moat.
- Create marked trails in and around the fortifications.
- Establish a bicycle or hiking path utilizing the road network inside the walls, as well as the moat. The routes can be used by tourists to discover the Walled City, as well as by residents for recreation.
- Create an outdoor cinema.

FIGURE 41. The Sea Gate is one of a few locations where the fortifications are formally accessible. Others include the Othello Tower and the Canbulat Gate along the waterfront, as well as the Land Gate to the west.

FIGURE 41. A path runs around the walls, in the moat, but it is infrequently used.

Mobility and transportation

Mobility within the Walled City is not an urgent issue, beyond the ubiquitous question of how to locate an adequate supply of parking in places unobtrusive to heritage assets and public spaces. Mobility between the Walled City and the rest of the municipality is a substantial barrier to regeneration at all scales. The connections between the Walled City and areas all around it are few and difficult.

Adding to the discussion in the public-space section above about rebalancing pedestrian and vehicle uses, pedestrian mobility outside the walls should be addressed. It is uncomfortable and dangerous to enter or exit the Walled City on foot, and to move on the surrounding roads once out of the city. The improvement of pedestrian connections and streetscape design has recently been addressed already on the road connecting the Canbulat Gate to Palm Beach, to good effect. The walkways are safe and spacious. This model can be applied more widely in the zone of open-land, larger roads, and sprawling development surrounding the Walled City on its three land sides.

Mobility around the greater municipality is not an issue taken up by this report. However, mobility to and from the Walled City is a strong influence on many of the issues raised. Currently, private vehicles and some buses provide nearly all of the access. The creation of a transit option should be explored, perhaps using modest-sized shuttle buses serving multiple stops within the Walled City and the greater municipality (Eastern Mediterranean University, Varosha, beaches, even Salamis and Boğaz to the north). As a public service, this might be regarded as too great an expense. Partnering with tourism companies or universities might result in a shared system easier to fund and implement.

The supply of parking space within the city needs to be carefully studied. Opinions differ on whether there is too much or not enough. The area inside the walls is too large to preclude all automobile traffic, as residents needs to access their houses by car. Visitors can use the parking lots already existing around the margins of the central business district. There is room for additional parking to be created in new surface lots inside the walls, as the revitalization plan suggested. Constructing additional parking spaces should be done very cautiously, as it provides an incentive to drive, for those with a choice of transportation modes. More cars traveling within the Walled City, particularly in the southern sections, should be discouraged. Parking structures other than surface lots are not compatible with the Walled City and should not be contemplated.

Interpretation and Wayfinding

Together, interpretation and wayfinding should be conceived and designed to help reinforce the center of the Walled City as the hub of activity while also educating visitors and residents about the rich, complex history of the city. Together, interpretation and wayfinding should demonstrate in practice how this heritage influences contemporary life.

Extend and deepen historic interpretation

The content of what is interpreted to visitors and local audiences seeking an educational experience is not sophisticated or deep enough. While the point of the city's many historical layers is implicit in recognizing the landmark religious buildings and fortifications, a full account must also narrate the less-evident, but equally impactful periods of history. This account should include the British period, when the city's built environment was substantially reshaped, for instance by enlarging Namık Kemal Square and launching conservation campaigns on some buildings. Further, the interpretation should draw a continuous narrative into the twentieth century, up to and including the difficult years of independence after 1960 and the 1974 conflict and its aftermath, which have such a marked influence on the city as experienced today. Finding the words and images to convey this recent history will not be simple, but it is an important task of the interpretation not to ignore or sublimate significant aspects of the city's history.

The goal of a comprehensive interpretation scheme is offering different levels of interpretation to accommodate individuals with different interests and attention spans. Colloquially, one can think of three distinct audiences: streakers, strollers, and students. "Streakers" go fast and look for headlines. "Students" pause for longer times and absorb more and more nuanced information, while the "strollers" are somewhere in the middle. An interpretive scheme for all three audiences uses many media, mixes long-form and short-form products, and reaches different levels of detail.

Without attempting to detail the nature of a comprehensive interpretive scheme for Famagusta's walled city, the project team identified several goals to work toward:

- Many existing signs at historic sites and buildings are merely information, but should include at least minimal historical content on dates and narratives (figure 42). This is essential for landmark buildings, whose dates and stories convey essential parts of the significance of the structures (and the whole settlement) that cannot be appraised at a glance.
- More in-depth understanding of sites could be delivered via QR codes and smartphones or by calling a local telephone number for recorded information. Both would be low-cost, and would serve the typically more tech-enabled "student" audience.
- Visitor centers are often proposed in interpretation plans, but their effectiveness is questionable. The current visitor center is tucked beside the Land Gate, and contains little information and no interpretation. A visitor center might be desirable if visitors are present in the city but are simply unaware of where important historic sites are, or where to get available information. In Famagusta, the most charismatic historic sites are visually very apparent (the Cathedral/Mosque and Namık Kemal Square), so the delivery of information should sensibly happen somewhere nearby. The question needs further study, but if a visitor center is indeed called for, a location in or very near the center of the Walled City should be used. The Bandabuliya suggests itself, as an empty and central building of some significance itself, central to the commercial activity of tourists (refer to pictures in section "Adaptively reuse historic buildings and sites"). When visitor centers are successful, they deliver multiple services to new visitors, often for free. In the case of Famagusta, a short list of these services would be: orientation information, an introduction to the city's history (in an exhibit or video), walking tours (guided and/or unguided, with thematic options to cover the city's complex history in greater detail), a place to buy a book or detailed map, restroom facilities, and relief from the heat (shade or air conditioning).

FIGURE 42. This sign identifies the Ayia Photou Underground Church, but does not provide any additional information.

The final interpretation issue raised by this study is the need or desirability for a museum. For good reason, it is generally a standard idea in every city to have a museum facility to tell its story. Does Famagusta need a museum? The argument is that Famagusta and its visitors would benefit by having purposeful interpretation of the city's history and evolution presented to the public and to Cypriots, but it might not be necessary or desirable to develop a separate facility for this. The current museum, at the Canbulat Gate, is narrowly focused, not very well organized, and not centrally located. Installing a city-history exhibit or interpretation node at an existing historic site, or in some other building or facility located in the urbanistic center of the city, would be the best solution in the short term. Perhaps later, as tourism demand and traffic rise, there will be impetus and resources to develop a new interpretive facility, whether it is a visitor center or a separate museum. At the moment, it would be most ideal to host interpretation in the most public of public places, in or around the main square. A new facility not in the center would be a diversion of important resources.

Comprehensive wayfinding strategy

Visitors are currently provided few means of orientation and wayfinding around the Walled City. (The wayfinding issues of getting to the Walled City, which are also substantial, are not addressed here). The medieval street pattern, changing street names, and a general dearth of signs make wayfinding a challenge. This, despite the true landmark monumental buildings that do lend a sense of orientation to the walker. The goal of this project's proposal is to establish basic wayfinding information for visitors by making it available in the main public spaces, and not only in the visitor center, which is not centrally located, and virtually, by phone and Internet or smartphone. Currently, there are few signs and only one fixed-sign map, in the new Desdemona Park, near the Sea Gate. The built environment itself provides some strong cues, but these need to be set in an environmental and wayfinding context. Good wayfinding tools will enable visitors to explore on their own beyond the main destinations of the central Namık Kemal Square and the Othello Tower.

These proposals are structured in short-, medium- and long-term phases. Short-term measures will be fairly easy to begin implementing (low-cost and minimal labor) and would be high-visibility first steps:

- Publish better, clearer, more detailed tourist maps. Cheap tear-away and give-away formats are very effective, but desktop publishing makes higher-quality graphics and information easy to achieve. These maps would be a good opportunity for business sponsorship and partnership with a university graphic design department.
- Create a large, stationary map and place it at a few strategic locations throughout the city. Some suggested locations are the car park and tourist hub at the Land Gate, the small square near the Church of Sts. Peter and Paul (Sinan Pasha Mosque), Namık Kemal Square, Desdemona Park, the Othello Tower, and the Canbulat Gate. These maps should include the distance or walking time between major points.
- Erect simple sign posts with arrows pointing toward common destinations, as is very effective in the confusing environment of Nicosia, or use stenciled ground-markings to mark out paths between heritage sites or other points of interest. The project team saw this employed elsewhere in northern Cyprus, marking out nature trails. These are subtle, cheap, and don't contribute to visual pollution of tourism and shop signs.

Medium-term measures are somewhat more complex and will involve more partnerships:

- Organize a small series of 2-3 self-guided tours within the city. They can be organized around religious buildings, the fortifications, a particular district, or a particular time period. Some tours may be more intensive than others. Self-guided tours can be tested and "marketed" by giving guided versions of them to residents as well as to tourists.
- Install descriptive signage at each monumental building—so that the buildings and ruins are not mute, nor merely identified with a name, as is now the case. Partner with university historians, architects, and graphic designers, who already have the content knowledge and design skills to execute these signs.
- Create a branding campaign to frame all these wayfinding efforts, in partnership and coordination with tourism promotion and business groups. All wayfinding and public interpretation installations would use consistent graphics, colors, and maps. Given the fondly remembered but mostly erased history of the city's citrus groves, we suggest using oranges, and orange color, as a brand evoking Famagusta's past.

In the long term, wayfinding and interpretation systems should be extended to improve visibility and accessibility between the interior and exterior of the Walled City. Extending the branding system and its markers outside the walls around the Famagusta municipality would make clear to pedestrians, drivers, and perhaps even cyclists how to navigate into and out of the Walled City.

Community Involvement and Capacity Building

Involve local communities in planning, design and heritage efforts

Local residents constitute important stakeholders in efforts to plan and conserve the city, but the public is not monolithic. It was apparent even in this short project that residents within the wall and outside the wall constitute a number of distinctly different groups, each with its own needs, desires, preconceptions, and prejudices. Understanding and being sympathetic to these distinctions will improve planning outcomes and streamline implementation of the plans that are formed by the authorities.

More specifically, a potential threat from the perspective of residents is that external forces will determine the future of Famagusta. Just as the current situation finds Famagusta and northern Cyprus suspended in a multinational geopolitical stalemate, the possible post-solution futures could well result in the city becoming a museum, slowly forcing out its residents, or becoming effectively abandoned by an intense focus on redeveloping Varosha as a resort. Current residents, owners, and entrepreneurs in the city should be able to articulate their positions on the large and small decisions lying ahead.

This project's proposal is, generally, to adopt an ethic of citizen involvement. The purpose of this is to ensure that current stakeholders (residents, landowners, businesspeople) are not alienated, forced out, or otherwise unfairly disrupted when change comes to Famagusta. Some venues or vehicles for citizen involvement should be created, at least informing local stakeholders more completely about planning issues and possible outcomes, and ideally enlisting them as partners in finding solutions and making decisions.

Participation in decision-making and power-sharing is at the heart of citizen involvement, but community involvement yields other benefits as well. Engagement of the public is also an interpretive strategy. It affords preservation, design, and planning professionals the opportunity to learn about the buildings, stories, and associations making up the city's built environment and to take account of these cultural values in their work. Every person on the street and in the neighborhoods of Famagusta seemed to have an untold story that revealed something significant about the place and its history. One proposal linked to this is creating a "public archive" that residents can submit to—sending family photographs or recording oral histories—helping record the history of the city and potentially making it available as historical interpretation. Such an archive could be hosted by the public library mentioned elsewhere, and programmatically linked to schools, through which children could help record the stories of their own families.

Public opinion research is another specific proposal. A survey of the local populations will inform future planning decisions by yielding data on public opinion as well as social factors of the current population (there has not been a census since the 1970s). Without some knowledge about public opinion, planning will only be regarded as top-down and will leave community sentiments and desires undervalued.

Finally, the project team recommends the creation of an agency to spearhead public partnership and community involvement, and to get people involved in planning and decision-making in various ways. For instance, the results of this study could be used as the basis of some community workshops, in which the analysis and proposals can be presented and opened for discussion. An existing organization or advocate would need to step forward and offer to carry the torch at first. This work will only happen, it was felt, if clear responsibility falls to a specific group or stakeholder. The project team has only cursory knowledge of local institutions and politics, so a specific recommendation will have to come from local stakeholders.

Greater involvement of third-sector groups

Third-sector groups—whether advocacy groups, foundations, religious organizations, or other NGOs—can contribute a great deal to the regeneration and conservation of the Walled City. In situations like the one Famagusta finds itself, with weak markets and government agencies hampered by political and economic constraints, third-sector organizations can fill gaps in responsibility, investment, vigilance, and service provision left by the inability or low capacity of the public and private sectors.

Apart from contributions of these external groups, some more immediate steps can be taken to increased the capacity of local NGOs: First, raise resources (financial, human and social-capital/political resources) for existing NGOs and, second, connect existing NGOs together through an informal roundtable to share interests and notes and connect them to networks of like-minded, small NGOs working in the heritage sector in other parts of the region or the world (of which there are many). Examples include the South East European Heritage Network (www.seeheritage.org) and Cultural Heritage without Borders (www.chwb.org).

Priority Actions

A long list of good ideas is less useful than a shorter, prioritized list of actions. The priorities should reflect the wide range of actions needed for holistic, comprehensive change (achieving the conservation and regeneration of the Walled City), and must recognize the need for short-term actions that can yield visible, momentum-building results as well as long-term, visionary actions.

The final part of the workshop framed the question this way: Of all the things that were identified as useful and implementable actions contributing to the overall conservation and regeneration framework, which ones would be the highest priority items to support without delay? The emergent list of proposals was the following:

- Create an agency tasked with organizing community involvement.
- Build a wayfinding system (signs, panels, markers).
- Open the port to the public.
- Fund incentives for local businesses (perhaps through a revolving loan fund or the mutual support of a local business association).
- Launch a public-relations campaign of magazine articles, familiarization tours, advertisements, and other media.
- Create residential opportunities in the Walled City for university employees and students.
- Revitalize, rehabilitate, and re-function the central section of the Walled City, including buildings as well as public spaces.
- Make the moat usable and accessible as a recreation area/linear park.
- Hire a design firm to develop a branding campaign and implement it.
- Create boat tours of the coast based in the Famagusta port.
- Program the Venetian, or "Chimney" House as an exhibition center or other school facility.
- Make physical improvements to the landscape of ruins—especially, at the ruins of the Church of St. George of the Greeks.
- Rehabilitate underutilized buildings in the Walled City for university student houses.
- Improve the infrastructure in residential areas where locals are clustered.
- Incentivize the production of local crafts, foods and goods for sale to tourists and export.
- Rehabilitate some historic buildings (British warehouses along Canbulat road) as loft housing and market them to young people and others living just outside the city
- Redesign the landscape around the fortifications to increase accessibility.

- Create areas for public use around the port—promenades, viewpoints, and points of access to the water.
- Re-establish connections between the sea and the city.

Of this raft of ideas emerging from the project participants, the following set of short-term initiatives are recommended actions to be initiated as soon as possible in order to build visibility, momentum and shared responsibility for the more ambitious goals that will have to wait for a solution to the larger political stalemate:

- Create a project or task an agency with organizing community involvement, and create a way for citizens to participate more broadly—open a channel of communications about the future of the Walled City and give some form to the stakeholders. A first step, no matter how modest, will be a contribution toward creating good will and increasing the capacity of local organizations to collaborate on shared goals. Ideally, a visioning exercise of some kind could be launched, though a local organization will have to step forward to lead it.
- Take first steps toward reconnecting the Walled City and waterfront by beginning to plan the future organization and development of waterfront space once the port functions are moved, as it is presumed will happen. This public space framework should also address making the moat usable and accessible as a recreation area or linear park. In the short term, identify more spaces where public use of the waterfront can be created quickly—such as promenades, viewpoints, or points of access to the water near the Canbulat Gate.
- Make modest physical improvements to the landscape of ruins—especially, at the Church of St. George of the Greeks—to make them more welcoming, accessible, and useful to both residents and visitors. These projects could include seating, shade, and interpretation, and should "read" as visible signs of improvement demonstrating the town's capacity to care for quality public spaces. Sponsorships from local business could be solicited for this purpose.
- Create plans—including public incentives—to rehabilitate some historic buildings as loft housing or hotels/holiday apartments to be marketed to young people, others living just outside the town, and visitors wishing to stay in the Walled City (for instance, the British-era warehouses along Canbulat road). Another way to advance the goal of increasing the diversity of local population within the walls is encouraging the universities to create residential opportunities in underutilized buildings in the Walled City for their employees and students.

Conclusions

Now is the time to step up efforts to plan for the dramatic changes that will one day reshape Famagusta. In order to regenerate and redevelop the city while retaining its incredible historic character and cultural significance, plans and partnerships need to be started now.

The Walled City of Famagusta has high levels of cultural significance and integrity, reflected in the fortifications and charismatic religious buildings as well as in the cultural landscape of vernacular buildings, blocks, streets, and squares.

The steady decline in conditions in the Walled City—social, economic, physical—will likely continue without an influx of new investment, which will not happen until a solution to the political stalemate is reached. At that time, urban dynamics will change quickly and Famagusta must have plans and institutions in place to deal with them.

There is a clear and present need for conservation planning and integration of heritage conservation with basic urban planning processes and urban design measures. Local and national governance capacity presents a major limit to action at the moment. The interventions of NGOs have been very helpful, but are not sustainable.

