

Mediterranean Perspectives

Series Editors

Brian Catlos University of Colorado - Boulder Boulder, Colorado, USA

Sharon Kinoshita University of California Santa Cruz Santa Cruz, USA As a region whose history of connectivity can be documented over at least two and a half millennia, the Mediterranean has in recent years become the focus of innovative scholarship in a number of disciplines. In shifting focus away from histories of the origins and developments of phenomena predefined by national or religious borders, Mediterranean Studies opens vistas onto histories of contact, circulation and exchange in all their complexity while encouraging the reconceptualization of interand intra-disciplinary scholarship, making it one of the most exciting and dynamic fields in the humanities. Mediterranean Perspectives interprets the Mediterranean in the widest sense: the sea and the lands around it, as well as the European, Asian and African hinterlands connected to it by networks of culture, trade, politics, and religion. This series publishes monographs and edited collections that explore these new fields, from the span of Late Antiquity through Early Modernity to the contemporary.

More information about this series at http://www.springer.com/series/15161

Michael J.K. Walsh Editor

The Armenian Church of Famagusta and the Complexity of Cypriot Heritage

Prayers Long Silent



Editor Michael J.K. Walsh Nanyang Technological University Singapore

Mediterranean Perspectives ISBN 978-3-319-48501-0 ISBN 978-3-319-48502-7 (eBook) DOI 10.1007/978-3-319-48502-7

Library of Congress Control Number: 2017937886

© The Editor(s) (if applicable) and The Author(s) 2017

This work is subject to copyright. All rights are solely and exclusively licensed by the Publisher, whether the whole or part of the material is concerned, specifically the rights of translation, reprinting, reuse of illustrations, recitation, broadcasting, reproduction on microfilms or in any other physical way, and transmission or information storage and retrieval, electronic adaptation, computer software, or by similar or dissimilar methodology now known or hereafter developed.

The use of general descriptive names, registered names, trademarks, service marks, etc. in this publication does not imply, even in the absence of a specific statement, that such names are exempt from the relevant protective laws and regulations and therefore free for general use. The publisher, the authors and the editors are safe to assume that the advice and information in this book are believed to be true and accurate at the date of publication. Neither the publisher nor the authors or the editors give a warranty, express or implied, with respect to the material contained herein or for any errors or omissions that may have been made. The publisher remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

Cover image © Michael J.K. Walsh

Printed on acid-free paper

This Palgrave Macmillan imprint is published by Springer Nature The registered company is Springer International Publishing AG The registered company address is: Gewerbestrasse 11, 6330 Cham, Switzerland



FOREWORD: FAMAGUSTA AND THE WORLD MONUMENTS WATCH: RESPONDING TO A CALL FOR ACTION

The World Monuments Watch, launched in 1996, acts as a call to action for cultural heritage sites in need of greater attention. For twenty years the Watch has been a portal through which we can understand the vast array of deserving sites that sometimes hide in plain sight, and yet are reminders of the artistic and cultural achievements of those who came before our own generation.

Cyprus remains at a crossroads of the Mediterranean, and Famagusta is a powerful reminder of the great forces that shaped the island over time. The city itself boasts a dizzying array of architectural treasures that span the successive reigns of Lusignan, Genoese, Venetian, Ottoman, and British rulers, all of whom left their mark within the walls of Famagusta. In 2008 and 2010, following its nomination by Michael J.K. Walsh, the Walled City of Famagusta was placed on the World Monuments Watch to draw attention to the rich architectural and artistic heritage that was in desperate need of conservation efforts to ensure that more than a millennium of history would not disappear from our lives.

The World Monuments Watch was catalytic in providing, then encouraging, modest funding which enabled condition surveys, conservation planning, and the implementation of conservation efforts for fragile wall paintings so central to the city's history. Speaking to the multicultural legacy of Famagusta, the conservation efforts supported by the World Monuments Fund (in collaboration with Nanyang Technological University in Singapore and the Famagusta Municipality) from 2008 to 2015 involved a truly international group of professionals and scholars who collaborated with local teams to complete these endeavors.

Today the United Nations Development Program is embarking on an ambitious program in Famagusta and we trust that our work of the last several years has helped to bring a greater awareness and understanding of the importance of Famagusta as a cultural beacon in the Mediterranean—yesterday, today, and tomorrow.

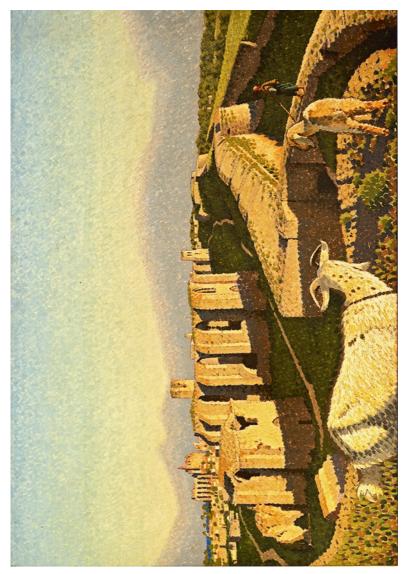
Lisa Ackerman World Monuments Fund, New York, NY, USA

Epigraph

Conflicts tend to produce simplified narratives of the past, stories with a straightforward theme and plots undisturbed by nuance and complexity. They feed on marked difference—a clear distinction between 'us and them' that leaves little room for ambiguity and hybridity—and thus place for people or phenomena that do not fit into the binary logics of most conflicts. If this is the case, perhaps the effort to retrieve the complex, the diverse, and the ambiguous is the most important contribution that we can make within the sphere of cultural heritage.¹

Note

1. Marie Louise Stig Sørensen and Dacia Viejo Rose, *War and Cultural Heritage: Biographies of Place* (Cambridge: Cambridge University Press, 2015), 266–67.



Keith Henderson (1883–1982) Famagusta ca 1928 Oil on Board $64\times21~\mathrm{cm}$

ACKNOWLEDGMENTS

This volume of essays is largely the outcome of the conference *Reconsidering Cultural Heritage in an Unrecognised State: The Armenian Church, Famagusta* hosted by the Trans-Mediterranean Studies Research Center, Institute of Art History, and in collaboration with the Institute of Advanced Study in the Humanities at the University of Bern, Switzerland, on January 8, 2015. It was organized by Michael Walsh and funded by Nanyang Technological University (NTU) in Singapore. It seems appropriate, therefore, that the acknowledgments should begin with those who helped pay for, host, organize, and publish the event. In particular, the Singapore Ministry of Education, the School of Art, Design and Media at NTU, Thomas Dittelbach, Bernd Nicolai, and Ágnes Sebestyén at the University of Bern.

The list of individuals who have taken Famagusta to their hearts gets longer by the year. The following are people I have come to regard as friends and with whom I hope to work again in the future: Gül İnanç, Nicholas Coureas, Lisa Ackerman, Dan Frodsham, Allan Langdale, Benjamin Arbel, David Jacoby, Carlos Jaramillo, Ege Uluca Tümer, Hülya Yüceer, Jan Asmussen, Luca Zavagno, Lucie Bonato, Marios Hadjianastasis, Michel Balard, Michele Bacci, Philippe Trélat, Pierre-Vincent Claverie, Danny Goldman, Thomas Kaffenberger, Sven Norris, Ünver Rüstem, Gohar Grigoryan, Alessandro Chechi, Vera Costantini, Will Spates, Tomasz Borowski, Francisco Fernandes, Andres Burgos Braga, Bora and Banu Sayin, Rocco Mazzeo, Duncan Rowland, Yuan Yi, Ender Jiang Shutao, Andrea Nanetti, Siew Ann Cheong, Sharon Little, Werner Schmid, Zehra Çağnan, Dickran Kouymjian, Duncan Rowland,

Arne Franke, Peter Edbury, Denys Pringle, George Ballard, Kent Severson, Nicola Coldstream, Paulo Lourenço, Luís Ramos, Robert Silman, Thierry Soulard, Stephen Kemp, Ulrike Ritzerfeld, Patricia Fortini Brown, Julie Heather Liew, Yilsu Hoca, Wu Jiamian Jamin, Shane McDonald, Sophia Basta, Sheryl Lee, Ketty Kanevesky, Catherine Williams, Anna Kosters, Hüseyin Küçüksu, Wilbert "Skip" Norman, Annemarie Weyl Carr, Ahmet Usta, Latife Sumerer, Paul Kohl, Maria Paschali, Randall Mason, Caroline Bruzelius, and Pete Burkholder. In Famagusta, I would like to thank Erkut Şahali, Oktay Kayalp, and Serdar Atai. Thanks also to Melissa Lovell for meticulous copy-editing, and the team at Palgrave for bringing this project to completion. At home there has always been amazing support for the Famagusta project. For this I thank my family, as always: Gül, Erdal, Ara, and Limon.

Michael J.K. Walsh Università degli Studi di Padova, March, 2017

Contents

1	Introduction: The Armenian Church Project: Heritage Welfare in an Unrecognized State Michael J.K. Walsh	1
Part	I Interpretation and Analysis	41
2	Famagusta: A Lifeline for the Kingdom of Cilician Armenia Nicholas Coureas	43
3	The Armenian Monastic Complex of St. Mary, Famagusta Dickran Kouymjian	61
4	The Painted Program of the Armenian Church in Light of Recent Discoveries Michele Bacci	99
5	On the Interpretation of the Crosses Carved on the External Walls of the Armenian Church in Famagusta Gohar Grigoryan	125

6	The Architecture of the Armenian Church and Convent Thomas Kaffenberger	143
7	The Armenian Church of Famagusta: Some Testimonies (Late Nineteenth–Early Twentieth Centuries) Lucie Bonato	169
Part	II Conservation, Education, and Diagnostics	185
8	Endangered Cultural Heritage in Unrecognized States Alessandro Chechi	187
9	Armenians and the Christian Society of Famagusta: Evidence from Spatial Analysis Tomasz Borowski	205
10	Ground Penetrating Radar and Mapping the Monastery Complex Francisco M. Fernandes	225
11	In-situ Investigation and Stability Analysis of the Armenian Church in Famagusta Andrés Burgos Braga, Paulo B. Lourenço, Nuno Mendes, and João M. Pereira	231
12	Conserving the Fourteenth-Century Wall Paintings of the Armenian Church in Famagusta Werner Schmid	245
13	Scientific Examinations of the Armenian Church Wall Paintings in Famagusta Rocco Mazzeo, Giorgia Sciutto, Irene Bonacini, and Silvia Prati	269

14	Teaching the Heritage of "Others" and Making It "Ours": The Power of Cultural Heritage Education Gül İnanç and Julie H. Liew	285
15	Emerging Computer Technologies for Cultural Heritage: The Armenian Church, Famagusta Dan Frodsham and Duncan Rowland	301
16	The Application of Virtual Reality Technology to Heritage Conservation in Famagusta's Armenian Church Yuan Yi and Ender Jiang Shutao	313
Part	t III Complexity and Heritage: Future Research Perspectives	325
17	Toward a Complexity Framework for Heritage Futures: Famagusta, its Armenian Church and SHIFT Andrea Nanetti and Siew Ann Cheong	327
18	Afterword Sharon Evelyn Little	357
	pendix 1: Laser Imaging in the Armenian Church a Sayin and Banu Sayin	361
Inde	ex	365

List of Figures

Fig. 1.1	Reconsidering Cultural Heritage in an Unrecognised State:	
	The Armenian Church, Famagusta, Institute of Advanced	
	Study in the Humanities, University of Bern, Switzerland, 2015	3
Fig. 1.2	The Armenian community in 1945 at Famagusta's	
	Armenian Church. Mogabgab Archive	11
Fig. 1.3	Peggy Hilton, c. 1934–35, collection of John Hilton	
	(Director of Department of Antiquities), Kings College	
	London. With permission. Written on the back of	
	the photograph is "Director's wife treating frescoes"	12
Fig. 1.4	Summer 1974: The Armenian Church with residents.	
	Photo: Dickran Kouymjian. With permission	12
Fig. 1.5	Searching for the "missing" from the 1960s and 1970s.	
	Armenian Church in the background. Author's	
	photograph, 2011	13
Fig. 1.6	Laser imaging of the Armenian Church: Section. Courtesy of	
	Solvotek	21
Fig. 1.7	Finding the initial reference from 1889. "B. Barker."	
	Author's photograph, 2014	23
Fig. 3.1	North Wall (before intervention). Photograph by	
	Wilbert "Skip" Norman, 2007	67
Fig. 3.2	North Wall in 1937. Photograph by Monica Bardswell.	
	Conway Library. With permission	71
Fig. 3.3	Flagellation from the Life of Christ. Photograph, Wilbert "Skip"	
	Norman, 2007	75
Fig. 3.4	Madonna (detail). Photograph, Wilbert "Skip" Norman, 2007	76
Fig. 3.5	Nativity. Photograph, Dickran Kouymjian, 1974	76
Fig. 3.6	Author's sketch of the north wall in 1974	79

xviii LIST OF FIGURES

Fig. 4.1	Kneeling female donor, mural painting, late fourteenth century	102
Fig. 4.2	Deposition and Entombment, mural painting, Famagusta,	
	Armenian church, north wall, late fourteenth century	104
Fig. 4.3	Christ holding the Virgin's soul, mural painting, Famagusta,	
	Armenian church, late fourteenth century	107
Fig. 4.4	Angels, mural painting, Famagusta, Armenian church,	
	late fourteenth century	108
Fig. 4.5	An angel holding a candlestick, mural painting, Armenian	
	church, Famagusta, late fourteenth century	109
Fig. 4.6	Saints Paraskeve and Helena, mural painting, west wall of the	
	Armenian church, Famagusta, late fourteenth century	111
Fig. 4.7	Vita-image of Saint John the Baptist, mural painting,	
	south wall of the Armenian church, Famagusta, late	
	fourteenth century	112
Fig. 4.8	Vita-image of Blessed Gerardo of Valenza, mural painting,	
	Santi Leonardo e Cristoforo, Monticchiello (Siena),	
	ca. 1360–1370	115
Fig. 5.1	Sundial, Armenian Church, south wall, [®] Photograph by Allan	
	Langdale	126
Fig. 5.2	Location of crosses, west wall, by Thomas Kaffenberger	127
Fig. 5.3	Location of crosses, south wall, by Thomas Kaffenberger	128
Fig. 5.4	Latin crosses, south wall, [©] Photograph by Allan Langdale	128
Fig. 5.5	Crosses carved on the eastern buttress, southern facade,	
	[©] Photograph by Michele Bacci	129
Fig. 5.6	Crosses carved on the western facade, [®] Photograph by	
	Michele Bacci	129
Fig. 5.7	Cross, St. Anne's Church, north wall, [©] Photograph by	
	Allan Langdale	133
Fig. 5.8	Cross, land castle of Korikos (Kızkalesi), [®] Photograph by	
	Hrair Hawk Khatcherian	134
Fig. 5.9	Armenian graffiti carved on the stairway wall of the	
	Chapel of St. Helena, Holy Sepulchre, Jerusalem,	
	[©] Photograph by Hrair Hawk Khatcherian	135
Fig. 6.1	Famagusta, Armenian Church, ground plan with	
	reconstructed northern annex	144
Fig. 6.2	Famagusta, Armenian Church, interior toward east	145
Fig. 6.3	Famagusta, Armenian Church, from southwest, photograph by	
	Camille Enlart (1896)	147
Fig. 6.4	Famagusta, Armenian Church and Carmelite Church,	
	from northeast, photograph by Camille Enlart (1896)	148
Fig. 6.5	Famagusta, Armenian Church Repairs 1937,	
	Theophilus Mogabgab archive	149

Fig. 6.6	Famagusta, Armenian Church, decorated niche in the	
	northern nave wall	151
Fig. 6.7	Famagusta, Armenian Church, vault toward west	152
Fig. 6.8	Famagusta, Armenian Church and Carmelite Church,	
C	from northwest, photograph by Lucien Roy (1911)	156
Fig. 6.9	Famagusta, Armenian Church and convent, site plan	159
Fig. 7.1	Drawing by Edmond Duthoit, 1862	
C	(Musée de Picardie, Amiens)	171
Fig. 7.2	Drawing by Camille Enlart, 1896 (from the book	
	L'art gothique et la Renaissance en Chypre)	174
Fig. 7.3	Photograph by Sédéfdjian, c. 1895	
	(Leventis Museum, Nicosia)	176
Fig. 7.4	Anonymous photograph, c. 1910 (from an English album,	
_	private collection, Paris)	177
Fig. 9.1	Streets and piazzas in Famagusta represented as nodes	209
Fig. 9.2	Sample access diagram of Famagusta showing the city	
	from the perspective of an inhabitant living in the	
	proximity of the central piazza (right)	210
Fig. 9.3	Visibility graph of Famagusta	215
Fig. 9.4	Agent analysis of Famagusta showing the movement	
	individuals released in the proximity of the Armenian	
	church and the gate of the Cave	217
Fig. 10.1	Location of the areas around the Armenian Church	
	surveyed with GPR	226
Fig. 10.2	Overview of the distribution of remains detected with	
	GPR as well as the aspect and size of the complex around	
	the Armenian Church	229
Fig. 11.1	Plan of the Armenian Church with main approximate	
	dimensions (meters). Dashed lines show the shape of the	
	vault and of the double-arch leading to the apse	233
Fig. 11.2	External damage maps of the (a) west, (b) east, (c) south,	
	and (d) north sides	234
Fig. 11.3	Condition of the vault and position of internal cracks	
	(highlighted in <i>bold lines</i>)	236
Fig. 11.4	Sonic testing. (a) Studied locations and testing grids at	
	the south wall and southwest buttress and (b) measured	
	sonic velocities	237
Fig. 11.5	Stability analysis. (a) Deformed shape (highly magnified)	
	and damage of the Church at failure, due to excessive vertical	
	loading and (b) results of the time-history analysis showing the	
	accumulated damage of the Church after an earthquake with	
	a PGA of 0.35 <i>g</i> . The darker grey color indicates the crack	220
	openings due to high tensile stresses	239

Fig. 12.1	Light gray areas correspond to originally painted wall surfaces.	
	Dark gray areas are those still preserved. Areas left in white do not show any evidence of painting	248
Eig 12.2	North wall—Detail with the Baptism and the <i>Imago Pietatis</i>	240
Fig. 12.2		
	panels on the lower register. <i>Arrows</i> indicate the direction	240
E: 12.2	of overlap of plasters	249
Fig. 12.3	New door, fitted in 2014	251
Fig. 12.4	Halo of St. Theodore before white-wash removal	257
Fig. 12.5	During emergency stabilization. Injection of a	
	pre-manufactured hydraulic grout in order to fill the gap	
	between the detached plaster and the masonry and to	
	re-establish adhesion	259
Fig. 12.6	Detail Flagellation with trial for wax removal	260
Fig. 12.7	Detail Imago Pietatis. Cleaning trial	262
Fig. 12.8	West wall—Panel with the Holy Virgin and St. Helene.	
	Intermediate state during removal of lime wash	263
Fig. 13.1	ATR mapping of sample FAC3: FTIR false-color plots	
	representing: (a) calcium carbonate (peak area 875 cm ⁻¹),	
	(b) oxalates (peak area 1318 cm ⁻¹), (c) silicates (peak area	
	1025 cm ⁻¹), (d) gypsum (peak area 3400 cm ⁻¹), (e) ester	
	(peak area 1730 cm ⁻¹), and (f) spectrum extracted from	
	layer 2 of the chemical map (e)	276
Fig. 14.1	URECA Undergraduate project, Nanyang Technological	
Ü	University, Heritage Conservation in Famagusta: Global Youth	
	Cultures by Julie Heather Liew	289
Fig. 14.2	Scratch card exercise, St. Theodore, from "Hidden Stories	
0.	in the Walls" Cultural Heritage Education Series: The Rich	
	History of My Beautiful City, Famagusta	293
Fig. 14.3	The stabilized image of St. Theodore used in the "Match	
118. 11.0	the Rider" exercise	295
Fig. 14.4	Sundial Exercise from "Hidden Stories in the Walls" <i>Cultural</i>	270
119. 11.1	Heritage Education Series: The Rich History of My Beautiful	
	City, Famagusta	296
Fig. 15.1	The Aurasma application displaying a film clip on a smart	270
11g. 10.1	phone, the playing of which has been triggered by	
	"recognizing" the paper glyphs attached to the poster	308
Fig. 16.1	Textured mesh converted from point cloud data	316
		318
Fig. 16.2	Accurate mapping of painted images to interior wall surfaces	
Fig. 16.3	Interactive Armenian Church VR Experiences	319
Fig. 17.1	A complex network of geographically situated agents. This	
	network evolves with time, as (1) old agents are removed	

	and new agents are added, (2) new links are added, and (3)	
	landmarks are removed or added. Patterns of interactions	
	between agents (filled links) that are widespread in the	
	network, and persist through replication and transmission	
	become intangible cultural heritage	342
Fig. A.1	Scanning the exterior of the Armenian church	362
Fig. A.2	Diagrammatic scan plan of Armenian complex	363
Fig. A.3	Exterior scan of western façade of the Armenian church,	
	Famagusta	364

LIST OF TABLES

Table 9.1	Syntactical measurements showing mean depth values of	
	Famagusta's spatial configuration from the perspective	
	of the city's inhabitants and visitors	210
Table 9.2	Syntactical measurements showing RRA values of	
	Famagusta's public spaces dominated by religious	
	architecture; letters in brackets mark the religious	
	denomination of churches related to given space: Latin,	
	Greek, Syrian (Maronite, Melkite, Jacobite, or Nestorian),	
	and Armenian	212
Table 9.3	Syntactical measurements showing mean depth values of	
	Famagusta's principal groups of churches from the	
	perspective of the city's inhabitants and visitors	212
Table 9.4	Syntactical measurements showing RRA values of	
	Famagusta's churches; letters in brackets mark the	
	religious denomination of churches related to given space:	
	Latin, Greek, Syrian (Maronite, Melkite, Jacobite,	
	or Nestorian), and Armenian	213
Table 13.1	Description of the investigated sample and the	
	sampling area	270
Table 13.2	Stratigraphic description of sample FAC1	272
Table 13.3	Stratigraphic description of sample FAC2	274
Table 13.4	Stratigraphic description of sample FAC3	275
Table 13.5	Sample FAC3, summary of results	277
Table 13.6	Sample FAC4, summary of the optical microscope	
	observations	278

Introduction: The Armenian Church Project: Heritage Welfare in an Unrecognized State

Michael J.K. Walsh

After over 40 years of impasse, however, the cultural heritage on the island is suffering. No one wins if sites, objects, and landscapes are neglected, damaged, destroyed, or looted. While this is Cypriot cultural heritage, to be sure, it is important to the global community too. Cypriots care deeply about their heritage, but geopolitics have created an impossible situation where even the most well-intentioned actions can cause trouble.

A. McCarthy (Director, Cyprus American Archaeological Research Institute, 2015)¹

This book is about seven centuries of change in Famagusta, Cyprus, and the Eastern Mediterranean, in which the fourteenth-century Armenian Church of Famagusta acts as the "constant." An examination of it through art, architecture, archives, photography, structural engineering, analytical chemistry, laser visualization, augmented reality, 3D modelling, developmental theory, international law, and pedagogical sciences escorts the reader through "a complex system of visible and invisible bonds" —from

M.J.K. Walsh (⋈)

School of Art, Design and Media, Nanyang Technological University, Singapore

the Lusignan era of the crusades, through the rise and fall of the Venetian, Ottoman, and British empires, to the post-conflict stasis of the present day. It also invites projections and forecasts about its future with or without a solution to the "Cyprus Issue" and encourages debate about the welfare of heritage located in territories with unresolved political status.³ This book, with an extremely tight focus on a single historical structure therefore, embraces a broad range of important and contemporary issues.

In 2013 a team led by the Nanyang Technological University (NTU) in Singapore, with additional funding from the World Monuments Fund in New York and the Famagusta Municipality, altered the destiny of an exquisite relic of Medieval Cyprus and in so doing prised open a debate that had long needed exposure. The trans-disciplinary and international project in fact dated back some 13 years, and was the culmination of a gradual, patient, and strategic series of trust-building measures that in 2015 led to the conference "Reconsidering Cultural Heritage in an Unrecognised State: The Armenian Church, Famagusta" held at the Institute of Advanced Study in the Humanities at the University of Bern, Switzerland (Fig. 1.1).

The papers delivered there, and presented here as chapters, combined the history of the Armenian community of Famagusta with an analysis of the art and architecture it left behind, then proposed strategies to safeguard the fragile and crumbling centuries-old frescoes, develop visualization media for future conservation and educational work, and create education materials to protect and appreciate such cultural heritage. It explored new management strategies for heritage sites in conflict zones and interrogated notions of cultural heritage acting as a bridge between political rivalries. The meeting was, and this book is, also necessarily about international law and the role of the Non-Governmental Organization (NGO) (in the absence of the United Nations Education, Science, and Cultural Organization [UNESCO]), the protection of Christian art in a predominantly Muslim/secular society, and Armenian heritage in this sensitive centenary era. The conference participants were, however, unaware that they would not be permitted to return to the site to complete the project as planned later in the summer. Instead, the United Nations Development Project, at the behest of the bi-communal Technical Committee on Cultural Heritage in Cyprus and with European Union funding, took over the "Martinengo-Famagusta Cluster" and declared it part of their "monument of great importance to Cyprus" project. As the original team no longer has access to the site, and as our original declared

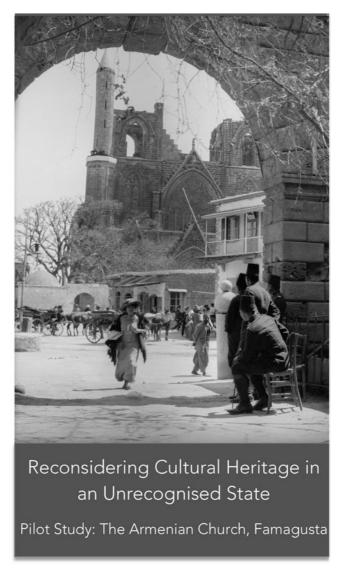


Fig. 1.1 Reconsidering Cultural Heritage in an Unrecognised State: The Armenian Church, Famagusta, Institute of Advanced Study in the Humanities, University of Bern, Switzerland, 2015

intention of bringing the dilemma of Famagusta's endangered heritage to the attention of the international community has clearly been satisfied, the publication of this book seems both timely and relevant as a swansong.

FAMAGUSTA

Famagusta, founded in the tenth century, rose to regional prominence in the late twelfth, then soared in prosperity and cultural hybridity after the fall of Crusader Acre in the thirteenth. Fourteenth-century Lusignan Famagusta became a principal *entrepôt* of commerce in the Eastern Mediterranean and also the coronation place of the Kings of Jerusalem as documented by the chronicler Leontios Makhairas:

And because the Saracens held Jerusalem, and because of the enmity between them and of many troubles, the kings assigned this honour to Famagusta, and the seals and the mint, that when the Kings of Jerusalem were to be crowned they went to Famagusta.⁵

The coronation Cathedral of St. Nicholas replaced a smaller edifice in the main square and was surrounded in a rapid and short-lived spate of building by many smaller churches of which our Armenian subject is one. There was a castle too (later named Othello's Tower by the British administration), a palace fit for a city of this stature, and a port from which impressive trade connections with the known world radiated from; Alexandria to Beirut, Tripoli to Antioch, Damascus to Constantinople, Venice to Pisa, and Bruges to London. According to Philippe de Meziérès, chancellor of King Peter I of Cyprus, Famagusta was exceptional for another reason too—besides the Latins of the city, there lived Greeks, Armenians, Nestorians, Jacobites, Georgians, Nubians, Indians, Ethiopians, and others. When Westphalian priest Ludolph von Suchen disembarked in Famagusta somewhere between 1336 and 1341 he observed a dynamic and complex society:

Auch muessent alle bilgerin die uebermoer woellent in ciper kommen. Und alltag von aufgang dersunnen untz zur irem nidergang hoert man da neuwe mer. Man hat auch in besunderheit schuelen darinnen man alle sprachen leret. (In fact, all pilgrims who want to go to outremer must come to Cyprus. And every day from dawn to dusk one can hear there more [and more] news. One can also learn all languages in special schools.)9

In a fifteenth-century hand-written version of Sir John Maundeville's unsubstantiated peregrinations, we read:

und die eine heißet Famegüst, die ist uff dem Mere und ist der obersten Porten eÿne in der Werlte zü allen kaüffmanschaze und dan komment auch Heiden und Cristen und von allen Landen Kaüfflüde. (And one is called Famagusta, which is on the sea and one of the principal havens in the world for all sort of goods and here come also pagans and Christians and foreign merchants from all countries.)10

Traders, merchants, soldiers, crusaders, pirates, slaves, and pilgrims from all over the Mediterranean world gathered in Famagusta.¹¹

The presence of an Armenian community in Famagusta dates in all probability to the thirteenth century, with a significant influx certain in the fourteenth.¹² Frater Jacobus de Verona witnessed one such enforced arrival in 1335 writing:

Prima est, quod illa die et hora, scilicet ultima mensis Junii, qua portum intravi, tunc et plures naves magne et galee et criparie venerunt de Armenia de civitate Logaze [read Layazii > Aïas], onerate senibus, parvulis, mulieribus, orphanis et pupillis ultraquam mille quingentis, fugientibus de Armenia, quod soldanus miserat gentes suas multas et fortes ad destruendum ipsam et combusserunt totam planiciem et captivas duxerunt ultraquam xii milia personarum preter illos, quos gladio detruncaverunt, et inceperunt ipsam destruere in die Ascensionis, ut dixerunt mihi Veneti mercatores, qui errant ibi, que fuit dies XXV mensis Maji. O Domine Deus, quanta tristicia videre ipsam multitudinem cum planctu et ejulatu filios lactantes ubera in platea Famagoste ad pectora mulierum, senes, canes famelicos lamentantes; audiant hec cristiani, qui in suis civitatibus et domiciliis habitant, comedentes et bibentes et seipsos in deliciis nutrientes, qui terram sanctam non curant acquirere et ipsam ad cultum deducere cristianum. (The first is that on that day and hour, the last of June, when I entered the harbour several large vessels and galleys and gripparia came from Armenia, from the city of Aïas, crowded with old men, children, women, orphans and wards more than fifteen hundred in number, who were flying from Armenia because the Soldan had sent hosts, many and mighty, to destroy it, and they burnt all that plain and carried off captive more than twelve thousand persons, over and above those whom they had slain with the sword, and they began to destroy it, as I was told by Venetian merchants who were there, on Ascension Day, which fell on May 25. Lord God, sad indeed it was to see that multitude in the square of Famagusta, children crying and moaning at their mothers' breasts, old

men and starving dogs howling. Hear it, ye Christians who live in your own towns and homes, eating and drinking and reared in luxury, who care not to make the Holy Land your own, and to restore it to the Christian Faith!)

He continued his observation of Famagusta in particular and of the place of the Armenian community within it:

Item, in eadem civitate, sunt plures secte gencium facientes suum proprium officium et proprias ecclesias: in primis very cristiani, secundo Greci, qui consecrant non asimis, sed cum pane fermentato, non elevant corpus Cristi, non credunt spiritum Sanctum procedure a Filio. Item sunt ibi Jacobini, qui se circumcidunt et eciam baptizantur more Grecorum et faciunt officium eorum. Item sunt ibi Armenii et faciunt officium ut vericristiani, dicunt tamen officium in lingua greca. Item sunt ibi Georgiani. Item sunt ibi Machonite; iste due secte baptizantur more cristianorum, sed faciunt officium Grecorum. Item sunt Nestoriani a perfido heretic Nestore dicti, qui dicunt Cristum solum purum hominem fuisse, et faciunt officium in Greco, sed non sequuntur Grecos, sed habent officium per se.13 (Also in the same city are several sects, which have their own worship and their own churches. First, true Christians; secondly the Greeks, who consecrate not with unleavened wafers, but with leavened bread; they do not elevate the Body of Christ, nor do they believe that the Spirits proceeds from the Son. There are also Jacobites, who are circumcised, and are baptised with the Greek rite. There are also Armenians, who perform their worship like true Christians, but say the service in the Greek tongue, also Georgians and Maronites. Those two sects are baptised like Christians, but use the Greek service. Also Nestorians, so called from the faithless heretic Nestor, who say that Christ was only a mere man, and perform their services in Greek, but do not follow the Greeks but have a service of their own.)14

Soon the growing Armenian community warranted its own bishop under the jurisdiction of the Catholicos of Cilicia, and by 1393 the Lusignan dynasty held the titles of Kings not only of Cyprus and Jerusalem but also of Armenia. This relationship is explored in detail by Nicholas Coureas (Chap. 2) and Dickran Kouymjian (Chap. 3).¹⁵

The Holy Mother of God Church of Famagusta (Sainte-Marie-de-Vert [French], Surb Astuvacacin [Armenian]), which is the subject of this book, was built in the second decade of the fourteenth century, was part of a larger monastic complex, and located in a "quarter" of Famagusta which Tomasz Borowski felt would have had a character unique unto itself as

without its own piazza, the Syrian neighbourhood must have presented a very different visual experience than the rest of the city. It was a reflection of a different tradition or urbanism in which covered streets and bazaars served as principal public and commercial spaces instead of central squares. This was the urbanization of the Islamic world of the Middle-East and Africa which differed from the cities of Latin Europe or Byzantium and was no doubt more familiar to the oriental Christians living in northern Famagusta.¹⁶

Importantly he went on in his doctoral study of 2015 (and in Chap. 9 of this volume) to suggest that an understanding of location within medieval Famagusta yields significantly different conclusions to those so far gleaned from a close inspection of the murals. He postulated that

religious groups in the city, including Armenians, Greeks, Syrians, Latins and Jews, are portrayed as active agents consciously using religion to manifest, confront and compromise their identities and maintain their own networks of interregional contacts. The principal observation is that the results of the spatial analysis of Famagusta provide a radically different image of the city than the analysis of its art. The arrangement of space reveals strong tensions, segregation and competition for the control of public space while art points to a high degree of acceptance, intense exchange of ideas and shared sense of aesthetics. 17

In 1893 Édouard Corroyer rather understated the fact that "in Cyprus we no longer find that scholastic uniformity which characterizes the Latin churches of the Holy Land."18 Collaborative and multi-perspectival studies rather enforce that generalized point of view leading us to appreciate that what we are seeing is in fact an insight into networks both internally and regionally, permitting us access to flows of people and movements of ideologies and aesthetics. It is about extracting meaning from the silence of centuries as Annmarie Weyl Carr elegantly anticipated in her 2014 publication on Famagusta saying "much that is now in question about Famagusta's surviving buildings can surely, with care, be coaxed from their walls and surfaces."19 An architectural analysis of the church itself is undertaken by Thomas Kaffenberger (Chap. 6) offering a further collaborative opportunity when read contrapuntally with Michele Bacci's analysis (Chap. 4) of the mural decorations and Gohar Grigoryan's interpretation (Chap. 5) of the incised crosses on the exteriors.²⁰

At the end of the fourteenth century, especially under the enforced government of the Genoese (1373-1464), the decline of Famagusta began, though this has recently been contested in Seyit Özkutlu's doctoral study.²¹ Trade began to re-route to Beirut, the Black Death decimated the population of the city three times (1348, 1362, and 1363), and an ill-advised war caused both prosperity and demographic statistics to go into rapid decline. When the Genoese departed in 1464, Famagusta became a source of heightened interest for Venice even if it was described by the Venetian ambassador as *quella poverissima et disolata cita* (that wretched and desolated town).²² By this time the Armenian Church had been abandoned and was perhaps already in ruins. The Armenian community nevertheless was still present and Dominican Friar Stephen de Lusignan describes their presence in the Corpus Christi procession the following century:

The spectator can see at first the Greek cross and the crowds of people go around it without any order. Then the Greek priests follow, then the image of the Holy Virgin, followed by crowds of women...Then there are the Latin mendicants arranged according to their order; then follow the Indian priests who wear a turban on their heads (these turbans are made of turquoise or blue linen) and the bishop and his mitre; then come the Nestorians, the Jacobites, the Maronites, the Copts, and the Armenians and almost all of them wear turbans. Also, all of them wear the chasuble, following the latin custom, except for the Armenians who wear white birettas with a white band. Then follow the Latin priests ... and the noblemen.²³

Despite the Venetian policy of rebuilding and repopulating Famagusta other factors started to impact upon the destiny of the city.²⁴ Basil Stewart wrote:

In 1492 and 1542 earthquakes destroyed many of the towns and villages. In 1544 locusts made their appearance in such large numbers that all existing vegetation was destroyed, and for two years the population was fed on imported provisions. In 1546 and 1568 earthquakes again visited the island, and did considerable damage to the buildings in Nicosia and Famagusta.²⁵

And then there was the fatal war with the Ottoman Empire. The fall of Famagusta in 1571 after a year-long siege is perhaps now one of the most infamous episodes in military history and resulted in its transfer to "Selim, Ottoman Sultan, Emperor of the Turks, Lord of Lords, King of Kings, Shadow of God, Lord of the Earthly Paradise and of Jerusalem." It is in the magnificent siege map of Famagusta of 1571 created in Brescia by Stephano Gibellino that we take our parting glance

at the ecclesiastical complex of the Carmelite Church of St. Mary and the Armenian Church. Three centuries of Ottoman rule now began in Famagusta, while Western nations refocused their Cypriot maritime ambitions on Larnaca and on other developing emporia such as Aleppo and Smyrna.²⁷ One botched attempt was made to recapture Famagusta by the Duke of Tuscany in 1607, but it failed, and from that point to the British takeover in 1878 Famagusta receded into history and the European imagination.²⁸ Now the name was synonymous with martyrdom not only in a military sense but also in losing one's very soul, or "turning Turk." It was for that reason that Shakespeare's "seaport in Cyprus" in Othello was Famagusta.²⁹ Cornelis de Bruyn's diaries from April 22, 1683, recalled:

Zelfs vermogen de Grieken, die daar ingezetenen zyn, niet omtrent de Wallen te komen; en indien zy'er gevonden wierden, zoudenze gevaar loopen, van tot het Turksche geloof gedwongen te worden (Even the resident Greeks can't come near the ramparts, and if found, would run the risk to be forcefully converted to the Turkish faith).30

In the following century Alexander Drummond recorded more destruction in a now virtually depopulated urban space:

In the year 1735, the town was greatly damaged by an earthquake: the Cathedral church of Sancta Sophia, which had been converted into a mosque, fell in and buried in its ruins above two hundred Turks who were at worship when the shock happened.³¹

Visual contact is only made again with the Armenian Church through Edmund Duthoit's sketch of 1862 and later through Camille Enlart's sketch during the years of transition from Ottoman to British administration (the subject of Lucie Bonato's study in Chap. 7). With the transfer from Sultan to Empress, Famagusta's fortunes began to swing once again, as did those of the now ruined Armenian Church and the frescoes that emerged, stubbornly clinging to the interior surfaces.³² Famagusta had life breathed back into it: the port was dredged and re-opened, schools were erected and the city and its environs repopulated, roads were made, a civil service put in place, and the pestilential swamps drained, as Ege Uluca Tümer's doctoral study records. 33 The city was photographed, explored, described, and studied—now visible again after so many years in hibernation. The historic graffiti on the interior walls of the Armenian Church attest to the visits of international "guests" boasting French, English, Armenian, and Ottoman names, mostly from the mid-nineteenth century onwards.³⁴ It was one such graffiti that acted as the starting point for this entire project (see the section "The Armenian Church Project" of this chapter).