While markets are currently weak in the Walled City (for tourism, real-estate development, or entrepôt functions), there is a high likelihood that this will change in the future. Now is the time—in advance of major political and economic changes envisioned in the future—to conserve proactively and put measures into place valorizing heritage assets and planning for their conservation and appropriate economic development. **Address the problems and opportunities of the waterfront**, and begin planning now for future change that embraces development options and ensures positive connections between the Walled City and the waterfront. Develop public assets—open spaces, natural and recreational sites, a public library—as a substrate for future public, private, and NGO programs and investments. **Continue to advance the stewardship and conservation of Famagusta's charismatic buildings**.

The next steps for academic study include the following:

- A detailed public survey on attitudes toward the built environment, social issues, tourism, and prospects for future change.
- A closer study of local institutional capacity, and how local capacity (in private, public, and nonprofit sectors) can be built around shared heritage—perhaps in the form of public-private partnerships, but more simply in pursuing more collaboration and complementarity between existing agencies.
- Multi-disciplinary studios addressing the urban design, planning, and conservation challenges of the waterfront, the public space network, and the regulatory framework for redevelopment.

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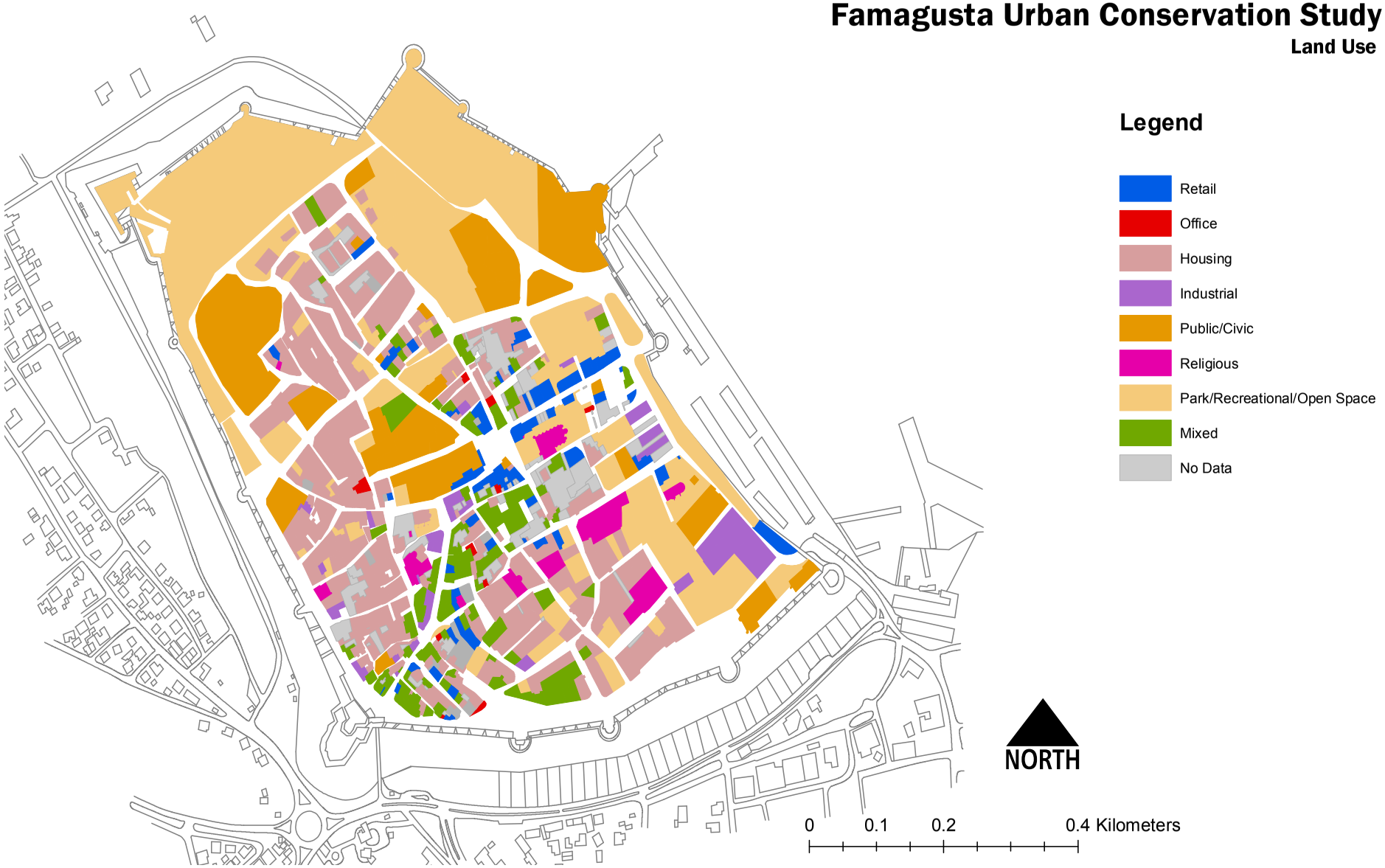
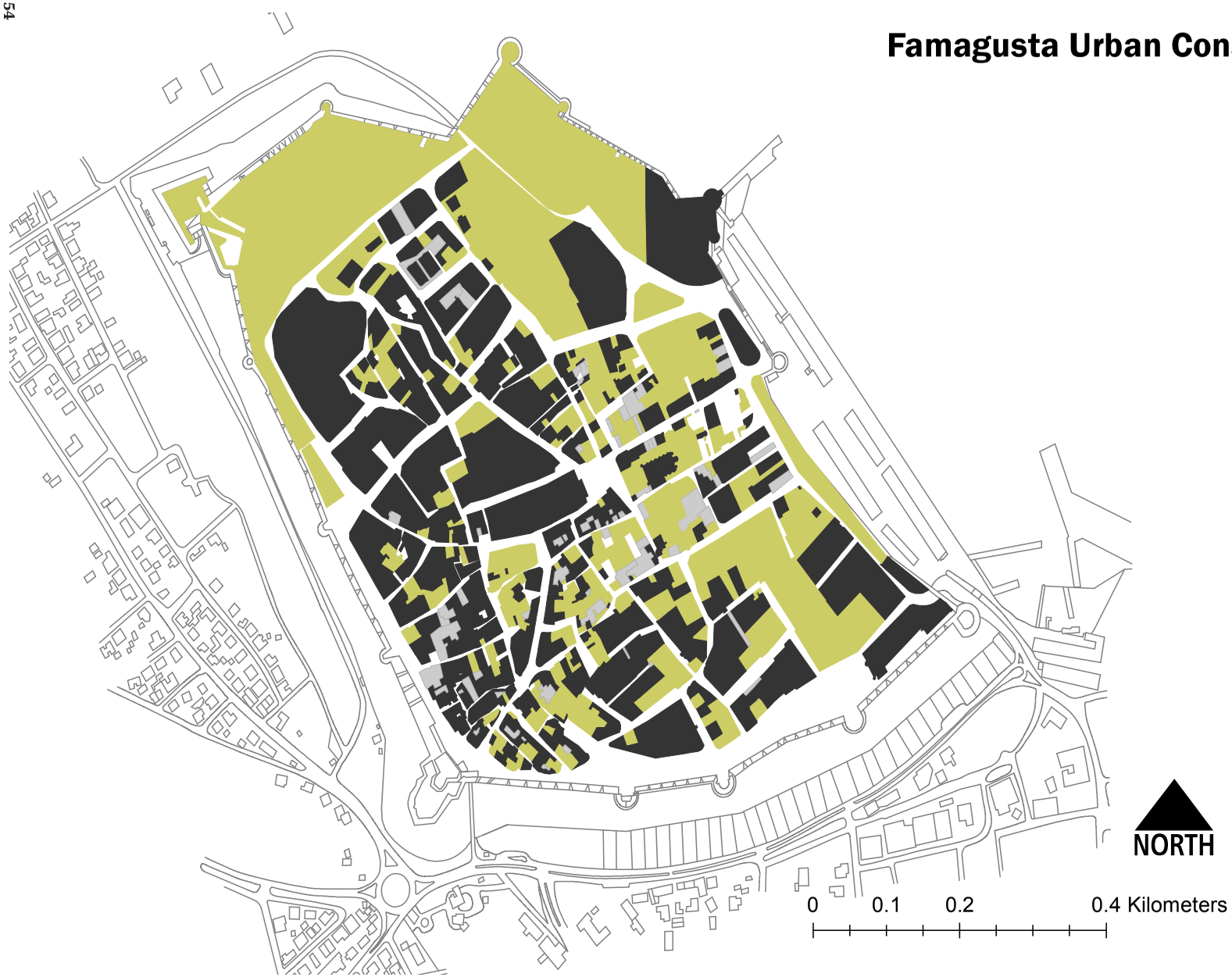
Famagusta Urban Conservation Study

Land Use




Famagusta Urban Conservation Study
Occupancy & Vacancy
Legend
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2
No Data
NORTH
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0.1
0.2
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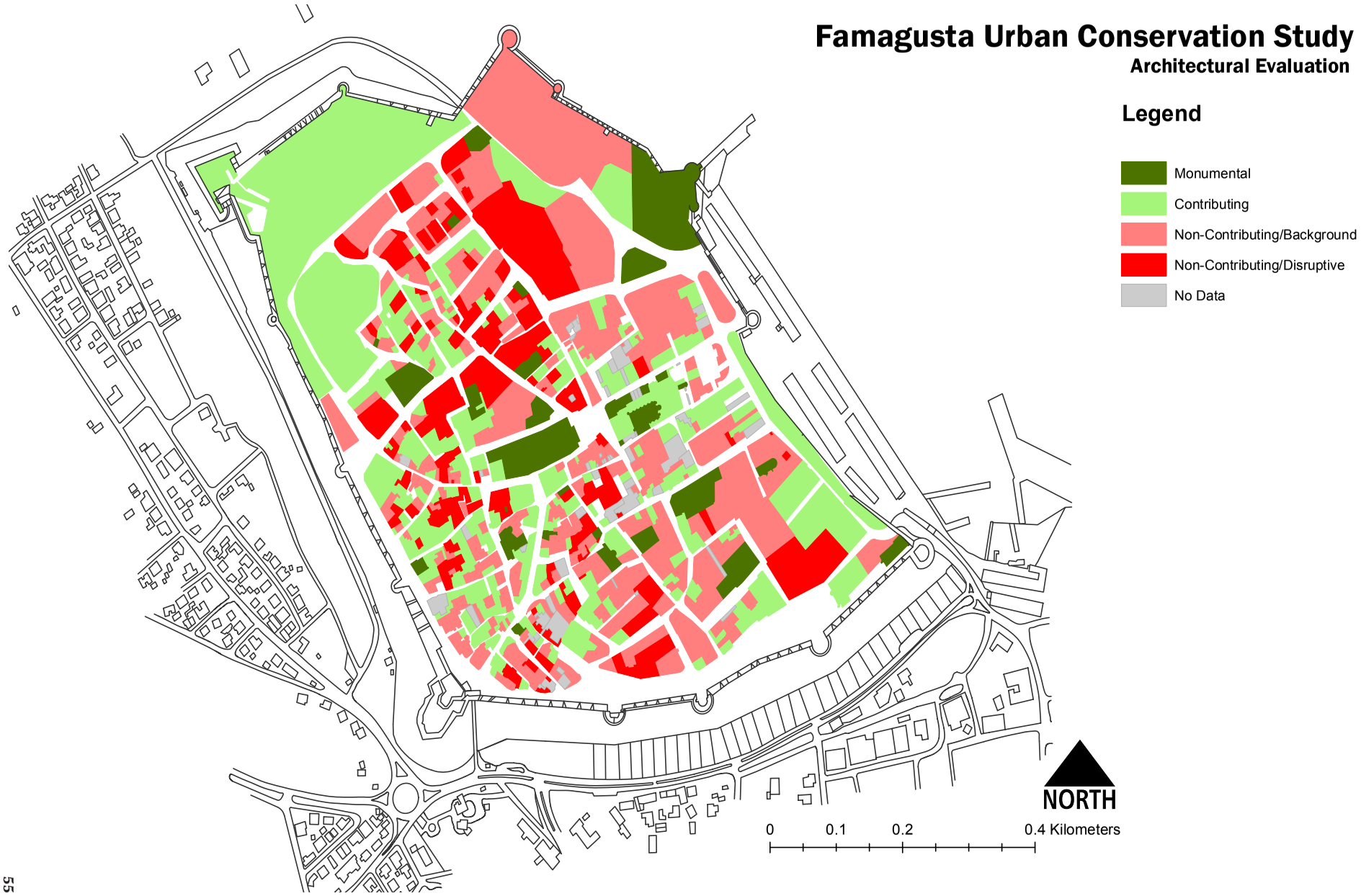
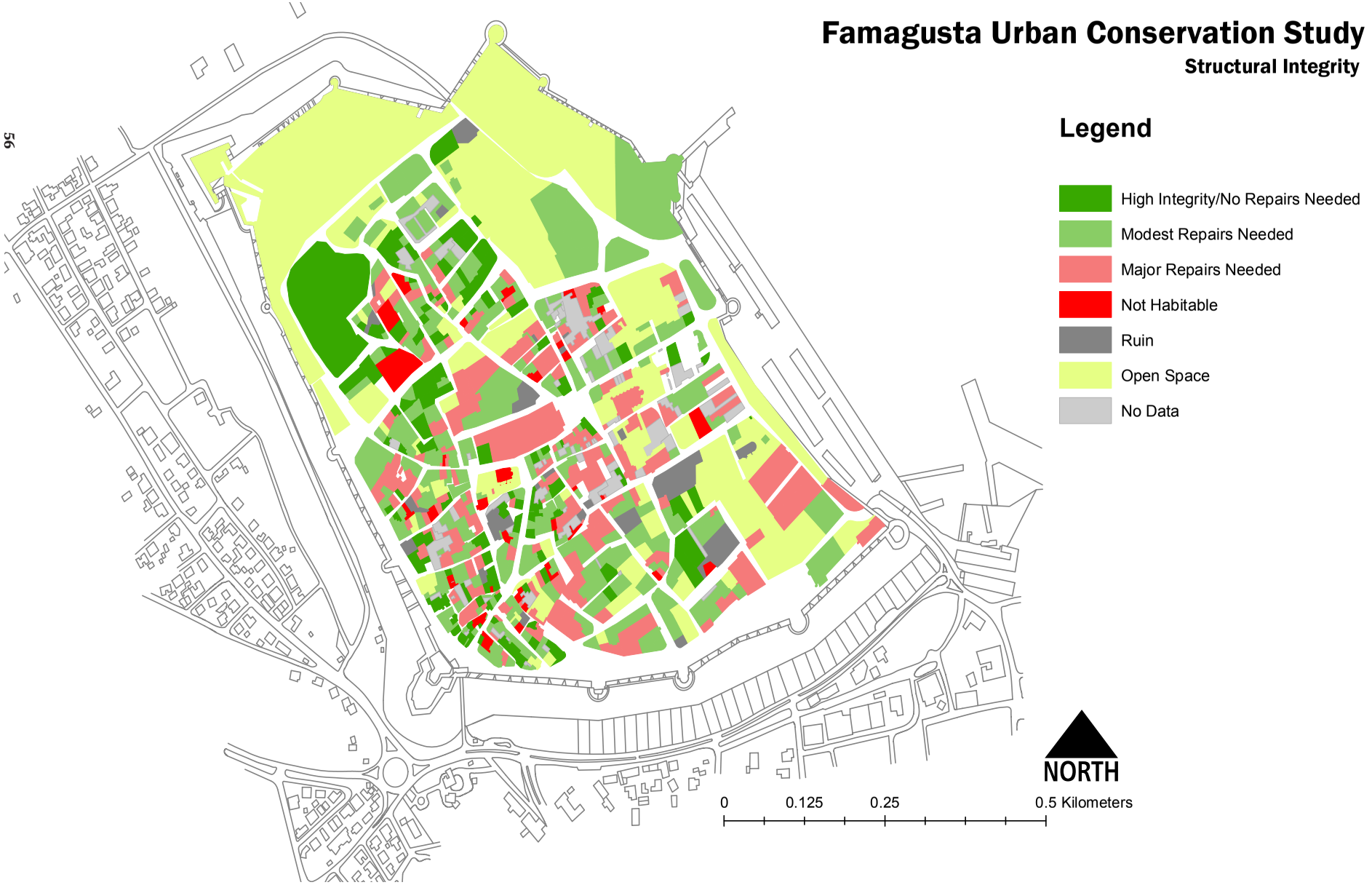

Famagusta Urban Conservation Study
Architectural Evaluation
Legend
Monumental
Contributing
Non-Contributing/Background
Non-Contributing/Disruptive
No Data
NORTH
0
0.1
0.2
0.4 Kilometers

Famagusta Urban Conservation Study

Structural Integrity



Part II

An Assessment of Conditions in the Walled City

(2008)

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This is an edited version of a report that was prepared for World Monuments Fund in 2008.
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(Michael J. K. Walsh, Peter W. Edbury and Nicholas S.H. Coureas, editors, Ashgate, 2012).

Introduction

The observations in this report are based on a three-day visit to Famagusta by Robert Silman (Robert Silman Associates, Structural Engineers, New York and Washington D.C.) and Kent Severson (conservator in private practice, Boston) on behalf of World Monuments Fund at the end of March 2008. A remarkable number of structures were examined in a very short time. Most of the monuments in Famagusta are open air and unrestricted to visitors. Exceptions include the Church of Sts. Peter and Paul (Sinan Pasha Mosque), the Church of St. Anne, and the Tabakhane (Tanners') Mosque; access to these buildings was graciously provided through the local office of the Directorate of Ancient Buildings and Museums (Eski Eserler ve Müzeler Dairesi); St. Nicholas Cathedral (Lala Mustafa Pasha Mosque), a working mosque, is open for public visit during the day at most times. The Othello Tower is a tourist attraction charging a modest entrance fee.

Prior to the visit, Silman and Severson were provided with a copy of the World Monuments Watch dossier for the Historic Walled City of Famagusta. The historical background, contents, legal situation, significance, and current threats to the city are thoroughly described by Dr. Michael Walsh, the author of the application. To the extent that it is possible to make an assessment in such a short visit, his description appears to be accurate and thorough. Prior to the visit, Dr. Walsh provided a number of recent articles on Famagusta and DVD copies of the video production *The Stones of Famagusta* were acquired. A great deal of additional material (articles, documentary papers and bibliographic material) was provided by Dr. Walsh during a visit to his office at Eastern Mediterranean University. In the course of his research, Dr. Walsh and his team became aware of a photographic archive made during the period of British administration of the island (the Mogabgab Archive). The images are small-scale black and white prints, from the 1930s to the 1950s, documenting (among other things) some of the repair work undertaken during this period. The prints are glued to cardboard pages with typewritten labels identifying locations, dates, and work depicted. There are hundreds of these cards, stored in 12 boxes. A second collection of photographs of the wall paintings inside the Armenian Church, the Carmelite Church of St. Mary, and the Church of St. Anne (date and source unknown, provisionally labeled 'Conway' and possibly related to the work of Monica Bardswell in the late 1930s as described below) was also made available, as were a series of scanned nineteenth-century drawings by Edmond Duthoit.

FIGURE 43. Ashlar dimension stone, filled with a core of mortared rubble.

FIGURE 44. Wind and water erosion.

FIGURE 45. The Carmelite Church of St. Mary.

FIGURE 46. The Church of St. Nikolaos.

Building Fabric and Deterioration

The historic structures of Famagusta are for the most part built from three types of local stone: a brown medium-fine grained, heterogeneous, marly limestone; a lighter, yellowish porous but homogeneous limestone with large clearly visible shell fragments; and a very fine buff limestone. Most structures (including the churches and the city walls) utilized the first type of limestone as the primary dimension stone, but also for some decorative elements. The second type of stone was used less frequently, and the third was reserved for the finest decorative elements, such as column capitals and gargoyles. Occasionally imported marble and, less frequently, granite and travertines appear in structures as columns, threshold blocks and other details; these are most likely reused ancient materials *(spolia)* probably taken from the nearby Roman city of Salamis. The ancient churches, bath buildings and domestic or commercial buildings are generally constructed of exposed wythes of ashlar dimension stone, filled with a core of mortared rubble (figure 43). The mortar was not analyzed but visual inspection reveals mixed sand aggregates and particles of pure white, suggesting a traditional lime mortar. Rarely, other mortars are visible, including a peculiar pure white material and gray Portland cement-based material; these appear to be associated with subsequent interventions, both ancient and modern. The city walls are likewise constructed of the first type of stone, much of which is likely to have been quarried during the construction of the moat. Where the walls have been cut, it can be seen that they are likewise constructed from ashlar outer wythes, but filled with packed mixed soil and rubble, rather than mortared rubble. The most commonly used dimension stone exhibits a distinctive erosion pattern where softer, poorly bound zones are lost, resulting in deep, irregular voids. This erosion pattern occurs on both exposed and protected surfaces, both high up and lower down on structures, suggesting that it is caused primarily by wind action rather than water flow (figure 44). It is postulated that these are marly zones, where the clay expands and softens with diurnal condensation and is subsequently lost to the frequent high winds. Interestingly, the material left behind is relatively hard and weather resistant, and in many cases capable of bearing some considerable load. Much of the dramatic erosion now visible probably occurred long ago and, while ongoing, it appears that the erosion is a relatively slow process. This erosion can be seen in the vertical faces of the living rock along cuts forming the walls of the moat around the city.

Many of the structures in Famagusta, particularly the churches, survive only as truncated ruins. The most dramatic examples of this type of ruin are the Church of St. George of the Greeks (refer to picture in section "Descriptive Analysis of the Walled City," page 18), the Church of St. George of the Latins (refer to picture in section "Descriptive Analysis of the Walled City," page 19), the Carmelite Church of St. Mary (figure 45), and, to a lesser extent, the Church of St. Francis (refer to picture in section "Strengthen the public space infrastructure of the Walled City," page 40) and the Church of St. Nikolaos (figure 46). While the climate of northeastern Cyprus

is often quite dry, heavy downpours do occur in the winter and spring. Where roof structures are lost or compromised, water ingress has softened and eroded mortars between stones and in the rubble core of standing walls. The loss of mortar, together with the erosion of the dimension stone, are the two main causes of deterioration threatening the historic structures. These phenomena are observed over and over when touring the city. Salt efflorescence and rising damp does not appear to be a major factor in the deterioration of the stone as the erosion occurs at all levels in structures, there is no evidence of horizontal drying fronts, and little or no efflorescence was observed.

Where roof structures survive, they generally seem to be sound. Examples of buildings with surviving roofs include: St. Nicholas Cathedral (Lala Mustafa Pasha Mosque) (figure 47), the Church of Sts. Peter and Paul (Sinan Pasha Mosque) (figure 48), the Church of St. Anne (figure 49), the Tabakhane Mosque (figure 50), the Othello Tower (figure 51), and the Armenian Church (figure 52). Except for the roof over the south side of the Church of Sts. Peter and Paul (Sinan Pasha Mosque), no roof structures were examined from the outside. Inside, most roofed buildings exhibit little to moderate evidence of water infiltration with the exception of the Tabakhane Mosque where there is clear salt efflorescence on much of the interior surface of the roof, especially at the east end. The loss of the glass elements in the Kertikli (Notched) Hamam, has left the roof structures generally perforated and open to the weather.

Although St. Nicholas Cathedral has been more or less maintained during the long period of its use as Lala Mustafa Pasha Mosque, many of the recent repairs have been made in a haphazard fashion, often using Portland cement mortars. More significantly, much of the exterior masonry does not appear to have been pointed in decades and there are open joints throughout. The massive brackets and platforms beneath the upper windows on the east end of the building are cracked and precarious (figure 53). It was reported by the attendant on duty that the interior had been painted in 1995; there is slight evidence of water infiltration visible on the ceiling.

The exterior of the roof on the Church of Sts. Peter and Paul (Sinan Pasha Mosque) (the only roof that was examined in this visit) is now covered with cement mortar; the slab is cracked in many places with plant growth emerging from the cracks. There is step cracking beneath the bulge in the parapet on the south side, highlighted by Dr. Walsh in the World Monuments Watch dossier.

FIGURE 47. The roof and buttresses of the well-preserved St. Nicholas Cathedral (Lala Mustafa Pasha Mosque).

FIGURE 48. The Church of Sts. Peter and Paul (Sinan Pasha Mosque), seen from the southwest.

FIGURE 49. The Church of St. Anne, seen from the northwest.

FIGURE 50. The interior of the Tabakhane (Tanners') Mosque.

FIGURE 51. The entrance to the Othello Tower.

FIGURE 52. The Armenian Church, seen from the southwest.

FIGURE 53. Eroded brackets on the apse of St. Nicholas Cathedral (Lala Mustafa Pasha Mosque).

FIGURE 54. Recent vandalism of ship graffiti in the Church of St. George of the Greeks.

The historic buildings of Famagusta are generally left unguarded and access by visitors is unrestricted. The grounds of the unrestricted monuments appear to receive at least moderate maintenance, such as occasional trash collection and the cutting of weeds and grass. Nevertheless, they tend to become collection points for trash and vulnerable to vandalism. Evidence of drinking parties (empty bottles, etc.) is seen frequently as is material left by some using the structures as shelter (bedding, etc.) While graffiti, painted or incised in plasters or stone, are not rampant, they occur regularly. Most disturbing are the scratched-in graffiti on the wall paintings in the Church of St. George of the Greeks (figure 54).

Previous and Recent Interventions

During the time of the British administration and the Republic of Cyprus, approximately from 1935 through 1972, many of the monuments in the city were repaired and/or partially reconstructed. These interventions are briefly but comprehensively documented in the annual *Reports to the Director of Antiquities of Cyprus (RDAC)* and the *Cyprus Annual Report of the Director of Antiquities (CARDA);* photocopies of many of these entries were provided by Dr. Walsh. These interventions included the reorganization of the city's central square (with the relocation of the Ağa Cafer Pasa Fountain near the Venetian Palace), reinforcement of many functional structures (such as the bridge across the moat at the Land Gate) and numerous repairs and partial reconstructions. Work included insertion of many substantial infills using materials and techniques that closely resembled the original building fabric. Among these, the stabilization of the broken wall at the west end of the Church of St. George of the Latins and the infill supporting the south wall of the Church of St. Nikolaos are examples of aesthetically attractive interventions that have contributed greatly to the stability of the structures.

Among the interventions during this period was a campaign in 1937 and 1938 to stabilize wall paintings, undertaken by Monica Bardswell. The documents indicate that this work included application of edgings around the paintings and application of a coat of protective wax. These interventions have contributed greatly to the survival of much of the painted plaster and will likely have great implications for their conservation in the future (see Wall Paintings and Plasters, page 62).

FIGURE 55. The Ağa Cafer Pasa Fountain on Namık Kemal Square, after conservation.

FIGURE 56. Interior of the Church of Sts. Peter and Paul (Sinan Pasha Mosque).

FIGURES 57, 58, AND 59. Examples of the adaptive re-use of historic structures as restaurants and taverns within the Walled City.

Between 2004 and 2006, a program of improvement sponsored by the European Union was undertaken to repave the Venetian Palace and the central square of the city, to redirect traffic around the north side of the square and restore the central market building on the north side of the square, known as the Bandabuliya. The latter project transformed a traditional open market structure into a sterile, "shopping-mall"-like space with a handful of cafes and restaurants but without the character typically associated with a vital, working market. Under the same auspices, a project to stabilize and restore the Sea Gate in the city wall, near the port, was begun, but work was stopped, reportedly due to dissatisfaction with the quality and character of the restorations; this structure remains closed to the public with no evidence of ongoing activity inside.

In 2006, a USAID funded capacity building project by International Resources Group (IRG), through their Supporting Activities that Value the Environment (SAVE) program, was initiated to provide demonstration/training sessions to local participants in modem stone conservation techniques. Using the Ağa Cafer Pasa Fountain and the ancient Roman sarcophagus on the west side of the main square as a project site, the stones were cleaned, missing elements replaced with new dimension stone, and the fountain structure pointed with lime mortars (this project was directed by K. Severson) (figure 55). The same group has cleaned the interior of the Church of Sts. Peter and Paul (Sinan Pasha Mosque) (figure 56), secured the open windows and gaps in the masonry against pigeons, and within the past 60 days, conducted a laser scanning documentation survey of the structure. Several small-scale structures in and around the city center have been recently converted into restaurants and taverns. These include the Monk's Inn, on a side street to the south of St. Nicholas Cathedral (Lala Mustafa Pasha Mosque), the Ginkgo Restaurant in the medrese of Lala Mustafa Pasha Mosque, on the east side of the main square, Jax Bar, on a side street off the south side of the main square, and the Hammam Inn, in the Ottoman bath building adjoining the Church of St. Francis on the north west corner of the main square. These seem to be effective and sensitively done examples of adaptive re-use of historic structures. There is considerable additional historic building stock in the city that could be likewise adapted for touristic enhancement while preserving the character and historic building fabric.

Wall Paintings and Plasters

Many of the historic churches in the city, as well as some of the secular buildings, retain *in situ* fragmentary wall plasters with a considerable amount of surviving polychromy. Based on visual inspection (no sampling or field analyses were undertaken during this visit) substrates consist of a single thin layer (0.5-1.5cm. thick) of traditional lime mortar. Painting appears to have been executed in a combination of *buon fresco* and *secco* techniques, along with a few incised or raised elements in substrates (primarily halos). There are very few instances of multiple layers of painting; one example was spotted in the vaulting on the north side of the Church of St. Symeon, one of the oldest structures in the city. In a very few places the plasters have been scored for application of a subsequent layer of mortar, but this is rare and is likely from the period after the Ottoman conquest. One valuable feature of the plastered and painted decorations are the historical incised graffiti. These marks often depict the ships of visiting sailors, as well as inscriptions with names, dates, and other texts, some dating to the sixteenth century. The graffiti are a subject of particular interest to Dr. Walsh who has published an article on the subject.[13]

In truncated ruins, wall paintings and plasters have generally survived only in protected areas, such as the undersides of vaults or under surviving roof structures, but in a few cases some have also survived on very exposed walls. Conditions of the paintings and plasters range from very well-preserved fragments (such as the underside of the vaults on the south side of the Church of St. George of the Greeks) (figure 60) to badly eroded passages where the painting only survives as a ghost and the substrates are crumbly and rough. Where mortars survive, they appear to be generally well attached to the walls, but there are invariably edges that are now crumbling and separating. Where paintings are partially exposed, there are varying degrees of loss and soiling primarily by airborne particulates. In the apse of the Church of St. George of the Greeks, small cleaning tests have been undertaken (figure 61). Where paintings are very exposed, they are seriously impacted by biological growth in addition to erosion.

13 Michael J. K. Walsh, "On of the Princypalle Havenes of the See': The Port of Famagusta and the Ship Graffiti in the Church of St George of the Greeks, Cyprus," *International Journal of Nautical Archaeology 37 (2008): 115–129.*

FIGURE 60. Well-preserved fragments of painted plaster can be seen in the apse on the south side of the Church of St. George of the Greeks.

FIGURE 61. Cleaning tests have been undertaken at the Church of St. George of the Greeks.

FIGURE 62. The interior of the Church of St. Anne, looking toward the west.

FIGURE 63. Potential plaster loss in the Church of St. Anne.

The best preserved wall painting cycles are to be found inside the churches with surviving roofs: the Armenian Church and the Church of St. Anne, with some surviving fragments in the Tabakhane Mosque and a very important example of a *sinopia* in the Church of Sts. Peter and Paul (Sinan Pasha Mosque). It is reported that the Armenian Church was used during the military actions of the 1970s for housing and it appears to have been used later for administrative purposes; it is now out of use and unsecured, with recent graffiti on some walls and numerous pigeons in the building. The lower portion of the church has been painted white up to approximately three meters, covering much wall painting (heads of saints can be seen just above the line of paint on the east wall). In places the plasters are detaching from the walls and empty edgings indicate some recent losses. Similarly, the Church of St. Anne was used by the Turkish military but has recently been turned over to the Turkish Cypriot Educational Authorities.14 The walls inside the church have been painted white up to about seven meters from the floor; however, the lower section at the east and west ends are not painted (figure 62). Up to a point about three and a half or four meters on the north and south walls, the painted plaster was covered before painting with a layer of cement, approximately 3 cm thick. In looking at the edges of this layer it appears that a separating layer of masonite-like fiberboard was installed prior to application of the cement; traces of the fiberboard are visible in places at the edges. Examination of the junction of the modern floor (installed after the cement layer) and the walls at the east and west ends of the church reveal traces of similar covers, but these are now removed. The paintings at either end of the church are somewhat damaged, but generally survived the covering and subsequent removal process. The edges of the cement suggest that wooden strapping was nailed to the walls as formers and anchors for the protective mortar. Examination of the edges of the remaining cement covers reveals many areas where the cement came around the edges of the strapping and is in direct contact with the wall painting. In other areas, however, the cement cover is pulling away from the wall painting cleanly. This evidence suggests that the paintings beneath the remaining cement covers may survive. By delicately separating the cement from the edges, it may be possible to remove the cement covers with only minimal damage to the paintings.15 The plaster substrate at the west end of the church and returning at the corners on both the north and south sides is detaching from the wall at the bottom edge and is in immediate danger of

14 Allan Langdale and Michael J. K. Walsh. "A Short Report on Three Newly Accessible Churches in the Syrian Quarter of Famagusta," *Journal of Cyprus Studies 13 (2007): 105-123.*

15 See contrasting analysis of this condition in the section on the Church of St. Anne in "Assessment of Medieval Mural Paintings in Six Churches (2010)" below.

serious loss (figure 63). The stone inside a niche on the north wall is severely eroded; the void is partially filled with mortared bricks and mortared cast cement block. The masonry in the area above this niche is unstable.

None of the white paint in either of these churches was tested for solubility. The paintings are slightly waxy to the touch probably as a result of the work of Monica Bardswell in the 1930s. If the waxy layer is sufficiently thick, it may act as a release layer, greatly facilitating the safe removal of the white paint.