Thanks to George Jeffery's significant publication of 1918 and the more recent publication of his personal diaries we learn that concerted conservation work was begun not only on the Armenian Church (perhaps as early as 1907) but also on the rest of the historic monuments of Famagusta at this time.³⁵ In the 1930s Jeffery worked with a certain Michael Pavli and on December 23, 1932, could declare triumphantly "work at Armenian Church looks very well. Marvellous effect by restoring cornice to roof."36 Bishop Petros of the Cilician Catholicosate then requested the renovation and return of the church to the Armenian community, a wish that was granted by the British authorities in 1936 with rent being set at five pounds annually for the next 90 years. In 1937, in order to make it usable, the Church Committee undertook its repair under the surveillance of the Department of Antiquities, which supplied most of the stone required. The work is meticulously recorded in the Mogabgab Photographic Archive which is currently unavailable to the public but some images of which I have included in this chapter (Fig. 1.2).

Every individually archived negative, of which there are many thousand, shows how the decayed vaulted roof was waterproofed, the north and south doorways opened up, their jambs and thresholds re-formed, the south wall repaired (its door supplied with a new lintel), and masonry replaced. They tantalizingly show also a number of medieval foundations belonging to the monastery which are now reburied and only "visible" through Ground Penetrating Radar (see Chap. 10 by Francisco Fernandes). The paintings too received their first rudimentary stabilization in centuries at the hands of a certain Monica Bardswell whose precious notes and photographs from the 1930s I have published elsewhere. The wife of John Hilton, Director of Antiquities (1934–1936), doing some rudimentary intervention on the Armenian Church frescoes (Fig. 1.3). An analysis of this, and subsequent interventions, can be read in Werner Schmid's study in Chap. 12.

The first liturgy in the Armenian Church was held on January 14, 1945, by Archimandrite Krikor Bahlavouni and an itinerant priest administered to the Armenian community of Famagusta up until circa 1957.



Fig. 1.2 The Armenian community in 1945 at Famagusta's Armenian Church. Mogabgab Archive

The Armenian Church, like Famagusta in general, was then witness to the birth of Cypriot independence which arrived in 1960, to the intercommunal strife which followed (during which it was lived in—Fig. 1.4), then impacted further by the events of 1974. After the division of the island in that year, the Syrian quarter of Famagusta in which the Armenian Church is located was sealed off completely as a military zone and the church was used as a storage facility. After 1983, and the self-declaration of the Turkish Republic of Northern Cyprus (TRNC), the political climate settled into stasis. The newly self-declared sovereign state was ostracized by successive UN resolutions, and the heritage therein found itself unthreatened by war or violence per se but exposed to the ruinous neglect brought about by an unresolved political issue.³⁸ Perhaps optimism peaked again, momentarily, with the opening of the "border" in 2003 and with the possible re-unification of Cyprus through the Annan Plan of 2004, but this opportunity was lost and the Armenian Church returned to the status



Fig. 1.3 Peggy Hilton, c. 1934–35, collection of John Hilton (Director of Department of Antiquities), Kings College London. With permission. Written on the back of the photograph is "Director's wife treating frescoes"

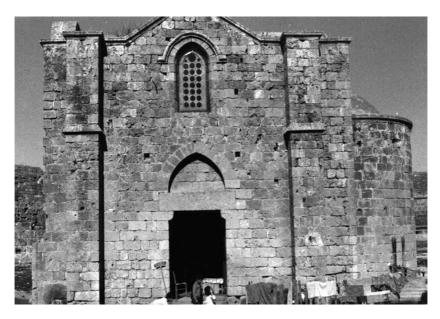


Fig. 1.4 Summer 1974: The Armenian Church with residents. Photo: Dickran Kouymjian. With permission



Fig. 1.5 Searching for the "missing" from the 1960s and 1970s. Armenian Church in the background. Author's photograph, 2011

quo ante. It now awaits the renewed ebb and flow of history to determine its fate (Fig. 1.5).

WHAT IS AN UNRECOGNIZED STATE?

The TRNC has been an unrecognized state since its declaration in 1983. Before that Famagusta and its heritage was geo-politically cut off by the Turkish intervention on Cyprus in 1974, and even before that, one might argue, from the inter-communal tensions that dated to the 1950s. To go even further, the old city of Famagusta has been fundamentally (but not exclusively) Muslim since the Christian expulsion of 1573.39 To retrace this troubled history is not the purpose of this book, rather it is to acknowledge that the subsequent post-conflict heritage crisis is inextricably linked to political stalemate. And so we must begin with the search for an understanding of what an unrecognized state is and decide where Famagusta's heritage fits into our understanding of it.⁴⁰ Nina Caspersen's definition is one that we can adopt as our own:

Unrecognized states are the places that do not exist in international relations; they are state-like entities that are not part of the international system of sovereign states; consequently they are shrouded in mystery and subject to myths and simplifications.⁴¹

These are places, she goes on to say, that

have achieved *de facto* independence, but have failed to gain international recognition or are recognized by a few states at most. They insist on their right to self-determination, but are faced with the stronger principle of territorial integrity.⁴²

Interestingly, though united by their unrecognized status, they are not all the same in the eyes of international observers: they range from the non-free (South Ossetia and Transnistria), to the partly free (Abkhazia, Kosovo, Nagorno Karabakh, and Somaliland), to the "free" (TRNC and Taiwan).43 The TRNC, having survived for more than four decades, and having voted for re-unification via the Annan Plan of 2004, has, Caspersen suggests, earned a right to partial recognition, or at least preferential status—some see it as a "state-in-waiting."44 It has two representatives on the Council of Europe's Parliamentary Assembly; some representation in Brussels and lobbying rights in the European Parliament; and the Organization of the Islamic Conference has upgraded its status to "state" from "community." Secondly, an unrecognized state is not necessarily a failed state though it might have been born from one, and though it lies beyond the parameters of international law, it is not necessarily in itself unlawful or ungovernable. But the adage persists that something lawful cannot originate in an illegal act, and that something unlawful at its origin must remain unlawful no matter what happens thereafter. The past, in short, cannot and will not go away. Instead

the politics of unrecognized states therefore tend to be shaped by four central factors: military victory, precarious existence, external dependence, and continuing attempts to legitimize the entity, both internally and externally.⁴⁵

This kind of limbo is between war and peace. Though Caspersen does not mention heritage by name the following impact assessment is seemingly relevant to it: The lack of international engagement with contemporary unrecognized states has important consequences. Unrecognized states are unable to obtain loans from international credit institutions; they are barred from membership of international organizations; international laws and regulations do not apply on their territories, which tends to discourage foreign investors; international markets are often closed to them; their inhabitants are unable to travel unless they can obtain (and are willing to use) passports from their parent states or external patron; and visitors are in some cases very actively discouraged from travelling to these unrecognized entities either through warnings on foreign office websites or legislation in the parent states which make such travel an offence.46

Much in the way of priceless and fragile cultural heritage is to be found behind contested "borders," in geopolitical landscapes that may seek *de jure* recognition but which cannot legally "exist" within the international political system. The TRNC is not the only unrecognized state in the world, nor is it, as Alessandro Chechi's essay (Chap. 8) in this collection points out, the only location in which there is concern about the impact of imperfect policy on fragile tangible heritage.⁴⁷ Carlos Jaramillo noted how these states have "failed to connect to the broader community of nations, thus it [cultural heritage] remains a local responsibility." This in turn means that while "it is difficult to view Cultural Heritage outside the spectrum of UNESCO and its principles,"48 it is nevertheless a necessity that we do so in certain cases such as northern Cyprus. Jaramillo identified "a crevice in the overarching, internationally endorsed system that established, and now maintains, the universal framework for heritage assets,"49 and so proposed a model for Famagusta based on Transitional Justice, Public-Private Partnerships, and Cost-and-Benefit Analysis. He recommended that "a third way, outside the convoluted web of political and social issues associated with Cyprus, may yet be created to rehabilitate and develop a heritage that is a universal inheritance."50 Importantly however, the Turkish Cypriot municipal administration of Famagusta, dating to 1958, remains legal as a communal-based body under the constitutional system of the Republic of Cyprus.⁵¹ This is the loophole that could be utilized for our work, for although the "state" and its Department of Antiquities were unrecognized, the Municipality and its mayor, Oktay Kavalp, were.

A 2008 survey noted that a staggering 92 per cent of Greek Cypriots and 72 per cent of Turkish Cypriots believe that protecting the cultural heritage of one community that is located within the territory of the other is an important way to improve understanding over the dividing line.⁵² Allan Langdale and I wrote a year later, and specifically of the Armenian church itself:

The medieval Armenian church of Famagusta, Cyprus, lying in the north-western or Syrian quarter of the city provides a case study through which to raise issues concerning the historical conservation of Famagusta's cultural heritage...Yet incredible potential for renovation and revitalization exists. The return of scholarship is a positive development which may well lead to other improvements in terms of restoration, conservation, urban development, and a renewed sense of internationally shared cultural values.⁵³

Michael Møller, then United Nations Chief of Mission on Cyprus and now Director General of the United Nations in Geneva, wrote to "encourage the two communities to work together and, just as importantly, [of] encourage[ing] them to safeguard the common cultural heritage of Cyprus." Susan Balderstone suggested something not dissimilar in 2010. The Technical Committee for Cultural Heritage's (TCCH) espoused desire presently is to use "past heritage so that we can build our future on a culture of peace, tolerance, cooperation, dialogue and respect for differences." The introduction to the UNDP's splendid publication relating to the Armenian Church of Nicosia makes clear

the aim is not only to conserve buildings and sites, but also to provide Cypriots with the opportunity to reconnect with their common heritage. These projects bring people together around a common and inclusive vision of a shared future.⁵⁷

In a special 2015 edition of the *Journal of Eastern Mediterranean Archaeology and Heritage Studies* entitled "Occupied with Saving the Past: Advancing the Preservation Agenda in Northern Cyprus" editors Sandra A. Scham and Ann E. Killebrew tackled the matter of Cyprus, heritage, and politics head-on:

The current political and legal situation on Cyprus hinders excavation, conservation, and preservation of sites and monuments that are not just important to the people of Cyprus—both Greek and Turkish—but to the world. While we must obviously live in the present, we must also strive to better understand and protect the remains of the past. Only by doing so now can we ensure the world's heritage for the future.⁵⁸

The division between north and south, between recognized and unrecognized, between legal and illegal, was and is a political division that scholars and politicians alike have to deal with. And yet Andrew McCarthy states:

Archaeologically and historically, this division makes no sense; in order to remain academically objective about the ancient past, this modern division must be ignored. At the same time, scholars must live in the real world.⁵⁹

It is not easy to shake off the past in order to live in "the real world." Interpretation, or misinterpretation, of international legislation designed to protect heritage, now seems to stifle the ability to pursue commonsense interventions. Sophocles Hadjisavvas, citing Protocol I of the Geneva Conventions, clearly stated that civilian objects should never have been the object of attack or reprisals, and attacks in war should be limited strictly to military objectives (Article 52, Paragraph 1).60 Furthermore, he highlighted how it is prohibited to commit any acts of hostility against historic monuments, works of art, or places of worship, which constitute the cultural or spiritual heritage of peoples (Article 53). The 1954 Hague Convention for the Protection of Cultural Property in the Event of Armed Conflict specifically emphasizes the protection of cultural property in the event of an armed conflict and subsequent occupation. The problem here is that the authorities in northern Cyprus do not concede that this is a military "occupation" and point out that since their "liberation" in 1974 and subsequent declaration of statehood in 1983, they have existed peacefully as a sovereign state. There can be no case, in their minds, for "occupier" and "occupied" therefore. Müge Şevketoğlu, Riza Tuncel, and Vasıf Şahoğlu also contest Hadjisavvas' selective reading of international law insisting that it actually harmed, and continues to harm, cultural heritage instead of protecting it especially as it systematically ignores the Second Protocol to the Hague Convention which judiciously required occupying powers to "prohibit and prevent ... any archaeological excavation, save where this is strictly required to safeguard, record or preserve cultural property."61 The 1975–1976 report by Canadian Jacques Dalibard,62 or the 1989 submission by the general rapporteur of the Parliamentary Assembly of the Council of Europe, did little other than to recognize the nature, scale, and intractability of the problem:

Despite expressions of concern and good will, UNESCO seems unable to make any official move with regard to the northern part of the island. UNESCO is accused both by the Turkish Cypriots of having 'repeatedly refused the many calls of the Turkish Cypriot Government (sic) for aid' and by the Greek Cypriots of ineffectiveness and of using the excuse of needing the approval of 'both sides.' Although the General Assembly of UNESCO decided in 1980 on sending permanent observers and a budget line exists, no action has been taken. It appears that the only way UNESCO could in fact intervene is on condition of recognizing the government in the north, which no UN organisation is able to do.⁶³

Also, despite being recommended by Robin Cormack as early as 1989,64 communication between the Departments of Antiquities in both the north and south of the island has only become a reality since 2008.65 This is now done through the Technical Committee on Cultural Heritage (TCCH), which operates on a voluntary basis, acts independent of governments and other institutions, and recommends actions for the protection, restoration, and preservation of important monuments. Funds by the European Commission can be channelled through the TCCH to the UNDP and so since 2012 approximately €5.3 million (just over \$6 million) has been provided to implement priority projects through-out the island. The opening of Othello's Tower in Famagusta in 2015, and the bicommunal/international opportunities it afforded, needs no further justification. A precursor for this, USAID's Supporting Activities that Value the Environment (SAVE), "with skilled diplomacy and adequate funding by a third party, coupled with determination by all sides concerned, and the right explanations to persuade the politicians, had demonstrated that saving heritage in the north of Cyprus was possible."66 Indeed, Elizabeth Kassinis reminisced that

ways were needed for the two sides to work cooperatively in order to begin solving shared day-to-day problems regardless of, though not at odds with, the political process. Forging channels of communication and habits of cooperation could in fact pave the way for common action in any post-settlement arrangement while reinforcing the ongoing political processes.⁶⁷

Activities funded by USAID's Cyprus Partnership for Economic Growth (CyPEG) were also designed to assist the Turkish Cypriots in preserving and managing the plethora of cultural heritage sites under their caretakership for two reasons: first, because they were economic assets that could contribute to balanced and sustained growth; and second, because responsible management of these sites would improve the political climate on the island. The US assistance programme can boast a long list of cultural

heritage accomplishments from supporting the relatively simple restoration of a Turkish-Cypriot traditional mud-brick building in a rural village to the more complex stabilization of the fourteenth-century Church of Saints Peter and Paul in Famagusta.

There can be little doubt that the past four or five years have seen enormous strides forward and perhaps sewn some seeds for optimism. It is into this context that we place our own study of the Armenian church of Famagusta at the outset of which we earnestly believed what Kissinis reiterated as recently as 2015 when she wrote that "appreciating Cyprus' multicultural past is one way of ensuring a more peaceful future. Indeed, preserving Cyprus' cultural heritage has proven to be an effective unifying force that merits international support."68

THE ARMENIAN CHURCH PROJECT

The specific project that forms the backbone of this book began in 2003 when I read W. H. Mallock's In an Enchanted Island, written over a century earlier. In it there is a chapter entitled "The Glories of Famagusta," which contains poetic descriptions by the writer as he wandered the Syrian Quarter of the city:

The sight, as I realized it, affected me like a burst of devotional music, vibrating far off from the lost ages of faith, distinct, and yet so faint that it made me hold my breath to hear it. It surrounded me with a new atmosphere, in which new thoughts were whispering; and amongst other things it occurred to me that outside of Palestine this was the most eastward town of all the crusading world—the town nearest to the Holy Sepulchre.⁶⁹

He went on and into the Armenian Church:

I went from this into several smaller churches, all standing so near to each other that they might have been in one large field. The structures of these were somewhat more ruinous, but the frescoes in one of them at least were more distinct and brilliant. There was a perfect St. George [sic] plunging his spear into the dragon, and a Madonna whose robes were as blue as that morning's sky: in all was the same soundless echo of prayers long silent.⁷⁰ It may be thought a piece of empty sentimentality to say so, but these churches seemed to me to be embodied prayers in themselves. There they stood, looking towards Jerusalem, broken but still steadfast, like the forlorn hope of a world.71

Though I was living in Famagusta at the time, and had documented every church, I knew of no such vivid and clearly emotive paintings, though I was also aware that a lot had happened in the ensuing century and that they might very well now be lost. Some years later, and while conducting a close examination of the unpublished Mogabgab Photographic Archive in Famagusta, the first traces of these elusive murals began, scarcely perceptibly, to emerge in the Armenian Church. The first appearance was a grainy image of the aforementioned St. George/Theodore, partially obscured by scaffolding, in a 70-year-old black-and-white photograph of the interior. Two years later, when the Armenian Church was no longer within a military zone, it was disappointing to note that almost the entire interior had been whitewashed over (Fig. 3.1). Not all murals had disappeared completely however and so photographer Wilbert "Skip" Norman (to whom this book is dedicated) and I conducted an emergency/detailed photographic survey during which Mallock's Madonna in her "morning sky" blue robes also emerged, high on the northern wall (Fig. 3.4).⁷²

Though there is the perception that "scholars of the past are ill-equipped to deal with the political entanglements of the present,"73 I was certain that rigorous intellectual inquiry by an international team on a manageable scale could prove a point and help, in principle, to create a theoretical or political step forward. The quality and obvious importance of these forlorn fourteenth-century images convinced me to commence a project to recover, protect, and study them as did the findings in the report prepared by Paolo Vitti in 2010.74 In the same year the World Monuments Fund, who had placed the Walled City of Famagusta on their Watch List of Endangered Sites in 2008 and again in 2010, published Werner Schmid's report Condition Assessment of Medieval Mural Painting in Six Churches. The contents of this report were harrowing and led directly to a joint commitment from Nanyang Technological University (Singapore), World Monument Fund (New York), and Famagusta Municipality to begin emergency work to stabilize them. The projects which followed were "Emergency Conservation and Restoration of the Art and Architecture of Famagusta" (2012), "Heritage Conservation, Visualization and Education: Protecting Regional Culture of Universal Significance in a Globalizing World" (2012), and most recently "A Multidisciplinary Investigation into the Conservation, Interpretation, Education and Policy Challenges Posed by Lime-wash and Cement-covered Medieval Italo-Byzantine Murals (2014)." To have an American NGO, a leading Asian university, and a local municipality, all engaged as equal partners, all providing matching

funds, was perhaps the first major victory of the project. In time our team would include experts from Israel, Switzerland, Germany, Cyprus (from the Greek, Turkish, and Armenian communities), Mexico, Portugal, England, Italy, United States, New Zealand, and others. It would bring together some of the world's most sophisticated laboratories and state-ofthe-art technologies in close collaboration with traditional art historians and archive-based scholars (Fig. 1.6). Methodologically, this was the second success of the project.

Work on the Armenian Church was conceived as a minimum intervention project, whereby having identified a conservation philosophy, and an appropriate methodology, immediate and urgent data collection began. This was followed by a condition assessment, the development of a conservation plan, and a full survey, before intervention (see Chaps. 10, 11, 12, and 13). Nothing would or should be disturbed, but at the same time, knowledge was needed to prevent further construction or disturbance of the site. After new doors and windows were put in place plans



Fig. 1.6 Laser imaging of the Armenian Church: Section. Courtesy of Solvotek

were drawn up to improve drainage as an essential long-term intervention and ideas proposed to improve visitor access and safety. Negotiations to return the church to the Armenian community for worship were tabled and well received. 75 All the while a huge archival database and bibliography was being created.⁷⁶ We also endeavoured to treat this as a site of memory, a lived space, as opposed to a material conservation project only, and efforts were made to trace the inhabitants from the 1974 photograph (Fig. 1.4). The documentary film Prayers Long Silent by Dan Frodsham was premiered at the invitation of H.E. Archbishop Nareg at the Armenian Prelature of Cyprus, then in Famagusta (in the church of Saints Peter and Paul) and in Nicosia (at the Home for Co-operation) in 2016 and showcased both the depth and breadth of the project in as transparent and intellectually neutral a manner as possible. The educational materials designed by İnanç and Liew (see Chap. 14) were rolled out by elementary school teachers with their pupils during Famagusta's heritage week in April 2016. Advanced 3D modelling of the Armenian Church, to compliment that already piloted at the Cathedral of St. George of the Greeks in Famagusta by Norris, Kaffenberger, and Walsh, is currently underway in Singapore (see Chap. 15).77 This is particularly exciting as it is stimulating musicological research into the "heritage sounds" of Famagusta in the fourteenth century and these will be inserted into the computer-generated models at a later date. The cultural legacy of Famagusta was not purely visual.

Returning to W. H. Mallock in 1889, a seemingly innocuous detail links us across the centuries:

As I walked my mind still went back to the churches, especially to the one in which the frescoes were most brilliant, and more especially still to two inscriptions I had noticed, the one on the dragon's scales, the other on the Madonna's robe. The first of these was a man's name, Demetrius Something, followed by a date. The second was a man's name also, with a date which was only a few years later. It was B. Barker.⁷⁸

The image of the newly stabilized and conserved fourteenth-century Agia Paraskevi (complete with B. Barker graffiti) has removed all doubt about where Mallock visited (Fig. 1.7). I suspect he would be delighted with what has happened to the church and its artwork since his visit 127 years ago. The mission of this exquisite gothic church and its beautifully decorated interior, I would argue, however, is not yet complete in assisting with our understanding of the past, identifying our responsibilities in the present, and demanding our planning for the future.⁷⁹



Fig. 1.7 Finding the initial reference from 1889. "B. Barker." Author's photograph, 2014

The primary mission of this project was to act as a pathfinder and to demonstrate that in the absence of a political solution within wellestablished international norms, there might yet be less obvious avenues worth exploring. Naturally it has led to some difficult questions along the way and that we feel is also one of its greatest impact indicators. For instance: (1) What internal/external influences can be brought to bear to ensure future conservation and educational work; to create strategies to ensure future conservation and educational work; to create strategies to protect and appreciate cultural heritage; and to consider new management strategies for such heritage sites in unrecognized states? (2) Can a wider, international consensus be fostered that accepts that heritage caught in political limbo is a universal responsibility and that it deserves the best efforts of the international community to safeguard it? (3) What roles can NGOs, universities, and special interest organizations play outside of the political sphere that so hampers all other efforts? (4) Should Famagusta be inscribed a UNESCO World Heritage Site or be placed on the World Heritage in Danger List through the efforts of the Technical Committee on Cultural Heritage; (5) Should an "Observatory for Cultural Heritage in Unrecognised States" be established at a research-intensive university or a relevant NGO? or a relevant NGO?

Andrew McCarthy, Director of the Cyprus American Archaeological Research Institute, touches on many of the points raised in this introduction and developed in the chapters that follow in this collection, saying

although archaeologists and historians are often uncomfortable and unprepared to deal with the intricacies of international law, negotiating the legal landscape is a simple fact of life in Cyprus. That said, just knowing the laws is not enough as Cyprus has become a special case requiring special treatment...The situation necessitates a custom-tailored solution to fit the situation in Cyprus.⁸¹

We believe that this "custom-tailored" approach was the value of our project: a triumph of intellectual rather than political leadership, and a detachment of art and architectural history from the Cyprus Issue which had been so detrimental to its own heritage for over 40 years. There is, I feel, a case to be made for the protection of art and architecture merely for the sake of it. One day, but not yet, the Armenian Church will be studied as a part of a complex network of signs, symbols, and belief systems. The art and architecture will be read as a response to, or expression of, a "multicultural and multi-confessional society"82 encapsulating overlapping cultural spheres of contact and patterns of assimilation, confrontation, and segregation in Famagusta.⁸³ It may well become a site of common pride and post-conflict rapprochement. It may even, as we had planned, become a place of worship again for the Armenian community of Cyprus. But not yet; for now, protecting it is quite enough. When discussing the permanent value of such work (undertaken by SAVE) Elizabeth Kassinis was pragmatic:

Furthermore, the nature of heritage projects is such that the tangible accomplishments left behind ensure that the next activity at that site will start at a better place, and the list of successes to which one can refer when under-taking a similar project is longer and more convincing. Ebbs on the political front cannot dismantle or otherwise undo the repair or restoration of a site.⁸⁴

I share that view and take heart from it. Annmarie Weyl Carr talking of Famagusta and both its histories and futures signed off saying "we write in the earnest hope that the future will be more favorable to their preservation than their past has been."⁸⁵ It is one thing to hope, it is another to wait for political winds to change, and it is quite another to pro-actively

search for solutions. The stabilized murals of the Armenian Church are certainly a testimony to the power of art over politics. The half-cleared Nativity scene on the north wall on the other hand, symptomatic of the sudden termination of the project, reminds us that the problematic relationship between culture and politics in Cyprus is still far from resolved.

Notes

- 1. Andrew McCarthy, "The Role of International Organizations in Protecting Cypriot Heritage," Journal of Eastern Mediterranean Archaeology and Heritage Studies 3, no. 2 (2015): 152.
- 2. Benjamin Arbel, Intercultural Contacts in the Medieval Mediterranean: Studies in Honour of David Jacoby (Routledge, 1996), p. ii.
- 3. M. Jansen, "War and Cultural Heritage: Cyprus after the 1974 Turkish Invasion," Minnesota Mediterranean and East European Monographs 14 (Minneapolis: University of Minnesota, 2005).
- 4. For recent studies on the Medieval and Renaissance period see: M. Walsh, N. Coureas, and T. Kiss, eds., Crusader to Venetian Famagusta: 'The Harbour of all this Sea and Realm' (Budapest: Central European Press, 2014); M. Walsh, N. Coureas, P. Edbury, eds., Medieval Famagusta: Studies in Art, Architecture and History (Farnham: Ashgate Press, 2012); Annemarie Weyl Carr, ed., Famagusta: Art and Architecture, vol. 1 (Turnhout: Brepols, 2014). In the latter Tassos Papacostas entitles his chapter "Byzantine Famagusta: An Oxymoron?"
- 5. L. Makhairas, Recital Concerning the Sweet Land of Cyprus entitled 'Chronicle', trans. R. M. Dawkins (Oxford: Clarendon Press, 1932), 81. The original sixteenth-century manuscripts are to be found in Libreria Nazionale, Venice (class. 8, cod. 16), and the Bodleian Library, Oxford (Selden, supra 14).
- 6. For a recent discussion on this earlier church and for evidence of its foundations see: M. Walsh and Z. Cagnan, "A Silent Witness: Seismic Activity and the Structural Integrity of St. Nicholas Cathedral Famagusta," in Famagusta: City of Empires 1571-1960, ed. M. Walsh, (Cambridge: Cambridge Scholars Publishers, 2015); for a recent discussion on "style" see: Nicola Coldstream, "Famagusta Cathedral and the Rayonnant Style," in Carr, Famagusta, 63-75.

- 7. M. Walsh "On of the princypalle Havenes of the See': The Port of Famagusta and the Ship Graffiti of its Ruined Churches," International Journal of Nautical Archaeology (2008).
- 8. Rita Severis, Monuments and Memories: Famagusta: The Emporium of the East (Nicosia: Hellenic Bank, 2005), 63. See also: D. Jacoby, "Studies on the Crusader States and on Venetian Expansion," in The Rise of a New Emporium in the Eastern Mediterranean: Famagusta in the Late Thirteenth Century (Northampton: Variorum Reprints, 1989), 164; Peter W. Edbury, "Famagusta in 1300," in Kingdoms of the Crusaders: From Jerusalem to Cyprus (Farnham: Ashgate/Variorum, 1999), 337-53; Michel Balard, "Famagouste au debut du XIV siècle," in Fortifications, Portes de Villes, Places Publiques dans le monde Mediteraneen, Jacques Heers (Paris: Presses de l'Université de Paris-Sorbonne, 1985), 294; I. A. Eliades, "Cultural Interactions in Cyprus 1191-1571: Byzantine and Italian Art," in Power and Culture - Hegemony, interaction and dissent, eds. A. Cimdina and J. Osmond (Pisa: Plus, 2006), 18; see Cliohres.net.
- 9. Ludolphus Suchensis, Eyn Register Über das Buch von dem Weg zu dem Heiligen Grab oder Gelobten Land und Wundern hei mit begriffen (Augsburg, 1477), 40.
- 10. Jean de Mandeville, Reisen dt. Heidelburg MS, See Ms. p. 17r (34 of the pdf), lines 25-29, accessed date, http://digi.ub.uniheidelberg.de/diglit/cpg138/0007.
- 11. M. 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," Journal of Eastern Mediterranean Archaeology and Heritage (2013); Ahmet Usta, Slavery in Fourteenth Century Famagusta: The Evidence of the Genoese and Venetian Notarial Acts (Saarbrücken: Lambert Academic Publishing, 2012).
- 12. The presence of an Armenian community on Cyprus pre-dates that considerably, probably to the sixth century. See: Alexander-Michael Hadjilyra, The Armenians of Cyprus (Larnaka: The Kalaydjian Foundation, 2009); Sossie Kasbarian, "Rooted and Routed: The Contemporary Armenian Diaspora in Cyprus and Lebanon," PhD diss., University of London, London, 2006; John Matossian, Silent Partners, the Armenians and Cyprus, 578-1878 (Nicosia: Lusignan

- Press, 2009); Andrekos Varnava, Nicholas Coureas, Marina Elia, eds, The Minorities of Cyprus: Development Patterns and the Identity of the Internal-Exclusion (Newcastle: Cambridge Scholars Publishing, 2009); Noubar Maxoudian, A belief history of the Armenians in Cyprus (1936) (published in Armenian Review 27, no. 4 (1975): 398-416); G. Dedeyan, Les Armeniens à Chypre de la Fin du XIe au Début du XIIIe Siécle, unpublished, Actes du Colloque 'Les Lusignans et L'outre-Mer', Poitiers-Lusignan, October 20–24, 1993.
- 13. M. Eeinhold Eoehricht, "Liber Peregrinationis Fratis Jacobi de Verona," Revue de l'Orient Latin (1895), 178.
- 14. Jacobus of Verona in Excerpta Cypria, ed. C.D. Cobham (Cambridge, 1908), 17. See also: Chris Schabel, "Religion," in Cyprus: society and culture 1191-1374, Angel Nicolaou-Konnari and Chris Schabel (Turnhout: Brill, 2005), 182. Five centuries later Gabriele d'Annunzio's La Pisanella of 1914 is set in Famagusta and has stage directions which talk openly of Armeni e Sirii, Nestoriani e Giacobiti, Samaritani e Giudei, Catalani e Arabi di Spagna, Siciliani e Napolitani, Fiorentini e Pisani, Venezziani e Genovese, uomini di Linguadoca e di Provenza, tutti I navigator del Mediterraneo, Levantini, e Ponentini. Sir Harry Luke, Cyprus: A Portrait and an Appreciation (London: Rustem and Co, 1957), 120. La Pisanelle was first performed on June 11, 1913, at the Théâtre de Châtelet, Paris, was directed by Vsevolod Meyerhold, choreographed by Mikhail Fokin, and accompanied by Ildebrando da Parma's score.
- 15. G. Dédéyan, "Les Arméniens à Chypre de la fin du XII^e au début du XIII^e siècle," in Les Lusignans et l'Outre-Mer (Poitiers: Université de Poitiers, 1995), 122-31; G. Grivaud, "Les minorities orientales à Chypre (époque medieval et moderne)," in Chypre et la Méditerranée orientale (Lyons: Université Lumière-Lyon 2, Université de Chypre, 2000), 43-70; N. Coureas, "Non-Chalcedonian Christians on Latin Cyprus," in Dei Gesta per Francos. Études sur les croisades dédiées à Jean Richard, ed. M. Balard, B. Z. Kedar and J. Riley-Smith (Aldershot: 2001), 349–360.
- 16. Tomasz Patryk Borowski, "The Role Of Religion in the Shaping of Identity and Social Relations in Crusader Famagusta, Cyprus 1191-1489," PhD diss., University of Reading, 2015, 89.