The sinopia on the south wall of the Church of Sts. Peter and Paul (Sinan Pasha Mosque) does not appear to have been affected by the recent cleaning of the interior of the building.16 The painting is fragile, and the plaster is unsecured (without protective edgings), leaving it vulnerable to further loss. There are additional painted plasters on the south and west walls in the second story gallery; these were not examined in this visit, but were briefly examined by Severson in 2007. These, like the sinopia, are fragile, unsecured and separating slightly from the wall.

Political Issues

As deterioration due to natural forces continues, efforts to mitigate these conditions are hampered by the paralysis of local authorities brought on by the ongoing political situation. Although the resulting neglect of the ancient monuments has in a sense protected them from overzealous interventions, the city is growing. It is reported anecdotally that many residents are renting their residential properties inside the city walls to recent immigrants (primarily from Turkey) and relocating to newer development outside the city walls, particularly to the west and north, where there are numerous new luxury hotels and casinos, residences, and the campus of Eastern Mediterranean University.

It can be expected that with the potential reunification of the island there may be a massive influx of attention from not only the tourism industry, but from developers and local residents seeking to capitalize on redevelopment. Reunification will also bring a dramatic upswing in traffic at the port facility, part of which is just outside the city walls to the east. Protection of both the ancient monuments and the unique environment created by the Walled City during this transformation will require strong political will. All aspects relating to the ancient monuments of the area under Turkish Cypriot administration are administered by the Department of Antiquities and Museums (Eski Eserler ve Müzeler Dairesi). Effective preservation of the monuments in the area under Turkish Cypriot administration will depend on revitalization of this administrative apparatus (particularly with regard to conservation issues) and careful integration with the better developed Department of Antiquities of the Republic of Cyprus.

16 This painting was conserved in the summer of 2012 by Nanyang Technological University (Singapore) and World Monuments Fund. See the section "Conservation of a wall painting fragment representing the Forty Martyrs of Sebaste and of a smaller fragment with two haloed heads" in "Assessment of Medieval Mural Paintings in Six Churches (2010)" below.

Basic Recommendations

The scale of preserving the remaining historic elements of Famagusta is of such enormous proportions that one almost does not know where to begin. It is quite clear that an overall preservation philosophy needs to be developed, written into a document and agreed upon by all of the stakeholders. In this document decisions must be made as to the standards that are to be adopted, which are to be saved as buildings and which as stabilized ruins, the priorities for the work, the identity of the decision makers and the regulators/enforcers of the rules—something like a master plan. Budgets will then need to be established and realistic estimates of funding sources identified. Assuming that the prioritized schedule of work will extend for many years, all emergency stabilization efforts must be highlighted and immediate threats of loss of fabric or collapse dealt with at once with the first available funds. Most of the sites are open to the public and a good deal of thought needs to be addressed to securing the sites against vandalism. Again, a prioritized security system will have to be developed as not all sites can be protected equally well. The documentation effort alone will take a huge amount of person-power, time and money. Standards of documentation must be developed as part of the master plan. Perhaps some of the latest technological tools such as computer tablet annotation and attribute systems can be used.

While each of the buildings that make up the Walled City of Famagusta has its own unique set of problems, the similarity in building fabric and mechanisms of deterioration threatening these structures do not vary widely. These include:

- Lack of security.
- Structural instability of many of the remaining fragments.
- Instability resulting from the Ottoman bombardment.
- Erosion of primary dimension stone.
- Loss of mortar in joints and mortared rubble core due to water ingress.
- Deteriorating or inappropriate modem repairs.
- Damage to churches resulting from change in governance of the city from Christian to Muslim.

Immediate Interventions

In the course of this visit, several places that would benefit from immediate intervention were identified:

- **Church of St. George of the Greeks:** the stone tracery in the second window on the south wall of the nave was restored in 1936 (see RDAC 1936).The bottom of the central column is now split, with some loss of material (probably concrete), revealing rusting iron reinforcements. This restoration is in danger of collapse and should be provided with temporary shoring (figure 64). Several walls and buttresses are totally freestanding and require immediate bracing.
- **Carmelite Church of St. Mary:** This beautifully proportioned church has one very serious problem with a large Gothic arch in the north wall that is loaded so asymmetrically (a high stone wall on one half and nothing on the other half) that collapse appears imminent (figure 65). The well-preserved ribbed vault of the apse is in somewhat less danger but the unraveling of the upper walls on both the north and south sides of the apse will eventually destabilize this element (figure 66).
- **Church of St. Anne:** the wall paintings at the west end of the nave, where the cement covers have been removed, are extremely fragile and substantial sections could collapse with even the most casual hand contact. At minimum, a stanchion and rope barrier with warning signs in several languages should be installed in front of this area to warn visitors not to touch the plasters. As soon as possible, a conservator with demonstrable experience in stabilization of wall plasters should be engaged to develop and execute an emergency stabilization program.

FIGURE 64. The erosion of previous restorations at the Church of St. George of the Greeks.

FIGURE 65. This arch on the south façade of the Carmelite Church of St. Mary is asymmetrically loaded and at risk of collapse.

FIGURE 66. This vault above the apse of the Carmelite Church of St. Mary may become compromised if the structure is allowed to deteriorate further.

Summary

There can be little doubt that the Historic Walled city of Famagusta is a first-rate historic site, deserving of the support of World Monuments Fund and one that ultimately should be listed as a World Heritage Site, although it is likely that until the current political situation is resolved, little can be done for most of the structures. The work done at the Church of Sts. Peter and Paul (Sinan Pasha Mosque) is an example of an isolated initiative, unguided by any sort of master plan or overall effort at preservation of the monuments of Famagusta. Although no harm was done to the fabric of the church (only cleaning and non-destructive testing), the city would be better served were this work integrated into a larger plan.

Threats to the structures and character of Famagusta include ongoing natural deterioration of buildings and ruins through weathering and potential seismic activity, as well as pressure from ongoing growth of the city and unrestricted development. Solutions to the natural deterioration, primarily pointing and filling voids in eroded stone, bracing unstable elements, general weatherproofing, seismic mitigation, and the stabilization and cleaning of wall paintings are relatively straightforward, requiring little additional research beyond application of generally accepted conservation methodology to the individual structures. What makes preservation of the buildings of Famagusta particularly challenging is the sheer quantity of building fabric in need of attention.

With the potential reunification of the island will doubtless come a dramatic increase in traffic (both touristic and industrial) and developmental pressures. Meanwhile, the structures and the environment in and around the city continue to degrade. It is therefore of vital importance to increase the world's awareness of the special qualities of Famagusta and to lay the necessary ground work for an appropriate evolution of the city from an isolated gem to an accessible, well-protected historic urban site.

Part III

Assessment of Medieval Mural Paintings in Six Churches (2010)

by Werner Schmid
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This is an edited version of a report that was prepared for World Monuments Fund in 2010.

General Considerations

The present survey focused on the six main painted churches of Famagusta: the Carmelite Church of St. Mary, the Armenian Church, the Church of St. George of the Greeks, the Nestorian Church, the Church of St. Anne, and the Church of Sts. Peter and Paul (Sinan Pasha Mosque). Several other churches with minor remains of painting and wall plaster were not visited. Surveys were carried out by Werner Schmid (mural painting conservator, private practice, Rome, Italy), on behalf of World Monuments Fund, in close co-operation with Dr. Michael Walsh (Eastern Mediterranean University, Famagusta).

Investigations were based on visual examination of the building structure and the wall surfaces. Due to the short time available and because of limited access to the higher parts of the walls, the survey must be considered preliminary, and does not satisfy the need for a more thorough assessment to be carried out on each single church prior to conservation. Such an assessment will require the full accessibility to all parts of the building through scaffoldings, the availability of measured drawings (plans, sections, and elevations), the establishment of a multi-disciplinary team, including all required areas of expertise, and some scientific on-site and laboratory testing.

Several observations, such as the existence of vertical plaster joints, preparatory incisions and cord snapping on fresh plaster, indicate that most if not all paintings were done by using the fresco technique. Plasters are rather thin (i.e. below 50 mm), and most are characterized by a high binder (i.e. lime) ratio. Many plasters contain vegetable fibers (i.e. chopped straw and/or hemp), while others are composed only of lime and fine sand.

The condition of wall paintings and historic plasters is generally bad or very bad. Severe lack of stability can be identified throughout, calling for urgent and timely intervention. The most dramatic situation is found in churches preserved as ruins, where several factors of decay are superimposed, resulting in a particularly high level of risk for the conservation of painted and unpainted surfaces.

The main factors of decay are:

1) Insufficient site protection (i.e. uncontrolled access)

Indicators are trash, numerous graffiti especially in the lower sections of the walls, and other mechanical damage. There is also a potential risk of looting of the better-preserved parts of the paintings.

This factor applies to the Armenian Church, the Carmelite Church of St. Mary, and the Church of St. George of the Greeks.

2) Preservation as a ruin and related structural stability and moisture problems

Loose masonry represents a risk for the security of visitors. Direct contact with rain and uncontrolled water run-off are the main causes for the advanced decay of mural paintings in exposed areas.

This factor applies to the Carmelite Church of St. Mary and the Church of St. George of the Greeks.

3) Lack of regular building maintenance

This regards mainly the water-proofing of roofs, but also the control of vegetation growing on the structures and general masonry repairs.

This factor applies to all six churches.

4) Severe lack of stability of all or part of the painting and/or plaster surfaces

This is a very severe and generalized phenomenon, which is directly threatening the integrity of painted and unpainted plasters.

This factor applies to all six churches, with a general profusion of the phenomenon in the Carmelite Church of St. Mary and the exposed parts of the Church of St. George of the Greeks, and a more localized but often severe occurrence in the remaining churches.

Many of the building structures and most of the mural paintings were treated for the first and last time in the 1930s. The treatment on the paintings consisted of the application of a wax-based surface coating and of securing the fragments by applying lime mortar around the edges and in larger lacunae. Evidently, no injection grouting was done, and it is likely that the advanced lack of adhesion of painted and unpainted surfaces already existed, at least to some degree, at the time of this intervention. The treatment on the building structures seems to have involved partial reconstruction and consolidation of vaults, water-proofing of roofs, reinforcement of exposed masonry and wall cores through mortar fills, as well as reconstruction of window tracery and of other architectural elements (this list includes only the most evident structural works). Visually, the building structures appear almost untouched and fully retain their material authenticity.

In addition to the above mentioned high-priority issues, all mural paintings show aesthetic problems due to different surface deposits. These alterations do not call for urgent intervention, although they are heavily compromising the legibility of the paintings, as well as their chromatic and artistic qualities:

1) Some paintings are totally or partially hidden by lime-wash and/or modern plaster (Church of St. Anne, Armenian Church).
2) Outdoor paintings are covered with a yellowish-brown deposit, which might be partly due to the discoloration of the wax coating and/or due to the fact that wax becomes tacky at temperatures above 35-40°C and tends to absorb atmospheric dust (Carmelite Church of St. Mary, Church of St. George of the Greeks).
3) Paintings in areas of preferential rainwater flow are covered with a thick blackish patina, constituted by algae. Some areas exposed towards the North show a grey patina, constituted by lichens (Carmelite Church of St. Mary, Church of St. George of the Greeks).
4) In churches where historically much incense and candle burning was used, the paintings are obscured by a blackish soot deposit. In the 1930s the wax coating was applied onto this soot deposit, without previously cleaning the paint layer (Armenian Church, Nestorian Church, and to a lesser degree at the Church of St. Anne).

The paintings are generally in a rather fragmentary condition. Numerous smaller and larger losses at both the level of the plaster and the paint layer also involve iconographically important parts such as faces. Moreover, the paint layer is often thinned through abrasion and/or erosion, and there are only few places in which the pictorial and artistic quality of the paintings can still be fully appreciated. Nevertheless, what remains is a painted heritage of exceptional historic and artistic value, which has a great potential to be strongly enhanced by the conservation treatment, namely through cleaning and aesthetic presentation. Attention should be given to the unpainted plasters, which are considered to be equally valuable. In several churches, fragments of unpainted historic plasters are also found on the outer façades.

FIGURE 67. The Carmelite Church of St. Mary from the southeast.

Carmelite Church of St. Mary

The Carmelite Church of St. Mary was built in the fourteenth century, after the arrival of the Carmelite Order on the island, and was originally part of a monastic complex (figure 67). It is located at the northwest corner of the Walled City, in the area that was known as the Syrian Quarter, immediately to the south of the small Armenian Church. Its plan consists of a long and narrow nave with two shallow side-chapels at the middle of its length, and ending in a three-sided apse. Visitors to Famagusta commented on its Italianate interior paintings, many fragments of which still survive. The Carmelite Saint Peter Thomas (1305–1366), Archbishop of Crete and Latin Patriarch of Constantinople, died in this monastery and was said to have been interred at the church.

Mural paintings and historic plasters

The church interior preserves extended surfaces of painted and unpainted plasters. Through visual examination it was possible to distinguish at least four different types of mural paintings (i.e painting phases), and to establish a relative chronology on the basis of their superimposition. The graphic record (figure 68) aims at facilitating the understanding of this complex situation. The results of investigation based on stratigraphic position, plaster composition, and other features relating to the original painting techniques is preliminary. This is why some uncertain fragments, which are difficult to identify due to their bad condition, are marked with a question mark. The graphic record provides an idea of the amount of mural painting and historic plasters surviving in the interior, which accounts for about 40% of the preserved masonry surfaces.

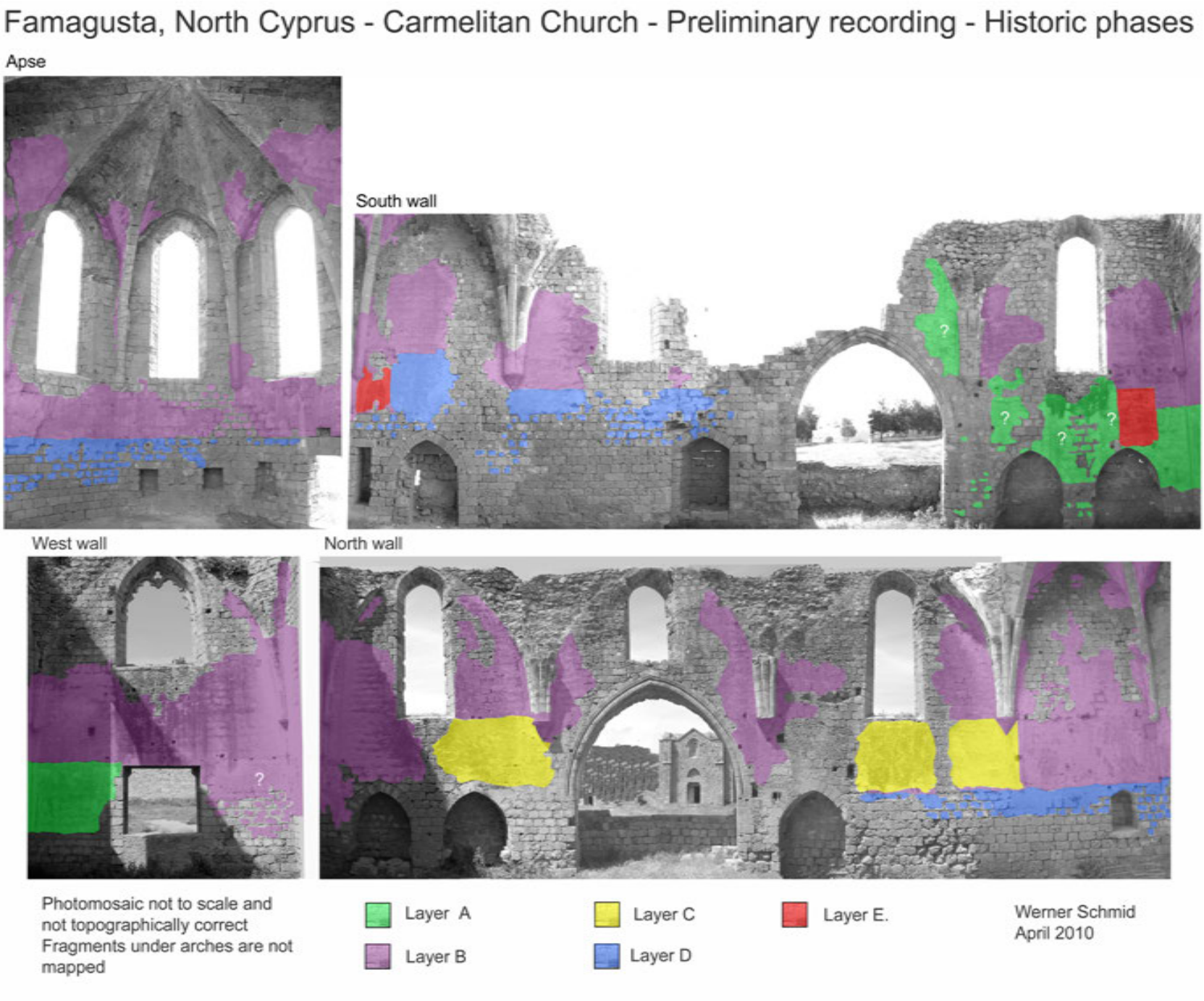


FIGURE 68. Preliminary recording of historic phases at the Carmelite Church of St. Mary, by Werner Schmid.