- 17. Borowski, "The Role of Religion," abstract. For painting see M. Bacci, "The Armenian Church in Famagusta and Its Mural Decoration: Some Iconographic Remarks," in *Culture of Cilician Armenia*, proceedings of the international symposium (Antelyas: Armenian Katholicossate of Cilicia, January 14–18, 2008), M. Bacci, "Patterns of Church Decoration in Famagusta (Fourteenth to Sixteenth Centuries)," in Famagusta. Art and Architecture, ed. A. W. Carr (Turnhout: Brill, 2014), 201–74; M. Bacci, "Identity Markers in the Art of Fourteenth-Century Famagusta," in *The Harbour of all this Sea and Realm. Crusader to Venetian Famagusta*, eds M. J. K. Walsh, T. Kiss, and N. H. Coureas (Budapest: Central European University, 2014), 145–58.
- 18. Édouard Corroyer, *Gothic Architecture* (New York: Macmillan & Co, 1893), 125; see also Michalis Olympios, "The Shifting Mantle of Jerusalem. Ecclesiastical Architecture in Lusignan Famagusta," in Annmarie Weyl Carr, *Famagusta: Art and Architecture* (Brepols, 2014), 75–142.
- 19. Carr, Famagusta, 19.
- 20. See also: Maria Paschali, "Painting Identities in Fourteenth Century Famagusta: Byzantine and Gothic Imagery in St. George of the Greeks and Our Lady of the Carmelites," PhD diss., Courtauld Institute, 2014–15.
- 21. Seyit Özkutlu, "Medieval Famagusta: Socio-Economic and Socio-Cultural Dynamics (13th to 15th Centuries)," PhD diss., University of Birmingham, 2014; also contested in R. Lopez, Storia delle colonie Genovese nel Mediterraneo (Bologna: Nicola Zanichelli, 1938), 425.
- 22. Emanuela Guidoboni and Alberto Comastri, Catalogue of earth-quakes and tsunamis in the Mediterranean area from the 11th to the 15th century (Istituto Nazionale di Geofisica e Vulcanologia), 809.
- 23. Angel Nicolaou-Konnari and Christopher David Schabel, *Cyprus: Society and Culture 1191–1374* (Brill: 2005), 160–61.
- 24. M. Walsh and Z. Cagnan, "A Silent Witness: Seismic Activity and the Structural Integrity of St. Nicholas Cathedral Famagusta" in *Famagusta: City of Empires* 1571–1960, ed, M. Walsh, M. (Cambridge Scholars Publishers, 2015).
- 25. Basil Stewart, My Experiences of Cyprus (Routledge, 1908), 213.
- 26. M. Walsh, "'The Age of Ruins': Whatever Happened to Venetian Famagusta," in *The Northern Face of Cyprus: New Studies in Cypriot*

- Archaeology and Art History, eds. Latife Summerer and Hazar Kaba (City: Yayinlari, 2016).
- 27. R. C. Jennings, Christians and Muslims in Ottoman Cyprus and the Mediterranean World 1571–1640 (New York: New York University Press, 1993).
- 28. See: Marios Hadjianastasis, "Ladders, petards and responsibility: retracing the failed Tuscan attempt at capturing Famagusta, 1607-2012" in City of Empires: Ottoman and British Famagusta 1571-1960, ed. M. Walsh (Cambridge Scholars Publishers, 2015).
- 29. Walsh, M. 'Othello', 'Turning Turk' and Cornelis de Bruyn's Copperplate of the Ottoman Port of Famagusta in the Seventeenth Century' Mariners Mirror (2012).
- 30. De Bruyn, de Reizen van Cornelis de Bruyn, 366.
- 31. Cobham, Exerpta Cypria, 274.
- 32. M. Walsh, "The Vile Embroidery of Ruin': Historic Famagusta between Ottoman and British Empires in fin de siècle Cyprus: 1878-1901," Journal of Intercultural Studies (2010).
- 33. Ege Uluca, Gazimağusa Kaleiçi'non Tarihsel süreç İçindeki Kentsel Gelişimi Ve Değişimi, PhD diss., Istanbul Technical University, 2006; for publications on this subject in English see Ege Uluca Tümer, "Twentieth-Century Restorations to the Medieval and Renaissance Monuments of Famagusta" in Medieval Famagusta: Studies in Art, Architecture and History, eds. M. Walsh, N. Coureas, P. Edbury (Farnham: Ashgate Press, 2012).
- 34. See also: J. G., Schryver and C. Schabel, The Graffiti in the Royal Chapel of Pyrga, Report of the Department of Antiquities, Cyprus, Nicosia, 2003, (2004).
- 35. George Jeffery, A Description of the Historic Monuments of Cyprus (Nicosia: GPO, 1918), 143-4.
- 36. Despina Pilides, George Jeffery: his diaries and the ancient monuments of Cyprus (Lefkosia: Department of Antiquities, 2009), 334.
- 37. Walsh, M., N. Coureas, P. Edbury, eds., Medieval Famagusta: Studies in Art, Architecture and History (Farnham: Ashgate Press, 2012): appendix.
- 38. See: See specifically UN Security Council Resolution 365 from 1974 and UN Security Council Resolution 367 from 1975. For the complete text of these and those listed below, go to: http:// www.un.org/en/sc/documents/resolutions/.

- See also: UN Security Council Resolution 541 from 1983 and UN Security Council Resolution 550 from 1984.
- 39. Vera Costantini, "The City of Famagusta in Early Ottoman Sources," in City of Empires Famagusta, ed. M. Walsh (CSP, 2015).
- 40. For parallel studies see: Government of Georgia, "State Strategy on Occupied Territories: Engagement Through Cooperation." 2010, accessed Jan 9, 2015, http://www.government.gov.ge/ files/225_31228_370287_SMR-Strategy-en.pdf. Pegg, Scott. "De Facto States in the International System."
 - Institute of International Relations The University of British Columbia Working Paper 21 (1998): 1-26.
- 41. Nina Caspersen, Unrecognised States (Polity, 2012), 1.
- 42. Ibid.
- 43. Ibid., 89.
- 44. Ibid., 23.
- 45. Ibid., 32.
- 46. Ibid., 42.
- 47. For other case studies on heritage in unrecognized states see: Sarah Wolfestan, "Community Participation in Heritage in Post-Conflict Kosovo. Promoting Democracy, Dialogue and Reconciliation Through Cultural Heritage," Interpreting the Past: The Future of Heritage. Changing Visions Attitudes and Contexts in the twentyfirst century, 2007, accessed Dec 17, 2014, https://ucl.academia. edu/sarahwolferstan; Savalan Suleymanli, "How conflicts pose a threat to cultural heritage: bitter realities of the Nagorno-Karabakh conflict." The University of Birmingham Linguistics Magazine, 2014, accessed Dec 12, 2014, http://theuoblinguist.co.uk/en/ culture/how-conflicts-pose-a-threat-to-cultural-heritage-bitterrealities-of-the-nagorno-karabakh-conflict/. Eleni Sideri, "'The Land of the Golden Fleece': Conflict and Heritage in Abkhazia," Journal of Balkan and Near eastern Studies 14, no. 2 (2012): 263-78. Anne-Françoise Morel, "Identity and Conflict: Cultural Heritage, Reconstruction and National Identity in Kosovo," Journal of Architecture Media Politics Society 3, no. 1 (2013): 1-20; Zoe Niesel, "Collateral Damage: Protecting Cultural Heritage in Crimea and Eastern Ukraine," The Wake Forest Law Review, August 22, 2014, accessed Dec 16, 2014;

Onnik Krikorian, "Cultural Destruction and Preservation in Armenia, Azerbaijan, and Nagorno Karabakh," Conflict Voices (2012), accessed Dec 22, 2014, http://www.conflict-voices.net/ blog/2012/05/cultural-destruction-and-preservation-in-armenia-azerbaijan-and-nagorno-karabakh/; Jose Maria Arraiza, "A matter of balance. Cultural heritage, property rights and interethnic relations in Kosovo" (The Jus Post Bellum Project, University of Leiden, The Hague, 2014), accessed Dec 17, 2014, http:// papers.ssrn.com/sol3/papers.cfm?abstract_id=2504990. Abdullaev, Ibraim. "Representation and Revival of the Cultural Heritage of the Crimean Tatars," UNPO (2005), accessed December 16, 2014, http://unpo.org/article/1746.

- 48. Carlos Jaramillo, "Cultural Heritage in Unrecognised Territories: A Report" unpublished, 2015.
- 49. Carlos Jaramillo, "Famagusta, Cyprus: A Third Way in Cultural Heritage," (PhD diss., Nanyang Technological University, 2015), iii.
- 50. Ibid., iv.
- 51. http://www.wipo.int/wipolex/en/text.jsp?file_id=189903#Link Target 2309.
- 52. E. Kaymak, A. Lordos, and N. Tocci, Building Confidence in Peace: Public Opinion and the Cyprus Peace Process (Brussels: Centre for European Policy Studies, 2008).
- 53. M. Walsh and A. Langdale, "The Architecture, Conservation History, and Future of the Armenian Church of Famagusta, N. Cyprus," Chronos (2009): 29.
- 54. Personal communication to the author, May 30, 2007.
- 55. Susan Balderstone, "Cultural Heritage and Human Rights in Divided Cyprus," in Cultural Heritage, Diversity and Human Rights: Intersections in Theory and Practice, eds. Michele Langfield, William Logan, and Máiréd Nic Craith (Routledge, 2010). In particular she had written "[t]he opportunity will be there perhaps in these projects for each community to recognize the cultural sensibilities of the other, and to demonstrate this understanding in the way the cultural heritage of Cyprus is conserved and presented," (240).
- 56. Cited in Andrew McCarthy, "The Role of International Organisations in Protecting Cypriot Heritage," Journal of Eastern Mediterranean Archaeology and Heritage Studies 3, no. 2 (2015): 151.

- 57. Christopher Louise, Programme Manager, UNDP-ACT, quoted in: Paolo Vitti, The Armenian church and Monastery Restoration Project (UNDP, 2014), 4.
- 58. McCarthy, "The Role of International Organizations," 126.
- 59. Ibid., 149.
- 60. See also: S. Hadjisavvas, "Preface," in Cyprus: A Civilization Plundered, ed. Committee for the Protection of the Cultural Heritage of Cyprus (Athens: The Hellenic Parliament, 2000), 13-15.
- 61. Müge Şevketoğlu, Riza Tuncel and Vasıf Şahoğlu, Protecting the Cultural Heritage of Cyprus: International Laws and Concerns', Journal of Eastern Mediterranean Archaeology and Heritage Studies 3, no. 2 (2015): p. 142.
- 62. J. Dalibard, Cyprus: Status of the Conservation of Cultural Property (Paris: UNESCO, 1976), http://unesdoc.unesco.org/ images/0002/000217/021772eb.pdf, accessed February 16, 2015.
- 63. Ymenus van der Werff presented his "Information Memorandum" on the cultural heritage of Cyprus after visiting the island in June 1989: See Y. van der Werff, "Information Report on the Cultural Heritage of Cyprus," Parliamentary Assembly of the Council of Europe Document 6079. (Brussels: Parliamentary Assembly of the Council of Europe, 1989).
- 64. Cormack in Y. van der Werff, 1989: 36.
- 65. See: Ali Tuncay, "The Technical Committee on Cultural Heritage in Cyprus: From Conflict to Co-operation," The Northern Face of Cyprus: New Studies in Cypriot Archaeology and Art History, Latife Sumerer and Hazar Kaba (Istanbul: Yayinlari, 2016).
- 66. Müge Şevketoğlu, Riza Tuncel and Vasıf Şahoğlu, "Protecting the Cultural Heritage of Cyprus: International Laws and Concerns," Journal of Eastern Mediterranean Archaeology and Heritage Studies 3, no. 2 (2015): 144.
- 67. Elizabeth V. Kassinis, "Patrimony for Peace: Supporting Cultural Heritage Projects to Build Bridges in Cyprus," Journal of Eastern Mediterranean Archaeology and Heritage Studies 3, no. 2 (2015): 152.
- 68. Ibid.
- 69. W. H. Mallock, In An Enchanted Island or A Winter's Retreat in Cyprus (London, Richard Bentley and Son, 1889), 251.
- 70. This is the source of the title of this book.

- 71. Mallock, In An Enchanted Island, 252-3.
- 72. These have been published in: Walsh and Langdale, "The Architecture, Conservation History, and Future of the Armenian Church."
- 73. Journal of Eastern Mediterranean Archaeology and Heritage Studies 3, no. 2, (2015: 127.
- 74. In this he noted that despite the overall sound structural integrity of the Armenian Church, there were nevertheless cracks on the wall above the apse; that there were deep gaps in the masonry due to erosion; and that the lintels and masonry above the south and west doorways were fissured and the vault damaged by granular disintegration. He pointed to water leakage too which had left painted plasters "particularly fragile" and often covered by dust and soot deposits (probably caused by burnt oilseed rape used in the oil-lamps) combined with bird droppings and anthropogenic impact (paint and graffiti). Bio-deterioration (and colonization), damage by soluble salts and capillary moisture, and inappropriate previous interventions added to the bleak diagnosis. Paolo Vitti was also responsible for the award-winning intervention in the Armenian Church of Nicosia, which was completed in 2014. See: Paolo Vitti, The Armenian church and Monastery Restoration Project (UNDP, 2014).
- 75. Hacer Basarir in her doctoral study finished with a particular recommendation for the Martinengo Bastion in which the Armenian Church and the Carmelite churches are located, as well as the "space" which surrounds them, to be reconditioned for "open air exhibitions and cultural gatherings." Hacer Basarir, "Urban Conservation in the Walled City of Famagusta/Gazimagusa" (PhD diss., University of Manchester, 2009), 325.
- 76. Simultaneously work on St. Anne's Church began. See: "Emergency Conservation of Medieval Murals in Northern Cyprus: St. Anne's Church, Famagusta," (3rd International Conference on Documentation, Conservation, and Restoration of the Architectural Heritage and Landscape Protection, REUSO 2015, Valencia, Spain, October 22-24, 2015).
- 77. S. Norris, M. Walsh and T. Kaffenberger, "Visualising Famagusta: Interdisciplinary Approaches to the Study of the Orthodox Cathedral of Saint George of the Greeks in Famagusta, Cyprus," Archives and Manuscripts Journal (March, 2014); M. Walsh and

- G. İnanç, "Conservation, visualisation, education, reconciliation" in International Council of Museums, ed. J. Bridgland (Paris, 2014).
- 78. Mallock, In an Enchanted Island, 253.
- 79. Carlos Jaramillo concluded his report as follows: "To conclude, it is difficult to view Cultural Heritage outside the spectrum of UNESCO and its principles. The understanding that what is left outside this community also requires to be assessed under the same standards is unquestionable. In short, the set of ethics that rule countries with full access to the deliberation among the international community is assumed to be needed for unrecognized territories."
- 80. One such recommendation was made by Birgitta Hoberg in 2011 after her visit to Famagusta at the request of the Swedish Foundation Cultural Heritage Without Borders and the Swedish Embassy in Nicosia.
- 81. McCarthy, "The Role of International Organizations," 152.
- 82. M. Bacci, "Syrian, Palaiologan, and Gothic Murals in the 'Nestorian' Church of Famagusta," Deltion tes christianikes archaiologikes Hetaireias (2006): 209.
- 83. J. G. Schryver, "Spheres of Contact and Instances of Interaction in the Art and Archaeology of Frankish Cyprus, 1191-1359" (PhD diss., Cornell University, 2005), 178-9.
- 84. Kassinis, Patrimony for Peace, 155.
- 85. Carr, Famagusta, 19.

BIBLIOGRAPHY

- Abdullaev, Ibraim. "Representation and Revival of the Cultural Heritage of the Crimean Tatars." *UNPO* (2005). Accessed December 16, 2014. http://unpo. org/article/1746.
- Arbel, Benjamin. Intercultural contacts in the Medieval Mediterranean: Studies in Honour of David Jacoby. London: Routledge, 1996.
- Arraiza, Jose Maria. "A matter of balance. Cultural heritage, property rights and inter-ethnic relations in Kosovo." The Jus Post Bellum Project, University of Leiden, The Hague, 2014. Accessed Dec 17, 2014. http://papers.ssrn.com/ sol3/papers.cfm?abstract_id=2504990.
- Bacci, M. "Syrian, Palaiologan, and Gothic Murals in the 'Nestorian' Church of Famagusta," Deltion tes christianikes archaiologikes Hetaireias (2006).

- Bacci, M. "The Armenian Church in Famagusta and Its Mural Decoration: Some Iconographic Remarks." In Culture of Cilician Armenia, proceedings of the international symposium. Antelyas: Armenian Katholicossate of Cilicia, January 14-18, 2008.
- Bacci, M. "Identity Markers in the Art of Fourteenth-Century Famagusta." In The Harbour of all this Sea and Realm. Crusader to Venetian Famagusta, edited by M. J. K. Walsh, T. Kiss, and N. H. Coureas. Budapest: Central European University Press, 2014.
- Bacci, M. "Patterns of Church Decoration in Famagusta (Fourteenth to Sixteenth Centuries)." In Famagusta. Art and Architecture, edited by A. W. Carr. Turnhout: Brepols, 2014.
- Balderstone, Susan. "Cultural Heritage and Human Rights in Divided Cyprus." In Cultural Heritage, Diversity and Human Rights: Intersections in Theory and Practice, edited by Michele Langfield, William Logan and Máiréd Nic Craith. London: Routledge, 2010.
- Balard, Michel. "Famagouste au debut du XIV siècle." In Fortifications, Portes de Villes, Places Publiques dans le monde Mediteraneen, by Jacques Heers. Paris: Presses de l'Université de Paris-Sorbonne, 1985.
- Basarir, Hacer. "Urban Conservation in the Walled City of Famagusta/ Gazimagusa." PhD diss., University of Manchester, 2009.
- Borowski, Tomasz Patryk. "The Role Of Religion in the Shaping of Identity and Social Relations in Crusader Famagusta, Cyprus 1191-1489." PhD diss., University of Reading, 2015.
- Carr, Annemarie Weyl, ed. Famagusta: Art and Architecture. Vol. 1. Turnhout: Brepols, 2014.
- Caspersen, Nina. Unrecognised States. Cambridge: Polity, 2012.
- Corroyer, Édouard. Gothic Architecture. New York: Macmillan & Co., 1893.
- Coureas, N. "Non-Chalcedonian Christians on Latin Cyprus." In Dei Gesta per Francos. Études sur les croisades dédiées à Jean Richard, edited by M. Balard, B. Z. Kedar and J. Riley-Smith. Aldershot: 2001.
- Dalibard, J. Cyprus: Status of the Conservation of Cultural Property. Paris: UNESCO, 1976. Accessed February 16, 2015. http://unesdoc.unesco.org/ images/0002/000217/021772eb.pdf.
- Dedeyan, G. Les Armeniens à Chypre de la Fin du XI^e au Début du XIII^e Siécle. Unpublished, Actes du Colloque 'Les Lusignans et L'outre-Mer'. Lusignan -Poitiers, October 20-24, 1993.
- Dédéyan, G. "Les Arméniens à Chypre de la fin du XIIe au début du XIIIe siècle." In Les Lusignans et l'Outre-Mer. Poitiers: 1995.
- Edbury, Peter W. "Famagusta in 1300." In Kingdoms of the Crusaders: From Jerusalem to Cyprus. Farnham: Ashgate/Variorum, 1999.
- Eliades, I. A. "Cultural Interactions in Cyprus 1191-1571: Byzantine and Italian Art." In Power and Culture - Hegemony, interaction and dissent, edited by A. Cimdina and J. Osmond. Pisa: Plus, 2006.

- "Emergency Conservation of Medieval Murals in Northern Cyprus: St. Anne's Church, Famagusta." 3rd International Conference on Documentation, Conservation, and Restoration of the Architectural Heritage and Landscape Protection, REUSO 2015, Valencia, Spain, October 22-24, 2015.
- Eoehricht, M. Eeinhold. "Liber Peregrinationis Fratis Jacobi de Verona." Revue de l'Orient Latin (1895).
- Government of Georgia. "State Strategy on Occupied Territories: Engagement Through Cooperation." 2010. Accessed January 9, 2015. http://www.government.gov.ge/files/225_31228_370287_SMR-Strategy-en.pdf.
- Grivaud, G. "Les minorities orientales à Chypre (époque medieval et moderne)." In Chypre et la Méditerranée orientale. Lyons: Maison de l'Orient et de la Méditerranée Jean Pouilloux, 2000.
- Guidoboni, Emanuela and Alberto Comastri. Catalogue of earthquakes and tsunamis in the Mediterranean area from the 11th to the 15th century. Istituto Nazionale di Geofisica e Vulcanologia, 2005.
- Hadjilyra, Alexander-Michael. The Armenians of Cyprus. Larnaka: The Kalaydjian Foundation, 2009.
- Hadjisavvas, S. Cyprus: A Civilization Plundered, edited by Committee for the Protection of the Cultural Heritage of Cyprus. Athens: The Hellenic Parliament, 2000.
- Hadjianastasis, Marios. "Ladders, petards and responsibility: retracing the failed Tuscan attempt at capturing Famagusta, 1607-2012." In City of Empires: Ottoman and British Famagusta 1571-1960, edited by M. Walsh. Cambridge: Cambridge Scholars Publishers, 2015.
- Jacobus of Verona. Excerpta Cypria, edited by C.D. Cobham. Cambridge: University Press, 1908.
- Jacoby, D. "Studies on the Crusader States and on Venetian Expansion." In The Rise of a New Emporium in the Eastern Mediterranean: Famagusta in the Late Thirteenth Century. Northampton: Variorum Reprints, 1989.
- Jansen, M. "War and Cultural Heritage: Cyprus after the 1974 Turkish Invasion." Minnesota Mediterranean and East European Monographs. Vol. 14. Minneapolis: University of Minnesota, 2005.
- Jaramillo, Carlos. "Cultural Heritage in Unrecognised Territories: A Report." Unpublished report, 2015.
- Jaramillo, Carlos. "Famagusta, Cyprus: A Third Way in Cultural Heritage." PhD diss., Nanyang Technological University, 2014.
- Jeffery, George. A Description of the historic Monuments of Cyprus. Nicosia: GPO, 1918.
- Jennings, R. C. Christians and Muslims in Ottoman Cyprus and the Mediterranean World 1571-1640. New York: New York University Press, 1993.
- Kasbarian, Sossie. "Rooted and Routed: The Contemporary Armenian Diaspora in Cyprus and Lebanon." PhD diss., University of London, London, 2006.

- Kassinis, Elizabeth V. "Patrimony for Peace: Supporting Cultural Heritage Projects to Build Bridges in Cyprus." Journal of Eastern Mediterranean Archaeology & Heritage Studies 3, no. 2 (2015), 153-156.
- Kaymak, E., A. Lordos, and N. Tocci. Building Confidence in Peace: Public Opinion and the Cyprus Peace Process. Brussels: Centre for European Policy Studies, 2008.
- Krikorian, Onnik. "Cultural Destruction and Preservation in Armenia, Azerbaijan, and Nagorno Karabakh." Conflict Voices (2012). Accessed December 22, 2014. http://www.conflict-voices.net/blog/2012/05/cultural-destructionand-preservation-in-armenia-azerbaijan-and-nagorno-karabakh/.
- Luke, Sir Harry. Cyprus: A Portrait and an Appreciation. London: Rustem and Co., 1957.
- Makhairas, L. Recital Concerning the Sweet Land of Cyprus entitled 'Chronicle', translated by R. M. Dawkins. Oxford: Clarendon Press, 1932.
- Mallock, W. H. In An Enchanted Island or A Winter's Retreat in Cyprus. London, Richard Bentley & Son, 1889.
- Mandeville, Jean de. Reisen dt. Heidelburg Manuscript. Universitatsbibiothek, Heidelberg. http://digi.ub.uni-heidelberg.de/diglit/cpg138/0007.
- Matossian, John. Silent Partners, the Armenians and Cyprus, 578–1878. Nicosia: Lusignan Press, 2009.
- Maxoudian, Noubar. A belief history of the Armenians in Cyprus. (1936) [published in Armenian Review 27, no. 4 (1974): 398-416].
- McCarthy, Andrew. "The Role of International Organizations in Protecting Cypriot Heritage." Journal of Eastern Mediterranean Archaeology and Heritage Studies 3, no. 2 (2015).
- Morel, Anne-Françoise. "Identity and Conflict: Cultural Heritage, Reconstruction and National Identity in Kosovo." Journal of Architecture Media Politics Society 3, no. 1 (2013).
- Nicolaou-Konnari Angel, and Christopher David Schabel. Cyprus: Society and Culture 1191-1374. Leiden: Brill, 2005.
- Niesel, Zoe. "Collateral Damage: Protecting Cultural Heritage in Crimea and Eastern Ukraine." The Wake Forest Law Review (August 22, 2014). Accessed Dec 16, 2014. http://wakeforestlawreview.com/tag/international-law/.
- Norris, S., M. Walsh and T. Kaffenberger. "Visualising Famagusta: Interdisciplinary Approaches to the Study of the Orthodox Cathedral of Saint George of the Greeks in Famagusta, Cyprus." Archives and Manuscripts Journal (March 2014).
- Olympios, Michalis. "The Shifting Mantle of Jerusalem. Ecclesiastical Architecture in Lusignan Famagusta." In Famagusta: Art and Architecture, edited by Annmarie Weyl Carr. Turnhout: Brepols, 2014.
- Orange, Donna M. Thinking for Clinicians: Philosophical Resources for Contemporary Psychoanalysis and the Humanistic Psychotherapies. New York: Taylor & Francis, 2009.

- Özkutlu, Seyit. "Medieval Famagusta: Socio-Economic and Socio-Cultural Dynamics (13th to 15th Centuries)." PhD diss., University of Birmingham, 2014.
- R. Lopez, Stiria delle colonie Genovese nel Mediterraneo. Bologna: Nicola Zanichelli, 1938.
- Paschali, Maria. "Painting Identities in Fourteenth Century Famagusta: Byzantine and Gothic Imagery in St. George of the Greeks and Our Lady of the Carmelites." PhD diss., Courtauld Institute, 2014–15.
- Schabel, Chris. "Religion." In Cyprus: society and culture 1191-1374, edited by Angel Nicolaou-Konnari and Chris Schabel. Boston: Brill, 2005.
- Severis, Rita. Monuments and Memories: Famagusta: The Emporium of the East. Nicosia: Hellenic Bank, 2005.
- Pegg, Scott. "De Facto States in the International System." Institute of International Relations The University of British Columbia Working Paper 21 (1998): 1–26.
- Philippe de Mezieres, Le Songe du Vieil Pelerin, edited by G. W. Goopland. Cambridge: Cambridge University Press, 1969.
- Pilides, Despina. George Jeffery: his diaries and the ancient monuments of Cyprus. Lefkosia: Department of Antiquities, Ministry of Communications and Works, Republic of Cyprus, 2009.
- Schryver, J. G. "Spheres of Contact and Instances of Interaction in the Art and Archaeology of Frankish Cyprus, 1191–1359." PhD diss., Cornell University, 2005.
- Schryver, J. G. and C. Schabel. The graffiti in the Royal Chapel of Pyrga. Report of the Department of Antiquities, Cyprus, Nicosia, 2003, (2004).
- Sideri, Eleni. "The Land of the Golden Fleece': Conflict and Heritage in Abkhazia." Journal of Balkan and Near eastern Studies 14, no. 2 (2012): 263-78.
- Şevketoğlu, Müge, Riza Tuncel and Vasıf Şahoğlu, "Protecting the Cultural Heritage of Cyprus: International Laws and Concerns." Journal of Eastern Mediterranean Archaeology and Heritage Studies 3, no. 2 (2015).
- Sørensen, Marie Louise Stig and Dacia Viejo Rose. War and Cultural Heritage: Biographies of Place. Cambridge: Cambridge University Press, 2015.
- Stewart, Basil. My Experiences of Cyprus. London: Routledge, 1908.
- Suchensis, Ludolphus. Eyn Register Über das Buch von dem Weg zu dem Heiligen Grab oder Gelobten Land und Wundern hei mit begriffen. Augsburg, 1477.
- Suleymanli, Savalan. "How conflicts pose a threat to cultural heritage: bitter realities of the Nagorno-Karabakh conflict." The University of Birmingham Linguistics Magazine (2014). Accessed December 12, 2014. http:// theuoblinguist.co.uk/en/culture/how-conflicts-pose-a-threat-to-culturalheritage-bitter-realities-of-the-nagorno-karabakh-conflict/.
- Tümer, Ege Uluca. Gazimağusa Kaleiçi'non Tarihsel süreç Içindeki Kentsel Gelişimi Ve Değişimi. PhD diss., İstanbul Technical University, 2006.

- Tümer, Ege Uluca. "Twentieth-Century Restorations to the Medieval and Renaissance Monuments of Famagusta." In Medieval Famagusta: Studies in Art, Architecture and History, edited by M. Walsh, N. Coureas, P. Edbury. Farnham: Ashgate Press, 2012.
- Tuncay, Ali. "The Technical Committee on Cultural Heritage in Cyprus: From Conflict to Co-operation." The Northern Face of Cyprus: New Studies in Cypriot Archaeology and Art History. Latife Sumerer and Hazar Kaba. Istanbul: Yayinlari, 2016.
- Usta, Ahmet. Slavery in Fourteenth Century Famagusta: The Evidence of the Genoese and Venetian Notarial Acts. Lambert Academic Publishing, 2012.
- Varnava, Andrekos, Nicholas Coureas, and Marina Elia, eds. The Minorities of Cyprus: Development Patterns and the Identity of the Internal-Exclusion. Newcastle: Cambridge Scholars Publishing, 2009.
- Vitti, Paolo. The Armenian church and Monastery Restoration Project. UNDP, 2014.
- Walsh, M. "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." Journal of Eastern Mediterranean Archaeology and Heritage (2013).
- Walsh, M. "On of the princypalle Havenes of the See': The Port of Famagusta and the Ship Graffiti of its Ruined Churches." International Journal of Nautical Archaeology (2008).
- Walsh, M. "Othello", 'Turning Turk' and Cornelis de Bruyn's Copperplate of the Ottoman Port of Famagusta in the Seventeenth Century." Mariners Mirror (2012).
- Walsh, M. "The Age of Ruins': Whatever Happened to Venetian Famagusta." In The Northern Face of Cyprus: New Studies in Cypriot Archaeology and Art History, edited by Latife Summerer and Hazar Kaba. Istanbul: Yayinlari,
- Walsh, M. "The Vile Embroidery of Ruin': Historic Famagusta between Ottoman and British Empires in fin de siècle Cyprus: 1878–1901." Journal of Intercultural Studies (2010).
- Walsh, M. and Z. Cagnan. "A Silent Witness: Seismic Activity and the Structural Integrity of St. Nicholas Cathedral Famagusta." In Famagusta: City of Empires 1571-1960, edited by M. Walsh. Cambridge Scholars Publishers, 2015.
- Walsh, M. and G. İnanç. "Conservation, visualisation, education, reconciliation." In International Council of Museums, ed. J. Bridgland. Paris, 2014.
- Walsh M. and A. Langdale. "The Architecture, Conservation History, and Future of the Armenian Church of Famagusta, N. Cyprus." Chronos (2009): 29.
- Walsh, M., N. Coureas, P. Edbury, eds. Medieval Famagusta: Studies in Art, Architecture and History. Farnham: Ashgate Press, 2012.
- Walsh, M., N. Coureas, and T. Kiss, eds. Crusader to Venetian Famagusta: 'The Harbour of all this Sea and Realm'. Budapest: Central European Press, 2014.

- Werff, Y. van der. "Information Report on the Cultural Heritage of Cyprus." Parliamentary Assembly of the Council of Europe Document 6079. Brussels: Parliamentary Assembly of the Council of Europe, 1989.
- Wolfestan, Sarah. "Community Participation in Heritage in Post-Conflict Kosovo. Promoting Democracy, Dialogue and Reconciliation Through Cultural Heritage." Interpreting the Past: The Future of Heritage. Changing Visions Attitudes and Contexts in the 21st Century, Monasterium PoortAckere, Ghent, Belgium, 2007. Accessed Dec 17, 2014. https://ucl.academia.edu/sarahwolferstan.

Interpretation and Analysis

Famagusta: A Lifeline for the Kingdom of Cilician Armenia

Nicholas Coureas

In describing the dangers faced by the kingdom of Cilician Armenia, the Venetian author Marino Sanudo, writing in the early fourteenth century, stated that:

It lies in the jaws of four beasts. On one side below ground it has a lion, namely the Tartars to whom the king of Armenia pays a huge tribute. On another side it has a panther, namely the sultan who daily ravages the Christians and the kingdom. On the third side there is the wolf, namely the Turks who destroy the lordship and the kingdom. On the fourth side it has a serpent, namely the corsairs of the Mediterranean who daily gnaw the bones of the Christians of Armenia.¹

This vivid description is not far off the mark. During the second half of the thirteenth and throughout the fourteenth centuries, Cilician Armenia was intermittently at war with the Seljuk Turks of Anatolia, the Mamluks of Egypt and Syria, and the Mongols, who despite being supposed protectors of the Armenians exacted heavy tribute without offering effective

N. Coureas (⋈)

Cyprus Research Centre, Nicosia, Cyprus

military protection. Indeed, in 1307, the Mongol emir Bilarghu had King Leo IV of Armenia, his uncle the former King Hethoum II, and their entourage massacred, while in 1321 Mamluks, Mongols, and Turks made a concerted attack on the kingdom. As for corsairs, they constituted a menace for not only Cilician Armenia but also all the lands of the eastern Mediterranean from the thirteenth to the sixteenth century, with Catalan and Turkish pirates being the most prominent.²

Hemmed in on all sides by danger, Cilician Armenia in the late thirteenth and fourteenth centuries nonetheless had a tenuous lifeline, this being the Lusignan kingdom of Cyprus in general and the port of Famagusta in particular. Besides being the main port of Cyprus, Famagusta was located in the east of the island, facing the Gulf of Alexandretta and the Armenian port of Laiazzo. A considerable volume of trade with Cilician Armenia was conducted through Famagusta, including much needed grain shipments at a time when Mamluks raids had caused widespread devastation, threatening Cilician Armenia with famine. During the beginning of the fourteenth century, Armenians settled there, constructing a church and monastery that came under papal protection, while ships for transporting supplies to the kingdom were constructed in its shipyards. Armenians sought and found a refuge there from the attacks of their enemies, especially in 1322, when the Mamluks stormed and sacked Laiazzo, the Armenian kingdom's chief port. Finally, Armenians settled in Famagusta following the final conquest of Cilician Armenia by the Mamluks in 1375, by which time Famagusta itself was under Genoese rule, having been seized during the Genoese invasion of Cyprus in 1373. The multi-faceted role of Famagusta in assisting the Armenians of Cilicia forms the subject of this chapter.

Armenians have been present on Cyprus since Byzantine times but their presence in Famagusta is not recorded with certitude before 1305. In that year, in a colophon to an Armenian manuscript originating from Famagusta, a scribe named Yohannes—asking that he be commemorated—mentions the city of Famagusta. Subsequent colophons of the years 1308 and 1309 by Yohannes and the Armenian priest Step'annos likewise mention Famagusta. A significant landmark in recording the Armenian presence in Famagusta comes in 1310. In that year, the priest Step'annos Goynerits'ants', a well-known scribe prominent in the circles of the royal family of Cilician Armenia, mentioned both Famagusta and the Armenian Church dedicated to Our Lady in this city in a manuscript containing the Acts of the Apostles and the Gospel of St John the Evangelist.³ The presence of this church in Famagusta is also recorded in contemporary papal

correspondence. In August 1311, Pope Clement V appealed to pilgrims to visit the church of Our Lady of Vert in Famagusta. Despite having been recently repaired by the family of Gerard of Laiazzo, the Armenian ambassador to the papal curia, the Armenian clergy attached to the church continued to be poor and to subsist on the contribution of pilgrims and worshippers. The description of the church as "Vert" deriving from the Latin "viridus" and meaning green is corroborated in contemporary Armenian sources. An Armenian colophon of 1317, written by Yohannes Vardapet, explicitly refers to the church itself, located in Famagusta, to the monastery attached to it and to how it is called Kanch'vor. The word Kanch'vor is probably derived from "kanch," the Armenian for a lament or a plaintive scream, but there is also a similar but distinct Armenian word, "kanach," the Armenian for green. The Latin designation of "vert" meaning green originates from confusing these two words, as it is far likelier that the church was dedicated to Our Lady of Sorrows than to Our Green Lady.4

Pope Clement V's appeal for help for the Armenian clergy of this church also constitutes evidence that these clergy had recognized the jurisdiction of the Roman Catholic Church. This notwithstanding, the response to the appeal must have been disappointing. In December 1317, Clement's successor Pope John XXII asked Baldwin, the Latin bishop of Famagusta, together with the cathedral chapter of St Nicholas, the Latin cathedral in the city then under construction, to grant for up to five years one-third of their cathedral's incomes for the sustenance of the impoverished Armenian clergy of Our Lady of Vert, who would have included monks as well as priests. This would have enabled the Armenian clergy of Famagusta to receive an annual income of 200 white bezants, and the pope appointed the abbot of the Benedictine monastery of the Holy Cross in Cyprus, Canon Robert Turchetti of the Latin church of Beirut, now in exile and probably resident on Cyprus, and the provost of the church of Parma as papal executors to enforce his instructions. Clearly the Latin bishop and cathedral chapter of Famagusta were reluctant to do so, for Pope John XXII repeated his instructions to them in a second letter of April 1318, only this time extending the period of time the grant would be valid for ten years, while appointing the same clergy as executors of his instructions. The outcome of the case is not known. A letter of Pope John XXII of September 1317 granting an indulgence for those visiting the church of St Leonard in Famagusta "in which some Armenian clergy were resident," is probably a scribal error for the church

of that name in Nicosia, which was available for use by Armenian clergy recognizing the primacy of the Roman Church. The church of Our Lady of Vert in Famagusta is not recorded again until modern times, indicating that it went into decline after the first quarter of the fourteenth century.⁵

Nevertheless, Famagusta played an important role in the second quarter of the fourteenth century on account of developments in Cilician Armenia. Following the Mamluk capture and sack of Laiazzo, the Armenian kingdom's chief port, in 1322, the country was in crisis. In response to this, Pope John XXII organized monetary aid for the embattled kingdom, promising 30,000 gold florins. Between March 1325 and August 1327, the Armenians received around 11,000 gold florins in cash, 2600 gold florins in the form of ships and supplies sent from Cyprus and 3268 gold florins by way of paying the salaries of Géraud of Verines, the papal nuncio for the lands of the eastern Mediterranean, and Aimery the Latin bishop of Paphos and collector of papal taxes on the island, who arranged the dispatch of this aid to Cilician Armenia. Although the aid sent was less than what had been promised it was nonetheless useful in financing the repair and refortification of Laiazzo. Famagusta's involvement in this affair stems from the fact that two transport ships, called tafforesiae in the contemporary documentation, were constructed in the port's arsenal. Timber was transported to Famagusta from both Limassol and the capital Nicosia for the construction of these ships and carpenters also came from Nicosia to Famagusta to work on building the ships. The labour force not only consisted of Syrian Christians, generally refugees from the former Latin territories conquered by the Muslims between the years 1260 and 1291, but also included Greeks from Rhodes, Franks from Catalonia, France, and Italy as well as native Greek Cypriots.6

It is interesting that no Armenians are mentioned. Cilician Armenia exported timber throughout the thirteenth century, including planks cut to specific sizes, an indication that carpenters and shipwrights were employed in the kingdom. By the second quarter of the fourteenth century, however, the Turks and Mamluks had overrun forested parts of Cilician Armenia, something that must have caused a decline, possibly a complete halt, to the exportation of timber from the kingdom. In 1326, planks and related items were exported from Venice to Armenia on a Venetian state galley, while a Venetian trying to export timber in 1333 from Cilician Armenia had it confiscated by royal officials. A shortage of timber in Cilician Armenia readily explains the construction of ships in

Famagusta destined for the kingdom, which could transport men and supplies from Cyprus to the embattled Armenian lands.⁷

Famagusta's importance in assisting Cilician Armenia was realized once again in the summer of 1335. As a result of the Mamluk assault on Laiazzo, many Armenians fled thence and arrived at the port of Famagusta on board "several large vessels and galleys and griparie," as James of Verona, an Augustinian friar who was visiting Cyprus at the time and who witnessed their arrival, recounts. He described these ships as being crowded with over 1500 old men, women, children, orphans, and wards fleeing from Armenia. He described a multitude of these refugees in the central square of Famagusta as "children crying and moaning at their mothers' breasts, old men and starving dogs howling." The port of Laiazzo was lost to the Mamluks for good by 1337.8 Trade between Famagusta and Cilician Armenia continued after its loss, albeit on a greatly reduced scale, but the poverty of the Armenians settled in Famagusta explains the exiguous references to the Armenian Church there, its small size, and its disappearance from the records after the first quarter of the fourteenth century. Despite their apparent poverty, however, the Armenians of Famagusta were held in high regard by Philippe de Mézières, chancellor of King Peter I of Cyprus, who together with the Carmelite friar and papal legate to the east Peter Thomas, titular Latin patriarch of Constantinople, was instrumental in organizing that king's crusade of 1365, culminating in the capture and pillage of Alexandria.

In his biography of Peter Thomas, written shortly after the latter's death in 1366, and with a view to securing his canonization, Philippe de Mézières referred to the Armenians of Famagusta as having witnessed a miracle concerning Peter Thomas during the time he was resident in the city, soon after his return from a visit to the Holy Places:

Remaining in Famagusta for some time, he used to serve his Creator and the glorious Virgin Mary so humbly ... that in the middle of every night or at around that time he was prostate on the ground in his room ... and he burst forth into prayers so intently ... that he sensed nothing worldly ... and during those hours when he was thus prostate in prayer a flame from the sky was seen by Armenians and others nearby and all around to be coming down over his room.9

By having the Armenians witness a miracle concerning a papal legate, even if it is said that others saw it too, Philip de Mézières was sending a clear signal in his biography of Peter Thomas that the Armenians were seen as closest to the Latins out of the various non-Latin communities living in Cyprus, as well as providing contemporary evidence that Armenians were resident in Famagusta during the second half of the fourteenth century. Armenians are mentioned on several other occasions in the biography, listening to Peter Thomas's preaching and attending his funeral, along with members of the Latin, Greek Syrian, and Nestorian communities.¹⁰

This particular mention of the Armenians in Famagusta can also be linked to King Peter I of Cyprus's interventionist policies regarding Cilician Armenia. In late 1367, the king sailed from the port of Famagusta in command of 28 galleys, including four belonging to the Hospitallers, to suppress a mutiny in the coastal town of Adalia on the southern coast of Asia Minor, captured and held by the Cypriots since 1361. He then went on to attack Laiazzo, which as stated the Mamluks had captured from the Armenians and occupied since 1337. His forces managed to occupy the sea tower and the town after overcoming fierce resistance by the Mamluk defenders, but the Mamluks continued to hold the land tower. Realizing that he could not take the land tower without incurring unacceptably heavy losses the king raised the siege, returning to Famagusta with his fleet in October 1367. The claim of the contemporary French chronicler Guillaume de Machaut that the Armenians offered King Peter I the crown of Armenia following the death of King Constantine V in 1368 is untrue, but the allegation illustrates how deeply King Peter was committed to assisting Armenia. 11 The king's murder in January 1369 by his own nobles put an end to any hopes of further assistance. In 1373, a few years after his assassination, Cyprus itself was invaded and devastated by the Genoese, and was therefore completely unable to prevent the final conquest of the Armenian kingdom in 1375, the year in which the Mamluks captured Sis, the Armenian capital.

Following the loss of the coastal towns constituting Latin Syria between the years 1260 and 1291, Famagusta and the Armenian port of Laiazzo became the leading commercial *entrepôts* of the eastern Mediterranean, along with Alexandria in Mamluk Egypt. Trade between Famagusta and Laiazzo, mainly in the hands of Genoese, Venetian, and other western merchants, was intense. It was characterized, however, by a heavy investment in grain imports, indicating the shortages faced by Cilician Armenia and the role of Famagusta in addressing them. As Professor Otten has observed, according to the extant notarial deeds drawn up in Famagusta and concerning all trade between Cyprus and Cilician Armenia between the years 1270 and 1320, around 30 per cent of the sum total was invested

in exports of grain from or via Cyprus to Cilician Armenia. This represents the largest portion for any particular commodity. Of the 28 extant notarial deeds from Famagusta giving specific sums in bezants invested in the export of such grain no less than 14 record transactions worth between 1000 and 2500 white Cypriot bezants and another four record transactions worth between 2500 and 4000 white Cypriot bezants. Of the 13 such deeds recording transactions in Armenia daremi, a unit of currency of which 3.6 daremi were worth one Cyprus bezant, five deeds record transactions worth between 5000 and 10,000 daremi, three transactions worth between 10,000 and 20,000 daremi, and one worth over 20,000 daremi. While most grain was exported from Famagusta to Laiazzo, the Armenian ports of Tarsus and Pals are also mentioned. Nor did all grain leave Cyprus from Famagusta, for Paphos and Limassol also figure, albeit rarely, as ports for the exportation of grain, which was sent to Armenia on a variety of ships.12

Why was so much grain exported? The explanation lies in the chronic shortage of grain experienced by the Cilician kingdom on account of the destructive raids visited on the kingdom from the late thirteenth century onwards. The Muslim writers Al-Makrizi and Al-Ayni observe that the Armenians troops supporting the Mongol invasions of Syria in the years 1299–1300 pillaged the suburb of Al-Salihiyya outside Damascus by way of revenge for the recurrent raids on his lands by the Muslims. Devastating raids against Cilician Armenia by the Mamluks took place in the years 1302, 1304, and 1305–1306. The execution of such raids, moreover, had been facilitated by the permanent loss to the Mamluks of the Armenian fortresses in the Amanus mountain range located in the southeast of Cilicia. Following their loss, the fertile Cilician plain had become defenceless and permanently vulnerable to the devastating Mamluk raids. Nor were the Mamluks the only culprits. Following the massacre of King Leo IV and his entourage by the Mongols in 1307, Tartar war bands began raiding the Armenian kingdom. The heavy losses the Armenians suffered following the concerted attack in their kingdom in 1321 by Mongols, Turks, and Mamluks were alluded to by Pope John XXII in a letter of December 1322, which described the Armenians as being "like a target placed before an arrow." These constant attacks only perpetuated the shortages of grain. Indeed, the ships constructed in the shipyards of Famagusta between the autumn of 1325 and the spring of 1326, discussed above, had a provision of ship biscuits for Armenia, "in constant need of imported grain" as Sarah Arenson points out.13

The transportation of grain on board ships from Famagusta to Cilician Armenia was an activity itself fraught with danger. According to the commenda contracts then current among Italian and other western merchants in the Mediterranean, whereby the carrier of goods transported was entitled to a part of the profit accruing from their sale and their owner to another part, carriers trading in Crete during the thirteenth century were normally entitled to one-third and sometimes even one-half of these profits. The carriers of goods shipped from Famagusta to Cilician Armenia in the fourteenth century, however, were generally entitled to only one-fourth of the profits accruing from their sale. This was primarily on account of the high incidence of piracy in the seas around Cyprus, which made the transportation of these goods a perilous undertaking. Because of this, a greater share of the profits went to the owners of the goods so as to give them an incentive to invest in this riskier trading. 14 These risks attendant on commerce because of piracy vividly underline the veracity of Marino Sanudo's observation, namely that among the beasts threatening the Armenian kingdom was the serpent of corsairs on the seaward side.

Despite the importance of the traffic in goods between Famagusta and Cilician Armenia, arguably vital to the Cilician kingdom's very survival, the extant records do not show Armenians as playing a prominent role in this trade. In part, this is attributable to the fact that the notarial deeds drawn up in Famagusta and surviving for the late thirteenth and early fourteenth centuries were written by Genoese notaries and so have a Genoese and generally western bias. To this one adds the fact that the transit trade throughout the Mediterranean and Black Sea areas was largely in the hands of Venetian, Genoese, and Catalan merchants. The exiguous references to Armenians in the Genoese notarial deeds drawn up in Famagusta by the notaries Lamberto di Sambuceto and Giovanni da Rocha nonetheless afford valuable insights on the presence if not the importance of the Armenians in Cyprus's chief port. In April 1299, a certain Theobald of Alba received from Flancha, his Armenian wife to be and possibly an enfranchised slave, a gift of 600 white bezants to which he added a further 600 white bezants of his own goods so as to make up a dowry of 1200 white bezants in total payable to her if conditions required its restitution. This was done "according to the mores and customs of the kingdom of Cyprus." In a deed dated September 2, 1302, Boninus Lecario—a servant of the Genoese podestà of Famagusta—acknowledged that he had sold an Armenian slave girl "of medium complexion" and around 12 years old

to Ottobuono de Volta for 60 white bezants. This girl, formerly named Margaret, had now been renamed Kale. 15

Armenians are also mentioned twice in Venetian notarial deeds of the later fourteenth century drawn up in Famagusta by the priest Simeone. In one dated April 3, 1363, the Venetian Fetus Semitecolo bequeathed 20 white bezants to an Armenian called Vanes, possibly a creditor of his. In a second deed of November 30, 1363, Aitonus, whose name is perhaps a Latinized version of the Armenian Hayton, son of Leo Cases of Famagusta, acknowledged receipt of all items owed to him by Salon, the former Barach of Laiazzo and a burgess of Famagusta. This act indicates that Armenians from Laiazzo continued to settle in Famagusta in the midto late fourteenth century. The fact that Salon is specifically mentioned as a burgess also shows that he belonged to those Armenian Christians who recognized the jurisdiction and primacy of the Roman Catholic Church. Christians not recognizing the primacy of the Roman Church, such as the Nestorians and Jacobites were legally disqualified from being burgesses. 16

Several notarial deeds from Famagusta feature Armenians in a commercial capacity. In a deed of March 1300, the three Armenians Syonus, Carenus, and Megal, all resident in Cilician Armenia acknowledged the receipt by way of a loan of the sum of 1155 Armenian daremi from Peter Vidalis of Messina, who was acting for Paul Papalardus of Savona near Genoa. They promised to repay this sum on reaching Cilician Armenia and before the end of March. In another deed of September 2, 1300, Coxa of Argento, a resident of Laiazzo in Armenia, formed an association with Raymond of Malacrea, whose name suggests a "White Genoese" originating from former Latin Syria. Coxa contributed 7000 Armenian daremi towards the association, which was to last until the next Pentecost, while Raymond contributed 11,000 daremi, of which 5000 would be sent to Sinachum through the offices of a certain Salvus of Jubail, also originating from former Latin Syria. With the moneys of the association, Coxa would trade solely in Armenia and Raymond in Cyprus. In a third notarial deed dated September 4, 1301, the Genoese Facino Arditus acknowledged receipt of the sum of 1983.5 white Cypriot bezants from Simon of Antioch and Homodeus of Armenia, promising to give them in exchange 6000 new Armenian daremi in two instalments, 3000 on his arrival in Laiazzo and the balance within the first eight days of the coming October.¹⁷ The deeds of the Venetian notary Nicola de Boateriis, drawn up in Famagusta between the years 1360 and 1362 while he was working there, contain no transactions with Cilician Armenia, an indication of the

steep decline of trade between Famagusta and Cilician Armenia after the permanent loss of Laiazzo to the Mamluks in 1337.

Trade between Cyprus and Cilician Armenia declined after 1337 and ceased altogether with the final conquest of Cilician Armenia in 1375, but Famagusta nonetheless provided a refuge and a home for those Armenians departing from their conquered kingdom. At times, these Armenians occupied posts in the Genoese administration of Famagusta, which the Genoese occupied following their invasion of Cyprus until 1464. Six Armenians are recorded in the registers of the massaria (treasury) of Famagusta in 1391 and an Armenian town crier is recorded for the year 1439. Nevertheless, Famagusta declined under Genoese administration and Armenians appear to have left the city, possibly for Nicosia or even with a view to emigrating from Cyprus. In a letter of November 8, 1427, that Cardinal James de Isolanis, the ducal governor of Genoa, and members of the senior council of the city sent to the captain and officials of Famagusta the cardinal referred to his receipt of a letter containing the complaints and requests of Latin, Jewish, Greek, and Armenian burgesses of Famagusta over the Genoese administration. He instructed the captain to provide for their well-being and their freedom from suffering any injuries. Perhaps his instructions were heeded, for in a complaint Battista Pernice lodged before the syndics of Genoa on December 3, 1448, over non-payment of his salary by Pietro di Marco, the former Genoese captain of Famagusta, Pernice, stated that such salaries were paid mostly to Greeks, Jews, and Armenians serving the Genoese administration.¹⁹ Even so, from the documentation in the registers of the massaria, it is clear that the Armenians were a smaller and less important community in Genoese Famagusta than other non-Latin elements, such as the Syrians and the Greeks.

One capacity in which Armenians served the Genoese administration of Famagusta was as mercenary soldiers. The names of all such mercenaries were registered by the clerks of the massaria. Following the fall of Sis in 1375, three dozen met at arms sought refuge thence in Cyprus. Furthermore, members of the royal family, the nobility, and the common people fled the capital to migrate westwards "to Frangistan," a designation that could encompass Cyprus, according to the eighteenthcentury Armenian chronicle of Malachi the clerk, although the lateness of this account casts doubts on its reliability. More contemporary is the testimony of Leo V, the last king of Armenia, dated July 20, 1392, and indicating that members of the royal court in Sis had sought refuge in

Cyprus. The statistics prepared by Michel Balard on the geographical origins of the mercenaries serving in Genoese Famagusta between the years 1407 and 1460, based on the registers of the massaria, show percentages of Armenian soldiers between 3.1 per cent and 6.1 per cent, the final figure for 1460 being 3.7 per cent. In general, they are fewer than the native Cypriot and Syrian soldiers, as well as Greeks, whose proportion rose over this period from 4.9 per cent to 12.2 per cent, while that of the Genoese and other western recruits declined.²⁰ It would appear from these figures that Armenians from Cilicia were no longer migrating to Cyprus during the fifteenth century and thereby replenishing the small Armenian community of Famagusta. Possible Armenian emigration from Famagusta to Nicosia or from Cyprus to lands overseas is another factor explaining the overall decline in the proportion of Armenian mercenaries in the fifteenth century.

The Armenians in fifteenth-century Famagusta were involved in commerce as well as serving the Genoese as soldiers or as officials, although the evidence deriving from unpublished notarial deeds drawn up in Famagusta by the Genoese notary Antonio de Foglietta is slight. In an act of January 11, 1453, the Armenian Canes Faraihi produced three witnesses, including one called Marius the Armenian, to attest that in 1450, he had dispatched to the late Oliverius Grillus in Nicosia, who at that time resided in Famagusta, a piece of camlet 20 cubits in length. Oliverius in turn was to consign it to Marius the Armenian, who was to pay him the price of 9.3 ducats. On seeing, however, that Marius had neither the money to pay for the camlet nor anything to offer by way of security, Oliverius had kept this article. Given the importance of camlet manufacture in the Cypriot economy and especially in that of Famagusta, it is interesting to discover that Armenians were involved in this activity. In a second act dated October 9, 1456, the Cretan Gianino Foscari acknowledged receipt of 25 Venetian ducats from Anthony de Frevante, representing the price of one-half of a ship sold to Anthony. Gianino undertook to give this money at once to the Armenians Abrach and his brother Luca, sons of the late John and residents of Nicosia. In addition, Anthony would give another 11 ducats to these Armenians once they had handed over to him the rigging of the ship purchased. This act incidentally shows how Armenians resident in Nicosia had dealings with persons in Famagusta, and one wonders whether these Armenians had formerly been resident in Famagusta.²¹

The Armenian community of Famagusta, inconspicuous in the extant sources but present nevertheless, survived into the Venetian period. Indeed, there are indications that it included Armenians loyal to the miaphysite Armenian Church as well as to the Roman Catholic Church. The Armenian Cypriot named Stavrianos, who had joined the Dominican Order in 1530, taking the name Julian, intervened in Rome in 1556 to secure the church of St Sarkis (St Sergius), hitherto subject to the jurisdiction of the miaphysite Armenian katholikos (Catholics) of Cilicia, for the Armenian community of Famagusta, presumably for those who were subject to Rome and not to the katholikos of Cilicia. His intervention in this regard indicates that both Roman Catholic and miaphysite Armenians were present in Famagusta towards the end of the Venetian period. In 1561, Stavrianos was appointed bishop of the Armenians of Cyprus, an office with personal and not territorial jurisdiction, which meant that he simply acted as the vicar of the Latin archbishop of Nicosia. Stephen de Lusignan thought highly of Stavrianos, maintaining that he succeeded in turning the Armenians away from their errors, by which he must have meant the adherence of some of them to traditional miaphysite Armenian Christianity. That at least some Armenians ceased to recognize the primacy of the Roman Catholic Church in the late fifteenth century was indicated in Pope Sixtus IV's letter written sometime before August 24, 1474. In this letter, the pope condemned the usurpation of the rights of Latin diocesan bishops by Greek bishops "and others of the Armenians and Jacobites and of various other heretic and schismatic sects."²² But when exactly Armenians not subject to the jurisdiction of the Roman Catholic Church first established their presence in Famagusta is not known.

From the above, it is clear that there was an Armenian presence in Famagusta from the beginning of the fourteenth century if not earlier, consisting of Armenians who had accepted the primacy of the Roman Catholic Church. Furthermore, the trade between this port and Cilician Armenia, especially the export of grain, was important and probably vital to the survival of the Cilician kingdom. After the conquest of Cilician Armenia, the port city of Famagusta, already home to a small and apparently indigent Armenian community, was a refuge for those Armenians fleeing Cilicia after its fall. The Armenians were involved, albeit on a small scale, in the commercial life of Famagusta throughout the fourteenth and fifteenth centuries, while in the fifteenth century they also served as officials and soldiers in the Genoese administration of the city. Their presence in Famagusta lasted throughout the Venetian period and at some unknown date miaphysite Armenians loyal to the *katholikos* of Cilicia established themselves in the city.

Notes

- 1. Marino Sanudo Torsello, The Book of the Faithful of the Secrets of the Cross: Liber Secretorum Fidelium Crucis, trans. Peter Lock (Farnham: Ashgate, 2011), 65.
- 2. Thomas S.R. Boase, "The History of the Kingdom," and Anthony Luttrell, "The Hospitallers' Interventions in Cilician Armenia: 1291-1375," both in The Cilician Kingdom of Armenia, ed. idem (Edinburgh and London: Scottish Academic Press, 1978), 29 and 126-127 respectively; Angus D. Stewart, "Alliance with the Tartars: The Armenian Kingdom, the Mongols and the Latins," in La Méditerranée des Armeniens XIIe -XVe siècle, ed. Claude Mutafian (Paris: Geuthner, 2014), 213-214 and 224; Nicholas Coureas, "Piracy in Cyprus and the Eastern Mediterranean during the Later Middle Ages (14th-15th centuries)," Mesogeios 12 (2001): 195–212.
- 3. Dickran Kouymjian, "The Holy Mother of God Armenian Church in Famagusta," in Medieval and Renaissance Famagusta: Studies in Architecture, Art and History, ed. Michael J.K. Walsh, Peter W. Edbury, and Nicholas S.H. Coureas (Farnham: Ashgate, 2012), 135 - 136.
- 4. Kouymjian, "Mother of God," 133-134 and 137; Nicholas Coureas, The Latin Church in Cyprus 1313-1378 (Nicosia: Cyprus Research Centre, 2010), 475. My thanks to Professor Dickran Kouymjian for explaining to me the similar sounding but distinct Armenian words for sorrow and green, and how the name of the church derives from the former.
- 5. Coureas, Latin Church, 475–476.
- 6. Coureas, Latin Church, 71-72; Jean Richard, "Les comptes de l'évêque Géraud de Paphos et les constructions navales en Chypre," in idem., Chypre sous les Lusignans: Documents chypriotes des archives du Vatican (XIV et XVe siècles) (Paris: Geuthner, 1962), 33-49; Sarah Arenson, "Ship Construction in Cyprus, 1325–26," in Tropis II: 2nd International Symposium on Ship Construction in Antiquity, ed. Harry Tzalas (Delphi: Hellenic Institute for the Preservation of Nautical Tradition, 1987), 13–25.
- 7. David Jacoby, "The Economy of the Armenian Kingdom of Cilicia: Some neglected and overlooked aspects," in La Méditerranée des Armeniens XIIe -XVe siècle, ed. Claude Mutafian (Paris: Geuther, 2014), 269–273.

- 8. Excerpta Cypria: Materials for a History of Cyprus, trans. Claude D. Cobham (Cambridge: Cambridge University Press, 1908), 16-17; Luttrell, "The Hospitallers' Interventions," pp. 134-144.
- 9. The Life of St Peter Thomas by Philippe de Mézières, ed. Joachim Smet (Rome: Institutum Carmelitanum, 1954), 82.
- 10. Smet, Peter Thomas, 155-156.
- 11. Guillaume de Machaut, The Capture of Alexandria, trans. Janet Shirley and Peter Edbury (Aldershot: Ashgate, 2001), 150-154, 157-158 and 158 note 6; "Chronique d'Amadi," in Chroniques d'Amadi et de Strambaldi, ed. René de Mas Latrie, 2 vols. (Paris: Imprimerie Nationale, 1891-1893), I, 416-417; The Chronicle of Amadi translated from the Italian, trans. Nicholas Coureas and Peter Edbury (Nicosia: Cyprus Research Centre, 2015), §835; Coureas, Latin Church, 489.
- 12. Nicholas Coureas, "Genoese Merchants and the Export of Grain from Cyprus to Cilician Armenia," Hask Hayakidagan 11 (2007-2008): 319-336.
- 13. Angus D. Stewart, The Armenian Kingdom and the Mamluks: War and Diplomacy during the Reigns of Het'um II (1289-1307) (Leiden: Brill, 2001), 136-142, 153-168 and 170-171; Sirarpie der Nersessian, "The Kingdom of Cilician Armenia," in A History of the Crusades, ed. Kenneth M. Setton, 6 vols. (Philadelphia/ Madison: The University of Wisconsin Press, 1955-1989), II, 657-658; Nicholas Coureas, "The Papacy's Relations with the Kings and Nobility of Armenia in the Period 1300-1350," in Les Lusignans et l'Outre Mer, ed. Claude Mutafian (Poitiers, 1994), 99-100 and 103; Arenson, "Ship Construction," 22.
- 14. Nicholas Coureas, "Lusignan Cyprus and Lesser Armenia, 1195-1375," Epeteris Kentrou Epistemonikon Ereunon 21 (1995): 64.
- 15. Notai Genovesi in Oltremare: Atti rogati a Cipro da Lamberto di Sambuceto (11 Ottobre 1296-23 Giugno 1299), ed. Michel Balard, Collana Storica Fonti e Studi (henceforth CSFS) 39 (Genoa, 1983), no. 128; Notai Genovesi in Oltremare: Atti rogati a Cipro da Lamberto di Sambuceto (6 Luglio-27 Ottobre 1301), ed. Romeo Pavoni, CSFS 32 (Genoa, 1982), no. 79; Michel Balard, "Les Arméniens dans les comptoirs génois de'Orient," in La Méditerranée des Armeniens XIIe -XVe siècle, ed. Claude Mutafian (Paris: Geuthner, 2014), 251.
- 16. Catherine Otten-Froux, "Un notaire vénitien à Famagouste au XIVe siècle, les actes de Simeone, prêtre de San Giacomo dell'Orio

- (1362-1371)," Thesaurismata 33 (2003): nos. 6 and 83; Marwan Nader, Burgesses and Burgess Law in the Latin Kingdoms of Jerusalem and Cyprus (1099-1325) (Aldershot: Ashgate, 2006), 7-10, 18-19 and 202-204.
- 17. Actes de Famagouste du notaire génois Lamberto di Sambuceto (décembre 1299-septembre 1300), ed. Michel Balard, William Duba and Christopher Schabel (Nicosia: Cyprus Research Centre, 2012), nos. 82 and 275; CSFS 32, no. 80; Balard, "Les Arméniens," 252.
- 18. Michel Balard, "Les Génois dans le royaume médiévale de Chypre," in idem, Les marchands italiens à Chypre (Nicosia: Cyprus Research Centre, 2007), I, 47.
- 19. Liber Officii Provisionis Romanie (Genova 1424-1428), ed. Laura Balletto (Genoa, 2000), no. 174; Genova e Cipro: L'inchiesta su Pietro de Marco capitano di Genova in Famagosta, ed. Silvana Fossati-Raiteri, CSFS 41 (Genoa, 1984), no. 45.
- 20. Michel Balard, "The Mercenaries of Genoese Famagusta in the Fifteenth Century," in The Harbour of all this Sea and Realm: Crusader to Venetian Famagusta, ed. Michael J.K. Walsh, Tamas Kiss and Nicholas S.H. Coureas (Budapest: Central European University Press, 2014), 82 and 84; Gérard Dédéyan, "The Armenians in Cyprus during and after the Ottoman Conquest," in The Minorities of Cyprus: Development Patterns and the Identity of the Internal-Exclusion, ed. Andrekos Varnava, Nicholas Coureas and Marina Elia (Newcastle: Cambridge Scholars Publishing, 2009), 54–56.
- 21. Actes de Famagouste du notaire génois Antonio Foglietta 1445-1458, ed. Laura Balletto, Michel Balard and Catherine Otten-Froux (Nicosia: The Cyprus Research Centre, 2016), nos. 34 and 187; David Jacoby, "Camlet Manufacture, Trade in Cyprus and the Economy of Famagusta from the Thirteenth to the Late Fifteenth Century," in Medieval and Renaissance Famagusta: Studies in Architecture, Art and History, ed. Michael J.K. Walsh, Peter W. Edbury and Nicholas S.H. Coureas (Farnham: Ashgate, 2012), 15-42.
- 22. Dédéyan, "The Armenians," pp. 68-69; Gilles Grivaud, "Les minorities orientales à Chypre (époques médiévale et moderne)," in Chypre et la Méditerranée orientale, ed. Yanis Ioannou, Françoise Métral and Marguerite Yon (Lyon: de Boccard, 2000), 46-47; The Cartulary of the Cathedral of the Holy Wisdom of Nicosia, ed. Nicholas Coureas and Christopher Schabel (Nicosia: Cyprus Research Centre, 1997), no. 94.

BIBLIOGRAPHY

PRIMARY SOURCES AND CHRONICLES

- Balard, Michel, Laura Balletto, and Catherine Otten-Froux, eds. Actes de Famagouste du notaire génois Antonio Foglietta 1445–1458. Nicosia: Cyprus Research Centre, 2016.
- Balard, Michel, William Duba, and Christopher Schabel, eds. Actes de Famagouste du notaire génois Lamberto di Sambuceto (décembre 1299–septembre 1300). Nicosia: Cyprus Research Centre, 2012.
- Coureas, Nicholas and Christopher Schabel, eds. *The Cartulary of the Cathedral of the Holy Wisdom of Nicosia*. Nicosia: Cyprus Research Centre, 1997.
- Mas Latrie, René de, ed. "Chronique d'Amadi," in *Chroniques d'Amadi et de Strambaldi*, 2 vols. Paris: Imprimerie Nationale, 1891–1893, I.
- The Chronicle of Amadi translated from the Italian, translated by Nicholas Coureas and Peter Edbury. Nicosia: Cyprus Research Centre, 2015.
- Excerpta Cypria: Materials for a History of Cyprus, translated by Claude D. Cobham. Cambridge: Cambridge University Press, 1908.
- Fossati-Raiteri, Silvana, ed. Genova e Cipro: L'inchiesta su Pietro de Marco capitano di Genova in Famagosta. Genoa: CSFS 41, 1984.
- de Machaut, Guillaume. *The Capture of Alexandria*, translated by Janet Shirley and Peter Edbury. Aldershot: Ashgate, 2001.
- Balletto, Laura, ed. Liber Officii Provisionis Romanie (Genova 1424-1428). Genoa, 2000.
- Smet, Joachim, ed. *The Life of St Peter Thomas by Philippe de Mézières.* Rome: Institutum Carmelitanum, 1954.
- Sanudo Torsello, Marino. The Book of the Faithful of the Secrets of the Cross: Liber Secretorum Fidelium Crucis, translated by Peter Lock. Farnham: Ashgate, 2011.
- Pavoni, Romeo, ed. *Notai Genovesi in Oltremare: Atti rogati a Cipro da Lamberto di Sambuceto (6 Luglio-27 Ottobre 1301)*. Genoa: Collana Storica Fonti e Studi (henceforth CSFS) 32, 1982.
- Balard, Michel, ed. Notai Genovesi in Oltremare: Atti rogati a Cipro da Lamberto di Sambuceto (11 Ottobre 1296-23 Giugno 1299). Genoa: CSFS 39, 1983.

SECONDARY WORKS

Arenson, Sarah. "Ship Construction in Cyprus, 1325–26." In Tropis II: 2nd International Symposium on Ship Construction in Antiquity, edited by Harry Tzalas. Delphi: Hellenic Institute for the Preservation of Nautical Tradition, 1987.

- Boase, Thomas S. R. "The History of the Kingdom." In The Cilician Kingdom of Armenia. Edited by idem. Edinburgh and London: Scottish Academic Press, 1978.
- Balard, Michel. "Les Arméniens dans les comptoirs génois de'Orient." In La Méditerranée des Armeniens XIIe -XVe siècle, edited by Claude Mutafian. Paris: Geuthner, 2014.
- Balard, Michel. "The Mercenaries of Genoese Famagusta in the Fifteenth Century." In The Harbour of all this Sea and Realm: Crusader to Venetian Famagusta, edited by Michael J. K. Walsh, Tamas Kiss, and Nicholas S. H. Coureas. Budapest: Central European University Press, 2014.
- Balard, Michel. "Les Génois dans le royaume médiévale de Chypre." In Les marchands italiens à Chypre, edited by idem. Nicosia: Cyprus Research Centre, 2007.
- Coureas, Nicholas. The Latin Church in Cyprus 1313-1378. Nicosia: Cyprus Research Centre, 2010.
- Coueas, Nicholas. "Genoese Merchants and the Export of Grain from Cyprus to Cilician Armenia." Hask Hayakidagan 11 (2007-2008).
- Coureas, Nicholas. "Piracy in Cyprus and the Eastern Mediterranean during the Later Middle Ages (14th–15th centuries)." Mesogeios 12 (2001).
- Coureas, Nicholas. "Lusignan Cyprus and Lesser Armenia, 1195-1375." Epeteris Kentrou Epistemonikon Ereunon 21 (1995).
- Coureas, Nicholas. "The Papacy's Relations with the Kings and Nobility of Armenia in the Period 1300-1350." In Les Lusignans et l'Outre Mer, edited by Claude Mutafian. Poitiers, 1994.
- Dédéyan, Gérard. "The Armenians in Cyprus during and after the Ottoman Conquest." In The Minorities of Cyprus: Development Patterns and the Identity of the Internal-Exclusion, edited by Andrekos Varnava, Nicholas Coureas and Marina Elia. Newcastle: Cambridge Scholars Publishing, 2009.
- Grivaud, Gilles. "Les minorities orientales à Chypre (époques médiévale et moderne)." In Chypre et la Méditerranée orientale, edited by Yanis Ioannou, Françoise Métral and Marguerite Yon. Lyon: de Boccard, 2000.
- Jacoby, David. "The Economy of the Armenian Kingdom of Cilicia: Some neglected and overlooked aspects." In La Méditerranée des Armeniens XIIe -XVe siècle, edited by Claude Mutafian. Paris: Geuther, 2014.
- Jacoby, David. "Camlet Manufacture, Trade in Cyprus and the Economy of Famagusta from the Thirteenth to the Late Fifteenth Century." In Medieval and Renaissance Famagusta: Studies in Architecture, Art and History, edited by Michael J. K. Walsh, Peter W. Edbury and Nicholas S. H. Coureas. Farnham: Ashgate, 2012.
- Kouymjian, Dickran. "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 W. Edbury and Nicholas S. H. Coureas. Farnham: Ashgate, 2012.

- Luttrell, Anthony. "The Hospitallers' Interventions in Cilician Armenia: 1291-1375." In The Cilician Kingdom of Armenia, edited by Thomas S. R. Boase. Edinburgh and London: Scottish Academic Press, 1978.
- Nader, Marwan. Burgesses and Burgess Law in the Latin Kingdoms of Jerusalem and Cyprus (1099-1325). Aldershot: Ashgate, 2006.
- der Nersessian, Sirapie. "The Kingdom of Cilician Armenia." In A History of the Crusades, 6 vols., edited by Kenneth M. Setton. Philadelphia and Madison: The University of Wisconsin Press, 1955–1989, II.
- Otten-Froux, Catherine. "Un notaire vénitien à Famagouste au XIVe siècle, les actes de Simeone, prêtre de San Giacomo dell'Orio (1362-1371)." Thesaurismata 33 (2003).
- Richard, Jean. "Les comptes de l'évêque Géraud de Paphos et les constructions navales en Chypre." In Chypre sous les Lusignans: Documents chypriotes des archives du Vatican (XIV et XVe siècles), edited by idem. Paris: Geuthner, 1962.
- Stewart, Angus D. "Alliance with the Tartars: The Armenian Kingdom, the Mongols and the Latins." In La Méditerranée des Armeniens XIIe -XVe siècle, edited by Claude Mutafian. Paris: Geuthner, 2014.
- Stewart, Angus D. The Armenian Kingdom and the Mamluks: War and Diplomacy during the Reigns of Het'um II (1289-1307). Leiden: Brill, 2001.

The Armenian Monastic Complex of St. Mary, Famagusta

Dickran Kouymjian

In a previous article, the history of the Church of St. Mary or literally in Armenian, the Holy Mother of God, Theotokos, the medieval and post-medieval Armenian community in Famagusta was presented. Some of this information is repeated in a more careful and fuller manner in this chapter, imagining it might contribute to the work of preserving and restoring the church that miraculously survived centuries of abandonment and neglect.

HISTORIOGRAPHY

There are no specific records relating to the circumstances or the date of the church's construction in Armenian sources. Latin documents, however, are quite explicit. According to a papal bull of 1311, the church's construction had recently started.² Pope Clement V had made an appeal to help the poor Armenian monks of St. Mary and ordered indulgences for those who helped the priests. The papal bull mentions the name of Gérard of Ayas, King Oshin's ambassador to the Pope, whose family undertook the building of the church.³ Yet, it is clear that there must

D. Kouymjian (⊠) California State University, Fresno, USA

have been a church already there since there were poor Armenian priests that needed help; the Latin text of the bull speaks of a new edifice (de novo edificare inceperit). Nicholas Coureas also understood that there was already a church, thus that the Pope's letter containing "the appeal alluded to how this church had been repaired and renovated by the family of Gerard of Laiazzo."4 The priests lived, according to the document, from the donations of pilgrims, one supposes Armenians from Cilicia and Latin visitors or merchants. Another papal bull from Pope John XXII of December 13, 1317, indicates that the work (of restoration) had been completed.⁵ The Pope's letter once again mentions the poverty of the Armenian clergy at the Church of St. Mary and decrees that a third of the annual proceeds of the Church of St. Nicholas in Nicosia, or 200 white bezants, should go to the Armenian Church of St. Mary in Famagusta for five years, later renewed for ten years. It is inevitable that there was a community of Armenians already in the thirteenth century, not only because of the intermarriages between Lusignans and Armenian aristocracy, but because Famagusta was an important port for the brisk trade with Armenia through Ayas/Lajazzo on the Cilician coast.