The most prominent stratum is the second in the sequence (Layer B). It consists of painted ashlar decoration in the higher parts of the walls and on the vault, and of a figurative frieze below. The ashlar decoration uses the white surface of the plaster as a ground color and dark grey lines, suggesting a regular pattern of mortar joints (figure 69). Large fragments of this decoration are preserved on the south wall, the apse, the west wall (very obscured by dark surface deposits) and in many parts of the remaining vault in the choir (figure 70). Many of the consoles from which the ribs of the vault spring preserve a polychrome painted decoration belonging to this layer(figure 71). The figurative scheme, painted on the same plaster is preserved on the north wall of the choir, where it depicts three standing saints. These three figures, although fragmentary, are amongst the best preserved paintings in the church (figure 72). The frieze continues into the apse, where the subject is unclear, but certainly not figurative(figure 73). Another larger fragment with remains of a standing figure, belonging to this layer, is found on the north wall near to the corner with the west wall. In this area is also a smaller fragment of the painted decoration of the arch of the small niche (figure 74). Several technical features such as vertical plaster joints between the standing saints on the north wall, the use of cord-snapping for the construction of the frames (figure 75) and incision of the preparatory lines for the ashlar decoration, indicate the use of fresco technique for this painting scheme.

An earlier painting scheme (Layer A) can be identified on the southern side of the west wall where it is clearly covered by the ashlar decoration (Layer B) (figure 76). The scheme, of which only few patches of color are remaining, represents life-size figures, probably, standing in niches, suggested by a dark red band (figure 77). There are three figures on the west wall and a fourth one near the corner on the south wall. Vertical plaster joints between the figures indicate that they were painted separately on fresh plaster (figure 78). The use of fresco technique is further attested by the presence of incised preparatory lines (figure 79). Also the almost completely illegible fragments in the lower part of the south wall before the side chapel, might be part of this scheme, as they show the same typical lime and straw plaster and other similar features regarding manufacturing techniques (figure 80). On the same basis, the painting fragment on the arch of the third small niche in the north wall might be attributed to this decorative phase and/or workshop.

A painting scheme which uses Layer B as a ground is found on the north wall, occupying about the same height as the earlier figurative frieze. The most legible part of this scheme (Layer C) is the panel with St. George and the Dragon (figure 81). Other larger fragments of this scheme are preserved throughout the north wall. These fragments are almost completely hidden by a thick blackish growth of algae and can be identified only on the basis of their stratigraphic position (i.e. on top of Layer B) and the raised and incised halos (figure 82. Remains of a painting with similar characteristics is found in the outside tympanum of the west portal (figure 83).

An unpainted light colored plaster covers the lower part of the south wall and of the apse (Layer D). This plaster, probably used to repair the surface of the lower parts of the wall, clearly superimposes onto Layer B and Layer C. A plaster with the same chromatic and compositional characteristics is also found on the south wall, in the higher parts of the third bay (figure 84).

On the south wall are two small panels of later painting (Layer E). The better preserved one in the choir represents a standing female saint. The plaster of this painting lays clearly on top of Layer B and covers on the right side the unpainted repair plaster (Layer D) (figure 85)(, thus indicating that it is the last in the chronological sequence. The other heavily deteriorated panel in the 1st bay of the nave superimposes in the upper part onto Layer B and on the sides onto Layer A (figure 86).

There are some other larger painting fragments, such as the one on the arch of the two aisles (figure 87), which are difficult to include in this tentative chronology, as they do not have any direct contact with other layers.

Also important to mention are the remains of unpainted plasters in several places on the outside facades. These surfaces have a high historical value and must be preserved (figure 88).

FIGURE 69. Dark gray lines on white plaster in the northwest corner of the church suggest a pattern of mortar joints.

FIGURE 70. Ashlar decoration in the vaults of the choir of the Carmelite Church of St. Mary.r

FIGURE 71. Console with painted decoration on the north wall of the Carmelite Church of St. Mary.

FIGURE 72. Detail of the figurative scheme of Layer B from the best preserved area, in the north wall of the choir.

FIGURE 73. Fragments of the figurative frieze in the apse of the Carmelite Church.

FIGURE 74. Fragment of a standing figure and of the painted decoration of the arch on the north wall.

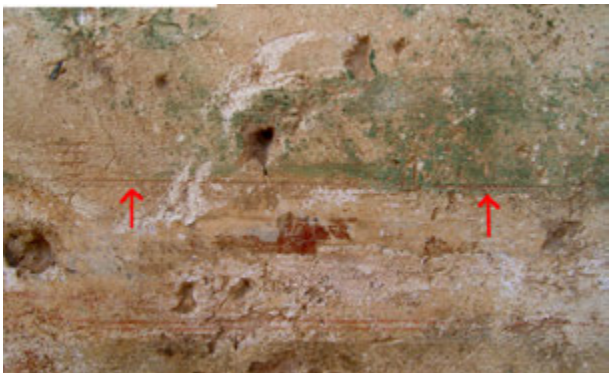


FIGURE 75. Evidence of the use of cord-snapping for the construction of the frames on Layer B in the wall paintings.

FIGURE 76. An earlier painting scheme is visible underneath the ashlar decoration on the west wall.

FIGURE 77. Standing figures standing in niches form part of the earlier painting scheme (Layer A) at the church.

FIGURE 78. A vertical joint between two figures indicates that they were painted separately on fresh plaster.

FIGURE 79. Incised preparatory lines on the plaster of Layer A are evidence of the original fresco technique.

FIGURE 80. The technique used for the plaster suggests that this fragment forms part of Layer A of the painting scheme.

FIGURE 81. Panel with St. George and the Dragon on the north wall of the Carmelite Church of St. Mary.

FIGURE 82. Fragment of Layer C of the painting scheme on the north wall, distinguished by raised halos.

FIGURE 83. Painting fragment on the tympanum of the west portal of the Carmelite Church of St. Mary."

FIGURE 84. An unpainted plaster layer covers the lower part of the wall, and earlier painted layers.

FIGURE 85. A panel containing a standing female figure was painted over an earlier layer on the south wall in the choir.

FIGURE 86. This highly deteriorated fragment on the south wall of the church is another later painting (Layer E).

FIGURE 87. Other painting fragments may not be integrated in the chronology established by the identifiable layers.

FIGURE 88. The exterior of the Carmelite Church of St. Mary also preserves fragments of unpainted plasters."

Condition of painted and unpainted surfaces

The main sources of decay are related to two factors: 1) the ruined state of the building and 2) the lack of site protection and visitor control.

Site protection

Until a few years ago, the site, which also comprises the Armenian Church, was part of a military area and therefore not open to the public. The former fence is still in place, but there is no gate and the site can now be accessed freely (figure 89).

FIGURE 89. View of the Carmelite Church of St. Mary from the East, with the fence that surrounds the site.

Structural stability

The church is preserved as a ruin. A 2008 survey, carried out by civil engineers from the University of Minho, Portugal, provides some preliminary indications regarding the condition of the building.[17] On the basis of a comparison with archival photographs, it is claimed that the present condition of the church seems not to differ significantly from its condition around 1940. Nevertheless, they also lament the advanced state of decay of the masonry, which represents a threat to visitors, and indicate numerous other

17 Paulo B. Lourenço, Luís F. Ramos, and Alejandro Trujillo Rivas, "In Situ Investigation and Stability Analysis of Famagusta Churches" (paper presented at the 8th International Masonry Conference, Dresden, Germany, July 4-7, 2010).

FIGURE 90. The detachment of plaster at the Carmelite Church of St. Mary.

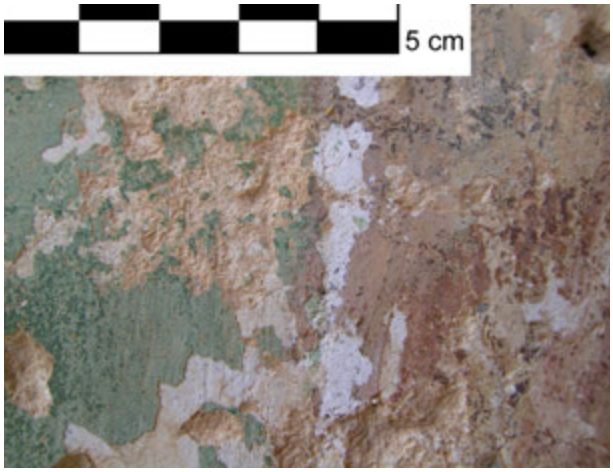


FIGURE 91. Thickly applied green color is unstable and flakes off the underlying plaster.

FIGURE 92. Erosion due to rainwater percolating over the south wall of the Carmelite Church of St. Mary.

FIGURE 93. Dark patina from the growth of algae on the north wall of the Carmelite Church of St. Mary.

deficiencies. As of the writing of this report, the total lack of maintenance after the conservation works carried out 70 years ago is clearly visible: vegetation is growing on all horizontal surfaces, including the floor, and the masonry, especially the exposed core of walls and vaults, is unstable in many places. The stabilization and structural improvement of the building is considered a prerequisite for the conservation of paintings and historic plasters in the church.

The stability of the painted and unpainted surfaces

Notwithstanding the limitations of this survey, during which it was not possible to examine the higher parts of the walls, it appears that more than 70% of the painted and unpainted surfaces show pronounced lack of adhesion and are in urgent need of repair (figure 90). In places with multi-layered surfaces, plasters are detaching from one another and from the masonry. Detached plaster is especially at risk along the edges of fragments where it is often bulging and lifting-off. The paint layer is generally rather stable. However, areas of thickly applied paint have a tendency to flake off (figure 91). In addition, the mechanical strength of most plasters appears to be satisfactory. An exception is the plaster of Layer B, the most prominent stratum, which shows a sufficiently hard surface but a very weak consistency underneath. This general lack of cohesion, also contributing to the instability of the layer, requires a strengthening treatment with a suitable consolidant.

Direct contact with rain water

As can be expected, the sheltered paintings in the choir are in a clearly better condition than the exposed ones in the remaining areas. On the latter, percolating rainwater has caused a progressive erosion of the paint layer which in most parts is almost illegible (figure 92). The legibility is further compromised by a thick black patina of algae, which develops in areas of preferential water run-off (figure 93).

Comparison with archival photographs

A photograph of the 1930s, kept by the Courtauld Institute, London, shows the north wall at the limit between the sheltered and the unprotected area, probably after the completion of the painting conservation. The comparison with the present condition of the painting shows clearly 1) the loss of several details of the painting (e.g. the hooves of the horse of St. George, the damsel with a dark coat standing on the right), 2) the advanced "fading" of the two standing saints, and 3) the enlargement of lacunae due to the loss of plaster (especially in the lower left corner).

Surface deposits

The surfaces in the sheltered areas are covered with a brownish dust deposit (figure 94). The dust might be partly absorbed by the wax coating applied in the 1930s. Moreover, on the better preserved paintings in the choir, the wax coating has become opaque, conferring a whitish, milky hue to the colors (figure 95). The combination of these phenomena is the reason for the evident fading of the painting when compared with archival photographs.

FIGURE 94. Brownish dust deposit covers the ashlar decoration of the plaster in the apse of the Church.

FIGURE 95. The wax coating that was applied over the wall paintings in the 1930s has become opaque.

Proposed conservation interventions

A—Higher Priority (Urgent)

A1—Site protection

Suggested interventions:

- All ground-level openings of the church should be closed with iron grills.
- In order to better protect the site, which also includes the Armenian Church, the fence that formerly protected the military area should be repaired and a gate should be installed.
- The area should be closed during night time and, if necessary, illuminated.
- A 24-hour guarding system should be put in place (even regular police patrols might be sufficient).
- If this proves insufficient, automated security systems such as alarm equipment, video control, and lighting may be considered.

A2—Structural repair

Following the recommendations of the Department of Civil Engineering of the University of Minho, Portugal, the following operations are suggested: 1) more detailed structural survey, including earthquake safety assessment, 2) urgent consolidation/removal of loose masonry and stones to protect the life of visitors, 3) stone replacement, stone consolidation, use of repair mortars, 4) repair of the base of the western towers, which show severe stone deterioration, and 5) additional protection for frescoes and engravings (water-proofing of vaults and protective shelters for exposed paintings). In addition it is recommended to remove plants growing on the masonry, to clear the floor from vegetation, to reduce water absorption of walls by re-pointing the masonry joints, and to provide the top of the walls with a suitable capping that prevents water infiltration and encourages a discharge of rainwater towards the outside façades.

A3—Stabilization of plasters

1) Re-adhesion of the paint layer where necessary through localized injection of a suitable adhesive (acrylic microemulsion or nanolimes), 2) Re-adhesion of loose plasters through injection of a suitable pre-manufactured hydraulic-lime-based grout, 3) Re-establishment of the cohesion of the original plaster (where necessary) through infiltration of a consolidant (acrylic microemulsion or naolimes), 4) Filling of lacunae and of overhanging plaster edges with a lime plaster of similar composition, color, and surface texture to the original.

B—Medium Priority

B1—Additional protection for mural paintings

The long-term conservation of mural paintings and historic plasters in the nave requires the installation of small, projecting shelters. Adequate design will be essential as visual interference with the monument should be minimal. Additionally, the physical protection of the paintings in the choir should be improved. This can be done by 1) closing the eastern windows and 2) installing a seasonal (January to March) protection measure against wind-driven rain (see suggestions for the Church of St. George of the Greeks).

B2—Disinfection of microbiological growth

Repeated spraying with a suitable biocide.

B3—Bird repellent devices

Installation of bird repellent devices (e.g. needles) on all horizontal surfaces above painted or unpainted plasters.

C—Lower Priority

C1—Cleaning of painted and unpainted surfaces

Removal of surface deposits (dust, microorganisms, guano, wax coating) by means of adequate cleaning agents/techniques. Removal of the lime mortar fills applied during the 1930s intervention around the edges of the fragments and in larger lacunae. Replacement with new fills according to the agreed presentation concept (see sub-section C2—Aesthetic presentation, below).

C2—Aesthetic presentation

Reduction of the visual disturbance created by losses through the application of fills, kept slightly below the original surface, and/or watercolor glazes. The aim should not be to reconstruct the missing parts pictorially but to enhance what remains of the original paint layer.

From an aesthetic point of view, the exposed masonry surfaces are the background for the fragments of painted and unpainted plaster, and should therefore be considered as part of the intervention. It is recommended to carry out a gentle dust cleaning while preserving the yellowish-brownish patina by means of rinsing with water, to remove darker stains (e.g. those created by the growth of microorganisms), to locally consolidate loose parts by means of lime-plaster fills and grouting, to re-point the joints between stone blocks with a lime plaster, similar to the original one, and left well below the original surface, and to chromatically blend in the newly applied fills with suitable color glazes.

C3—Visitor management and site interpretation

- Development and implementation of a visitor management system.
- Production and installation of didactic aids that explain the site.

FIGURE 96. The Armenian Church, seen from the southwest.

Armenian Church

This very small fourteenth-century church is located in the area of open land at the north of the Walled City, to the north of the Carmelite Church of St. Mary (figure 96).[18] Also dedicated to Mary, it is likely that its construction was associated with waves of refugees to Cyprus in the middle of the fourteenth century. In plan, it consists of a single bay with a semicircular apse to the west, and openings on all three other sides. Triangular or trapezoidal gables define the aspect of all four façades. The church fell into disuse soon after its completion, but it was restored and given back to the city's small Armenian community in 1936 following a formal entreaty.

Mural paintings and historic plasters

The church preserves extended fragments of mural painting on all three walls of the nave and some smaller fragments in the apse. On the north wall is a painting scheme in two registers, which reaches up to the springs of the cross-vault (figure 97). Although heavily obscured by blackish deposits, most of the paintings are rather complete and can be easily understood. Scenes on the higher register include the Flagellation of Christ and a Deposition scene. The lunette above retains large fragments of probably unpainted plaster. On the lower west and south wall are extensive remains of figurative panels, which in the first case reach a slightly lower level than the division between the two registers on the north wall, and in the latter extend above it (figure 98). This observation suggests that they do not belong to the scheme as the panels on the north wall. A limewash, applied during the use of the church by the military, covers most of the lower register of the north wall up to the end of the walled door, and of the panel on the south wall, right to the door. Moreover, it hides completely the painted panels on the west wall. Historic photographs from the 1930s (Courtauld Institute, London) show the paintings before they were covered with lime.

18 Dickran Kouymjian, "The Holy Mother of God Armenian Church in Famagusta," in *Medieval and Renaissance Famagusta: Studies in Architecture, Art and History*, edited by Michael J. K. Walsh, Peter Edbury, and Nicholas Coureas (London: Ashgate, 2012), 133-46.

Stucco finish of the stone masonry

The earliest decorated surface is a very carefully done finish of the masonry, composed of limestone blocks. It consists of the application of slightly projecting bands of lime stucco, approximately 3 cm wide, which embellish and regularize the mortar joints underneath. This decoration is well-preserved in the higher part of the west wall (figure 99), where it extends also onto the portal, and is visible on the north and south walls, in places where the painted plaster is lost (figure 100). The same masonry finish can also be found on the outside façades. Larger areas are preserved on the north façade and it appears in the tympanum of the west portal below the residues of painted plaster (figure 101). On the west façade are also patches of straw containing plasters, which need to be conserved.

FIGURE 97. The north wall of the Armenian Church contains a painting scheme in two registers.