The stone church lacks carved inscriptions of any sort. The principal western authors, Camille Enlart, George Jeffery, Jean-Bernard de Vaivre, and Philippe Plagnieux, 6 concur that the Church of St. Mary is datable to the fourteenth century, some like Enlart placing it late in the century. The major Armenian studies by Vahan Kurkjian (Bakuran), Arshak Alpoyachian, Babgēn Gulesserian, and Ghevond Ch'ēpēyan,7 while providing primary source references from the first quarter of the fourteenth century, postulate an earlier foundation going back in some cases to the late twelfth century, during the time of Nerses of Lambron (1153–1198).

EARLY SETTLEMENTS OF ARMENIANS IN CYPRUS

Armenians have been in Cyprus since early Byzantine times; this precocious presence of Armenians on the island, many as agricultural peasants, was not one of political or military power. The sources mentioning Armenians have been brought together for the twelfth and thirteenth centuries by Gérard Dédéyan.8 Several Byzantine governors of the island were of Armenian origin, but relations between Armenians and Cyprus became close during the period of the Crusades, which corresponds to the establishment of an Armenian presence and eventually in 1198 a kingdom in Cilicia. In the later twelfth century, there was already a prelate, a certain T'adéos, bishop of Cyprus, who signed a declaration of faith in 1179 prepared by Catholicos Grigor IV (1173-1193) at the request of Emperor Manuel I Comnenus (1143-1180).9 According to Armenian sources, King Levon II visited Cyprus in 1210 and married a Lusignan princess¹⁰; other marriages are recorded including that of King Henry I of Cyprus with Stephania, sister of Het'um.¹¹ Maria, daughter of King Het'um I, married Guy of Ibelin and upon his death became a nun at the convent attached to the Latin church of Notre Dame de Tyr in Nicosia. Later, in 1307, Catholicos Grigor VII convoked a church council in Sis and among those present was the Armenian Prelate of Cyprus, Bishop Nikoghayos. 12 In the early fourteenth century, the Cilician Armenian nobility was very active in Cyprus. In 1308 after the renovation by Henry II of the convent, Princess Euphemia (Armenian, Fimi), daughter of the Armenian king Het'um I and sister of Maria, was appointed Mother Superior. 13 Earlier in 1305, her cousin, Het'um the historian, known as Hayton in the Latin sources, author of the famous Fleur des histoires de la terre d'Orient, and himself the son of Oshin, brother of King Het'um I, was exiled by King Het'um II and came to Cyprus, the land of his wife, where he became a monk. He was back in Cyprus in 1308 after a sojourn in Europe. 14

By the first years of the fourteenth century, Famagusta had replaced Limassol as Cyprus's major port in which the Genoese were firmly settled. 15 The brisk trade with Armenian kingdom of Cilicia took place from Famagusta, closest in distance.¹⁶

References in Armenian Colophons

It is in this context, the first and second decades of the fourteenth century, that we initially hear of the Armenian Church, the Holy Mother of God, Surb Astuvacacin, a literal translation of Theotokos. Our information comes entirely from colophons of Armenian manuscripts copied in Cyprus, the earliest of which referring to such a church is from a Gospel manuscript dated 1280: "I, Petros of Cilicia, came to ... the island of Cyprus, at [the church] of the Holy Mother of God (*i dur* 'n Srbuhoy Astuacacnin) ... [and] completed the copying of these Gospels."17 Although no locality on the island is mentioned, the reference is most probably to Famagusta. The only other church that might have been so designated by the Armenians was that of Notre Dame de Tyr in Nicosia, but that was a Latin church despite such converts as the later Armenian heads of the convent, the sisters Maria and Euphemia. Such a prominent position was probably due to their importance as princesses who had married into the Ibelin royal line ruling the island. Another St. Mary in Nicosia was only given to the Armenians shortly after the Ottoman conquest of Cyprus in 1570. One must not, however, totally discount the idea that Petros the scribe worked in Nicosia. In this period of confusion with regard to Armenia's official position on union with the Catholic Church, little attention was paid to the matter of strict adhesion to either Armenian Apostolic or Catholic rite; witness for instance the clear call for aid by two successive popes mentioned above for the St. Mary in Famagusta, which supports information from other sources that it was in communion with the Church of Rome.¹⁸

In his travel account, James of Verona, an Augustinian friar who visited Cyprus in June of 1335, says, "the Armenians (in Famagusta) had the same offices as the Roman Church, but celebrated them in the Greek language." Coureas offers a concise summary of the matter in his conclusion: "[O]ne can state that although from the early fourteenth century onwards distinct groups of Armenians loyal to their traditional church and of others acknowledging papal jurisdiction co-existed on the island of Cyprus, following the conquest of Cilician Armenian in 1375 by the Mamluks, those Armenians loyal to Rome disappeared from view, either reverting to their own native Armenian confession or becoming gradually assimilated into the main body of Latin Christians."

In 1287, the scribe Khach'atur, along with other scribes, copied another Gospel in Cyprus under the protection of the Saints Var'var'a and Sargis the General, again without mentioning a specific locality.²¹ These churches have been ascribed to Famagusta by a number of scholars.²²

The first direct reference to Famagusta is from 1305 in a colophon that Jacobus Dashian found in a codex of 1773, a collation of Old Testament manuscripts in the collection of the Mekhitarist fathers of Vienna²³; the scribe had copied an older colophon from a manuscript in the Armenian Patriarchate of Jerusalem.²⁴ Unfortunately, a search through the Jerusalem catalogue has failed to find the precise manuscript.²⁵ The colophon is by Yohannēs the scribe in 1305, "at Maghuayn of Cyprus, ... remember Yohannēs the writer." Bishop Ghevond corrects the reading to Maghu[s] ayn, that is, to say Maghusa/Famagusta. In 1306 and 1308, Levon the priest copied psalters on Cyprus, now in the Jerusalem collection: the first at a village called Cips/Djips (today Kornokipos/Kornodjipos) under the protection of the archangels, Mikayel and Gabriel, and the second at Maghusa, but without a reference to the church of St. Mary.²⁶ Colophons of 1308 and 1309 by Yohannēs, with Step'annos the priest as patron, in

an Old Testament manuscript, mention Maghusa, but again without reference to the church of the Holy Mother of God.²⁷

The earliest Armenian reference to both Famagusta/Maghusa and the Church of the Holy Mother of God is in a manuscript containing the Acts of the Apostles and the Gospel of St. John copied in 1310-1312 by the well-known scribe, the priest Step'annos Goynerits'ants', who was important in the Cilician royal circle. "Written in 1310 ... with the intercession of the Holy Mother of God"; and further along, "written by Step'annos Govnerits'ants' for Lady Alic (Alitz, Alice), wife of the seneschal (paron) (of Cyprus) and aunt of the kings of Armenia ... on 29 December 1312 on the Island of Cyprus at Maghusa under the protection of the Holy Mother of God."28 Her sister Queen Keran (†1285), a major patron of the arts, was the wife of King Levon (1269-1289), who was succeeded by their sons Het'um II (1289-1293, 1295-1296, 1299-1303), T'oros (1293-1298), Smbad (1296-1298), Constantine (1298-1299), Levon III son of T'oros (1301-1307), and Oshin (1308-1320). By the time of this colophon, according to the papal bull of 1311, the church was probably under restoration. Shortly afterwards in 1314, Step'annos copied another manuscript, a collection of religious texts, again for Alic, in Maghusa, Cyprus, under the protection of the Holy Mother of God and St. John the Evangelist.²⁹

Only in a single surviving colophon of 1317 do we read in Armenian sources that the Holy Mother of God was a monastery and that it was called Kanch'owor, pronounced Kanch'vor, rendered into Latin by an incorrect translation as green.³⁰ As we saw above in the papal documents, the restoration of the church, referred to as "Marie de Vert," was begun in 1311 and completed in 1317. The original is a colophon in a manuscript of the Commentary on Chronology and the Liturgy by Khosrov Anjevats'i and Nerses Lambronats'i by the scribe (also the patron and editor) Yovhanes Vardapet; it was recopied in two later manuscripts. The part of the colophon that relates to the Famagusta church is as follows: "This book was written by the insignificant sinner Yovhanes, servant of the word of God, in the year of the Armenian race 766 [1317 in Gregorian or Christian calendar] on the Island of Cyprus, at the Church (tachar) of the Mother of God (Astucoy mor), Theotokos (Astuacacnin), which is a monastery (vank'), and is called Kanch'owor (weeping or sorrow) in this city Famagusta (Maghusa)."31

This is the first and only time, according to my records, that the Holy Mother of God in Famagusta is referred to as a monastery and is said to be called Kanch'owor, incorrectly rendered in the Latin as "green." The word kanch'owor/kanch'vor is otherwise lexically unattested, but it was assumed by those responsible for the Latin that it is derived somehow from kanach', the color green, rather than kanch', a cry, scream, lament, sorrow, from the verb kanch'el, to cry out, scream, call out, call. Assuming, for the sake of argument, that the 1317 use of kanch'owor was translated by Step'annos the scribe from the earlier papal decree of 1311 referring to "vocatam beate Marie de Vert"; if he wanted to say green, one would expect kanach avor (green) or the grammatically incorrect kanch avor. In the papal document of 1317 announcing the completion of the work, the term is "in ecclesia S. M. Viridis Famagustan." This is a very rare appellation for the Virgin, perhaps referring to fertility of fields or a painting or fresco with a green background or showing Mary dressed in green. The only medieval church with such a name is St. Mary the Green in Ascalon, itself associated with the early crusaders.³² Yet another interpretation would be the monastery of the weeping or lamenting Virgin, from Armenian kanch', a cry, scream, shriek.

This appellation would serve as the equivalent of Our Lady of Sorrows or Our Lady of Pity or Mater Dolorosa: literally in Armenian the weeping or sorrowful Mary, Holy Mother of God. The cult of the Madonna of Sorrows began in Tuscany in the 1230s and by 1237 became the Servite Order.³³ In the fifteenth century mostly in northern Europe, an iconography developed around seven moments in the Virgin's life that caused her sorrow, the last three being the Crucifixion, the Removal from the Cross, and the Entombment. It was a Catholic phenomenon only accepted much later in the Russian Orthodox world. In part, the choice of scenes in the fresco program on the walls of the Famagusta church to be discussed below includes a number of scenes that caused this suffering: the Crucifixion, the Entombment, but also the Flagellation, and the Piéta, also called the Man of Sorrows (Fig. 3.1).

The photograph taken by Camille Enlart in the last years of the nineteenth century shows with clarity not only the south wall of the monastery but also the lower foundations of other buildings, perhaps cells, clearly visible to the north and south of the church (Fig. 6.4). A photograph I took in 1974 also shows the wall, thus supporting convincingly the reference to the church as part of a monastery.³⁴ The joined buttresses or pilasters on that wall are the same as those on the church, so the monastic complex and the church, as we see in the photograph, were built in the same period. This would satisfy the requirements for a scriptorium at which earlier Armenian manuscripts from Cyprus were copied.



Fig. 3.1 North Wall (before intervention). Photograph by Wilbert "Skip" Norman, 2007

Summarizing the content of the primary sources above, of the thirteen colophons in the revised corpus dating from 1280 to 1317 or 1318, five are from Famagusta and one from Nicosia. I know of no further Armenian textual references to the Famagusta church until modern times, 35 though I have collected some 15 further colophonic citations in my revision from Armenian manuscripts copied in Cyprus between 1341 and 1679.³⁶ Seven of these refer to Levk'osia (variant spellings: Levk'usieay, Lōk'oshia, Lōk'ōshay, Lōk'och'a, Lōk'ashē) and one to "Nicosia" (1679); those of the seventeenth century (six) consistently refer to the Church of the Holy Mother of God in Levk'osia/Nicosia.

From non-Armenian sources, there are references to Armenians in Famagusta in the accounts of Fr. John of Verona (1335) and of pilgrim James of Bern (1346); the former speaks of the mass of Armenian refugees arriving at the port of Famagusta after the Mamluks seized Ayas/Layasso.³⁷ It is curious that there are no references in Armenian sources, especially colophons of manuscripts, to the church in the second quarter of the fourteenth century or immediately after, when James of Verona tells us that in

1335 there was an influx of some 1500 Armenian refugees from Cilicia.³⁸ That the church was still used by the Armenians up to the second half of the fourteenth century is confirmed by a remark in the life of St. Pierre Thomas (titular Latin Patriarch of Constantinople, 1364–1366) telling of a lightning strike or a bright light in 1364-1366 (immediately after his return from a visit to the Holy Places) above the Carme of Famagusta during his residence there for two years before his death in January 1366, which was confirmed by the neighboring Armenians presumably of the nearby Church of St. Mary.³⁹ Enlart reported a graffiti inscription on the frescoes of the church with a date of 1547, suggesting that the church would have had to have been abandoned sometime between 1366, assuming that the Armenians in the biography of St. Pierre Thomas were from St. Mary, which is not mentioned by name in de Mézières, and the midsixteenth century; a date in the third quarter of the fourteenth century does not seem unreasonable.40

It is probable that after the first quarter of the fourteenth century, the church was in decline and by the end of the century neglected, probably even abandoned. Refugees after the fall of the Cilician Armenian kingdom in 1375 undoubtedly made their way to Nicosia, from which we have manuscript colophons of 1341, 1467, and more than half a dozen from 1636 to 1679, when scribal manuscript production begins to disappear. There are also nearly as many colophons from other towns on the island or simply "Kipros."41 Thus, one may surmise that the Armenian Church of St. Mary the Holy Mother of God, Our Lady of Sorrows, was probably built in the thirteenth century and restored or added to, as discussed above, between 1311 and 1317. It would be hard to hypothesize fresco painting, whether original or additions to the originals after 1350 (or 1367) unless evidence can be found of Armenian presence at the church after that date.42

Ignoring style and iconography, the frescoes must date from the time of restoration or slightly after. When the refugees mentioned above arrived in Famagusta, there was an Armenian monastery, clearly attested three decades earlier. Of the thirteen Armenian manuscript colophons from Cyprus from 1280 to 1318, there is one from Nicosia (1316) and five from Famagusta (1305-1317), only three of which mention St. Mary. Afterward there are none that mention Famagusta among the fifteen colophons to 1679: two from the fourteenth century, 1341 (Nicosia), 1379 (Kipros); three from the fifteenth century; two from the sixteenth; eight from the seventeenth, six of them from Nicosia. 43 Logically, one must

imagine that the wall paintings were done during this time of active manuscript copying, and since the paintings are inscribed in Armenian probably by artists of that nation, perhaps themselves also miniaturists. One enigma or peculiarity is precisely these inscriptions in Armenian and not in Greek, since James of Verona tells us that during his visit of 1335 the language of the liturgy was Greek (see above). Nevertheless, the travel account not only reports the arrival of a large contingent of Armenian refugees from the Cilician mainland, but clearly establishes that the monastic church of St. Mary was functioning.

Further details of the fresco decoration might offer another path toward establishing an early date for the frescoes. In the apse, there is a fragment, clearer after the new restoration, of a kneeling woman in white (Figs. 4.1 and 6.2). This probably represents a donor or the sponsor of the paintings. There are three possible candidates from the period of the first quarter of the fourteenth century, indeed, for the first half or the whole century, all three active in the first decades. They were all princesses of the Armenian aristocracy of the Cilician Kingdom with ties by marriage to Cyprus. Beside the sisters Marie and Fimi, daughters of King Het'um, who succeed one another as Mother Superior of the convent attached to the Church of Saint Mary of Tyr in Nicosia, there is Alice/Alidz, wife of the Seneschal of Cyprus, Balian, son of Connetable Guy Ibelin, and first cousin of Guy, the husband of Marie. 44 Alidz seems the most likely candidate because of her evident involvement with the activities of the Church and Monastery of St. Mary in Famagusta, notably through the commissioning of manuscripts from the famous scribe of Skevra in Cilicia, Step'annos, who worked in Famagusta from 1307 to 1317.45

Modern History of St. Mary, Holy Mother of God

The modern history of St. Mary suggests it was not used in the nineteenth century. In 1907, the holes in the church's walls were repaired and the main doorway was fitted with a strong gate⁴⁶; this work was intended to protect the wall paintings inside as much as possible.⁴⁷ Babgen Gulesserian reports in 1936 that thirty years earlier, in 1906, Bishop Petros (later catholicos) of the Cilician Catholicosate upon visiting the church made a formal request to the government for the restoration of the church and its return to the Armenians. He pursued this request upon his return to Sis (today Kozan), the Holy See. The church was restored and eventually, in a letter dated January 20, 1936, given over to the Armenians for ninety years with an annual charge of five pounds sterling.⁴⁸ From the 1940s onwards, an itinerant priest administered to the Armenian faithful in Limassol and Famagusta.⁴⁹ There was a school in Famagusta in the house where the teacher lived, with seventeen students in 1955.⁵⁰ Church services were only occasionally held there, the church being too far during inclement weather. The Armenian community in Cyprus in 1955 numbered over 4000.⁵¹ His Holiness Karekin I (*Hovsēp'ian*), Catholicos of the Great House of Cilicia, made pastoral visits to Cyprus, including Famagusta, in 1946, 1947, and 1948.⁵²

THE FRESCOES OF THE CHURCH OF THE HOLY MOTHER OF GOD⁵³

Architecturally, Camille Enlart adequately and carefully described the church of St. Mary. More recently, Philippe Plagneiux and Thierry Soulard as well as Allan Langdale and Michael Walsh have repeated and augmented this information.⁵⁴ The stone church is rectangular, resembling the simple hall church or mono-nave popular in Armenia from the fifth-century conversion to Christianity until late medieval times some of which had a salient apse, although the great majority of Armenian Churches including such single nave affairs were domed (Fig. 6.1).

All the walls of the church were frescoed, an unusual rather than usual practice. Many Armenian Churches dateable to the fifth to seventh centuries were decorated with frescoes, but these, though often spectacular, represent a minority compared to the thousands without wall paintings. Among those with cycles of paintings from the life of Christ are the tenth-century churches of the Holy Cross on the island of Aght'amar⁵⁵ and Saints Peter and Paul at Tat'ev. The Church of St. Gregory built at Ani under the patronage of the rich merchant Tigran Honents' in 1215 has a large fresco cycle of the conversion of the Armenians to Christianity, but also liturgical scenes in the now exposed narthex.⁵⁶ Finally, there is an important and large series of frescoes in a Byzantine-Georgian style in the northern churches of Kobayr and Ahlata in Lori. However, iconographic parallels to the church in Famagusta must be sought primarily in miniature cycles of the abundant Armenian Gospel manuscripts from the eleventh, thirteenth, and fourteenth centuries.

After 1974, much of the lower register of the frescoes in St. Mary Church were covered with whitewash (Fig. 3.1). Below is a listing of the scenes represented in the frescoes and details about them from traditional sources. Enlart was the first to describe them at the end of the nineteenth



Fig. 3.2 North Wall in 1937. Photograph by Monica Bardswell. Conway Library. With permission

century, but at times the positioning of the scenes is confused. George Jeffery made a summary description of the frescoes commenting on what was still visible in his time (1918).⁵⁷ Bishop Babgen Gulesserian lamented the deterioration of the frescoes, covered with graffiti in many languages, including Armenian; he noted that those in Armenian were essentially unreadable, but saw the words "St. Barbara (?), this is Abka(r) (Surb [Var'var' \bar{e} ?], Abka(r)in \bar{e})."58 Monica Bardswell's description of 1937 is more systematic and at times furnishes better details.⁵⁹

EAST WALL AND APSE

The dome of the apse once had a fresco of Christ, according to Bardswell "probably a Majesty," although since the church is dedicated to the Mother of God, it may well have been the Virgin. Nothing was discernable in 1974. On the south side of the vault of the apse, there was, so Enlart recorded, a kneeling figure with a white robe, probably a donor, with a large coat of arms above to the left. Although both Enlart and Jeffery referred to this figure, in Bardwell's time the head was missing; in 1974, nothing discernable appears on my photos, and Langdale and Walsh report nothing but bare stones at the spot. Below, Enlart saw the Apostles seated with Armenian inscriptions and Bardswell referred to them as nimbed on a dark-blue background; under them, Enlart identified full-length-standing figures as the patriarchs of the Eastern Church under arches, which Bardswell called canopies and Jeffery, niches. In 1934, Gulesserian was able to make out the identifying Armenian inscriptions for the Apostles Thaddeus and Bartholomew.⁶⁰ Enlart saw a similar, but larger, figure on the vertical pilaster of the apse to the north. According to the latter, only two of these were visible: a patriarch or ecclesiastic on the left or north side and a figure with a red cloak blessing, with a small kneeling donor to the right. On the 1974 photo of the apse, there is only the slightest glimmer of what appears as a row of seated figures just above the string course that divides the vault from the lower cylindrical back of the altar area.

SOUTH WALL

There are two subjects, one on each side of the central doorway. Enlart spoke of a large figure of St. John the Baptist with sixteen associated scenes framing it and the Death of the Virgin (Fig. 4.7). Mrs. Bardswell is more precise, though she was unable to determine the number of scenes from St. John's life: "very large figure of St John the Baptist surrounded by square compartments arranged perpendicularly on either side, containing? [sic] scenes from his life (all perished) within yellow frame. To left and to right, a strip of ornament containing shields of arms, one of them bearing a mitre and crosier on white shield." Additionally, she describes in some detail a large Dormition of the Virgin on the east end of the south wall: "Death of Virgin, she lies on a couch, above is the figure of Our Lord who receives her soul, as a swaddled infant. Our Lord in a white mandorla, and

around Him a red glory filled with angels who bear candlesticks, censers, etc. All painted in red and white. Below, left and right Apostles weeping. Above to the right, there are angels in adoration on a green background."61 Langdale and Walsh reported that St. John was covered with whitewash, which is the case of the Dormition as well. These have all now been cleared and can be seen in Figs. 4.3, 4.4, and 4.5.

A photograph of 1974 shows twelve rectangles placed vertically, six on each side of the portrait of the standing St. John, who has a golden halo and long curled hair falling to the right. His bare right arm, bent at the elbow, holds an object at his breast. At first glance, it looks like a hand cross, but closer examination shows it as floral stalk, very much like a lily branch, the symbol of the Virgin. His left shoulder is covered with his redbrown garment and in his hands he holds an object that looks very much like a serpent winding down to ankle level, perhaps a staff. None of the twelve panels reveals any clear sense of what scene was originally depicting. The left-hand band of heraldic emblems is totally effaced; the right band includes two shields, one with perhaps a spear and the lower one with what might be an eagle. Below it is graffiti: "L. Bon 1898." Another example of graffiti on the saint's lower garment has the date 1828. To the upper right, above the figure's head the reading of Armenian SB, S[ur]b, saint, is possible. No trace of the Dormition was seen or photographed.

WEST WALL

Enlart identified the two standing figures to the north or right of the door as the Virgin and St. Helena (Fig. 4.6). Bardswell offers more details: "To the north of door, two figures of saints, under arched ornamental canopies, green backgrounds. On the left a female saint in cloak, who holds a head of our Lord within a medallion. Inscription on the background in Armenian. On right, a royal personage, nimbed, crowned, wearing much jewelry. Armenian inscription." In 1974, the figures were still visible. Individual Armenian letters can be made out here and there on each of the two panels, but there are not enough letters to offer the names of the two female figures. Though Bardswell did not offer names for the saints, Enlart was able to read or have read the Armenian inscriptions and one must assume the identifications are correct. The figure represented as St. Helena has a white kerchief attached to the right side of her waist and her crown is very pointed. The other figure has all the characteristics of the Virgin, but the head or figure in a halo itself within a large circle seemingly held at her chest is difficult to visually decipher. Is it intended to be the

Virgin of Wisdom, with the Christ Child in a round mandorla of light, a theme popular in early Christian, but also Armenian, art?⁶² Or might it be, as Professor Bacci has convincingly suggested, Saint Paraskeve?⁶³

To the left of the door is a large framed, nearly square portrait of St. Theodore (T'oros in Armenian) killing the dragon (Figs. 14.2 and 14.3). The identification made by Bacci based on the color of the horse 64 can be reinforced by the first letter (perhaps letters), the Armenian, T', of the saint's name, visible to the upper right above the cape. The horse is galloping to the left with St. Theodore, whose cape flows right and is turned frontally while he is looking back, stabbing the serpent's head under the hind feet of his mount with his long spear. He has a shield attached to his left upper arm. The frame is yellow, the background gray, the horse red, and the dragon green. In the 1974 photographs, the colors are faded but the image is still visible even though much diminished. Bardswell had a photograph of the fresco as it was in 1937, as well as a copy that she executed. 65

NORTH WALL

The Life of Christ cycle, including the Passion, is painted on the north wall. The scenes are in two parallel bands, the subjects more or less in chronological order, but with the lower band starting with a large and full Nativity including the washing of the infant below the main scene, followed rather than preceded by the Annunciation in the center in a smaller panel sandwiched between the door and a window, and then the Baptism. To the right of this on the same level is an ogival niche in the spandrels of which is crowded the naked torso of Christ with His arms crossed on His chest: the Man of Sorrows or Pieta as it is known in western art (Figs. 12.2 and 12.7). The upper band continues the cycle with the Flagellation to the left followed by Christ bearing the cross or appearing before Pilate. An arched window with the parallel vertical rows of circular openings interrupts the series. The paintings continue with the Crucifixion, the Deposition or Descent from the Cross, and the Entombment, which abuts the east wall.

Camille Enlart simply lists the scenes, discussing only the Nativity in detail; Mrs. Bardswell is more detailed on this important north wall. Examining these scenes, following the chronological order of Christological cycle, the Annunciation in 1974 was virtually unidentifiable with most of the paint in the middle of the scene dropped off. But in 2007, the outlines in cobalt blue of the Virgin's head are still apparent in a detailed close-up (Fig. 3.4).



Fig. 3.3 Flagellation from the Life of Christ. Photograph, Wilbert "Skip" Norman, 2007

Both Enlart and Bardswell found strong affinities with Italian-style paintings, the latter adding that the plaster was tinted buff with green backgrounds. Unfortunately, her photographs of the north wall lack this section, but she describes the Annunciation as "very fragmentary. To left St Gabriel. To right the Blessed Virgin Mary. Centre, pot of lilies (Vase with two handles)," The Nativity, the first scene on the lowest register at the west, is the largest and iconographically the most complete scene among the frescoes (Fig. 3.5). The Virgin is reclining to the left, next to, and parallel to the manger in the form of a sarcophagus-like rectangle. Above each side are five angels, the first one on the right extending a hand toward the Child, who lies in swaddling clothes and has a halo. To the left, at the height of Mary's head, are the three magi drawn in miniature



Fig. 3.4 Madonna (detail). Photograph, Wilbert "Skip" Norman, 2007



Fig. 3.5 Nativity. Photograph, Dickran Kouymjian, 1974

size. Enlart pointed out that the Virgin's name was inscribed in Armenian on her purple robe, that the heads of the ox and the ass are visible next to the manger, and that there are thirteen angels. In Bardswell's photograph, only nine angel heads and ten halos can be counted; the animals have disappeared though perhaps their hooves or their ears or horns are apparent. In 1974, the angels on the right had almost faded away, with the first angel being the clearest; the Virgin and Jesus are still easy to identify though diminished. The magi are quite clear, in file with hands extended and bearing gifts toward the Mother and Child. Their costumes and their peculiar hats, like little folded cards pinned at the top of their hair, as well as the rather massive corpulent grouping of bodies, are reminiscent of those in Cilician Armenian Nativity miniatures from the second half of the thirteenth century.⁶⁷ Below as an extension of the episode is pictured the washing of the child by midwives, a popular iconographic element in the same Cilician manuscript illustrations. Enlart observed two women, as did Bardswell, but her photograph lacks them. In 1974, the one on the left was quite clear seemingly holding the child, while in the center is a large rectangular basin with a table on which is a spouted urn for water and a basin. The woman on the right is faded away and partly fallen off. By 2007, virtually all of the Nativity had disappeared or was whitewashed over.⁶⁸ It has now been stabilized and partially cleared.

The Baptism is to the right of the door and on the same level as the Nativity. Bardswell's photographs lack this scene, but her description traces most of the elements and offers some idea of the color.⁶⁹ Our 1974 photograph in black and white shows the elements rather clearly: John the Baptist to the left, Christ naked with halo standing in the Jordan, with a ray of light perpendicularly descending from the orb of heaven and with the dove evident. To the right, two angels are holding their garments. The lower parts are already deteriorated. There is only a vague sense of the garments flowing down on each side. The photographs taken by Wilbert Norman in 2007 seem to show clearly and in good color the head of the furthest angel and the feet of John with graffiti in various languages carved over it. 70

The series then moves to another band devoted to the Passion except for the Annunciation, in the middle directly above the north entry and under the window. Above the doorway, Enlart saw Christ with extended arms.⁷¹ There was no trace of such a fresco in 1974; Bardswell does not speak of it but moves directly to the Annunciation. Perhaps, Enlart confused it with the *Pieta* above the piscine arch at the eastern extremity of the north wall next to the Baptism. In my 1974 photograph of the top of the doorway and in the photograph of 2007, there simply seems to be no room for a painting.

The five scenes in the top band (excluding the Annunciation) according to Enlart are the Flagellation, Christ Bearing the Cross, the Crucifixion, the Descent from the Cross, and the Entombment, but he offers no details. Bardswell's account is more substantial. She hesitatingly thought the second scene was Christ before Pilate. Here is the section from her notes:

A. Series more Italian in style than the rest of the paintings. Plaster tinted buff, green backgrounds.

- 1. The Scourging. Christ in centre, bound to pillar. An executioner to the right and to left with whip of knotted thongs. A building top left.
- 2. ? Christ before Pilate. Mostly, perished. Christ centre left faces right, hands bound before Him. Right part of picture missing.
- 3. Crucifixion. Skull of Adam under the cross. Left, Virgin fainting in the arms of the two Maries, to right, St John. All the upper part gone.
- 4. ? Deposition. (very faint) Several figures to right.
- 5. Entombment, or Pieta. Several Figures carry the body of Christ wrapped in winding sheet and laid across the lap of the Virgin. A female figure stands behind.

In 1974 as well as in 2007, many of the frescoes were still visible, probably protected because they were high up on the wall; Bardswell also applied protective wax over many of the frescoes. The Flagellation is quite clear with Christ facing right in three-quarter profile, hands tied to the pillar, and feet apart as though walking to the right (Fig. 3.3). In the upper left, a building with a pitched roof is evident, but those scourging Christ are not easily visible (even on the left, very clear in Bardswell's photograph), in part because a large part of the upper right of the panel shows either the naked wall or the plaster repair near a square recess or a window. A single very faint figure of the following episode did not help in determining the scene.

The cross of the Crucifixion was still apparent in the 1974 photographs, as was the silhouette of St. John and very vaguely another form, which

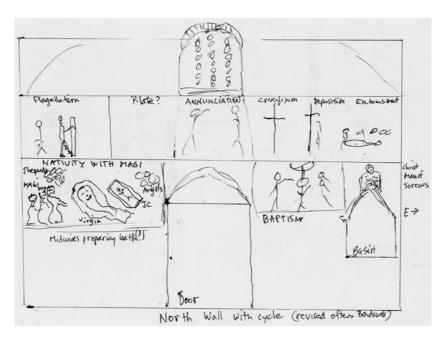


Fig. 3.6 Author's sketch of the north wall in 1974

could represent the fainted Virgin. Of the Descent from the Cross, again a slight trace of the cross is visible with a figure on the right perhaps removing a nail. The last of the cycle, the Entombment, is the best preserved today as it was in 1974 (Fig. 4.2). Christ in his burial shroud is being moved toward the right by two figures (perhaps Joseph of Arimathea in the foreground) with another figure close by on the rear part of the body, which seems to be lying or passing over the Virgin, since her bended knees are very clear. To the extreme right is a third male figure, with bare legs seemingly guiding the corpse into the tomb. Such a representation of the burial is known in late thirteenth and early fourteenth century Armenian manuscripts. In the case of the Lectionary of Het'um, it is combined with the removal from the cross as in the fresco.⁷³

There remains one more scene found at the east end of the lower band above the arch of the piscine (the basin used to dispose of water from various liturgical rites). Bardwell's photograph is very clear, showing Christ naked from the waist up, perhaps in the tomb, with his hands crossed on his chest (Fig. 12.7). The figure was still clear in 1974, but it was hard to make out the two instruments of the passion Bardswell had seen. The image of the "Pity" as Bardswell calls it or in the case of Enlart, "Christ ressuscitant" is a symbol of the Resurrection appearing in the fourteenth century in western art, but also earlier in Byzantine art, sometimes with the Holy Women near the body or as a *Pieta, Arka Tapeinosis, Imago Pietatis*, or Man of Sorrows. It is essentially foreign to the Armenian tradition. The painting completes the cycle but it was probably added after the original ones; the painting looks fresher in the earlier photographs. Technically, the cycle continues on the south wall with the Dormition of the Virgin, but that too is a late subject in Armenian iconography essentially borrowed from the Byzantine or western tradition, though the borrowing was as early as 1232 in Greater Armenia long before the fresco decoration at Famagusta.⁷⁴

Conclusion

The history of the Life of Christ cycle in Armenian painting is complex.⁷⁵ In the early Christian period, the first such cycles contained the Annunciation, the Nativity, and ended with the Baptism. By the eleventh century, a larger cycle from seven to fifteen scenes was used in Gospels manuscripts. Armenian Churches were not systematically graced with wall paintings as in the Byzantine tradition. The earliest surviving fresco cycle at the Church of the Holy Cross on the island of Aght'amar (915–21) with twenty-five scenes is unique in its extent.⁷⁶ Yet, it too lacked the Flagellation, the Descent from the Cross, the Entombment, the Dormition, and the *Piéta*, while incorporating the other scenes we find at Famagusta as well as the Judgment of Pilate. These latter scenes fit very well with the name of the church, Holy Mother of God, the Lady of Sorrows (Kanch'vor) and may have served as the inspiration for some of the many scenes of Christ's suffering witnessed by His mother, thus her sorrow.

The frescoes themselves were, at least initially, probably painted by an Armenian artist from Cilicia in the first half of the fourteenth century. The Armenian inscriptions and the refined style of many of the figures and their garments underline an eclectic court art prevalent in Cilician Armenian manuscripts. Perhaps with the recent restoration of the church and its paintings, a clearer notion of the style and the iconographic details of the scenes will allow future art historians to more conclusively evaluate

the history, style, and influences at work in what is a unique witness to Armenian wall painting of the late medieval period associated with Cilicia and its Latin tendencies.

In a detailed and intriguing presentation of this fresco cycle published after my own work on the church and its frescoes was in press, Michele Bacci⁷⁷ discussed the faded, damaged, and partially destroyed wall paintings in the context of the decorations of other medieval churches of various denominations and general art trends among Catholic circles of the time, especially in Italy. In the end, he proposes a supposition that in the thirteenth and fourteenth centuries, "it may so be assumed that, almost in the same period, a painter or a team of painters from Thessaloniki (or possibly from Constantinople, whose role in art history in the second half of the fourteenth century is hardly known) was required to embellish the major churches of Famagusta, regardless of the different religious communities who ruled them."78 Is it impossible to hypothesize more specific solutions? Such a problematic hypothesis requires cooperation between churches and acceptance by the Armenian clergy of non-Armenian artists when there was an abundance of them active in nearby Cilicia, whence it has been conjectured an artist of talent had come to Famagusta's St. Mary early in the fourteenth century. This is based on a religious miscellany commissioned by Alitz, the Senechal, sister of Queen Keran of Cilicia, and copied in Famagusta between 1310 and 1312 by the famous scribe originally from Skevra, Step'annos Goynerits'ants', and beautifully illustrated by the artist Sargis. 79 Since the style of the decorative illustrations is purely Cilician of the early fourteenth century and close to that of the most prolific Armenian miniaturist of the first half of the century, Sargis Pidzak, there has been speculation that he, a collaborator of Step'annos in Skevra, was the artist. As Sylvia Agemian points out, however, there is no formal proof that Pidzak had ever traveled to Cyprus.⁸⁰ Furthermore, despite the fineness of the decorative ornaments, there are no miniatures of narrative scenes or portraits in the manuscript; curiously in her Preface to Agémian's book, Sirarpie Der Nersessian does not discount an attribution to Pidzak.⁸¹ It would be more prudent, given all the important members of the royal entourage of the Cilician Kingdom active in Cyprus, especially Famagusta, to continue to explore the role of Armenian artists for the execution of the frescoes of St. Mary, particularly those exposed to western, especially Italian, art of the thirteenth century.⁸²

Excursus on the Iconography of St. Mary Church Frescoes

Most recently, Michele Bacci proposed an ambitious explanation of the fresco cycle in the Armenian Church of St. Mary of Sorrows in Famagusta. 83 Having already studied the frescoes of the many other denominations who built and decorated churches in the thriving commercial and cultural environment of the port city in the late thirteenth and especially the first three quarters of the fourteenth century, he endeavors to contextualize the style, the subjects, and the iconography of the Armenian paintings within the very eclectic cultural landscape in Lusignan Cyprus. As with so many of the metropolis's other churches, the Armenian sanctuary suffered neglect and destruction and after the Turkish invasion of 1974, a program of effacement of an undesirable cultural past. The small Armenian Church had its frescoed walls whitewashed, so even what was still visible in early 1974 disappeared. The recent restoration⁸⁴ with the meticulous effort to remove the white covering has revealed most but not all of what was visible during my hasty afternoon visit during which the photographs taken were only haphazardly useful.85

The difficulty of determining the sources of the art is accentuated by the total lack of references to these wall paintings in Armenian or other texts. Thus, identifying the artists by their origin when names and geographical original are totally lacking is at best guesswork dependent on supposition. The most important identifiers are the inscriptions in Armenian uncials still apparent on some of the frescoes. Other languages are found only on later graffiti that covered the walls after its Armenian congregation had abandoned the church and town, probably already by the end of the fourteenth century as explained above. Furthermore, the religious trends among the Armenians were complex, at times ambiguous, between loyalty to the Armenian Apostolic Church or to Roman Catholicism, which was adopted by many of the Armenian nobility and upper classes in the Armenian Kingdom of Cilicia and in Lusignan Cyprus.

Though Bacci is well informed on the history of Armenian painting in Cilicia, patronized by the royalty and the upper clergy, he prefers or simply finds more inspiration for the source of these frescoes in western, more often Latin than Byzantine, models as opposed to the available painting in Armenian manuscript illumination, which has a very prolific and distinguished flourishing under royal patronage in the royal capital Sis and the seat of the Catholicos at Hromkla, especially in the second half of the thir-

teenth and the first decades of the fourteenth century.⁸⁶ During the period, many members of the Armenian royal family married into the Lusignan and Crusader royal and noble families. 87 The Senechal of Famagusta was a certain Balian who had married Alitz/Alice, sister of the famous Armenian Queen Keran, patron par excellence of the arts, and she retained the function after her husband's death. The proximity of the island to the Cilician mainland also allowed a constant flow of population between the Rubenid domains of Cilicia and those of the Lusignans. Alice, the Senechal after the death of her husband Balian son of Guy Ibelin, 88 commissioned Armenian manuscripts and brought scribes and artists active at the Armenian court in Cilicia to Famagusta, was discussed above. During this period of aggressive exchange of cultural and artistic ideas among all the nations involved in Eastern Mediterranean politics and commerce, the Italians were very active and precisely at the same time Armenians representing both religious and merchant classes were present throughout Italy.⁸⁹ Armenian art was already enriched through tendencies in both religious and secular domains by western, Byzantine, Islamic Near Eastern, and even Central Asian and Chinese subjects and styles. 90 Such tendencies have been insufficiently studied until now to determine whether quite apparent nontraditional Armenian modes found in Armenian art are the work of native artists influenced by foreign fashions in both style and iconography or if such work was perforce executed by non-Armenian artists in the service of Armenian patrons. No doubt, there was probably an indistinguishable combination of both trends.

Thus, as was pointed out in the tentative conclusions to this study, Bacci has favored the more logical and, in terms of comparisons, the more easily demonstrable path of foreign artists for the painting of the St. Mary frescoes. In the face of a total lack of source proof, he has hypothesized an artist, but more likely a team of them, perhaps from Thessaloniki or even Constantinople who came or were invited to come to Cyprus not only for the decoration of the walls of St. Mary, but for many new churches— Syriac, Nestorian, Latin, Greek, Armenian—being erected in the flourishing environment of one of most important urban centers in the East.91 Such an intellectually constructed "pool" of artists helps to understand the similarities found in the images displayed in such diverse religious environments. This is done without neglecting certain similarities between the iconography and style of these frescoes with manuscript illumination, which flourished in the Armenian kingdom of Cilician, in surprising contrast to the almost total lack of wall painting in the innumerable castles and churches of the kingdom.

Acknowledging the breath of Bacci's analysis and research, it is clear that more work needs to be done on seeking out Armenian artistic elements in the paintings and perhaps also providing an explanation how, as he has pointed out, some paintings resemble the work of Armenian miniaturists like the most famous court artist T'oros Roslin whom he cites. Does that mean that the unidentified itinerant coterie of painters included some who were familiar with Armenian art or that perhaps some of them were by origin Armenian? The great merit of Michele Bacci's investigation is its global scheme to integrate the fresco cycle into the context of the city it was part of, thereby removing some of its isolation and mystery.

Notes

- 1. Dickran Kouymjian, "The Holy Mother of God Armenian Church in Famagusta," Appendix IV: "Armenian Manuscript Colophons from Famagusta and Cyprus," Appendix V: "Typed Notes by M[onica] Bardswell, February 1937 from Conway Library, Courtauld Institute," *Medieval and Renaissance Famagusta: Studies in Architecture, Art and History*, eds. Michael J. K. Walsh, Peter W. Edbury, Nicholas S. H. Coureas (Farnham: Ashgate, 2012), 133–46, 301–305, 307–309.
- 2. Regestum Clementis V., ed. cura et studio monachorum Ordinis S. Benedicti, 8 vols (Rome, 1885–1892), no. 7209 (August 10, 1311): "in civitate Famagustane ad honorem ipsius Virginis quandam ecclesiam vocatam beate Marie de Vert, de licentia venerabilis fratris nostri episcopi Famagustane, in qua presbyteri Armeni habentur inibi Domino servientes, de novo edificare inceperit." Latin text quoted in part in Philippe Plagnieux and Thierry Soulard, "Famagouste. L'Église des Arméniens (Sainte-Marie-de-Vert)," in Jean-Bernard de Vaivre and Philippe Plagnieux, L'art gothique en Chypre (Paris, 2006): 258 n. 6, cf. 260 for the dates.
- 3. Ibid., 258. "[P]ar une bulle du 10 août 1311 accordée à la demande de Gérard de Layas, ambassadeur du roi Ochine, le papa concéda des indulgences pour aider les prêtres arméniens de l'église Sainte-Marie-de-Vert, qu'un membre de la famille de l'ambassadeur avait entreprise de construire."
- 4. Nicholas Coureas, "Lusignan Cyprus and Lesser Armenia, 1195–1375," *Journal of the Cyprus Research Centre* 21 (1995 Leykosia): 33–71, esp. 65.

- 5. Lettres communes de Jean XXII, ed. G. Mollat, 16 vols (Paris, 1904-1947), no. 6022 (13 December 1317): "Episcopo et capitulo Famagustan mandatur ut de tertia parte reddituum ecclesie Famagustane, juxta antiquam consuetudinem regni Cypri pauperibus erogari solita, 200 argenti bisantios annis singulis usque ad quinquennium cleribus pauperibus Armenis commorantibus in ecclesia S. M. Viridis Famagustan assignari faciant"; quoted by Plagnieux and Soulard, "Famagouste," 258, n. 7. This is confirmed in a letter of April 13, 1318. Mollat, no. 6958; Coureas, "Lusignan Cyprus," 65–66; Plagnieux and Soulard, "Famagouste," 258, n. 8.
- 6. Camille Enlart, L'art gothique et la Renaissance en Chypre, 2 vols (Paris, 1899); English trans., D. Hunt, Gothic Art and the Renaissance in Cyprus (London, 1987), 286-8; G. Jeffery, A Description of the Historic Monuments of Cyprus: Studies in the Archaeology and Architecture of the Island (Nicosia, 1918, repr. London, 1983), 143; Plagnieux and Soulard, "Famagouste," 257-60.
- 7. Bakuran (Vahan M. K'iwrkdchian/Kurkjian), Kipros kghzin (The Island of Cyprus), (Nicosia, 1903), 51; A. Alpoyadjian, "Kipros kghzin (Ir anc'ealn u hnerkan) [The Island of Cyprus (Its Past and Present)]," T'eodik Yearbook (1927): 192–239; Babgen Archbishop Kiwleserian/Gulesserian (BAK), Hay Kiprose [Armenian Cyprus], (Antelias, 1936): 46, 53, 71; Bishop Ghevond (Ch'epeyan), Yishadakaran kiprahay gaghut'i [Memoir on the Cypriot-Armenian Community, (Antelias, 1955), 2.
- 8. Gérard Dédéyan, "Les Arméniens à Chypre de la fin du XI^e siècle au début du XIIIe siècle," Les Lusignans et l'Outre-Mer (Actes du Colloque Poitiers-Lusignan, 20-24 octobre 1993), ed. Cl. Mutafian (Poitiers, 1995), 122-31.
- 9. Mik'ayēl Ch'amch'ian, Hayots' patmutiwn [Armenian History], vol. 3 (Venice, 1786), 132: "T'adēos epis. Kiprosi." See also Gulesserian, Armenian Cyprus, 53.
- 10. Coureas, "Lusignan Cyprus," 34, quoting Recueil des historiens des croisades, I, 424-5, 643.
- 11. Ibid., 35.
- 12. Bishop Ghevond, Memoir on the Cypriot-Armenian Community, 2.
- 13. Ibid.

- 14. See Angèle Kapoïan-Kouymjian, L'Égypte vue par des Arméniens (XIe-XVIIe siècle), (Paris, 1988), 55-56; Coureas, "Lusignan Cyprus," 34–36. But in the same year, he was forced to return to Cilician Armenia when his son-in-law, Oshin, became king.
- 15. Nicholas Coureas, "Genoese Merchants and the Export of Grain from Cyprus of Cilician Armenia: 1300-1310," Hask Armenological Yearbook, N.S. vol. 11 (2007-8, published 2009): 319-38.
- 16. Coureas, "Lusignan Cyprus," 58-60.
- 17. New Julfa, Armenian Prelacy, manuscript no. 33, fol. 335. See also Artashēs Mat'evosyan, Hayeren jer'agreri hishatakaranner. XIII dar (Colophons of Armenian Manuscripts: Thirteenth Century), (Erevan, 1984), no. 408, 510.
- 18. Michel Balard, "Les Arméniens dans les comptoirs génois d'Orient," in Claude Mutafian, ed., La Méditerranée des Arméniens. XIIe-XVe siècle (Paris: Geuthner, 2014), 251: "[I]ls célèbrent les mêmes offices que l'Église romaine, dont ils reconnaissent la juridiction, au moins jusqu'à la seconde moitié du XIVe siècle," quoting Nicholas Coureas, "Non-Chalcedonian Christians on Latin Cyprus," in Michel Balard, Benjamin Z. Kedar and Jonathan Riley-Smith, eds., Dei Gesta per Francos. Études sur les croisades dédiées à Jean Richard (Aldershot, 2001), 349-360.
- 19. Nicholas Coureas, "Between the Latins and Native Tradition: The Armenians in Lusignan Cyprus, 1191-1473," Isabelle Augé et Gérard Dédéyan, éd., L'Église arménienne entre Grecs et Latins : fin XIe - milieu XVe siècle (Paris: Geuthner, 2009), 207, quoting R. Röhricht, "Le pèlerinage du moine augustin Jacques de Vérone," Revue de l'Orient latin 3 (1895): 175-8.
- 20. Coureas, "Between the Latins and Native Tradition," 214.
- 21. Erevan, Matenadaran (henceforth M), M6845, fol. 280, cf. Mat'evosyan, Colophons of Armenian Manuscripts: Thirteenth Century, no. 495, 609-10. Perhaps in Famagusta as suggested by Gulesserian, Armenian Cyprus, 53.
- 22. Gérard Dédéyan, "The Armenians in Cyprus during and after the Ottoman Conquest," in The Minorities of Cyprus, eds. Andrékos Varnava, Nicholas Coureas, et Marina Elia (Newcastle upon Tyne: Cambridge Scholars Publishing, 2009), 52-91; electronic version in French, "Les Arméniens en Chypre à la veille, pendant et au lendemain de la conquête ottomane," 2, "Les Arméniens possédaient, à Famagouste, à la fin du XIIIe siècle, trois églises : Sourb Sargis (Saint-Serge), Sourb Varvarê (Sainte Barbara), Sourb Astwatzatzin

- (Sainte-Mère de Dieu) et un monastère, Sainte-Marie de Verte, fondé par de pauvres clercs arméniens que le pape Jean XXII prit sous sa protection," quoting Le Livre des remembrances de la Secrète du royaume de Chypre (1468–1469), published by Jean Richard with Théodore Papadopoullos (Nicosia: Centre de Recherches scientifiques, 1983), 210 and n. 2, 214, 215; see also Bakuran, The Island of Cyprus, 51, n. 2; Frédéric Macler, Île de Chypre. Notices de manuscrits arméniens (Paris, 1923), [an abridged translation and commentary of Bakuran], 28, n. 1.
- 23. However, Bakuran, 51, n. 2, cited after Macler, Île de Chypre, 28; claims an earlier reference, though perhaps not from an Armenian colophon: "Famakosta possédait, en 1287, trois églises arméniennes : Saint Sargis, Sainte Varvarê et Sainte Mère de Dieu."
- 24. Jacobus Dashian, Catalog den armenischen handscriften in der Mechitaristen-bibliothek zu Wien [in Armenian with title and abbreviated catalog in German], (Vienna, 1895), no. 244, 632. See also Bishop Ghevond, Memoir on the Armenian Community of Cyprus, 56. The scribe must be the same Yovhanes as the copyist of J1141 of 1317; Norayr Bogharian, Grand Catalogue of St. James Manuscripts [in Armenian with English title], 11 vols. (Jerusalem, 1966–1991), vol. V, 226. [J refers to the Armenian Patriarchate of Jerusalem manuscript collection.
- 25. Norayr Bogharian, Grand Catalogue of St. James Manuscripts, op. cit. The colophon was not included in Levon Khach'ikyan, XIV dari Hayeren jer'agreri hishatakaranner [Fourteenth-Century Armenian Manuscript Colophons], (Erevan, 1950); published nearly two decades before the Jerusalem catalog.
- 26. J1033, fol. 685 and J1926, fols. 268v, 426v; Bogharian, Jerusalem Catalogue, vol. 4, 45-49 and vol. 6, 417-421. The patron of the later manuscript was a certain T'oros the priest.
- 27. J1926, fols. 268v and 426v; Bogharian, Catalogue, 6, 417.
- 28. The original manuscript seems not to have survived. An eighteenthcentury Commentary on the Acts of the Apostles copied the earlier colophon of 1310. Bogharian, 3, no. 700, 145. Khach'ikyan, Fourteenth Century Colophons, no. 92, 68-9, extracted from a published collection from Gherla in Transylvania, presents a slightly different version.
- 29. J265, fol. 300v, Bogharian, Catalogue, 2, 61. On Step'annos Goynerits'ants' and his relationship to the royalty of Cilician Armenia and Cyprus see: Hrachya Achar'ian, Hayots' anjnanunneri par'aran

- [Armenian First Name Dictionary], vol. 4 (Erevan, 1948), 635-6; about his work as scribe, Claude Mutafian, L'Arménie du Levant (XIe-XIVe siècle), (Paris: Les Belles Lettres, 2012), I, 700-701.
- 30. Gulesserian, Armenian Cyprus, 53, suggests that the term was already in use in 1307, even perhaps in 1179: "It seems to us that the residence of Bishop T'adēos of Cyprus who participated in the Council of Hromkla in 1179 was Kanch'avor as was that of Bishop Nikoghayos who participated in the Council of Sis in 1307." This supposition is a projecting back from the colophon of 1317; in the acts of the Council of 1179 no specific place in Cyprus is mentioned.
- 31. J1142, fol. 664, Bogharian, Catalogue, 4, 226 (re-copied at St. James in Jerusalem in a manuscript of the Commentary on the Liturgy by Anjevats'i in 1840. J2254, fol. 100, Bogharian, Catalogue, 7, 349). Khach'ikyan, Fourteenth Century Colophons, no. 175, 135, takes his information from M6273, vol. 1 of Nshkhark 'patmut'ean Hayots' (Fragments of the History of the Armenians) by Ghevond P'irghalēmian. The emendations by Khach'ikyan must be ignored and admit that P'irghalēmian incorrectly copied the word Kanch'uor as Kanch'ut.
- 32. "The small church, which is built against the eastern wall of Ascalon near the Gate of Jerusalem, is thought to be St. Mary the Green (Maria Viridis). It remounts to the Byzantine era, but was rebuilt anew by the Crusaders," Moshe Gil, A History of Palestine, 634-1099, trans. Ethel Broido (Cambridge, 1997). For an alternative interpretation see Dennis Pringle, The Churches of the Crusader Kingdom of Jerusalem: a Corpus (Cambridge, 1993–2009), 1, 63–4. One might note that there is or was an Armenian Catholic Church called the Cathedral of Our Lady of Pity (also known as St. Rita) on Tillel Street in Aleppo inaugurated in 1840, last restored in 1990, and bombed by terrorists on January 9, 2015. I asked Nanore Barsoumian, who reported the story in the Armenian Weekly the next day, if she could get more details about the name. She reported on January 24 that according to Bishop Mikael Mouradian, it is called literally, the Cathedral of the Mother of God of Succour.
- 33. General information on the early history of the Servite order can be found in the Catholic Encyclopedia, http://www.newadvent.org/ cathen/13736a.htm, accessed August 24, 2015; see also Georges K. Khayiguian and Maxime K. Yevadian, Saint Servatius d'Arménie premier évéque de Maastricht (Lyon: Sources d'Arménie, 2012).

- 34. The photograph is reproduced in P. Plagnieux and T. Soulard, "L'Église des Arméniens," in L'Art gothique en Chypre, éd. Jean-Bernard de Vaivre et Philippe Plagnieux (Paris: de Broccard, L'Académie des Inscriptions et Belles-Lettres, 2006), 259, Fig. 3.
- 35. Bakuran-Macler, Île de Chypre, 58: "1711. Astwadzatour vardapet, visiteur à Famakostha."
- 36. Kouymjian, Appendix IV: "Armenian Manuscript Colophons from Famagusta and Cyprus," Medieval and Renaissance Famagusta, 301-305.
- 37. R. Röhricht, "Liber peregrinationis fratris Joannis de Verona," Revue de l'Orient latin 3 (1895):177; for James of Verona, R. Röhricht and H. Meisner, Deutsche Pilgerreisen (Berlin, 1880), 51.
- 38. C.B. Cobham, ed. and trans., Excerpta Cypria (Cambridge: 1908; repr. 1969), 16-17, cf. Coureas, "Lusignan Cyprus and Lesser Armenia," 50.
- 39. Plagnieux et Soulard, "L'Église des Arméniens," 257, n. 2; quoting Philippe de Mézières, "Vita Sancti Petri Thomasii," Acta Sanctorum, janvier, 2: 1005; Philippe de Mézières, Life of St. Peter Thomas, ed. J. Smet (Rome, 1954), 82; Nicolas Coureas, "Friend or Foe? The Armenians in Cyprus as Others Saw Them During the Lusignan Period (1191-1473)," La Méditerranée des Arméniens, éd. Claude Mutafian (Paris: Geuthner, 2014), 78-79. Peter Thomas died in Famagusta in January 1366.
- 40. Enlart, L'art gothique et la Renaissance en Chypre, 368. This was the oldest date he found among the many graffiti.
- 41. Kouymjian, "The Holy Mother of God Armenian Church in Famagusta," Appendix IV, 303-04.
- 42. Macler, Île de Chypre, 32-33, quotes a Latin source, but without specific reference, perhaps from Bakuran, thus: "Dans la seconde moitié du XVIe siècle (1572), un moine latin de Chypre, le P. Etienne de Lusignan, donne les renseignements suivants: 'Actuellement, on parle ici les langues, le latin, l'italien, le grec corrompu, l'arménien, le copte, le jacobite, le maronite, le syriaque, l'indien, le géorgien, l'albanais, le macédonien et l'arabe ... Les Arméniens de Chypre ont deux évêques, un à Famagosta et un à Nikosia. Ceux-ci ne dépendent que du patriarche arménien qui réside en Cilicie. Ils le considèrent comme le chef de leur église, qui a autant de pouvoir que le pape de Rome."

- 43. Kouymjian, "The Holy Mother of God Armenian Church in Famagusta," Appendix IV, 302-304; the data presented here updates and revises that in the early publication when later copies of older colophons were also included.
- 44. Mutafian, L'Arménie du Levant (XIe-XIVe siècle), I, 698-701, II, genealogical table nos. 46 and 79.
- 45. Kouymjian, "The Holy Mother of God Armenian Church in Famagusta," colophons of 1308, 1310, 1314, Appendix IV, 302–303.
- 46. Jeffery, Description, 144.
- 47. R. Gunnis, Historic Cyprus (London: Methuen, 1936), 40.
- 48. Gulesserian, Armenian Cyprus, 73–74. He had visited the church in 1934.
- 49. Alexander-Michael Hadjilyra of Nicosia suggests it would probably have been Fr. Khoren Kouligian.
- 50. Bishop Ghevond, Cypriot-Armenian Community, 86–87.
- 51. According to the registration census of October 1956, there were 4549 Armenians in Cyprus; I would like to thank Alexander Hadjilyra for this information. Today, there are approximately 2500 Armenians living in Cyprus, in addition there are some 1000 non-Cypriot Armenians working on the island.
- 52. Bishop Ghevond, Cypriot-Armenian Community, passim.
- 53. See the section with the same title in Kouymjian, "The Holy Mother of God Armenian Church in Famagusta," 139-146; shortly after it was submitted, the very interesting iconographic study and contextualization of the Armenian frescoes within the artistic tradition of Cyprus was published by Michele Bacci, "The Armenian Church in Famagusta and Its Mural Decoration: Some Iconographic Remarks," Hask hayagitakan taregirk', vol. 11 (2007–2008, published 2009), 489–508.
- 54. Enlart, L'art gothique, 366–368; Plagnieux et Soulard, "Famagouste," 257–260; A. Langdale and Michael J. K. Walsh, "The Architecture, Conservation History, and Future of the Armenian Church of Famagusta, Cyprus," Chronos (2009): 7-40.
- 55. N. Thierry, "Les peintures de l'église de la Sainte-Croix d'Aghtamar (915-921)," The Second International Symposium on Armenian Art, Erevan, 1978, vol. 3 (Erevan, 1981), 182-190.
- 56. N. Thierry, "The Wall Painting at Ani," Documents of Armenian Architecture, vol. 12 (Milan: Edizioni Ares, 1984), 68-71.
- 57. Jeffery, Description, 143-144.

- 58. Gulesserian, Armenian Cyprus, 73.
- 59. Kouymjian, "Appendix V: Typed Notes by M[onica] Bardswell, February 1937 from Conway Library, Courtauld Institute," Medieval and Renaissance Cyprus, 307-309.
- 60. "T'adeos and Bart'oghemeos," Gulesserian, Armenian Cyprus. The two are always included among the Twelve Apostles in Armenian artistic and literary traditions, see Dickran Kouymjian, "Identifying the Apostles in Armenian Narrative Miniatures," From Byzantium to Iran: Armenian Studies in Honour of Nina G. Garsoïan, eds. Jean-Pierre Mahé and Robert W. Thomson (Atlanta: 1997), 453-474.
- 61. Kouymjian, "Appendix V," 308.
- 62. The enthroned Virgin and Child in the Presentation of the Magi, Etchmiadzin Gospels, final miniatures, ca. 600, M2374, fol. 229, N. Kotanjian, The Etchmiadzin Gospels (Erevan, 2000: text in Armenian, Russian, English), 64; Bible Syriac, BnF, ms. Syr. 341, see Sirarpie Der Nersessian, "Le peinture arménienne au VIIe siècle et les miniatures de l'Évangile d'Etchmiadzin," reprinted in S. Der Nersessian, Byzantine and Armenian Studies (Lisbon, 1973), vol. 1, 529, vol. 2, Fig. 277; André Grabar, "Iconographie de la Sagesse Divine et de la Vierge," Cahiers archéologiques 8 (1956): 255-257.
- 63. Prof. Bacci in a personal communication has carefully elucidated the iconography and properly identified the figure(s). I thank him for it.
- 64. Bacci, "The Armenian Church in Famagusta," p. 500.
- 65. This and other photos were communicated to me from the Courtauld Institute at the same time as her typed notes.
- 66. Allan Langdale and Michael J. K. Walsh, "The Architecture, Conservation, History, and Future of the Armenian Church of Famagusta, Cyprus," Chronos, no. 19 (2009): 7-31, Fig. 17.
- 67. T'oros Roslin painted the scene many times, but usually with the Magi entering from the right, while others had them as in the fresco on the left. See Sirarpie Der Nersessian, Miniature Painting in the Armenian Kingdom of Cilicia, 2 vols. (Washington: Dumbarton Oaks, 1993), vol. 2, Figs. 183-184, 212-213, 378-380.
- 68. Photograph by Wilbert "Skip" Norman. Langdale and Walsh, "The Architecture, Conservation History, and Future of the Armenian Church of Famagusta, N. Cyprus," Fig. 10.

- 69. Bardwell's description: "Green background. To left St. John ... stands on the bank ... and pours water on head of Christ, who stands ... naked, water up to middle. (Not heaped up water). To right two angels stand on the bank. Of most of this subject only the under-painting remains; the outline sketched in red," for which see Kouymjian. Appendix V, (308).
- 70. Langdale and Walsh, "Armenian Church of Famagusta," Figs. 18-19.
- 71. Enlart, L'art gothique et la Renaissance en Chypre, 367: "Dessus du portail nord. - Tympan, buste du Christ, les bras étendus."
- 72. Jeffery, Description, 144, sees the same "Carrying of the Cross" after the Flagellation rather than Christ before Pilate.
- 73. Der Nersessian, Miniature Painting in the Armenian Kingdom of Cilicia, Fig. 473, M979, Lectionary of Het'um II, 1286, fol. 194; Fig. 472, M7651, Gospels of the seven painters, late thirteenth century to 1320, fol. 81.
- 74. Erevan, M2743, fol. 294, T'argmanch'ats' Gospels, Dormition, artist Grigor, 1232; Levon Chookaszian, Grigor caghkogh (Grigor the Painter), (Erevan: Yerevan State University Press, 1986), Figs. 7 and 31.
- 75. Dickran Kouymjian, "The Evolution of Armenian Gospel Illumination: The Formative Period (9th-11th Centuries)," Armenian and the Bible, ed. C. Burchard (Atlanta: Scholars Press, 1993), 125-42; idem, "The Melitene Group of Armenian Miniature Painting in the Eleventh Century," Armenian Kesaria/ Kayseri and Cappadocia, ed. Richard G. Hovannisian (Costa Mesa, CA: Mazda Publishers, 2013), 81–115.
- 76. Thierry, "Les peintures de l'église de la Sainte-Croix d'Aghtamar," 182-190.
- 77. Bacci, "The Armenian Church in Famagusta," op. cit.
- 78. Ibid., 496, col. 2.
- 79. Cluj-Napoca, State Archives no. 15, formerly Gherla 2 (13), Sylvia Agémian, Manuscrits arméniens illustrés dans les collections de Roumanie (Bucarest: Meridiane, 1982), 19-21, pls. 6-14.
- 80. Agémian, Manuscrits arméniens illustrés, 21. On the scribe and manuscript see Mutafian, L'Arménie du Levant, I, 700-701; Kouymjian, "Appendix IV, Armenian Manuscript Colophons," Medieval and Renaissance Famagusta, 302.
- 81. Sirapie Der Nersessian, "Préface," in Agemian, Manuscrits arméniens illustrés, 6: "Quant au peintre Sargis qui a orné le manuscrit

- « avec de l'or jusqu'à la fin » il s'agit très probablement, comme le pense Mademoiselle Agémian, de Sargis Pidsak l'artiste cilicien le plus réputé du XIVe siècle," this despite Agémian's skepticism in her own discussion.
- 82. Some 70 Armenian manuscripts, many illuminated, were copied in Italy, most during the Cilician period, 28 of which are preserved in the Matenadaran in Erevan, Emma M. Korkhmazian, "Armenian Manuscripts Copied in Italy," in Arm., Patma-banasirakan Handes [Historico-philological Review], (1971, no. 3): 247–254.
- 83. Bacci, "The Armenian Church in Famagusta and Its Mural Decoration: Some Iconographic Remarks," op. cit.
- 84. For which see, Langdale and Walsh, "The Architecture, Conservation History, and Future of the Armenian Church of Famagusta," op. cit.
- 85. Kouymjian, "The Holy Mother of God Armenian Church in Famagusta," 133 for details; the trip and the photographs were discussed at 15th International Byzantine Congress in Athens, September 5–11, 1976: "The Frescoes of the Armenian Church in Famagusta, Cyprus: Preliminary Report," and the 25th Spring Symposium of Byzantine Studies at the University of Birmingham, March 25-28, 1991: "Armenian Art in Cyprus in the 14th Century." Neither paper has been published.
- 86. Der Nersessian, Miniature Painting in the Armenian Kingdom of Cilicia, passim.
- 87. Mutafian, L'Arménie du Levant, I, "La diplomatie matrimoniale," 371-408.
- 88. Mutafian, ibid., 342, 571.
- 89. Claude Mutafian, éd., Roma Armenia (Vatican: Edizioni De Luca, 1999), "Les Arméniens en Italie médiévale (VIe-XVe siècle)," 195-234, and map 22, "La présence historique arménienne en Italie," 205. See also, Boghos Levon Zekiyan, ed., Gli Armeni in Italie (Rome: De Luca edizione d'arte, 1990) and idem, ed., Ad Limina Italiae. In viaggio per l'Italia con mercaniti e monaci armeni (Padova: Editoriale Programma, 1996).
- 90. Der Nersessian, Miniature Painting in the Armenian Kingdom of Cilicia, passim; Dickran Kouymjian, "Chinese Influences on Armenian Miniature Painting in the Mongol Period," Armenian Studies/Études arméniennes: In Memoriam Haïg Berbérian (Lisbon: Calouste Gulbenkian Foundation, 1986), 415-468, and idem, "The Intrusion of East Asian Imagery in Thirteenth Century

- Armenia: Political and Cultural Exchange along the Silk Road," *The Journey of Maps and Images on the Silk Road*, eds. Philippe Forêt and Andreas Kaplony (Leiden: E. J. Brill, 2008), 119–133, pls. 12–19.
- 91. Bacci, "The Armenian Church in Famagusta," 496–498.

BIBLIOGRAPHY

PRIMARY SOURCES

- Alpoyadjian, Arshag "Kipros kghzin (Ir anc'ealn u hnerkan) [The Island of Cyprus (Its Past and Present)]." *T'eodik Yearbook*, in Armenian (Paris: Masis, 1927).
- Bakuran (Vahan M. K'iwrkdchian/Kurkjian). *Kipros kghzin* [The Island of Cyprus]. (Nicosia, 1903).
- Regestum, Clementis V., ed. cura et studio monachorum Ordinis S. Benedicti. 8 vols. (Rome: 1885–1892).
- Lettres communes de Jean XXII, no. 6022. December 13, 1317. edited by G. Mollat, 16 vols. (Paris: 1904–1947).

SECONDARY SOURCES

- Achar'ian, Hratcheay. *Hayots' anjnanunneri par'aran* [Armenian First Name Dictionary], vol. 4 (Erevan, 1948).
- Agémian, Sylvia. Manuscrits arméniens illustrés dans les collections de Roumanie (Bucarest: Meridiane, 1982).
- Augé, Isabelle et Gérard Dédéyan, éds., L'Église arménienne entre Grecs et Latins: fin XIe—milieu XVe siècle (Paris: Geuthner, 2009).
- Babgen Archbishop Kiwleserian/Gulesserian (BAK). *Hay Kiprose* [Armenian Cyprus] (Antelias, 1936).
- Bacci, Michele. "The Armenian Church in Famagusta and It's Mural Decoration: Some Iconographic Remarks." *Hash hayagitakan taregirk*, vol. 11 (2009): 489–508.
- Balard, Michel. "Les Arméniens dans les comptoirs génois d'Orient," La Méditerranée des Arméniens. XIIe-XVe siècle, ed., Claude Mutafian (Paris: Geuthner, 2014).
- Bogharian, Norayr. *Grand Catalogue of St. James Manuscripts*, 11 vols. [in Armenian with English title] (Jerusalem, 1966–1991).
- Bishop Ghevond (Ch'ēpēyan). *Yishadakaran kiprahay gaghut'i* [Memoir on the Cypriot-Armenian Community] (Antelias, 1955).

- Ch'amch'ian, Mik'ayēl. Hayots' patmutiwn [Armenian History], vol. 3 (Venice, 1786).
- Chookaszian, Levon. Grigor caghkogh [Grigor the Painter], (Erevan: Yerevan State University Press, 1986).
- Cobham, C.B., ed. and trans., Excerpta Cypria (Cambridge: 1908; repr. 1969).
- Coureas, Nicholas. "Friend or Foe? The Armenians in Cyprus as others Saw Them During the Lusignan Period (1191-1473)," La Méditerranée des Arméniens, ed., Cl. Mutafian (Paris: Geuthner, 2014).
- Coureas, Nicholas. "Lusignan Cyprus and Lesser Armenia, 1195-1375." Journal of the Cyprus Research Centre 21 (Leykosia, 1995): 33-71.
- Coureas, Nicholas. "Non-Chalcedonian Christians on Latin Cyprus," Dei Gesta per Francos. Études sur les croisades dédiées à Jean Richard, eds., Michel Balard, Benjamin Z. Kedar, and Jonathan Riley-Smith (Aldershot, 2001), 349–360.
- Coureas, Nicholas. "Between the Latins and Native Tradition: The Armenians in Lusignan Cyprus, 1191-1473," L'Église arménienne entre Grecs et Latins: fin XIe-milieu XVe siècle, éds., Isabelle Augé et Gérard Dédéyan (Paris: Geuthner, 2009).
- Coureas, Nicholas. "Genoese Merchants and the Export of Grain from Cyprus of Cilician Armenia: 1300-1310." Hask Armenological Yearbook, N.S. vol. 11(2009): 319-338.
- Dashian, Jacobus. Catalog den armenischen handscriften in der Mechitaristenbibliothek zu Wien [in Armenian with title and abbreviated catalog in German] (Vienna, 1895).
- Dédéyan, Gérard. "Les Arméniens à Chypre de la fin du XI° siècle au début du XIII° siècle," Les Lusignans et l'Outre-Mer (Actes du Colloque Poitiers-Lusignan, 20-24 octobre 1993), éd., Claude Mutafian (Poitiers, 1995).
- Dédéyan, Gérard. "The Armenians in Cyprus during and after the Ottoman Conquest," The Minorities of Cyprus, eds., Andrékos Varnava, Nicholas Coureas, et Marina Elia (Nicosia, 2009), 52–91; electronic version in French, "Les Arméniens en Chypre à la veille, pendant et au lendemain de la conquête ottoman."
- Der Nersessian Miniature Painting in the Armenian Kingdom of Cilicia, vol. 2 (Washington, D.C.: Dumbarton Oak, 1993).
- Der Nersessian, Sirarpie. "Le peinture arménienne au VIIe siècle et les miniatures de l'Évangile d'Etchmiadzin," reprinted in S. Der Nersessian, Byzantine and Armenian Studies, vol. 2 (Lisbon, 1973).
- Enlart, Camille. L'art gothique et la Renaissance en Chypre, 2 vols. (Paris, 1899); English trans., D. Hunt, Gothic Art and the Renaissance in Cyprus (London, 1987).
- Gil, Moshe. A History of Palestine, 634-1099. Translated by Ethel Broido (Cambridge: Cambridge University Press, 1997).

- Grabar, André. "Iconographie de la Sagesse Divine et de la Vierge," Cahiers archéologiques 8 (1956).
- Gunnis, Rupert. Historic Cyprus (London: Methuen, 1936).
- Jeffery, G. A Description of the Historic Monuments of Cyprus: Studies in the Archaeology and Architecture of the Island (Nicosia, 1918, repr. London, 1983).
- Kapoïan-Kouymjian, Angèle. L'Égypte vue par des Arméniens (XIe-XVIIe siècle) (Paris, 1988).
- Khach'ikyan, Levon. XIV dari Hayeren jer'agreri hishatakaranner [Fourteenth-Century Armenian Manuscript Colophons (Erevan, 1950).
- Korkhmazian, Emma M. "Armenian Manuscripts Copied in Italy," in Arm., Patma-banasirakan Handes [Historico-philological Review], (1971, no. 3): 247-254.
- Kotanjian, Nikolai. The Etchmiadzin Gospels (Erevan, 2000: text in Armenian, Russian, English).
- Kouymjian, Dickran. "Appendix V: Typed Notes by M[onica] Bardswell, February 1937 from Conway Library, Courtauld Institute," Medieval and Renaissance Cyprus, 307-309.
- Kouymjian, Dickran. "Chinese Influences on Armenian Miniature Painting in the Mongol Period," Armenian Studies/Études arméniennes: In Memoriam Haïg Berbérian (Lisbon: Calouste Gulbenkian Foundation, 1986), 415–468.
- Kouymjian, Dickran, "The Evolution of Armenian Gospel Illumination: The Formative Period (9th-11th Centuries)," Armenian and the Bible, ed., Christoph Burchard (Atlanta: Scholars Press, 1993), 125-142.
- Kouymjian, Dickran. "Identifying the Apostles in Armenian Narrative Miniatures," From Byzantium to Iran: Armenian Studies in Honour of Nina G. Garsoïan, eds., Jean-Pierre Mahé and Robert W. Thomson (Atlanta: 1997), 453-474.
- Kouymjian, Dickran. "The Intrusion of East Asian Imagery in Thirteenth Century Armenia: Political and Cultural Exchange along the Silk Road," The Journey of Maps and Images on the Silk Road, eds., Philippe Forêt and Andreas Kaplony (Leiden: E. J. Brill, 2008), 119-133.
- Kouymjian, Dickran. "The Holy Mother of God Armenian Church in Famagusta," Appendix IV: "Armenian Manuscript Colophons from Famagusta and Cyprus," Appendix V: "Typed Notes by M[onica] Bardswell, February 1937 from Conway Library, Courtauld Institute," Medieval and Renaissance Famagusta: Studies in Architecture, Art and History, eds., Michael J. K. Walsh, Peter W. Edbury, Nicholas S. H. Coureas (Farnham: Ashgate, 2012), 133-146, 301-305, 307-309.
- Kouymjian, Dickran. "The Melitene Group of Armenian Miniature Painting in the Eleventh Century," Armenian Kesaria/ Kayseri and Cappadocia, ed., Richard G. Hovannisian (Costa Mesa, CA: Mazda Publishers, 2013).
- Langdale, A. and Michael J. K. Walsh. "The Architecture, Conservation History, and Future of the Armenian Church of Famagusta, Cyprus," Chronos (2009).