FIGURE 99. The stucco finish of the stone masonry can be seen clearly on the west wall.

FIGURE 98. Remains of figurative panels can be seen on the south wall of the Armenian Church.

FIGURE 100. Fragments of the stucco finish can also be seen in areas where the painting has been lost.

FIGURE 101. Stucco finish and remains of painted plaster on the tympanum of the west portal of the Armenian Church.

The north wall scheme

The squared figurative panel between the walled door and the small niche is earlier than the painting scheme. This is indicated by a clear overlap of the plaster of the scheme onto this panel on all three sides (figure 102). A second element is a different plaster composition of the two layers. While the plaster of the scheme is very white (i.e. lime-rich), with a few reddish inerts and without vegetable fibers, the plaster of the earlier panel contains considerable amounts of fine sand and some chopped straw, and has a notably darker color.

Paintings in other areas

The plasters of the paintings on the west and south walls were not examined closely. However they seem to consist of a single, thin, lime-rich layer, containing fine vegetable fibers, probably hemp. On the left side of the south wall the painting plaster appears to be applied onto an earlier plaster layer with traces of color. The two smaller fragments in the conch of the apse show different plaster compositions, which along with evident stylistic differences, suggest different periods of execution. In the semi-dome is one larger, heavily deteriorated fragment showing a kneeling figure and two minor ones. The outside painting on the tympanum of the west portal is almost completely lost (figure 103).

Condition of painted and unpainted surfaces

In terms of preventative and curative conservation, the main issues are uncontrolled access, lack of building maintenance, and a severe lack of stability of the painted plasters. From an aesthetic point of view, the main problems are the lime coating, which covers about 50% of the painted surfaces, and the reduced legibility of the exposed paintings, which are heavily obscured by blackish surface deposits.

FIGURE 102. figurative panel in the Armenian Church can be seen to predate the rest of the painting scheme.

FIGURE 103. The outside painting on the tympanum of the west portal is almost completely lost

FIGURE 104. Broken wire mesh on the western window of the Armenian Church.

FIGURE 105. Active water infiltration is indicated by a stain of green algae and salt efflorescence on the painting below.

Site protection

The church can be accessed only through the south and west portals, which both retain heavy iron doors, installed by the military after 1974. Apparently, the doors were forced open and at present the closing system (i.e. horizontal lock bars) is out of order. As a result, the church remains open allowing for uncontrolled access at any time. Numerous recent graffiti are amongst the most evident signs of this unsustainable situation. In addition the closures of the west and north window are almost completely lost. This, together with the almost complete abandonment of the church, encourages birds (pigeons and others) to use it for nesting. On the western window is still a broken wire mesh, probably meant at some time to keep birds out (figure 104).

Infiltration of rain water

The building structure of the church is still complete and apparently sound. However, weeds growing on the roofs indicate a prolonged lack of maintenance. Problems related to defective water-proofing of the roofs can be seen in two places with active water-seepage: 1) On the right side of the north wall, where a stain of green algae is visible and white areas in the painting panel below indicate an initial damage caused by soluble salts (figure 105) in the semi dome of the apse, where the original plaster, as well as the plaster applied during the 1930s' restoration, are both heavily eroded. In this area, percolating water has "cleaned" part of the larger painting fragment (i.e. washed off the blackish surface deposits) and is beginning to erode what remains of the color (figure 106). Repeated episodes of water infiltration in the past are likely to be the reason for the almost total loss of painted surfaces in the apse.

Stability of the paintings

Exposed and lime-washed paintings show severe problems of adhesion. The situation is particularly dramatic in the lower wall sections, where the plaster is bulging and lifting off from the masonry support. There is a high risk of losing precious original material, which may crumble with the slightest touch (figure 107). The painted plasters in the upper areas of the wall could not be investigated during the present survey. They appear to be more sound, although severe detachment can be observed in many places along the edges of fragments. Plaster detachment is an ongoing decay process, as is shown by the advanced deterioration and partial loss of the lime plaster fills applied around the edges of fragments in the 1930s.

Limewash coating

In many places the paintings, documented by photos in the 1930s, are now hidden under limewash. It is rather likely that most of the painting is preserved in rather good condition underneath this coating. A small trial has demonstrated that the lime layer is very soft (i.e. does not contain additives) and can be removed easily by means of a blade scalpel (figure 108). The original color—at least in the area where the trial was made—is sound and in good condition.

Blackish deposits

Blackish deposits, which are heavily obscuring the exposed paintings are probably due to the historic use of incense and candles in the church. This soot layer was probably not removed in the 1930s, and the alteration of the wax coating applied on top of it might have increased the opacity of the deposit.

Guano

Bird droppings are found in all places where birds are resting or nesting near to the painted surfaces (figure 109).

FIGURE 106. painted fragment in the apse of the Armenian Church, "cleaned" by percolating water.

FIGURE 107. Severe detachment of plaster from its support can be seen in the lower part of the north wall.

FIGURE 108. The lime layer that has been applied over earlier painted plaster can be easily removed.

FIGURE 109. Bird nest and guano deposits can be seen inside the Armenian Church.").

Proposed conservation interventions

A—Higher Priority (Urgent)

A1—Site protection

Suggested interventions:

- The iron doors of the church should be repaired and all windows should be closed in order to keep birds off.
- In order to better protect the site, which also includes the Carmelite Church of St. Mary, the fence that formerly protected the military area should be repaired and a gate should be installed.
- The area should be closed during night time and, if necessary, illuminated.
- A 24-hour guarding system should be put in place (even regular police patrols might be sufficient).
- If this proves insufficient, automated security systems such as alarm equipment, video control, and lighting may be considered.

A2—Building maintenance

Suggested interventions:

- Removal of plants growing on roof and walls.
- Maintenance of the water-proofing and drainage systems.

A3—Stabilization of plasters
1) Re-adhesion of the paint layer where necessary through localized injection of a suitable adhesive (acrylic microemulsion or nanolimes), 2) Re-adhesion of loose plasters through injection of a suitable pre-manufactured hydraulic-lime-based grout, 3) Re-establishment of the cohesion of the original plaster (where necessary) through infiltration of a consolidant (acrylic microemulsion or naolimes), 4) Filling of lacunae and of overhanging plaster edges with a lime plaster of similar composition, color, and surface texture to the original.

B—Lower Priority

B1—Removal of the limewash covering part of the paintings
Note: this should be done only after the high priority interventions are successfully completed.

B2—Cleaning of painted and unpainted surfaces
Removal of surface deposits (soot, guano, wax coating) by means of adequate cleaning agents/techniques. A general dust cleaning should also be extended to the masonry surfaces. Removal of the lime mortar fills applied during the 1930s intervention around the edges of the fragments and inside larger lacunae. Replacement with new fills according to the agreed presentation concept (see sub-section B3—Aesthetic presentation).

B3—Aesthetic presentation
Reduction of the visual disturbance created by losses through the application of fills, kept slightly below the original surface, and/or watercolor glazes. The aim should not be to reconstruct the missing parts pictorially but to enhance what remains of the original paint layer.

B4—Visitor management and site interpretation
Development and implementation of a visitor management system.
Production and installation of didactic aids that explain the site.

FIGURE 110. The ruins of the Church of St. George of the Greeks, looking east.

Church of St. George of the Greeks

The Church of St. George of the Greeks is a fourteenth-century building that survives as a ruin, having lost its roof and much of the walls (figure 110). It was Famagusta's Orthodox cathedral, a counterpart to St. Nicholas Cathedral, and bears similarities to its design, as well as to the design of the Church of Sts. Peter and Paul. Its plan is similar to the latter building, consisting of a nave and side aisles, each terminating in a semicircular apse. The three monumental apses survive to this day, and the building preserves Gothic architectural elements such as window tracery, flying buttresses, and ribbed vaulting.

Mural paintings and historic plasters

The most extended remains of painted surfaces are found in the central apse and in the two side apses, which are the only areas of the church where the vaults are preserved. Other fragments of painting, less visible because strongly eroded by the direct exposure to rain water, are found on the south wall of the nave, below the small cornice running at the level of the capitals, on the west wall, also above this cornice, and on what remains of the elevation of the south wall. This indicates that the church interior was originally almost completely covered with paintings.

With the exception of the lower part of the conch and large parts of the semi-dome, the central apse is almost completely covered with the whitish plaster of a monumental scheme of which only a few areas of painting (approximately 5% of the total surface) remain (figure 111). As indicated by what remains of the paint layer, the conch below the small cornice featured two superimposed registers with standing saints. The upper register, especially the haloed heads sheltered by the cornice, is better preserved (figure 112) , while the lower register retains only some small patches of paint and larger areas of rather detailed preparatory incisions (figure 113). On the basis of clearly visible horizontal plaster joints, usually corresponding to the limits between two registers, one can presume that between the small cornice and the beginning of the semi-dome there were another three registers. A small band of preserved paint layer under the small cornice at the vault level shows a series of houses and what seems to be a tent, suggesting the existence of rather elaborate scenes on these higher registers (figure 114). The plaster has a two layer structure, with a lime and sand plaster, containing straw, in contact with the wall, and a thin lime-rich plaster with fine sand, apparently without fibrous reinforcements, as a finish (figure 115).

The best-preserved paintings are found in the southern side apse (figure 116). Being stylistically far from Byzantine models, they distinguish themselves from most of the religious painting in Famagusta (figure 117). Another characteristic is a rather reduced palette with a dominance of green for the backgrounds and different shades of red. The figures are generally very worn, and the fact that many parts seem to have a more linear and less pictorial treatment might be due to the loss of secco finishing (figure 118). The scheme is preserved only in the conch, where it is divided into four superimposed registers. The plaster of the scheme consists of a very thin layer of coarse lime plaster finished with a thin coat of very well-smoothed fine plaster (figure 119). No fibrous material seems to be used in the plaster mix.

In the northern side apse are only the fragments of a lower painting register, featuring standing saints, painted according to Byzantine standards (figure 120). Although the figures are of different sizes, the continuing frame with two parallel red bands seems to indicate that all fragments belong to the same phase. The plaster consists of two layers: a lime and coarsely chopped

FIGURE 111. The central apse of the Church of St. George of the Greeks is almost completely covered with whitish plaster.

FIGURE 112. Detail of standing saints in the lower part of the central apse of the Church of St. George of the Greeks.

FIGURE 113. Direct incisions outline the coats of standing figures, with a squared pattern and incised graffiti.

FIGURE 114. Remains of the painting scheme in the higher registers suggest the existence of detailed scenes.

FIGURE 115. The plaster in the central apse is composed of a rough plaster containing straw and a thin layer of fine plaster.

FIGURE 116. The southern side apse contains the best-preserved paintings.

FIGURE 117. The style the paintings here differs from that found at other sites in Famagusta.

FIGURE 118. This detail shows the worn condition of the figures.

FIGURE 119. The painting plaster in the southern side apse is composed of two thin layers without fibrous material.

FIGURE 120. A fragment of painting from the northern side apse of the Church of St. George of the Greeks.

straw plaster, finished with a well-smoothed, lime-rich fine plaster containing fine fibers, probably hemp (figure 121). The preparatory drawing is incised in the fresh plaster, in the case of the halos by means of a compass.

The lower walls of the southern aisle preserve fragments of plaster with traces of painting in all five bays(figure 122). The only better-preserved fragment is a painted decoration under the narrow arch in the fourth bay(figure 123). All the other fragments are illegible due to advanced weathering. Due to their height, the technical features of the nave fragments could not be examined during this investigation. A peculiar phenomenon can be observed on a fragment near the corner of the west wall. A painted scene, representing a standing figure in profile and a furniture-like object, surrounded by a large frame, is preserved as a sort of silhouette (figure 124). The effect is due to the complete erosion of the paint layer and the consequent exposure of the beige-colored plaster surface in all areas except the background, which retains a white paint. The same differential decay occurred to the Crucifixion on the southern side of the west wall (figure 125), and to most fragments of painting remaining in this part of the church.

On the two wall portions of the northern aisle are extended remains of heavily eroded painting that is no longer legible (figure 126). On the north wall of the choir is a fragment of unpainted plaster with interesting historic graffiti, including several representations of ships, unfortunately disturbed by many modern ones (figure 127).

Only two fragments of painting remain in one of the side chapels of the adjacent earlier Church of St. Symeon(figure 128).

FIGURE 121. The painting plaster in the northern side apse contains straw and fine fibers.

FIGURE 122. The lower sections of the south wall preserve fragments of plaster with traces of painting in all five bays.

FIGURE 123. A well-preserved fragment survives under the narrow arch in the fourth bay of the south wall.

FIGURE 124. Differential decay of this painting has caused a void to appear in the place of a standing figure.

FIGURE 125. The main features of the Crucifixion scene on the west wall of the church are visible due to differential decay.

FIGURE 126. Heavily eroded painting fragment on the north wall, near the northwest corner of the church.

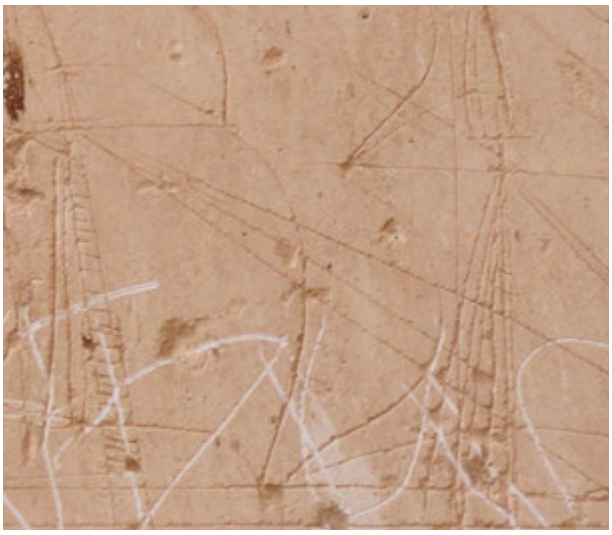


FIGURE 127. Historic ship graffiti with superimposed incised vandalism.

FIGURE 128. Painting fragments survive in the Church of St. Symeon, adjacent to the Church of St. George of the Greeks.

Condition of painted and unpainted surfaces[19]

The main sources of decay are related to two factors: 1) the ruined state of the building and 2) the lack of site protection and visitor control.

Direct contact with rain water

Rain water percolating on paintings will gradually erode them, even when they were created a fresco and without using organic binders. This phenomenon is clearly demonstrated by the fact that the paintings in the three apses are better preserved then the ones in the nave. Moreover, water is a catalyst for salt decay and biological growth. The latter phenomenon affects large parts of the fragments in exposed areas. All preferential areas for water percolation are indicated by a blackish patina of algae(figure 129). Most of the south wall is covered by a light gray patina of lichens (figure 130). These microorganisms cause not only visual, but also chemical and mechanical damage to the surfaces on which they grow.

However, observing the central apse, one can see that also in the "sheltered" areas, water erosion has resulted in the near-total loss of the painted surfaces. This was probably caused by prolonged water infiltration through the vaults. At present there is no evidence (such as white-colored areas due to "fresh" losses of painted surface) of active water infiltration from the eastern domes. The regular control of their water-proofing capacity is, however, vital for the long-term conservation of historic surfaces in this area.

Remaining risks in the "sheltered" areas

- The above-mentioned infiltration of rain-water through the vaulting (this risk can be managed through regular building maintenance).
- Direct contact with water from wind-driven rain.
- Wind erosion (caused by sand particles).
- Strong surface temperature fluctuations due to direct sun exposure (damage due to thermal expansion/contraction). (Note: UV-light doesn't harm the paintings as they are composed of inorganic, UV-insensitive materials).

19 Paulo B. Lourenço, Luís F. Ramos, and Alejandro Trujillo Rivas. "In Situ Investigation and Stability Analysis of Famagusta Churches" (paper presented at the 8th International Masonry Conference, Dresden, Germany, July 4-7, 2010).

FIGURE 129. Dark stains from the growth of algae can be seen on the south wall of the nave.

FIGURE 130. A light gray patina of lichens covers most of the south wall of the nave.

Surface deposits

The surfaces in the sheltered areas are covered with a brownish dust deposit. The dust might be partly absorbed by the wax coating that was applied in the 1930s. Cleaning tests carried out by an American team in 2005 show the potential of recovering the original chromatic values of the paintings by removing this brownish deposit (figure 131). Pigeons use the small cornices on the walls for resting. As a result, the painted areas below the cornices are covered with guano.

The stability of the painted and unpainted surfaces

Considering the limits of this survey, during which it was not possible to examine the higher parts, it appears that the situation in the three apses is not dramatic. There are, however, several critical areas which require a systematic survey and localized intervention. The fragments in the nave appear to be very unstable, with many areas at risk. Losses since the restoration in the 1930s are indicated by the absence in many places of the border fills applied around the fragments at that time.

Site protection

At present the site can be accessed 24 hours a day and there is no guard. An old iron fence (approximately 2m high) is closing the main portals in the west façade (figure 132). The north wall is rather low and can be climbed over easily. An iron gate in the former north portal is always open and lacks a lock. The west side of the Church of St. Symeon, another potential access to the site, is closed with a low fence that had a higher extension, probably with barbed wires, which is now missing (figure 133). The stone blocks of a small walled opening in the southeastern corner of the choir were partly removed, and thus offer an additional means of entry (figure 134). During night time the site is completely in the dark.

Human causes of decay

Due to the total lack of control, people feel free to use the site for whatever purpose:

- The lower parts of the paintings are covered with modern incised and painted graffiti. New incisions can be easily distinguished from the older inscriptions because of their white color (clean surface of the plaster) (figure 135).
- Children are using the site as a playground. During the inspection for this report, two little boys were using the saints in the left side apse as targets for throwing stones (figure 136).
- In the night time, the site is used for drinking parties.
- Homeless people are using the small closed spaces in the apse wall as a night shelter.

FIGURE 131. Example of a cleaning test carried out recently in the northern side apse by an American team of conservators.

FIGURE 132. An old iron fence closes the portals on the west front of the Church of St. George of the Greeks.

FIGURE 133. The fence protecting the site toward the southwest.

FIGURE 134. A walled opening has been partially reopened, and now offers a way to enter the interior of the church.

FIGURE 135. Recently incised graffiti in the lower part of the wall of the southern side apse.

FIGURE 136. Children using the heads of standing saints as targets for throwing stones.

Proposed conservation interventions

A—Higher Priority (Urgent)

A1—Site protection

Suggested interventions:

Improvement or replacement of the present fence on the west side and of the southern gate.

Installation of a fence on the low section of the south wall.

Repair of the hole made in the small walled opening at the southeast corner and closing other means of entry.

Installation of signs and information boards, which explain the value of the monument and the need for protection.

A 24-hour guarding system should be put in place (even regular police patrols might be sufficient).

If this proves insufficient, automated security systems such as alarm equipment, video control, and lighting may be considered.

A2—Structural repair

Following the recommendations of the Department of Civil Engineering of the University of Minho, Portugal, the following operations are suggested: 1) more detailed structural survey, including earthquake safety assessment, 2) consolidation of some vaults, arches, flying arch, 3) water-proofing of vaults, 4) consolidation or replacement of loose and deteriorated stone and reconstructed window tracery.

In addition it is recommended to remove plants growing on the masonry, to reduce water absorption of walls by re-pointing the masonry joints, and to provide the top of the walls with a suitable capping that prevents water infiltration and encourages a discharge of rainwater towards the outside façades.

A3—Stabilization of plasters

1) Re-adhesion of the paint layer where necessary through localized injection of a suitable adhesive (acrylic microemulsion or nanolimes), 2) Re-adhesion of loose plasters through injection of a suitable pre-manufactured hydraulic-lime-based grout, 3) Re-establishment of the cohesion of the original plaster (where necessary) through infiltration of a consolidant (acrylic microemulsion or naolimes), 4) Filling of lacunae and of overhanging plaster edges with a lime plaster of similar composition, color, and surface texture to the original.

B—Medium Priority

B1—Additional protection for mural paintings

The long-term conservation of mural paintings and historic plasters in the nave requires the installation of shelters. Adequate design will be essential as visual interference with the monument should be minimal. Additionally, the physical protection of the paintings in the three apses should be improved. A seasonal (January to March) protection measure against wind-driven rain by means of nylon nets might be considered. Protection by means of a water-repellent surface coating is not recommended.

B2—Disinfection of microbiological growth

Repeated spraying with a suitable biocide.

B3—Bird repellent devices
Installation of bird repellent devices (e.g. needles) on all horizontal surfaces above painted or unpainted plasters.

C—Lower Priority

C1—Cleaning of painted and unpainted surfaces
Removal of surface deposits (dust, microorganisms, guano, wax coating) by means of adequate cleaning agents/techniques. Removal of the lime mortar fills applied during the 1930s intervention around the edges of the fragments and in larger lacunae. Replacement with new fills according to the agreed presentation concept (see sub-section C2—Aesthetic presentation).

C2—Aesthetic presentation
Reduction of the visual disturbance created by losses through the application of fills, kept slightly below the original surface, and/or watercolor glazes. The aim should not be to reconstruct the missing parts pictorially but to enhance what remains of the original paint layer.

From an aesthetic point of view, the exposed masonry surfaces are the background for the fragments of painted and unpainted plaster, and should therefore be considered as part of the intervention. It is recommended to carry out a gentle dust cleaning while preserving the yellowish-brownish patina by means of rinsing with water, to remove darker stains (e.g. those created by the growth of microorganisms), to locally consolidate loose parts by means of lime-plaster fills and grouting, to re-point the joints between stone blocks with a lime plaster, similar to the original one, and left well below the original surface, and to chromatically blend in the newly applied fills with suitable color glazes.

C3—Visitor management and site interpretation
Development and implementation of a visitor management system.
Production and installation of didactic aids that explain the site.

FIGURE 137. The "Nestorian" Church, or the Church of Saint George Exorinos, seen from the southwest.

Nestorian Church

This church was traditionally identified as the church that was built in 1359 by a wealthy Nestorian merchant (figure 137). The Nestorians were members of the Church of the East, which had been constituted by followers of the Nestorian doctrine and was at the peak of its growth in Syria, Persia, and Central and East Asia in the fourteenth century. In plan, it originally consisted of a nave with three groin-vaulted bays terminating in a semicircular apse. This plan with expanded with the addition of two shorter side aisles, transforming the western bay of the original plan into a vestibule. A prominent bell tower with three lancet openings also stands against the north side. Recent research disputes the attribution of this building to the Nestorian Church, based on the style of interior and exterior architectural features, which would suggest a construction date prior to the fourteenth century, and, more significantly, on an analysis of the style and iconography of the interior wall paintings, which do not point to this confession.[20] The church was not used during the Ottoman period but it passed into the hands of the Greek Orthodox community in 1905, when it was dedicated to St. George the Exiler. The building was also used to shelter refugees in the 1970s.

20 Michele Baci, "Syrian, Palaiologan, and Gothic Murals in the "Nestorian" Church of Famagusta," *Deltion tēs Christianikēs Archaiologikēs Hetaireias 27 (2006): 207-20.*

Mural paintings and historic plasters

The Nestorian Church, or the Church of St. George the Exiler, contains significant cycles of religious paintings. The main fragments of mural painting are in the nave and in the southern aisle (figures 138 and 139). Other minor fragments of painting, most of them heavily obscured by soot, are in the remaining parts of the church. A very thin lime-rich plaster, apparently without vegetable fibers, is found as a first layer in many parts of the church. Most of the paintings were done on top of this layer, which was previously pick-marked to provide a better key for the painting plaster (figure 140). The paintings in the first bay of the nave (i.e. those in the corner of the south and west walls, and the fragments of a two-register scheme on the north wall) form an exception. In their case, the painting panels are done on the same white plaster, indicating that the general covering of the masonry with white plaster and the painting execution were done at the same time. As a fact, large areas of white plaster that remained unpainted are found in the same area. Chronologically, these paintings should therefore be the earliest in the church (figure 141). The panel with standing saints in the southwest corner shows evident vertical plaster joints, which indicate that each saint was painted separately, and confirm the use of fresco technique for this painting. Another interesting technical detail is the bright green background

FIGURE 138. View of the nave of the Nestorian Church toward the west.

FIGURE 139. Mural painting fragments in the southern aisle of the Nestorian Church.

FIGURE 140. Fragment of painting done on the previously pick-marked white plaster.

FIGURE 141. Three standing saints painted concurrently with the application of the underlying white plaster.

color of the same panel, which seems to be azurite altered into malachite, applied a secco onto a blackish ground color, which had been previously applied a fresco[21] (figure 142). Many of the plasters of later paintings are composed of lime, fine sand and chopped straw.

Condition of painted and unpainted surfaces

At present, the church is managed as a cultural center by Eastern Mediterranean University. The building and its surroundings are therefore well maintained and protected. The fact that it has been in use throughout history explains the relative good condition of wall paintings and the almost total absence of graffiti.

Stability of the paintings

Painted and unpainted plasters show extended problems of adhesion, which are only critical in a few places, especially in the northwest corner of the nave (figure 143).

Surface deposits

All paintings are obscured by blackish deposits, probably due to the historic use of incense and candles in the church. There is also evidence that the wax coating applied in the 1930s has taken up a blackish hue, probably due to the absorption of atmospheric dust (figure 144). In addition there is a thick, not coherent dust layer on all surfaces.

The 1930s restoration

The 1930s treatment was done according to the methodology followed in the other churches. Apart from the application of wax on all painted surfaces, and of lime mortar fills around the edges of fragments and in larger lacunae, there are some fills that were coarsely in-painted (i.e. retouched) (figure 145).

Damage caused by humans

The transformation into a Greek orthodox church has inflicted some damage to the paintings. When the pulpit was built on the northern pillar of the central nave, a large area of painted plaster was removed to install the staircase (figure 146). From the same period are a number of crosses made of a wax-based material, which were applied in many places, including painted surfaces (figure 147).

21 This technique is described in the medieval manual *Il Libro dell'Arte by Cennino Cennini* (1370-1440), which refers to the technique of fourteenth-century Italian fresco painting. The same phenomenon is frequently found on Italian mural paintings of that period (e.g. those of the Basilica of St. Francis in Assisi).

FIGURE 142. Azurite transformed into malachite, applied a secco on a fresco-painted black ground.

FIGURE 143. Severe detachment of plaster in the northwest corner of the nave.

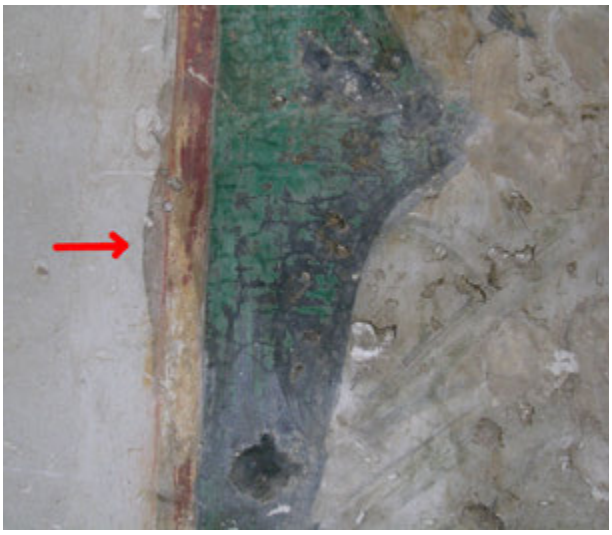


FIGURE 144. The blackening of the wax coating is visible in areas where its application extended onto the white plaster.

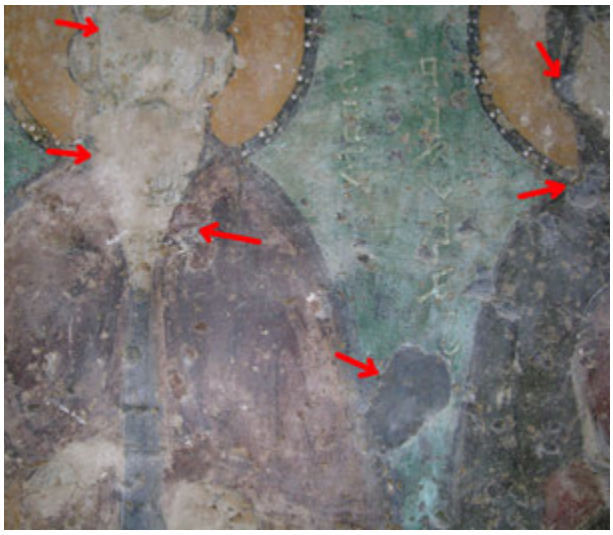


FIGURE 145. Fills and coarse in-painting from the 1930s treatment of the wall paintings.

FIGURE 146. A large area of painted plaster was removed from the northern pillar to install the staircase of the pulpit.

FIGURE 147. Crosses made with a wax-based material have been applied in many locations at the church.

Proposed conservation interventions

A—Higher Priority (Urgent)

A1—Stabilization of plasters (first phase)
Emergency stabilization in the most threatened areas

B—Lower Priority

B1—Stabilization of plasters (second phase)
Systematic stabilization of all painted and unpainted plasters

B2—Cleaning of painted and unpainted surfaces
Removal of surface deposits (dust, soot, wax coating) by means of adequate cleaning agents/techniques. A general dust cleaning should also be extended to the masonry surfaces. Removal of the lime mortar fills applied during the 1930s intervention around the edges of fragments and inside larger lacunae. Replacement with new fills according to the agreed presentation concept (see sub-section B3—Aesthetic presentation).

B3—Aesthetic presentation
Reduction of the visual disturbance created by losses through the application of fills, kept slightly below the original surface, and/or watercolor glazes. The aim should not be to reconstruct the missing parts pictorially but to enhance what remains of the original paint layer.

Some of the paintings are rather complete and of high artistic quality. These qualities will be strongly enhanced through cleaning and aesthetic presentation.

B4—Visitor management and site interpretation
- Development and implementation of a visitor management system.
- Production and installation of didactic aids that explain the site.

FIGURE 148. The Church of St. Anne, seen from the northwest.

Church of St. Anne

The Church of St. Anne was built in the second half of the fourteenth century and was originally part of a Benedictine monastery, after the Convent of St. Anne in Jerusalem (figure 148).[22] Its plan consists of a single, short nave formed by two groin-vaulted bays, ending in a polygonal apse with a ribbed vault. Its western façade culminates in a belfry wall with two lancet openings. Post-holes and brackets suggest the existence of a porch or a balcony, and like other churches in Famagusta, the exterior was also adorned with flags. Inside, it presents a tall but austere interior to the visitor. The building is well-preserved today, with its vaulting intact.

Mural paintings and historic plasters

Only a small part of the rich painting décor of this church is visible. Most of it was covered with a cement plaster and/or limewash after 1974, when the church became part of a military base.

The largest area of remaining mural paintings is on the west wall and on the first section of the adjacent side walls of the nave. What is visible is a lower register with standing saints and a more articulated, but hardly legible figurative scene around the arch of the niche on the north wall

22 Allan Langdale and Michael J. K. Walsh, "A Short Report on Three Newly Accessible Churches in the Syrian Quarter of Famagusta," *Journal of Cyprus Studies 13 (2007): 105-23, esp. p. 105-08.*

(figures 149, 150). A first layer of light-colored lime and sand plaster covers the masonry in this area. The two saints to the left of the portal, on the south side are painted on this plaster (figures 151, 152). The painting technique is characterized by a red preparatory drawing (figure 153)) and direct incisions (figure 154). All other paintings are made on a plaster, which was applied on top of this layer (figure 155). These later paintings are different from both a stylistic and painting execution point of view, indicating that they belong to various periods.

An archival photograph found at the Courtauld Institute, London shows an area of the painting scheme which is now hidden by cement plaster in the lower walls and by white wash higher up. The area depicted in the photograph, on one of the nave walls, is not clearly identifiable, but it nevertheless documents the artistic quality, complexity, and good condition of the painting scheme in the 1930s. It also demonstrates that there was a second register, which is now hidden by limewash. Differences in surface levels and texture indicate that fragments of the higher register might still exist (figure 156).

Other painted surfaces are patches of white plaster with an ashlar decoration, visible in the higher parts of the walls, above the white-washed area, and in some parts of the vaults. On the higher south wall of the choir are remains of a rather complex painting composition, apparently made directly on the ashlar decoration, which is visible where the painting is lost (figure 157).

On the exterior of the church, on the western façade, there is a painting fragment in the tympanum of the main portal. The painting originally showed the Virgin and Child flanked by angels (figure 158).

FIGURES 149, 150. Views of the interior of the Church of St. Anne looking along the nave in both directions, showing the extension of the plastered and/or lime-washed areas.

FIGURES 151, 152. The southwest and northwest corners. In the southwest corner, the earliest painting consists of the two saints on the west wall. Figures on the south wall use the white plaster as ground, as does all the painting in the northwest corner.

FIGURE 153. The earliest painting at the church shows a characteristic red preparatory drawing and incised halos.

FIGURE 154. Another technical characteristic of the earliest painting are incised preparatory lines.

FIGURE 155. A detail of one of the later paintings in the northwest corner, which use the white plaster as a ground.

FIGURE 156. Differences in surface levels and texture indicate that painting fragments might still exist underneath.

FIGURE 157. Fragments of white plaster with ashlar decoration and remains of a complex composition painted directly on top.

FIGURE 158. A painting of the Virgin and Child can be seen in the tympanum above the main portal on the western façade.

Condition of painted and unpainted surfaces

The church is on the grounds of a former military base, which was closed only a few years ago. The adjacent military buildings are now used by public institutions. The church has a solid iron door with an efficient lock, the key of which is with the Directorate of Antiquities. The building and its surroundings are well maintained and protected. There are almost no modern graffiti.

Stability of the paintings

The stability of visible wall paintings is dramatic and calls for urgent intervention. The mortar edges applied in the 1930s are often missing, indicating areas where portions of painting were lost. Active decay is demonstrated by the existence of fragments of painting plaster lying on the floor under the big bulge in the lower part of the painting on the south wall closest to the south-west corner (figures 159 and 160).

Surface deposits

The surface is obscured by a brownish-gray layer which is probably due to the altered wax-coating applied in the 1930s mixed with dust.

The limewash

The limewash was applied after 1974 directly on masonry and painting fragments in the higher parts and on the cement plaster in the lower walls. There are many drips of limewash on the exposed paintings. The lime is very soft and can be removed easily, which means that there is a good chance to recover what is left of the upper register of the painting scheme.