- Macler, Frédéric. Île de Chypre. Notices de manuscrits arméniens (Paris, 1923).
- Mat'evosyan, Artashēs. Hayeren jer'agreri hishatakaranner. XIII dar [Colophons of Armenian Manuscripts: Thirteenth Century] (Erevan, 1984).
- Mutafian, Claude, éd., Les Lusignans et l'Outre-Mer (Actes du Colloque Poitiers-Lusignan, 20–24 Octobre 1993), (Poitiers, 1995), 122–131.
- Mutafian, Claude, ed., Roma—Armenia (Vatican: Edizioni De Luca, 1999).
- Mutafian, Claude. L'Arménie du Levant (XIe-XIVe siècle), 2 vols. (Paris: Les Belles Lettres, 2012).
- P'irghalē mian, Ghevond. Nshkhark'patmut'ean Hayots' (Fragments of the History of the Armenians) by Philippe de Mézières, Life of St. Peter Thomas, ed., J. Smet, vol. 1 (Rome, 1954).
- Plagnieux, Philippe et Thierry Soulard. "L'Église des Arméniens." L'Art gothique en Chypre, eds., Jean-Bernard de Vaivre et Philippe Plagnieux (Paris: de Broccard, Académie des Inscritions et Belles Lettres, 2006), 257-260.
- Richard, Jean with Théodore Papadopoullos. Le Livre des remembrances de la Secrète du royaume de Chypre (1468-1469) (Nicosia: Centre de Recherches scientifiques, 1983).
- Röhricht, Reinhold. "Liber peregrinationis fratris Joannis de Verona," Revue de l'Orient latin 3 (1895):177; for James of Verona.
- Röhricht, Reinhold and Heinrich Meisner. Deutsche Pilgerreisen (Berlin: 1880).
- Thierry, Nicole. "Les peintures de l'église de la Sainte-Croix d'Aghtamar (915–921)." The Second International Symposium on Armenian Art, Erevan, 1978, vol. 3 (Erevan, 1981), 182-190.
- Thierry. "The Wall Painting at Ani," Documents of Armenian Architecture, vol. 12 (Milan: Edizioni Ares, 1984), 68–71.
- Vaivre, Jean-Bernard de and Philippe Plagnieux. L'Art gothique en Chypre (Paris, 2006).
- Varnava, Andrékos, Nicholas Coureas and Marina Elia, eds., The Minorities of Cyprus (Newcastle upon Tyne: Cambridge Scholars Publishing, 2009).
- Walsh, Michael J. K., Peter W. Edbury and Nicholas S. H. Coureas, eds., Medieval and Renaissance Famagusta: Studies in Architecture, Art and History (Farnham: Ashgate, 2012).
- Zekiyan, Boghos Levon, ed., Gli Armeni in Italie (Rome: De Luca edizione d'arte, 1990).
- Zekiyan, Boghos Levon, ed., Ad Limina Italiae. In viaggio per l'Italia con mercaniti e monaci armeni (Padova: Editoriale Programma, 1996).

The Painted Program of the Armenian Church in Light of Recent Discoveries

Michele Bacci

In their churches they put only one cross and nothing else: they say it would be sinful to have more than one sacrifice to our Lord within the same church. On their altars they have no image...No doubt that they nicely decorate their churches and have good samite liturgical vestments and good silken cloths of all colours.¹

Such words by Johannes Schildtberger, a German knight who spent six years in the Ottoman Empire between 1417 and 1422, indicate that Western Medieval visitors to Eastern Mediterranean countries perceived Armenian churches as almost empty spaces, deprived of any painted decoration. In comparison with Greek buildings, which caressed viewers with multiple decorations and icons, Armenian churches stood out for their modest decorum, where the cross, visible in the multiple *khatchkars* (Armenian cross-stones) decorating the façades or erected in the vicinity of the building, was the only prominent and recognizable Christian symbol.

M. Bacci (⊠)

Department of Art History and Archaeology—Chair for Medieval Art History, University of Fribourg, Fribourg, Switzerland

Indeed, according to a stereotype which has enjoyed much success even in recent art historical discourse, Medieval Armenians would have been basically iconophobic. This bias probably dates back to the religious polemics of the eleventh and twelfth centuries, when Byzantine theologians accused Armenians of despising the holy icons and addressing their worship exclusively to the holy cross, wherefore the latter were derogatively named Chatzitzarioi, in other words, worshippers of khatchkars.2 Such an emphasis on the nude cross, a symbolic not figurative image, was viewed as a direct consequence of the Miaphysite orientation of Armenian theology: if Christ was considered to have only one nature said to be both human and divine, it would be improper and contradictory to represent him in human terms and even more to worship him in an anthropomorphic image. The compromise proposed by Yovhannes Ojnec'i in the synod of Manazkert in 726 stated that only crosses anointed with chrism could be worshipped by believers within the church: Christological themes could be used in the illustration of liturgical books but were to be avoided in the decoration of monumental spaces.³ The essential lack of painted programs in Armenian churches between the eighth and tenth centuries was normally interpreted by scholars as a consequence of these decisions, whereas the revival of mural paintings in subsequent centuries was mainly explained as either due to Georgian influence or associated with Armenian Chalcedonian communities 4

Nonetheless, even if a number of Armenian churches seem to have never been embellished with murals, some others, especially from the thirteenth century onward, were lavishly painted in both Great Armenia, the Kingdom of Cilicia, and the Armenian colonies in other areas, like Italy, Crimea, or as far as Afghanistan.⁵ This was also the case of the Armenianrite church in Famagusta. As Cypriot Armenians were strictly connected with the Cilician Kingdom—and many of them actually fled there to escape the advance of the Mamluk army—their decision to embellish their church with murals can be considered to be in accordance with customs already widespread in their mainland, as is indicated by the remnants of murals in the chapel of Zoravač in the fortress of Anavarza, erected by King T'oros I in the first quarter of the twelfth century: in keeping with early Christian Armenian tradition, the main apse was decorated with a theophanic image, displaying Christ in Majesty with the tetramorph and two seraphims (whose scant remains can be detected also today), whereas a military saint was displayed in the western part of the building.⁶

The apse decoration in the Famagusta church still shows elements which, in spite of their extremely fragmentary state, indicate connections with the visual repertory of Armenian and other Eastern churches: the decoration of the lower wall of the apse with a row of prophets represented under an arcade is reminiscent, for example, of compositional schemes encountered in both Great Armenia (Tat'ev, late ninth century)⁷ and the Lebanon (Kfar Qahel, Ba'deidat, thirteenth century).8 In any case, the murals display a number of features that can be better understood in their interplay with the specific cultural and artistic context in which they emerged, that of fourteenth-century Famagusta.

First of all, emphasis should be laid on the peculiar way in which the program was organized. On account of its role as visual and performative focus of the sacred space, the apse was given an especially solemn appearance. It may be inferred that the semi-dome displayed a theophanic image, like the one in Anavarza, or more likely the Virgin Mary, as titular of the church, Surp Astuvacacin Kanch'owor, translated into Latin, probably by mistake, as "Our Lady of Green." The presence of the Mother of God in this location is hardly surprising, given the importance of Marian devotion in Armenian spiritual life¹⁰ and the frequent display of her image in the apses of several churches of Great Armenia during the twelfth through the fourteenth centuries.¹¹ Much more unexpected is the kneeling donor (Figs. 4.1 and 6.2) intruding into the most important composition of the church space: the long mantle falling from the head up to the shoulders and the simple white tunic reveal that it is a lay woman to be represented in such a prominent place.

This is somewhat striking and unprecedented in Armenian tradition. The representation of donors and founders is certainly frequent in book illumination, and portraits are sometimes used in the sculpted decorations of churches in Great Armenia, but even in such cases they are normally displayed in marginal zones of the building, in narthexes and exteriors, certainly not in the main apse. 12 The intrusion of lay figures other than political rulers in the altar zone occurs only sporadically in Medieval arts, most notably in the fourteenth century with the emergence of new patterns of piety according to which the sponsorship of church ornaments by means of testamentary bequests and donations may surrogate more traditional forms of charity and contribute more efficaciously to the sake of individual souls. Such ideas, fostered by the new Mendicant orders, became especially popular in the rich trade centers of Italy and spread throughout the major centers of the

Fig. 4.1 *Kneeling female donor*, mural painting, late fourteenth century



Mediterranean. In the wealthy and multilayered port of Famagusta, inhabited by so many merchants from different countries and by a composite residential population, many people seem to have shared a much rooted belief in the spiritually remunerating efficaciousness of giving alms for the improvement of a church's decorum. As a countergift, they obtained special prayers, masses for their souls' sake, the right to be buried in the church interior, and to build up structures associated with their liturgical commemoration. Sometimes, donors pretended to display inscriptions, coats-of-arms, and portraits that worked as visual reminders of their sponsorship and therefore of the clergy's duties to their benefactors in terms of liturgical activities *pro remedio animae* (to obtain remission from sins). A variety of such individual signs is encountered in the painted programs of Famagustan churches: cases in point are the monumental inscription of the Genoese Corrado Tarigo

in Saint Anne's, the figures of kneeling donors displayed in the apses of Our Lady of Carmel, and Saint George of the Greeks. 13

As elsewhere in Famagusta, the present decoration of the Armenian church seems to suit two different, and in some way mutually contradictory, intents. On the one side, it can be clearly remarked that a significant portion of many of the images was arranged according to a pattern which, in general terms, made efforts to adapt the traditional Byzantine system of church decoration to the diminutive dimensions of the building and its specific use for the performance of Armenian rites. At the same time, the program was only partly achieved and at least a portion of wall was reserved for the display of an image type being alien to eastern Christian tradition and, perhaps most relevantly here, structured as a self-contained, autonomous image made to be viewed in an independent way, unconnected to the nearby program of murals and associated with an individual's specific strategies for the soul's sake.

In light of the recent restorations, it is now possible to better evaluate the painted decoration from both an iconographic and a compositional viewpoint.¹⁴ Moreover, the rather extensive research activity on Famagustan arts made in recent years enables us to glance at the images in the Armenian church, regardless of their still precarious state of preservation, in a much more conscious and trained way, than some years ago. Yet, in order to avoid repetitions, the present author will focus on those aspects of the painted program which can now be better understood, in order to integrate and partially reconsider the interpretation made in his previous works, which the reader will refer to for further information and reference. 15

Not unlike Byzantine painted programs, the decoration of the nave consists of both mural icons of saints and narrative scenes, yet their arrangement proves to be rather unconventional. Saints are normally located on the lower portion of walls, whereas the intermediate zones are traditionally reserved for the visual evocations of the major events of the Gospels (which, in the usages of the Byzantine church, correspond to the 12 major feasts of the liturgical year, the so-called *Dodekaorton*). In the Armenian church, mural icons are to be seen only in the inner façade, but they are completely absent on the north wall, which was mostly reserved for the display of a selection of scenes from Christ's life. Apart from the small lunette over the side door, which displayed, according to Camille Enlart, a blessing Pantokrator, and the portion of wall above the niche used for the table of gifts (entsaraian or matout'saran in Armenian), which was decorated with an *Akra Tapeinosis*, the lower wall was embellished with the *Nativity*, the *Annunciation*, and the *Baptism*. The narrative cycle was meant to be read from west to east, so corresponding to the believer's movement when entering the church, and from the bottom to the top, in such a way as to invite viewers to shift their thoughts from an earthly to a heavenly dimension. The restoration revealed that the upper portion of the wall, from both sides of the window, was originally also decorated with a painted surface, which is presently no longer recognizable. These lost images must have evoked Christ's Resurrection, probably by displaying the *Anastasis* and the *Ascension*, as the necessary outcome of the events which were so distinctly emphasized in the lower, intermediate row of murals, where the most painful moments of the Passion were represented in five scenes, namely the *Flagellation*, the *Carrying of the Cross*, the *Crucifixion*, the *Deposition*, and the *Entombment* (Fig. 4.2).

The choice to represent the Passion in such an analytic way is most striking, but it fits in the general context of Famagustan arts, given that such themes were given much emphasis in the decoration of some of the major churches belonging to the different Christian denominations in town. In the Greek cathedral of Saint George, a wide cycle, dating from 1380s to



Fig. 4.2 Deposition and Entombment, mural painting, Famagusta, Armenian church, north wall, late fourteenth century

1390s, and including the Arrest of Jesus, the Crucifixion, the Deposition, the Pious Women at the Sepulchre, and the Anastasis decorated the south apse. 16 In the Syriac-rite, probably Maronite church of Agios Georgios Exorinos, the almost contemporary Passion cycle was displayed in the intermediate and upper rows of murals in the first bay of the south aisle: remnants of the Flagellation are still discernible, whereas the rest of the scenes have long since vanished.¹⁷ In the Benedictine church of Saint Anne's the program, also dating from the last quarter of the fourteenth century and displayed in the vicinity of the altar, included the Crucifixion, Deposition, and Lamentation, whereas a probably later cycle in the apse of the nearby Carmelite church included the *Carrying of the Cross* and other scenes. ¹⁸

The grounds for the spreading of such motifs in Famagusta can be traced back to both the emphasis given to the most painful events of Christ's life in contemporary piety, especially in the Latin church and more specifically in the context of Mendicant orders, and the association of the town with the Holy Land, which was not only geographic, on account of its role as port of call for merchants and pilgrims on the route to Palestine, but also political and symbolic, given its designation as capital in exile of the Latin Kingdom of Jerusalem. Famagustan Armenians may have been interested in displaying their connections with the sites of Christ's Passion in the Holy City: the inclusion of the Flagellation in the cycle, being unprecedented in Armenian arts, might be viewed as a hint at the site commemorating this event in Jerusalem, which was by then under Armenian control (Figs. 3.2 and 3.3). Nevertheless, there may be subtler grounds to explain the specific selection of scenes displayed on the north wall. It is striking that this selection corresponds exactly to the Gospel events which Vrtanes Kertogh, in his seventh-century treatise against the Iconoclasts, had specifically mentioned as fit to be displayed in the painted decoration of churches, namely the Nativity, Baptism, Passion, Crucifixion, Entombment, Resurrection, and Ascension. 19 We may wonder if the decision to exhibit all these themes on the same wall may have been inspired by Kertogh's recommendations. This would imply that local monks had access to this old text and that they used it to legitimize the decoration of their church with lavish murals, regardless of the indications of the synod of Manazkert.

The restorations revealed that the Passion scenes were the first to be painted, together with the Nativity (Fig. 3.5). The Baptism was made in a different moment, but given that it is painted on the same kind of plaster, it can be assumed that it was made by the same artists shortly after the other scenes. On the contrary, the Akra Tapeinosis was painted on a different plaster, which superimposes onto the Baptism image. ²⁰ This probably indicates that the latter was painted sometime later than the other images, but in general terms the cycle seems to be coherent on both stylistic and compositional grounds. The representation of the dead Jesus rising from the Sepulchre was suitable to decorate the niche of the table of gifts, and its display under the *Entombment* established a visual connection between Christ's burial and its liturgical reenactment in the Eucharist and, more specifically, in the *prothesis* rite. From a stylistic viewpoint, the murals are characterized by features typical of late fourteenth-century Byzantine painting and represented in Famagusta by the murals of Saint George of the Greeks, Agios Georgios Exorinos, and Saint Anne's, dating from the times of Genoese rule. The closest comparanda are the murals in the latter, Benedictine church, even if the figures in the Armenian cycle are rendered in a more linear way. Some elements, such as the shape of the rocks over the Nativity cave, the form of the clothes covering the angels' hands, and the iconographic detail of Nicodemus waiting for Christ's body inside the Sepulchre in the *Entombment*, are best paralleled by formulas frequently encountered in the painted programs known from the area of Thessaloniki and Macedonia in the last quarter of the century, such as the murals made by Metropolitan Jovan in Saint Demetrius at Prilep (ca. 1380) and Saint Andrew on the Treska (1388-1389).21

The Palaiologan features detected in the Famagustan murals of the Genoese period stand out for their distinctiveness *vis-à-vis* local Greek Cypriot tradition and their closeness to the production of the most important artistic centers of mainland Byzantium, namely Constantinople, and, even more, Thessaloniki and its area of influence. This connection appears very clearly in the Dormition of the Virgin displayed on the south wall. Prior to the cleaning, it was only possible to discern some elements of the general composition, namely the image of Christ represented in the middle of a round-shaped cloud of glory, or *kavod*, the inner part of which was colored in white and the rest in red. On his left arm, he elevates the soul of Mary (Fig. 4.3), whose corpse is laying below in a coffin covered with a red fabric, her head placed on the right side. To the left of it, two apostles, clad with tunic and himation, could be detected: the bowing figure can be identified with Saint Peter, on account of his almost normative place in the composition.

A closer look at the restored painted surface enables us to detect some more significant details. In conformity with Byzantine conventions, the

Fig. 4.3 Christ holding the Virgin's soul, mural painting, Famagusta, Armenian church, late fourteenth century



Virgin's soul is represented as a babe: the painter took care to provide this diminutive figure with accurately outlined facial features (especially eyes and eyebrows) and attributed it swaddling clothes whose red color, combined with the peculiar shape of the head covering, reminded viewers of Mary's most venerable mantle, the maphorion. The reddish part of the kavod, far from working as a mere decorative ornament, proves to be inhabited by half-figures of angels rendered in grisaille with soft white brushstrokes. Three can be detected to the right of Christ, represented in three-quarter view, two looking to the right and one to the opposite side (Fig. 4.4).

The lower angel is represented holding a long candlestick in a way that mirrors the pose of the figure located on the left side, who is also raising an analogous, yet a slightly different, object (Fig. 4.5).

Fig. 4.4 Angels, mural painting, Famagusta, Armenian church, late fourteenth century



It is possible here to recognize features that prove to be unprecedented in Cypriot tradition but were already widespread in Palaiologan painting of the Balkan area. The use of the monochrome technique to emphasize the angels and emphasize their supernatural substance when permeated by the light of God's cloud of glory first appears in the mosaic image of the *Dormition* located over the *naos* (shrine) doorway in the church of Saint Saviour in Chora (Kariye Camii) in Constantinople (ca. 1315–1321).²² Round-shaped versions of the *kavod* are known from a number of fourteenth-century painted programs, including Saint Demetrius in Peć (1346–1356),²³ an annex to the Aphendiko in Mystras (ca. 1370),²⁴ and the monastery church in Ravanica (1387).²⁵ Angels holding candlesticks appear in Staro Nagoričino (1315–1317)²⁶ and Gračanica (ca. 1321)²⁷ and become commonplace in the second half of the fourteenth century, as seen again in Saint Demetrius in Peć, in Saint Andrew on the Treska



Fig. 4.5 An angel holding a candlestick, mural painting, Armenian church, Famagusta, late fourteenth century

river, 28 and in a Constantinopolitan icon from around 1400, now in the Kanellopoulos Museum in Athens. 29

Also in keeping with the new Palaiologan versions of the theme are some more details that can be detected only by means of a very close inspection. On the upper right portion of the painted fragment, a number of haloed half-figures associated with flying angels can be clearly detected. They can be easily identified with the apostles coming from far away countries, who, according to John of Damascus' Third Homily on the Dormition, were miraculously transported to Jerusalem seated on clouds. This detail was introduced in the Byzantine painting since the eleventh century, but the variant showing each apostle accompanied by angels is first encountered in a number of fourteenth-century examples, such as the *Dormitions* in Žiča (ca. 1310), Staro Nagoričino (1315–1317), and in the Hodegetria church in Peć (ca. 1337). It is possible that the composition culminated in the image of the Assumption of the Virgin, as in the Serbian and Macedonian examples.30

Another distinctive motif appears on the lower edge of the composition. It is namely still possible to discern the fragmentary outlines of an angel holding his raised sword and another figure, placed to his right and

moving with lifted arms. Reference is made here to an episode mentioned in the fifth-century apocryphal *Narrative on the Dormition* attributed to Saint John the Divine: according to this text, the Jew Jephonias attempted to grasp at the coffin, in the aim of knocking it down, but he did not succeed, as an angel of the Lord cut his arms off his shoulder and let them hang in the air. This episode was first included into the traditional scheme of the *Dormition* in the eleventh century and became especially popular in the thirteenth and fourteenth centuries, even if it was never perceived as a normative element of the composition. The most anomalous detail in the image displayed in the Armenian church is the position of Mary with her head to the right. This contradicts standard iconography, where the Virgin is shown laying in the opposite direction. Such a compositional change may be due to the need of harmonizing the image with the liturgical use, during funeral services, of placing corpses with their feet oriented toward the altar space.

Icon-like images of saints are displayed on the lower portion of the western wall, to both sides of the main entrance. All of them were recovered during the restoration, with the removal of the thick layer of plaster, which covered them probably since the late 1970s, when the church was included into a military camp. The dark color of the horse of the military saint represented on the left side, revealed by the restoration works, rules out his identification with Saint George (whose hagiographic text describes him as riding a white horse), and corroborate that with Theodore Stratilates, whose worship as a holy rider and dragon slayer was very ancient and much rooted in the Eastern Christian world³² and more specifically in Armenia.³³ Moreover, the initial of the saint's name, the Armenian letter t'0, can still be seen on the upper right edge of the composition (Figs. 14.2 and 14.3).

On the opposite side, the images of two female saints, represented full-figure under arcades, have been rediscovered (Fig. 4.6): the one to the left, shown in the gesture of exhibiting the holy cross and clad in imperial garb, can be recognized as Saint Helena.

Significantly enough, the saintly queen is here represented alone, in a sort of reduced version of the standard Byzantine scheme showing her and her son Constantine holding the precious relic. It can be assumed that the Armenian donors of the Greek artists working in Famagusta deliberately wanted the figure of Constantine to be absent, probably because it was perceived as too strictly associated with the visual symbolism of the court of Constantinople.



Fig. 4.6 Saints Paraskeve and Helena, mural painting, west wall of the Armenian church, Famagusta, late fourteenth century

The other figure is represented wearing a blue tunic with reddish mantle and holding a medallion displaying Christ in the scheme of the *Akra Tapeinosis*. The latter image corresponds to an iconographic scheme typical of Cypriot tradition: first encountered in the monastery church of Saint Herakleidios in Kalopanagiotis (ca. 1280), it represents Saint Paraskeve, a hagiographic figure conflating different homonymous martyrs, in such a way as to visualize the etymological meaning of her name as "Friday" and therefore to transform her into a personification of the day of Christ's death on the cross. This interpretation is confirmed by the Armenian *titulus* (inscription), reading *surb Urbat'*, "holy Friday." In the Byzantine world, this allegorical understanding seems to have prevailed on Paraskeve's historical and cultic specificity in the Byzantine world since the tenth century, when she was represented holding the instruments of the tenth century, when she was represented holding the instruments of the Passion in a miniature of the *Homilies of Gregory of Nazianzus*, 35 but it was on Cyprus only that the hint at Holy Friday was evoked by an attribute in the form of either a medallion or a quadrangular icon.³⁶ It is hardly surprising to encounter this figure in an Armenian-rite church, given that the worship for Paraskeve was shared by almost all Christian denominations



Fig. 4.7 Vita-image of Saint John the Baptist, mural painting, south wall of the Armenian church, Famagusta, late fourteenth century

in Famagusta: her image appeared namely also in the Syriac-rite church of Agios Georgios Exorinos and in Our Lady of Carmel.³⁷

The western portion of the south wall was also decorated with the image of a saint yet of a completely different type. It is a monumental, large panel displaying Saint John the Baptist full-figure (Fig. 4.7), flanked by 16 small scenes, now almost thoroughly vanished, and a wide ornamental band, decorated with foliate motifs and coats-of-arms.

Unlike all other murals in the church space, this one stands out for its distinctive appearance: it proves to be an isolated, self-contained image, meant to be looked at separately from the nearby images and from the main painted program of the nave. Saint John is represented full-figure in frontal pose and wears a camel-hair garment and a purple tunic, whose elegantly rendered, softly shaded V-shaped folds seem to be reminiscent of features widespread in Late Gothic paintings. The round-shaped attribute in the saint's left hand can be interpreted as a medallion originally meant to display the Lamb of God, according to a type especially widespread in Northern Europe, yet diffused by Westerners also in the Eastern Mediterranean, as is seen in a thirteenth-century "Crusader" triptych on Mount Sinai. ³⁸ Definitely Italianate are the two side bands, whose foliate

ornaments belong to the repertory of forms associated with Giotto and his followers. This repertory, including not only vegetal but also geometric motifs (such as quadrilobes and simulated intarsia), was introduced into the decoration of Latin churches in Famagusta and employed also in the painted programs commissioned by other Christian denominations, such as those in Saint George of the Greeks and the Syriac-rite church of Agios Georgios Exorinos.³⁹

It is no coincidence that Westernizing elements can be detected in an image compositionally and typologically connected with patterns of church decoration typical of Latin churches, in Italy and elsewhere. Isolated, self-contained murals were used by lay patrons in the West to appropriate portions of sacred space and associate them with structures used for the commemoration of the soul and the performance of votive masses and anniversaries, such as side altars, burial sites, and chapels. As they were made on the initiative of single donors in different periods and by different hands, they did not give shape to a coherent program of church decoration and often dotted the side walls, especially those in the westernmost part of the church reserved for the laity, in a rather chaotic way. Their use in Famagusta is witnessed not only by a number of mural images in the Carmelite church⁴⁰ but also by a rather unusual frescoed panel in Agios Georgios Exorinos, displaying the Virgin of Mercy and Saint Mary Magdalene and framed by an ornamental band looking much like the one in the Armenian church, with foliate motifs and coats-of-arms of the powerful Gibelet family.⁴¹

Only one of the coats-of-arms in the frame of Saint John's image is still readable. It displays a brown crozier and what may be interpreted as a black-colored miter on a white background, so indicating the emblem of a major prelate, or even more probably an Episcopal institution. It should be remarked that the display of this ecclesiastical head covering typical of the Roman church cannot be used as a clue to speculate about the involvement of a Latin bishop in the making of the image, given that the miter had become standard in the Armenian church of Cilicia since 1184–1185, when Pope Lucius III conferred it to Katholikos Gregory Taghay. Shortly after, in 1202, the use was adopted by more Cilician bishops, who received from Pope Innocent III not only Latin-like miters but also croziers, like the one in the Famagustan church.⁴² It can therefore be safely assumed that the coat-of-arms worked as the emblem of an Armenian bishop or more likely of an Episcopal institution, the Armenian Bishopric of Famagusta, whose legitimacy was recognized by the Latin church of the island and by the Papacy. 43 This may indicate that the image of Saint John

was commissioned by the Bishop himself or some cleric of his curia in the aim of manifesting his special devotion to a saint perceived as the most important intercessor with God on behalf of sinners. The display within a tiny church of an imposing image, standing out for its distinctive composition, iconography, and style, contributed to create a separate, privileged space, associated with an individual's quest for salvation. The compositional scheme, combining an iconic image with a row of narrative scenes, enabled the donor to set up a sort of "contracted" chapel, with a complete hagiographic cycle displayed on a two-dimensional surface.

From a compositional viewpoint, the image echoed the traditional type of the so-called *Vita-icons*. The latter were widespread in the Eastern Mediterranean and in both Byzantine and Latin-rite contexts since the twelfth century in two basic forms, one with scenes encircling the central figure and another one with narrative images displayed on both sides.44 Frescoed versions seem to have been diffused on Cyprus from the late fourteenth century onward: a notable example is a Saint George in the church of the Holy Cross in Pelendri, 45 whereas in the still unpublished church of Agia Marina in Pyrga, this kind of image was used to decorate two side recesses, which may have been originally intended as privileged, chapel-like spaces. In Famagusta, they were displayed in churches belonging to different rites, including Our Lady of Carmel and Agios Georgios Exorinos. The Saint John image in the Armenian church, anyway, stands out for its decorated frame, a significant addition which makes it look much like contemporary paintings of this kind in Italy, whose use as diminutive chapels, associated with side altars and burials and marking out privileged spaces for the performance of pro anima rites, is well known. 46 A notable example is the frescoed Vita-retable of Blessed Gerardo from the 1360s in the parish church of Monticchiello (Siena), originally associated with an altar for the performance of votive masses (Fig. 4.8).⁴⁷

On the whole, the program of the Armenian church proves to be in keeping with the evidence provided by other Famagustan monuments, being the outcome of a very complex, multilayered, and multi-confessional context. Even if its authors were artists acquainted with the most recent trends of Palaiologan painting, the painted cycle did not conform to the standard patterns of church decoration in the Byzantine world. The apse was embellished according to models being rooted in Armenian tradition, whereas distinctive Palaiologan forms were used for the sacred narratives displayed in the nave. In general, styles and iconographic motifs were used in a selective way: Cypriot elements were evoked in the representation of Paraskeve, whose image with the medallion was very popular on the

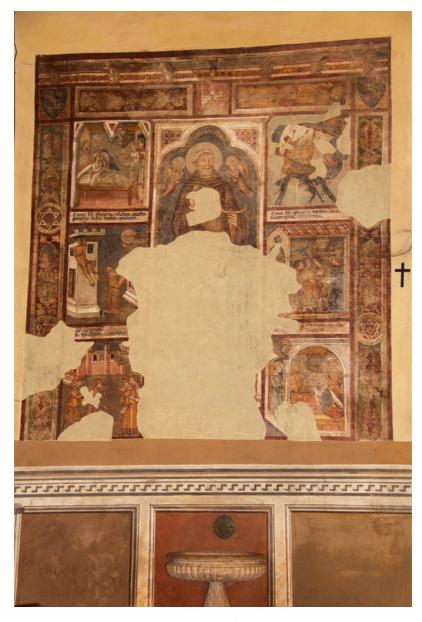


Fig. 4.8 Vita-image of Blessed Gerardo of Valenza, mural painting, Santi Leonardo e Cristoforo, Monticchiello (Siena), ca. 1360–1370

island. On the contrary, Italianate elements were adopted in the making of a distinctively Western type of image, the self-contained "votive" mural with Saint John, associated with the sake of an individual's soul. On the whole, far from witnessing either indiscriminate acceptance of or resistance to other people's forms, the painted cycle indicates that Famagustan Armenians charged a Greek artist or team of artists to decorate their church with forms associated with different traditions, yet combined and transformed in such a way as to fit in with their own liturgical needs and devotional sensibility.

Notes

- 1. Johannes Schildtberger, "Travel to the Holy Land," ed. V. Langmantel, *Hans Schiltbergers Reisebuch nach der Nürnberger Handschrift* (Tübingen: H.Laupp, 1885), 107–108.
- 2. P. Eleuteri and A. Rigo, *Eretici, dissidenti, musulmani ed ebrei a Bisanzio. Una raccolta eresiologica del XII secolo* (Venice: Il Cardo, 1993), 62, f. n. 22.
- 3. Jean-Pierre Mahé, "L'église arménienne de 611 à 1066," ed. A. Vauchez, Histoire du Christianisme. T. 4: Évêques, moines et empereurs (610–1054) (Paris: Desclée, 1993), 457–547 (here 485); idem, "Le christianisme arménien avant et après l'Islam: rupture et continuité," eds. J. Durand, I. Rapti, and D. Giovannoni, Armenia sacra. Mémoire chrétienne des Arméniens (IVe-XVIIIe siècles), exhibition catalog (Paris, Louvre, September 21, 2006–July 14, 2007) (Paris: Somogy, 2006), 115–20 (here 116); A. S. Ramazyan, 'K voprosu o prichinakh ikonoborchestva v srednevekovoy Armenii,' Vestnik PCTGU III: Filosofiya 5 (2013): 76–85.
- 4. Cf. A. Lidov, *The Mural Paintings of Akhtala*, 2nd ed. (Moscow: Nauka, 2014), 323–331, and idem, 'Iskusstvoarmyan-xalkedonitov', *Istoriko-filologičeskij žurnal AH Arm. SSR* 128 (1990): 75–87.
- 5. Cf. the survey by N. Kotadjian, "Les décors peints des églises d'Arménie," in Durand, Rapti, and Giovannoni, *Armenia Sacra*, 137–44.
- 6. R. W. Edwards, "Ecclesiastical Architecture in the Fortifications of Armenian Cilicia: Second Report," *Dumbarton Oaks Papers* 37 (1983): 123–146 (here 159); Kotadjian, "Les décors peints," 142.
- 7. L. A. Dournovo, *Očerki izobrazitel'novo iskusstva srednevekovoj Armenii* (Moscow: Iskusstvo, 1979), 143–4.

- 8. L. Nordiguian and J.-C. Voisins, Châteaux et églises du Moyen Âge au Liban (Beirut: Terre du Liban: Editions Trans-Orient, 1999), 250-51, 254-56. M. Immerzeel, Identity Puzzles. Medieval Christian Art in Syria and Lebanon (Leiden: Peeters, 2009), 101-105.
- 9. On the church dedication and its meaning cf. D. Kouymjian, "The Holy Mother of God Armenian Church in Famagusta," eds. M. J. K. Walsh, P. W. Edbury, and N. S. H. Coureas, Medieval and Renaissance Famagusta. Studies in Architecture, Art and History (Farnham: Ashgate, 2012), 133-46. See also B. Imhaus, "L'église arménienne de Famagouste. Description et historique de sa rehabilitation (XIV^c-XX^c siècle)," in La Méditerranée des Arméniens XII-XV siècle (Paris: Paul Geuthner, 2014), 325-52; as well as Dickran Kouymjian's article in this book.
- 10. Th. Dasnabedian, "Mariologie de l'église arménienne orthodoxe," Hask hayagitakan taregirk' 10 (2002-2006): 233-56.
- 11. Kotadjian, "Les décors peints," 141.
- 12. I. Rapti, "La voix des donateurs: pages de dédicaces dans les manuscrits arméniens de Cilicie," in Donation et donateurs dans le monde byzantine, eds. Jean-Michel Spieser and Élisabeth Yota (Paris: Desclée de Brouwer, 2012), 309-26; M. Angar, "Stiftermodelle in Byzanz und bei christlich-orthodoxen Nachbarkulturen," in Mikroarchitektur im Mittelalter. Ein gattungsübergreifendes Phänomen zwischen Realität und Imagination, eds. C. Kratzke and U. Albrecht (Leipzig: Kratzke Verlag für Kunstgeschichte, 2008), 433-53.
- 13. On all this, see M. Bacci, "Patterns of Church Decoration in Famagusta (Fourteenth to Sixteenth Centuries)," in Famagusta. Art and Architecture, ed. A. W. Carr (Turnhout: Brepols, 2014), 201-274. On portraits see idem, "Images 'votives' et portraits de donateurs au Levant au Moyen Âge tardif," in Donation et donateurs, eds. Spieser and Yota, 293-308.
- 14. See Werner Schmid's contribution in this volume.
- 15. M. Bacci, "The Armenian Church in Famagusta and Its Mural Decoration: Some Iconographic Remarks," in Culture of Cilician Armenia, proceedings of the international symposium (Antelyas, Armenian Katholicossate of Cilicia, 14–18 January 2008), Antelyas, Catholicosate of Cilicia, 2009 = Hask hayagitakan taregirk' 11 (2007–2008): 489–508; Bacci, "Patterns," 231–2.