The cement plaster

Cement plaster, approximately 3 cm thick and extremely strong, covers the lower parts of the walls up to a height that is roughly corresponding to the lower register. This plaster was applied by the military after 1974 (figure 161). The only wall sections that were left out were the west wall and the adjoining sections of the north and south, where fragments of painting remain visible, and the central part of the apse, where the masonry is exposed. The existence of a sort of fiberboard between the wall and the cement layer was interpreted by Silman and Severson, as a possible separating layer, installed prior to the application of the cement. Although they observed some places where the cement is in direct contact with the wall, they expressed the hope that the fiberboard would make it possible to remove the cement plaster safely. Observations made during the present survey seem to indicate a different, unfortunately much less comforting situation:

The fiberboard seems to exist only in the bottom part of the wall (its technical function remains unclear) (figure 162). Higher up, the cement plaster appears to be in direct contact with the original wall surface. There is clear evidence that a liquid sand and cement slurry was first applied directly to the wall in order to provide a grip for the cement plaster. This slurry is visible also in some areas that were eventually not plastered, but just white-washed (figures 163, 164). These factors, together with the fact that the cement was probably applied onto a very fragile and loose painted surface, do not make it likely that this intervention can be reversed.

FIGURE 159. Severe bulging of the plaster and separation between the two layers on the south wall.

FIGURE 160. On the west wall, the painting plaster is lifting off from the plaster underneath.

FIGURE 161. Cement plaster covers most of the lower register of the painting scheme, as seen here along the north wall.

FIGURE 162. Fiberboard between the original wall surface and the cement plaster near the bottom of the south wall.

FIGURES 163, 164. These details on the south wall (left) and the north wall (right) show the application of cement slurry onto the walls. As the right image shows, the cement slurry is in contact with the painted surface and lies underneath the cement plaster.

Proposed conservation interventions

A—Higher Priority (Urgent)

A1—Stabilization of plasters 1
Emergency stabilization in the most threatened areas.

B—Lower Priority

B1—Removal of the lime-wash
Careful mechanical removal of the limewash covering the upper register of the south and north walls.

B2—Cement removal trials
It is suggested to carry out trials in at least 5-6 areas to better understand the stratigraphy of the cement plastering and to study the feasibility of removing it. Air-powered tools with diamond-coated grinding and cutting accessories will be needed. Laser-cleaning might be experimented as well to remove the last few millimeters of cement from the original wall surface.

B3—Stabilization of plasters 2
Systematic stabilization of all painted and unpainted plasters.

B4—Cleaning of the already exposed surfaces
Removal of surface deposits (dust, soot, wax coating) by means of adequate cleaning agents/techniques. A general dust cleaning should also be extended to the masonry surfaces. Removal of the lime mortar fills applied during the 1930s intervention around the edges of the fragments and inside larger lacunae. Replacement with new fills according to the agreed presentation concept (see: B5).

B5—Aesthetic presentation
Reduction of the visual disturbance created by losses through the application of fills, kept slightly below the original surface and/or water color glazes. The aim should not be to reconstruct the missing parts pictorially but to enhance what remains of the original paint layer.

B6—Visitor management and site interpretation
Development and implementation of a visitors' management system;
Production/installation of didactic aids that explain the site.

FIGURE 165. View of the church from the east, along the north side that was adjacent to the royal palace.

Church of Sts. Peter and Paul (Sinan Pasha Mosque)

During the summer of 2012, a project was undertaken to conserve the surviving wall painting fragments in the Church of Sts. Peter and Paul (Sinan Pasha Mosque). See the sidebar on page 114 for more information on this conservation effort.

The Church of Sts. Peter and Paul most likely dates from the fourteenth century and was located next to the royal palace (figure 165). A large building with a boxy exterior, in plan it consists of a nave with narrower side aisles, divided into five bays, and each terminating in a semicircular apse covered by a semidome. The plan is very similar to that of the Church of St. George of the Greeks. On the exterior, the building presents an uncharacteristically plain western façade, with thick flying buttresses along the sides, but the interior is elegant and airy, and filled with light. A door along the north wall faced the palace. The church was converted into a mosque after 1571 and was named after Sinan Pasha, but it might have been put to non-religious uses since the Venetian period. Later in its history it was used for different kinds of storage and even as a library.

Mural paintings and historic plasters

The church of Sts. Peter and Paul was converted into a mosque after 1571, when its original wall paintings would have been plastered over.[23] But the building lost all of its wall plasters when it was "cleansed" by the British in the late 1930s and subsequently used for grain storage. There are only two small fragments of painting remaining in the third and fourth bays of the south wall. The larger fragment, below the window is depicting the Forty Martyrs of Sebaste (figure 166). The smaller fragment features two haloed heads and part of a colored background (figure 167). The Forty Martyrs are painted on a very smooth lime-rich plaster, which does not seem to contain vegetable fibers. The high binder ratio is indicated by a pronounced grid of shrinkage cracks. The plaster also extends onto the frame of the window and below the figurative scene, where a horizontal scaffolding joint (pontata) is visible. Traces of a yellow stripe are all that remains of the painted decoration around the arch on this layer. The painting consists mainly of a red line drawing, probably executed on the fresh plaster. The broader, light-red lines seem to be the first sketch done by the artist with a strongly diluted color. The final shapes of the figures were then defined with a narrower, dark-red line (figure 168). Patches of mainly light blue, but also green and yellow paint are probably the only residues of the final paint layer (figure 169). It is most likely that what has remained of this painting is the very elaborate preparatory drawing, probably done a fresco, while the final paint layer, probably done a secco by using an organic binding medium, is almost completely lost. The final paint layer may have been lost during the uncovering of the painting in the British period. This operation has a high destructive potential, especially if the original paint shows a strong adhesion to the limewash which is being removed.

The smaller fragment has completely different technical characteristics and belongs probably to a different painting phase. There are some traces of polychrome architectural decoration on the pillars of the central apse and fragments of historic plaster with interesting ship graffiti on the west wall, at the level of the balcony.

Condition of painted and unpainted surfaces

The church is closed to the public. A project of reconverting it into a concert hall is being developed. The plaster of both fragments shows problems of adhesion, especially along the edges (figure 170). Fills applied during a former intervention are aesthetically detracting and extend onto the original surface.

FIGURE 166. The fragment with the Forty Martyrs of Sebaste, in the third bay on the south wall of the Church of Sts. Peter and Paul (Sinan Pasha Mosque).

23 For the history of the building see Michael J. K. Walsh, "Saint Peter and Paul Church (Sinan Pasha Mosque), Famagusta: A Forgotten Gothic Moment in Northern Cyprus," *Inferno: Journal of Art History Vol. 9 Article 5 (2004).*

FIGURE 167. Small fragment with two haloed heads on the south wall.

FIGURE 168. Detail of the Forty Martyrs of Sebaste, showing the light-red preparatory sketch and the dark-red final preparatory drawing, as well as patches of blue color.

FIGURE 169. Details of the Forty Martyrs of Sebaste, showing the area with the highest concentration of blue, green, and yellow color, the remains of the final paint layer.

FIGURE 170. Advanced lack of adhesion can be detected along the edges of the fragment of the Forty Martyrs of Sebaste.

Proposed conservation interventions

A—Higher Priority (Urgent)

A1—Stabilization of plasters 1
Emergency stabilization in the most threatened areas

B—Lower Priority

B1—Stabilization of plasters 2
Systematic stabilization of all painted and unpainted plasters

B2—Cleaning
Removal of dust deposits. Removal of old fills applied and replacement with new fills according to the agreed presentation concept (see: B3).

B3—Aesthetic presentation
Reduction of the visual disturbance created by losses through the application of fills, kept slightly below the original surface and/or water color glazes.
Note: for aesthetic reasons, the conservation treatment should also include a larger area of masonry surface around the paintings.

Conservation of a wall painting fragment representing the Forty Martyrs of Sebaste and of a smaller fragment with two haloed heads

During the summer of 2012, between June 23 and July 14, a project was undertaken to conserve the two surviving wall painting fragments in the Church of Sts. Peter and Paul (Sinan Pasha Mosque). The project was supported by Nanyang Technological University (Singapore) and World Monuments Fund.

The painted plaster was stabilized through injections of a liquid mortar. All deposits covering the painting were removed, manly by mechanical means. Nails were cut and/or removed with a microgrinding tool. The paint layer was cleaned with distilled water. All cement fills were replaced with a lime mortar imitating the color and texture of the stone masonry. Smaller holes in the painting were filled with a light-colored lime plaster and kept slightly below the level of the painted surface. Small losses in the paint layer, standing out as white spots, were toned back with neutral watercolor glazes.

A technical report on this conservation project, including the findings on the technique of execution of the mural and more details on its condition at the time of conservation and on its treatment is available by contacting World Monuments Fund. A short film about the project can be viewed at http://www.wmf.org/project/historic-walled-city-famagusta. For an interpretation of the significance of the conserved mural, see: Michael J. K. Walsh, "A Spectacle to the World, Both to Angels and to Men'—Multiculturalism in Medieval Famagusta, Cyprus, as seen through *The Forty Martyrs of Sebaste* Mural in the Church of Saints Peter and Paul," *Journal of Eastern Mediterranean Archaeology and Heritage Studies 1.3* (2013): 193-218.

Above: Conservator Werner Schmid cleaning the painted surface of the mural. Below: detail, before and after conservation.

Proposed conservation strategy

The following section contains a proposed conservation strategy for the painted heritage of Famagusta. In general, highest priority must be given to the churches that survive as ruins (Carmelite Church of St. Mary, Church of St. George of the Greeks), where problems are particularly complex and go far beyond the curative treatment of mural paintings. Another requirement for conservation is the protection of those sites that are now openly accessible to anyone.

Proposed project phases

Phase 1: Emergency site protection

Three of the six painted churches were completely unprotected at the time of this visit (the Armenian Church, the Carmelite Church of St. Mary, and the Church of St. George of the Greeks). In order to prevent further damage through uncontrolled access, these sites must be protected as soon as possible, if necessary with provisional solutions to improve the current situation.

Phase 2: Preparation for documentation

Measured drawings (plans, sections, and elevations) are necessary for any conservation activity, from survey to planning and implementation. These drawings will constitute permanent records of the existing condition of the monuments and will allow anyone working on the monuments to refer to location information accurately. At present, this material is not available. It is therefore recommended to carry out systematic measured and photographic surveys in all painted churches.

Phase 3a: Conditions assessment

A complete conditions assessment must consider the building structure, the mural paintings and other architectural surfaces (such as surviving historic plaster and other masonry), and each site as a whole. In order to understand the existing condition, the integration of historical, art-historical, and archaeological information is necessary. Scientific on-site examinations and/or laboratory analysis might be required to better understand the original constituent materials, manufacturing techniques, decay phenomena, and materials that have been applied during prior interventions. Cleaning or other treatment trials will be an integral part of the investigation. The output of the assessment will be a report that collects, correlates, and interprets all existing and newly acquired information. Visual information such as graphic records (e.g. condition mapping) and photographs should be included. The assessment should be carried out by a multi-disciplinary team of experts.

Phase 3b: Emergency stabilization and high-priority interventions

The stabilization of plasters has been identified as high priority in all churches. The emergency stabilization of the most endangered areas, by means of localized grouting and/or application of mortar fills, should go hand in hand with the conditions assessment phase (Phase 3a). In churches where this was identified as high priority, some first structural works, such as the stabilization of loose masonry and the securing of unstable building parts must be included. Sheltering of paintings directly exposed to rainwater may be considered as part of this phase, at least as a temporary solution.

Phase 3c: Conservation and management plan

The final output of phase 3 should be a conservation plan that describes in detail all required actions, as well as basic concepts, proposed methodologies, required expertise and a timetable for implementation. It should describe single operations by specifying materials and techniques. On the basis of graphic records produced in phase, 3a it will be possible to quantify conservation needs and to create a budget. Plans for site protection, visitor management, and site interpretation should also be included.

Phase 4: Site protection

Before starting the final conservation intervention, it is recommended to make sure that an efficient site protection system is in place. Scaffolding might encourage vandalism and theft of equipment kept on site. Once the churches are treated and the value of mural paintings is enhanced there will be an increased risk of vandalism and looting (i.e. detachment of parts of the paintings).

Phase 5: Structural conservation

The conservation of the building structure must anticipate the final treatment of mural paintings and other architectural surfaces. Conservation works should address all structural deficiencies identified in phase 3a. In order to improve the conservation conditions of mural paintings and other architectural surfaces, special care must be given to protection against moisture and direct contact with rainwater. In all cases, roofs and drainage systems must be maintained, windows must be installed, fixed or replaced, and masonry joints must be repaired to reduce water absorption. In the case of churches preserved as ruins, this will also include the capping of wall tops and the installation of adequately designed shelters to protect exposed surfaces.

Phase 6: Architectural surfaces conservation

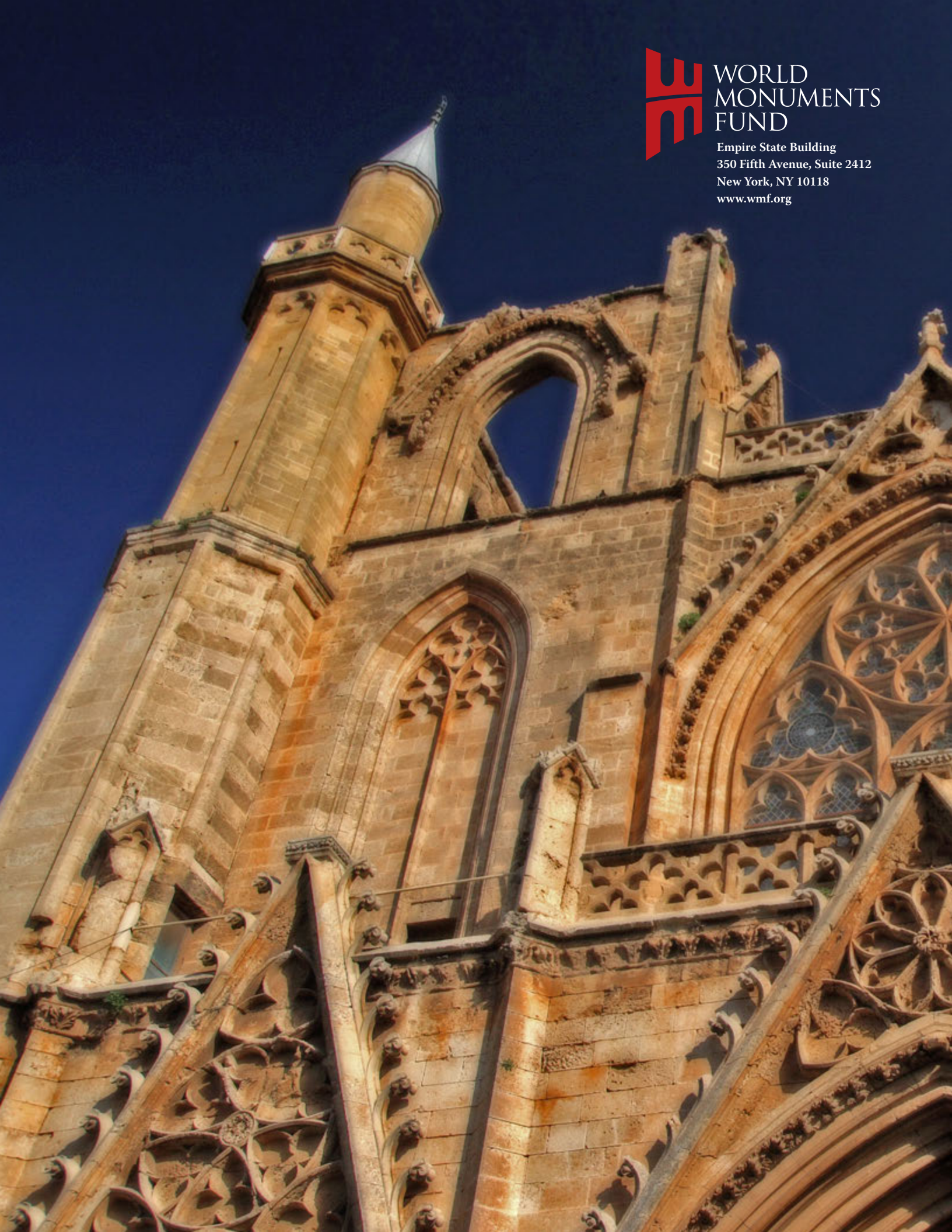
The final conservation of mural paintings and other architectural surfaces should include the final stabilization of plasters and paint layers, the uncovering of lime-washed or plastered surfaces, the removal of surface deposits, including microorganisms and the wax coating applied in the 1930s, and aesthetic presentation (i.e. pictorial and/or plaster reintegration of losses).

Phase 7: Visitor management and site interpretation

The implementation of a visitor management and site interpretation system may involve components such as the publication of leaflets and guide books, training of tourist guides, or installation of information boards.

Phase 8: Monitoring and maintenance

In order to maintain improved conditions, especially at churches that are preserved as ruins, the implementation of a policy for regular inspection, monitoring, vegetation control and small-scale repair is required.



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