- 16. M. Paschali, "Mural Decoration in Saint George of the Greeks," in Carr, Famagusta, 275–311. Cf. also N. Zarras, "Reflections of Palaiologan Style in Cypriot Monumental Painting," in Symmeikta. Collection of Papers Dedicated to the 40th Anniversary of the Institute for Art History, Faculty of Philosophy, University of Belgrade (Belgrade: Filozofski fakultet, 2012), 291–308 (here 297–301).
- 17. M. Bacci, "Identity Markers in the Art of Fourteenth-Century Famagusta," in *The Harbour of all this Sea and Realm. Crusader to Venetian Famagusta*, eds. M. J. K. Walsh, T. Kiss, and N. H. Coureas (Budapest: CEU Press, 2014), 145–58, here 148.
- 18. Bacci, "Patterns," 217-18, 222-3.
- 19. S. Der Nersessian, 'Une apologie des images du septième siècle', in idem, *Études byzantines et arméniennes* (Louvain, 1973), 379–403, esp. 384.
- 20. Cf. Werner Schmid's chapter in this volume.
- 21. On this attribution see Bacci, "The Armenian Church," 496–497; Bacci, "Patterns," 223–4, 247–9. On Metropolitan Jovan's artistic career and works cf. J. Prolović, *Die Kirche des Heiligen Andreas an der Treska. Geschichte, Architektur und Malerei einer palaiologenzeitlichen Stiftung des serbischen Prinzen Andreaš* (Vienna: Verlag der Österreichischen Akademie der Wissenschaften, 1997), esp. 42–50.
- 22. P. Underwood, *The Kariye Djami*, vol. 2 (New York, Pantheon, 1966), 320–327 and pl. 320.
- 23. G. Subotić, Terra sacra. L'arte del Cossovo (Milan: Jaca Book, 1997), 210-215.
- 24. V. N. Lazarev, *Storia della pittura bizantina* (Turin: Einaudi, 1967), 381 and fig. 549.
- 25. V. J. Djurić, *Byzantinische Fresken in Jugoslawien* (München: Publisher, 1976), 139–44. Cf. also B. Todić, *Manastir Resava* (Belgrade: Draganič, 1995).
- 26. B. Todić, Serbian Medieval Painting in the Age of King Milutin (Belgrade: Publisher, 1999), 114 and fig. 55.
- 27. Ibidem, 121
- 28. Djurić, *Byzantinische Fresken*, 129–31; Sašo Korunovski, Elizabeta Dimitrova, *Macedonia. L'arte medievale dal IX al XV secolo* (Milan: Jaca Book, 2006), 206–10; Tsvetan Grozdanov, *Živopisot na ohridskata arxiepiskopija. Studii* (Skopje: Makedonska akademija na naukite i umetnostite, 2007), 232–53.

- 29. K. Skabavias, entry no. 7, in M. Vassilaki, ed., The Hand of Angelos. An Icon Painter in Venetian Crete (Farnham: Lund Humphries in association with the Benaki Museum, Athens, 2010), 82–83.
- 30. L. Wratislaw-Mitrović, N. Okunev, "La Dormition de la Sainte Vierge dans la peinture médiévale orthodoxe," Byzantinoslavica 3 (1931): 134-73, here 140-41; C. D. Kalokyris, "La Dormition et l'Assomption de la Théotokos dans l'art de l'église orthodoxe," Epeteris tes theologikes scholes tou Aristoteleiou Panepistemiou Thessalonikes 19 (1974): 133-43. On the Serbian and Macedonian examples see Todić, Serbian Medieval Painting, 113-15 and 119-21.
- 31. Élisabeth Revel-Neher, The Image of the Jew in Byzantine Art (Jerusalem: Pergamon, 1992), 81-84; Alifa Saadya, "Convert or Desecrator? The Image of the Jew in the 'Jephonias Episode' in Icons of the Dormition," in SICSA Annual Report 1999 (Jerusalem: Publisher, 1999), 23-26.
- 32. Chr. Walter, The Warrior Saints in Byzantine Art and Tradition (Aldershot: Ashgate, 2003), 44-66; idem, "Saint Theodore and the Dragon," in Through the Glass Brightly. Studies in Byzantine and Medieval Art and Archaeology Presented to David Buckton, ed. Chr. Entwistle (Oxford: Oxbow Books, 2003), 95–106.
- 33. Bacci, "The Armenian Church," 500.
- 34. I thank Gohar Grigoryan (Fribourg/Yerevan) for deciphering the Armenian inscriptions in the church.
- 35. Paris, BNF, Par. gr. 510, fol. 285.
- 36. Chr. Walter, "The Portrait of Saint Paraskeve," Byzantinoslavica 56 (1995): 753–757.
- 37. Bacci, "Patterns," 217, 233.
- 38. V. Pace, entry no. V.3, in San Nicola. Splendori d'arte d'Oriente e d'Occidente, exhibition catalog, ed. M. Bacci (Bari, Castello Svevo, December 7, 2006-May 6, 2007) (Milan: Skira, 2006), 286-7 (with literature).
- 39. Bacci, "Patterns," 209-10, 212, 230-31.
- 40. Bacci, "Patterns," 208, 213-14, 229, 231, 236, 242-3.
- 41. M. Bacci, "Syrian, Palaiologan, and Gothic Murals in the 'Nestorian' Church of Famagusta," Deltion tes Christianikes archaiologikes hetaireias, ser. 4, 27 (2006): 207-220; Bacci, "Identity Markers," 145-158.

- 42. J. Muyldermans, "Le costume liturgique arménien. Étude historique," *Le Muséon* 39 (1926): 253–324, esp. 293–296 (on the miter) and 307–309 (on the crozier).
- 43. On the Cypriot Armenians and their bishops cf. G. Dédéyan, "Les Arméniens à Chypre de la fin du XII° au début du XIII° siècle," in Les Lusignans et l'Outre-Mer (Poitiers: Université de Poitiers, 1995), 122–131; G. Grivaud, "Les minorities orientales à Chypre (époque medieval et moderne)," in Chypre et la Méditerranée orientale (Lyons: Maison de l'Orient et de la Méditerranée Jean Pouilloux, 2000), 43–70; N. Coureas, "Non-Chalcedonian Christians on Latin Cyprus," in Dei Gesta per Francos. Études sur les croisades dédiées à Jean Richard, ed. M. Balard, B. Z. Kedar and J. Riley-Smith (Aldershot: Ashgate, 2001), 349–360 (here 353); idem, The Latin Church in Cyprus 1313–1378 (Nicosia: Cyprus Research Centre, 2010), 474–480; Kouymjan, "The Holy Mother of God Armenian Church," 136–138. Cf. also Coureas' and Kouymjian's articles in this volume.
- 44. The most relevant studies on the subject include N. P. Ševčenko, "The Vita Icon and the Painter as Hagiographer," Dumbarton Oaks Papers 53 (1999): 149–165; T. Papamastorakis, "Pictorial Lives. Narrative in Thirteenth-Century Vita Icons," Mouseio Benaki 7 (2008): 33–65; P. Chatterjee, The Living Icon in Byzantium and Italy. The Vita Image, Eleventh to Thirteenth Centuries (Cambridge: Cambridge University Press, 2014).
- 45. Christodoulos Hadjichristodoulou, "O naos tes Ypsoses tou Timiou Stavrou," in *Oi naoi ton Pelendrion. Istoria-architektonike-techne*, ed. A. Tsagaris (Nicosia: Publisher, 2005), 56–99, here 92–97.
- 46. M. Bacci, "Arte e raccomandazione dell'anima nei domini latini del Levante: alcune riflessioni," in Oltre la morte. Testamenti di Greci e Veneziani redatti a Venezia o in territorio greco-veneziano nei sec. XIV-XVIII. Atti dell'incontro scientifico, Venezia, 22–23 gennaio 2007, eds. Chr. Maltezou and G. Varzelioti (Venice: Istituto Ellenico Di Studi Bizantini e Postbizantini, 2008), 131–159; M. Bacci, "Side-Altars and 'pro anima' Chapels in the Medieval Mediterranean: Evidence from Cyprus," in The Altar and Its Environment, 1150–1400, eds. V. M. Schmidt and J. Kroesen (Turnhout: Brepols, 2010), 11–30.

47. M. Bacci, "Le bienheureux Gérard de Valenza, O.F.M.: images et croyances dans la Toscane du XIVe siècle," Revue Mabillon, n.s., 12 (2001): 97–119.

BIBLIOGRAPHY

- Angar, M. "Stiftermodelle in Byzanz und bei christlich-orthodoxen Nachbarkulturen." In Mikroarchitektur im Mittelalter. Ein gattungsübergreifendes Phänomen zwischen Realität und Imagination. Edited by C. Kratzke and U. Albrecht, pp. 433-453. Leipzig: Publisher, 2008.
- Bacci, M. "Arte e raccomandazione dell'anima nei domini latini del Levante: alcune riflessioni." In Oltre la morte. Testamenti di Greci e Veneziani redatti a Venezia o in territorio greco-veneziano nei sec. XIV-XVIII. Atti dell'incontro scientifico, Venezia, 22-23 gennaio 2007, edited by Chr. Maltezou and G. Varzelioti. Venice: Publisher, 2008.
- Bacci, M. "Side-Altars and 'pro anima' Chapels in the Medieval Mediterranean: Evidence from Cyprus." In The Altar and Its Environment, 1150-1400, edited by V. M. Schmidt and J. Kroesen. Turnhout, Publisher, 2010.
- Bacci, M. "Le bienheureux Gérard de Valenza, O.F.M.: images et croyances dans la Toscane du XIVe siècle." Revue Mabillon, n.s., 12 (2001): 97-119.
- Bacci, M. "Patterns of Church Decoration in Famagusta (Fourteenth to Sixteenth Centuries)." In Famagusta. Art and Architecture, edited by A. W. Carr, pp. 203-276. Turnhout: Publisher, 2014.
- Bacci, M. "Images 'votives' et portraits de donateurs au Levant au Moyen Âge tardif." In *Donation et donateurs*. Edited by Spieser and Yota eds, pp. 293–308.
- Bacci, M. "The Armenian Church in Famagusta and Its Mural Decoration: Some Iconographic Remarks." In Culture of Cilician Armenia, proceedings of the international symposium (Antelyas, Armenian Katholicossate of Cilicia, 14–18 January 2008), Antelyas, Catholicosate of Cilicia, 2009 = Hask hayagitakan taregirk' 11 (2007-2008).
- Bacci, M. "Identity Markers in the Art of Fourteenth-Century Famagusta." In The Harbour of all this Sea and Realm. Crusader to Venetian Famagusta, edited by M. J. K. Walsh, T. Kiss, and N. H. Coureas. Budapest: Central European University Press, 2014.
- Bacci, M. "Syrian, Palaiologan, and Gothic Murals in the 'Nestorian' Church of Famagusta." Deltion tes Christianikes archaiologikes hetaireias ser. 4, 27 (2006), 207-220.
- Chatterjee, P. The Living Icon in Byzantium and Italy. The Vita Image, Eleventh to Thirteenth Centuries. Cambridge: Publisher, 2014.
- Coureas, N. "Non-Chalcedonian Christians on Latin Cyprus." In Dei Gesta per Francos. Études sur les croisades dédiées à Jean Richard, edited by M. Balard, B. Z. Kedar and J. Riley-Smith. Aldershot: 2001.

- Dasnabedian, Th. "Mariologie de l'église arménienne orthodoxe." *Hask hayagita-kan taregirk* '10 (2002–2006).
- Dédéyan, G. "Les Arméniens à Chypre de la fin du XII^e au début du XIII^e siècle." In *Les Lusignans et l'Outre-Mer.* Poitiers, 1995.
- Djurić, V. J. Byzantinische Fresken in Jugoslawien. München: Publisher, 1976.
- Dournovo, L. A. Očerki izobraziteľ novo iskusstva srednevekovoj Armenii. Moscow: Publisher, 1979.
- Edwards, R. W. "Ecclesiastical Architecture in the Fortifications of Armenian Cilicia: Second Report." *Dumbarton Oaks Papers* 37 (1983), 134–141.
- Eleuteri, P. and A. Rigo. Eretici, dissidenti, musulmani ed ebrei a Bisanzio. Una raccolta eresiologica del XII secolo. Venice: Publisher, 1993.
- Grivaud, G. "Les minorities orientales à Chypre (époque medieval et moderne)." In *Chypre et la Méditerranée orientale*. Lyons: Publisher, 2000.
- Hadjichristodoulou, Christodoulos. "O naos tes Ypsoses tou Timiou Stavrou." In A. Tsagaris (ed.), Oi naoi ton Pelendrion. Istoria-architektonike-techne. Nicosia: Publisher, 2005.
- Imhaus, B. "L'église arménienne de Famagouste. Description et historique de sa rehabilitation (XIV^e-XX^e siècle)," in *La Méditerranée des Arméniens XII^e-XV^e siècle*. Paris: Publisher, 2014.
- Immerzeel, M. Identity Puzzles. Medieval Christian Art in Syria and Lebanon. Leiden: Publisher, 2009.
- Kalokyris, C. D. "La Dormition et l'Assomption de la Théotokos dans l'art de l'église orthodoxe." Epeteris tes theologikes scholes tou Aristoteleiou Panepistemiou Thessalonikes 19 (1974): 133–143.
- Korunovski, Sašo and Elizabeta Dimitrova, *Macedonia*. *L'arte medievale dal IX al XV secolo*. Milan: Publisher, 2006.
- Tsvetan Grozdanov, *Živopisot na ohridskata arxiepiskopija*. *Studii*. Skopje: Publisher, 2007.
- Kotadjian, N. "Les décors peints des églises d'Arménie," In *Armenia Sacra*, edited by Durand, Rapti, and Giovannoni.
- Kouymjian, D. "The Holy Mother of God Armenian Church in Famagusta," edited by M. J. K. Walsh, P. W. Edbury, and N. S. H. Coureas. *Medieval and Renaissance Famagusta*. *Studies in Architecture, Art and History*. Farnham, 2012.
- Lazarev, V. N. Storia della pittura bizantina. Turin, 1967.
- Lidov, A. The Mural Paintings of Akhtala. 2nd ed. Moscow, 2014.
- Lidov, A. "Iskusstvo armyan-xalkedonitov," In *Istoriko-filologičeskij žurnal AH Arm. SSR* 128 (1990).
- Mahé, Jean-Pierre. "L'église arménienne de 611 à 1066," edited by A. Vauchez, Histoire du Christianisme. T. 4: Évêques, moines et empereurs (610–1054). Paris, 1993.

- Mahé, Jean-Pierre. "Le christianisme arménien avant et après l'Islam: rupture et continuité," eds. J. Durand, I. Rapti, and D. Giovannoni, Armenia sacra. Mémoire chrétienne des Arméniens (IVe-XVIIIe siècles), exhibition catalog. Paris, Louvre, September 21, 2006-July 14, 2007. Paris, 2006.
- Muyldermans, J. "Le costume liturgique arménien. Étude historique." Le Muséon 39 (1926), 253–324.
- Nordiguian, L. and J.-C. Voisins, Châteaux et églises du Moyen Âge au Liban. Beirut, 1999, 371-372.
- Papamastorakis, T. "Pictorial Lives. Narrative in Thirteenth-Century Vita Icons." Mouseio Benaki 7 (2008), 33-65.
- Paschali, M. "Mural Decoration in Saint George of the Greeks." in Carr, Famagusta.
- Prolović, J. Die Kirche des Heiligen Andreas an der Treska. Geschichte, Architektur und Malerei einer palaiologenzeitlichen Stiftung des serbischen Prinzen Andreas. Vienna, 1997.
- Ramazyan, S. 'K voprosu o prichinakh ikonoborchestva v srednevekovov Armenii,' Vestnik PCTGU III: Filosofiya 5 (2013).
- Rapti, I. "La voix des donateurs: pages de dédicaces dans les manuscrits arméniens de Cilicie." In Jean-Michel Spieser and Élisabeth Yota (eds.), Donation et donateurs dans le monde byzantin (Paris, 2012.
- Revel-Neher, Élisabeth. The Image of the Jew in Byzantine Art (Jerusalem, 1992), 81–84:
- Saadya, Alifa. 'Convert or Desecrator? The Image of the Jew in the 'Jephonias Episode' in Icons of the Dormition', in SICSA Annual Report 1999 (Jerusalem, 1999), 23–26.
- Schildtberger, Johannes. "Travel to the Holy Land," edited by V. Langmantel, Hans Schiltbergers Reisebuch nach der Nürnberger Handschrift. Tübingen, 1885.
- Ševčenko, N. P. 'The Vita Icon and the Painter as Hagiographer', Dumbarton Oaks Papers 53 (1999), 149-165;
- Subotić, G. Terra sacra. L'arte del Cossovo (Milan, 1997).
- Todić, B. Manastir Resava. Belgrade, 1995.
- Todić, B. Serbian Medieval Painting in the Age of King Milutin. Belgrade, 1999.
- Underwood, P. The Kariye Djami, volume 2. Washington, D.C., 1966.
- Wratislaw-Mitrović, L. and N. Okunev. "La Dormition de la Sainte Vierge dans la peinture médiévale orthodoxe," Byzantinoslavica 3 (1931), 140-141.
- Zarras, N. "Reflections of Palaiologan Style in Cypriot Monumental Painting," in Symmeikta. Collection of Papers Dedicated to the 40th Anniversary of the Institute for Art History, Faculty of Philosophy, University of Belgrade. Belgrade, 2012.
- S. Der Nersessian, 'Une apologie des images du septième siècle', in idem, Études byzantines et arméniennes (Louvain, 1973), 379-403, esp. 384.

- K. Skabavias, entry no. 7, in M. Vassilaki (ed.), The Hand of Angelos. An Icon Painter in Venetian Crete (Athens, 2010), 82-83.
- Chr. Walter, The Warrior Saints in Byzantine Art and Tradition (Aldershot, 2003), 44–66; idem, 'Saint Theodore and the Dragon', in Chr. Entwistle (ed.), Through the Glass Brightly. Studies in Byzantine and Medieval Art and Archaeology Presented to David Buckton (Oxford, 2003), 95–106.
- Chr. Walter, 'The Portrait of Saint Paraskeve', *Byzantinoslavica* 56 (1995), 753–757.

On the Interpretation of the Crosses Carved on the External Walls of the Armenian Church in Famagusta

Gohar Grigoryan

The *Surb Astuacacin* (Holy Mother of God) Church of Famagusta, more commonly and simply known as the Armenian Church, represents an interesting example of medieval Armenian architecture outside the native Armenian lands. The frescoes inside the church, which in recent years have been at the center of scholarly attention, are, in turn, rightly considered to be one of the important manifestations of medieval Armenian mural paintings.¹

The exterior of the church is much less decorated than its interior, although slight traces of paint on the tympanum over the western entrance prove that it was once painted. It might be assumed that the tympana of the southern and northern (now closed from reconstruction) portals also had paintings at one time, but it is now no longer possible to say how they looked originally.

The modest exterior decorations contain the arched tympana, the hood molds over the windows, and the remains of a sundial on the southern

Fribourg, Switzerland

G. Grigoryan (\boxtimes) Department of Art History and Archaeology, University of Fribourg,



Sundial, Armenian Church, south wall, [®]Photograph by Allan Langdale Fig. 5.1

facade, which is often encountered in Armenian architecture (Fig. 5.1). Beside these, on the church exterior walls, several carved crosses stand out, which have not yet been discussed, with the exception of a few concise observations.2 The crosses, of different types, are carved on the southern and western facades of the church and sometimes are difficult to distinguish, as they blend with natural stone holes on the wall surfaces (Figs. 5.5 and 5.6). On the western facade, the following crosses are found (Fig. 5.2): to the left of the entrance, two crosses with equal-length arms within medallions, and two small, simple crosses without frames. To the right of the door, nine similar rounded crosses of different size are counted, and a cross within a rectangular frame. Among all the crosses carved on the Armenian Church, the latter is rather decorated: at each of the two tips of the flaring arms of the cross, a small bud is depicted resembling the shape of the so-called budded cross. On the southern facade, the following crosses are depicted (Fig. 5.3): to the left side of the entrance are three Latin crosses,³ carved on one stone, and obviously by one hand (Fig. 5.4). To the right of the southern portal, on the buttress, are four rounded crosses similar to those on the western wall, one simple Latin cross between two of the rounded crosses, two simple crosses without frames, depicted vertically

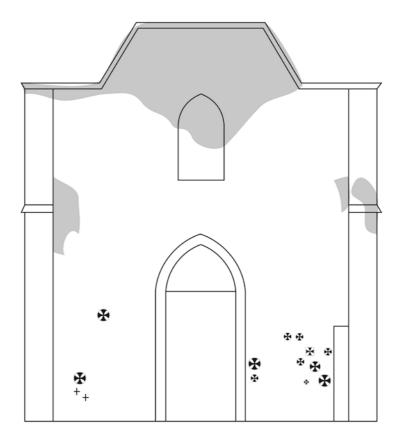


Fig. 5.2 Location of crosses, west wall, by Thomas Kaffenberger

one below the other, and a parted and fretted cross (or, probably two), whose form is difficult to fully discern. As can clearly be seen, the most common type of cross is the rounded cross with four equal arms (also called consecration cross),4 well known from the early Christian period and especially widespread during the High and Late Middle Ages as a heraldic symbol.

The simplicity of the crosses and the lack of compositional program do not allow us to consider them as xač'k'ars (cross-stones), but perhaps an imitation of xač'k'ars can be accepted. In medieval Armenian architecture, we find multiple examples where the internal and especially external surfaces

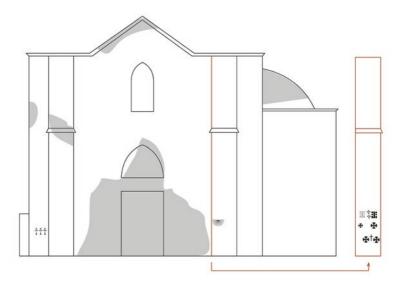


Fig. 5.3 Location of crosses, south wall, by Thomas Kaffenberger



Fig. 5.4 Latin crosses, south wall, [©]Photograph by Allan Langdale

Fig. 5.5 Crosses carved on the eastern buttress, southern facade, [®]Photograph by Michele Bacci





Fig. 5.6 Crosses carved on the western facade, [®]Photograph by Michele Bacci

of buildings are decorated with cross-stones and engraved crosses. One of its best examples in Greater Armenian architecture is the western facade of the *matenadaran* (manuscript library) of the *Salmosavank'* monastery (thirteenth century). Some crosses can still be observed on the ruins of the neighboring Armenian Kingdom of Cilicia, as, for example, the *xač'k'ar* set into the wall of Constable Smbat's Church in Paperon (now, Candur), the *xač'k'ar* of *Vasil of Karkar'* from Hromkla (now, Rumkale), two crosses (now scratched out) carved on the tower of Hromkla, a *xač'k'ar* and a decorated cross (Fig. 5.8), placed in the walls of the Korikos land castle (now, Kızkalesi), and so on. Two examples of crosses are also found in the ruins of the Church of Baron T'oros I in the fortress of Anavarza, one of which decorated a carved inscription, and the other a column capital.

However, the crosses of the Surb Astuacacin Church in Famagusta are quite different from the abovementioned Cilician Armenian examples in their style and function. Being somewhat irregularly spread over the church facades, they seem to have been carved not by master artists but rather by ordinary believers who visited the church and were compelled to leave traces of their pilgrimage. Thus, these crosses do not belong to the initial decoration of the church exterior, though in the course of time they have become inseparable parts of it. With the existence of the splendid wall paintings inside, it seems less possible that the church, which apparently was commissioned by rich donors, 10 would be decorated with simple irregular crosses and not with beautifully ornamented traditional xač'k'ars. The crosses might have appeared on the church shortly after its construction (or reconstruction), during the fourteenth century, 11 or perhaps in the course of the fifteenth century, when the number of Famagustan Armenians was still continuing to grow, as a result of the exodus of Armenians after the Mamluk invasion of the Armenian Kingdom in Cilicia in 1375 and the new immigration policy of the Genoese. 12

The depiction of crosses and various cross compositions in Armenian arts is conditioned, first of all, by the special attitude toward the cross, formed in Armenian Church and culture in the early Christian period and developed during the following centuries. Against the background of the active iconoclastic movement in Byzantium, and perhaps even in response to it, in 726, Catholicos *Yovhannēs III Awjnec'i* established the *Canon of Blessing and Anointing of the Cross*, ¹³ which by the end of the ninth century was included by Catholicos *Maštoc' I Elivardec'i* in

maštoc', the book of the Armenian Church rituals. 14 Notwithstanding that the use of religious images never gained great popularity in the Armenian Church, the latter, however, adopted a particular position on depictions of the cross, considering that one who "worships the cross of Christ and the image of it, also worships Christ" (Yovhannes Awjnec'i, Ynddem Pawlikeanc'—Contra Paulicianos). 15 Moreover. among the Armenians, veneration of images was generally understood as veneration of the cross and its images, 16 based on the foundation that, although images of saints are respected, one can only worship the image and the cross of Christ.¹⁷ As a generalization, for Armenian believers, a cross played the same role as an icon in Byzantine or other Orthodox churches.

The carved crosses of the Surb Astuacacin Church were once called "pilgrim's crosses." ¹⁸ Although this designation was made without further discussion of the matter, it certainly makes sense to focus on it and to develop this concept, which fits well with the geographical, national, and social contexts of the church.¹⁹ The masters engaged in the construction of the church, who, according to Michele Bacci's reasonable conjecture, likely were Palaiologan artists working in Famagusta for patrons of different nationalities, 20 could well have been unfamiliar with the Armenian tradition of decorating churches with carved crosses and cross-stones. If the crosses of the Armenian Church are in fact late medieval pilgrim graffiti, they seem to be represented as living signs of pilgrims, testifying their visitation and veneration of the church, and thereby also filling out the ornamental gap of the exterior walls of the church. Carving these crosses on the church, the pilgrims were consciously or unconsciously signaling to other "viewers that the place was an active and effective venue for Christian prayer."²¹ That the Armenian Church was a pilgrimage site is manifested in Pope Clement V's appeal from August 1311, by which he appeals to pilgrims to visit the Armenian Church of Famagusta, which, as a result, would reduce poverty of the local clergy.²² In order to incite pilgrims to visit the church, remission of penances was even promised them for one year and a hundred days.²³ The further circumstances show that the financial situation of the Armenian clergy did not improve much, but one thing is certain: if the (re)opening of the church increased pilgrim visitations, those could have resulted in the crosses observed on the outside walls. We must also pay attention to the locations of the crosses: they are engraved on the

western and southern walls of the church, where there are entrances. According to the Armenian ritual book maštoc', during the anointment and consecration ceremony of a new church, the ritual of Drnabac'ēk' takes place, which, literally translated, means ritual of "opening of the doors."24 During this ceremony, which is manifested in the Canon of Blessing and Anointing of a New Church, 25 Psalm 118:19 is read: "Open for me the gates of the righteous; I will enter and give thanks to the Lord." The latter idea is in fact "realizable" only after the consecration of the church, since a church, which has not yet been anointed with the holy miwron (chrism), cannot have the same spiritual impact for prayers as an anointed and blessed church. It is, perhaps, not by accident that among the carved crosses of the Armenian Church, the consecration cross is the most widespread one. This type of cross is commonly used to consecrate a church: in particular, the anointing with chrism is carried out on these crosses of stone, from which, actually, the name "consecration cross" originates. Understandably, one cannot be sure whether the crosses of the Armenian Church, or some of them, were carved for the church's consecration ceremony, but any crosses placed at that event could conceivably subsequently have inspired pilgrims to copy them in their proximity. Most probably, it was in the beginning of the fourteenth century that the church was (re)anointed and (re)vitalized by new Armenian visitors, who from the beginnings of the century had started to immigrate to Cyprus and especially to Famagusta as a consequence of Mamluk raids in the Armenian Kingdom of Cilicia. Apparently, with the growth of the Armenian population in Famagusta, it became necessary to build, or more likely, to renovate the church, which in former times may have been part of a monastic complex.²⁶ One may suppose that the interior was decorated with mural paintings during the same period of the church's revitalization.

The drawing or carving of different symbols on the walls of a holy place was, and still is, a typical custom and behavior of pilgrims. As the most important Christian symbol, the cross is very common among pilgrim graffiti, especially in an Armenian Church, where the depiction of crosses is first of all a significant ideological part of the church decoration. For the Armenians of Famagusta and its surroundings, as a national and religious minority, the *Surb Astuacacin* Church was indeed an important place in the multiethnic and multicultural town, where "each of the town's 'nations' was accustomed to gather within its own

church and ... the latter functioned as symbol of interpersonal solidarity."27 The crosses in question may also have served as specific "identity" symbols, making the site recognizable for other Armenian believers.²⁸ However, the Armenian Church is not the only one in Famagusta on whose walls Armenian believers left traces of their presence. A carved cross, called "une bizarre croix" by Camille Enlart, 29 is found on the northern facade of the Church of St. Anne, also known as the Maronite Church, which is located together with the Armenian Church in the so-called Syrian quarter of the town (Fig. 5.7). Between the arms of the cross, there is an Armenian inscription which had been mistakenly read and transcribed as the Greek inscription—"Jesus Christ, Son of God."30



Fig. 5.7 Cross, St. Anne's Church, north wall, [®]Photograph by Allan Langdale



Fig. 5.8 Cross, land castle of Korikos (Kızkalesi), [®]Photograph by Hrair Hawk Khatcherian

The correct transcription is: "Ter Astuac, Yisus K'ristos," or "Christ God, Jesus Christ." The form of the cross resembles to some extent the aforementioned cross found in Korikos, but the latter is simpler in its design (Fig. 5.8).

Finally, the crosses on the Church of the Holy Mother of God in Famagusta show an interesting parallel with the Armenian pilgrim graffiti carved on many walls and piers of the Holy Sepulchre in Jerusalem, especially on those of the Chapel of Saint Helena. These depict almost exclusively crosses, occasionally with accompanying inscriptions, sometimes covering entire wall surfaces (Fig. 5.9). As we can clearly see here, graffiti in sacred spaces can attract other graffiti, encouraging pilgrims to copy the gesture "of joining the ranks of those who had gone before in seeking divine assistance at that place."³¹ If the Armenian Church in Famagusta had been active continuously, without the enforced pauses that frequently appeared in the course of its history, it might have attracted and gathered more pilgrims into its holy environs.



Fig. 5.9 Armenian graffiti carved on the stairway wall of the Chapel of St. Helena, Holy Sepulchre, Jerusalem, [®]Photograph by Hrair Hawk Khatcherian

Notes

- 1. On the frescoes of the church, see: Michele Bacci, "The Armenian Church in Famagusta and Its Mural Decoration: Some Iconographic Remarks," in Culture of Cilician Armenia, proceedings of the international symposium (Antelias, Armenian Catholicosate of Cilicia, January 14-18, 2008); Antelias, Catholicosate of Cilicia, 2009 = Hask hayagitakan taregirk' 11 (2007-2008): 489-508, and in Chap. 4 in this volume; Dickran Kouymjian, "The Holy Mother of God Armenian Church in Famagusta," in Medieval and Renaissance Famagusta. Studies in Architecture, Art and History, ed. Michael J. K. Walsh, Peter Edbury, and Nicholas Coureas (Burlington: Ashgate, 2012), 139-146, and in Chap. 3 in this volume.
- 2. Bacci, "Armenian Church," 490; Idem., "La concepción del espacio sagrado en la Famagusta medieval," Studium Medievale. Revista de Cultura visual—Cultura escrita 3 (2010): 92; Idem., "Patterns of Church Decoration in Famagusta (Fourteenth to Sixteenth Centuries)," in Famagusta, vol. 1, Art and Architecture, ed. Annemarie Weyl Carr (Turnhout: Brepols, 2014), 233, 246; and

- in Chap. 4 in this volume; Allan Langdale and Michael J.K. Walsh, "The Architecture, Conservation History, and Future of the Armenian Church of Famagusta, Cyprus," *Chronos: Revue d'Histoire de l'Université de Balamand* 19 (2009): 20.
- 3. "Cross," in *The Encyclopedia of Christianity*, vol. 1 (Michigan: Brill, 1999), 735–736 [734–738].
- 4. Carl G. Liungman, *Symbols: Encyclopedia of Western Signs and Ideograms*, 3rd rev. and augmented English language edn. (Stockholm: HME Publishing, 2004), 238.
- 5. On the origins, types, and functions of Armenian xač'k'ars, see: Levon Asarian, "Die Kunst der armenischen Kreuzsteine," in Armenien. Wiederentdeckung einer alten Kulturlandschaft, Museum Bochum und das Institut für Armenische Studien, Bochum, January 14 April 17, 1995 (Tübingen: Wasmuth Verlag, 1995), 109–113; Katharina van Loo, "Zur Ikonographie des armenischen Kreuzsteines," in Armenien, 115–118; Hamlet Petrosyan, Khachkar: The Origins, Functions, Iconography, Semantics (Yerevan: Printinfo, 2007) [in Armenian with summaries in English and Russian]; Haroutioun Khatchadourian and Michel Basmadjian, L'art des khatchkars. Les pierres à croix arméniennes d'Ispahan et de Jérusalem (Paris: Geuthner, 2014), 5–7, 41–45, etc.
- 6. Hovhannes Xalp'axč'yan, "Dproc'nern u gratnerə mijnadaryan Hayastanum [Schools and Libraries in Medieval Armenia]," ĒĬmiacin 4 (1964): Fig. 11.
- 7. Robert W. Edwards, "Ecclesiastical Architecture in the Fortifications of Armenian Cilicia," *Dumbarton Oaks Papers* 36 (1982): 161–164, esp. 162, Fig. 11.
- 8. Claude Mutafian, *L'Arménie du Levant (XI^e-XIV^e siècle)*, tome 2 (Paris: Les Belles Lettres, 2012), Fig. 131.
- 9. See: Robert W. Edwards, *The Fortifications of Armenian Cilicia* (Washington D.C.: Dumbarton Oaks Research Library and Collection, 1987), 36, 67; Idem., "Ecclesiastical Architecture in the Fortifications of Armenian Cilicia: Second report," *Dumbarton Oaks Papers* 37 (1983): 129, Fig. 24.
- 10. A kneeling female donor in a white dress is painted in the conch of the apse, very likely in front of the Theotokos (Fig. 4.1). About this image, see: Bacci, "Concepción del espacio sagrado," 93; Idem., "Patterns of Church Decoration," 233; Dickran Kouymjian,

- in Chap. 3 in this volume. It is also known that the church had been renovated with the financial support of the family of Gerard of Ayas, Armenian ambassador to Pope Clement V. See: Jean-Bernard de Vaivre and Philippe Plagnieux, eds., L'art gothique en Chypre (Paris: De Boccard, 2006), 258; Nicholas Coureas, The Latin Church in Cyprus (1313-1378), Cyprus Research Centre (Nicosia: Theopress, 2010), 475; Dickran Kouymjian, in Chap. 3 in this volume.
- 11. The date of the church construction is given variously between the thirteenth and fourteenth centuries. See: Camille Enlart, L'art gothique et la Renaissance en Chypre, tome 1 (Paris: Ernest Leroux, 1899), 365-366; George Jeffery, A Description of the Historic Monuments of Cyprus. Studies in the Archaeology and Architecture of the Island (Nicosia: Government Printing Office, 1918), 143; Robert B. Francis, The Medieval Churches of Cyprus, The Ecclesiological Society, Transactions, vol. 2 (New Series), Part 1 (London, 1948), 47; de Vaivre and Plagnieux, L'art gothique, 259; Bacci, "Armenian Church," 491; Dickran Kouymjian, "The Holy Mother of God Armenian Church in Famagusta," in Medieval and Renaissance Famagusta. Studies in Architecture, Art and History, ed. Michael J. K. Walsh, Peter Edbury, and Nicholas Coureas (Burlington: Ashgate, 2012), 138; and in Chap. 3 in this volume; Langdale and Walsh, "Architecture," 15; Thomas Kaffenberger in Chap. 6 in this volume.
- 12. David Jacoby, "Citoyens, sujets et protégés de Venise et de Gênes en Chypre du XIIIe au XVe siècle," Byzantinische Forschungen 5 (1977): 168, 172 (reprinted in D. Jacoby, Recherches sur la Méditerranée orientale du XIIe au XVe siècle: Peuples, sociétés, économies, London: Variorum reprints, 1979, Study 6).
- 13. Tearn Yovhannu Imastasiri Awjnec'u Matenagrut'iwnk' (Venice: Mekhitarist Publishing House, 1834), 72 (in Classical Armenian with Latin translation). See also: Hakob K'yoseyan, "Xorhrdanšanə Yovhan Ōjnec'u Matenagrut'ean mēĬ (Symbolism in the Matenagrut'iwn (bibliography) of Yovhan Ōjnec'i)," in Drvagner hay mi Inadaryan arvesti astvacabanut'yan (Issues in the Theology of Medieval Armenian Art) (ĒJmiacin: Mother See of Holy Ēļmiacin, 1995), 139; Hakob K'yoseyan and Artašes Łazaryan, "Xač' (Cross)," in Christian Armenia. Encyclopedia (Yerevan: Armenian Encyclopedia Publishing, 2002), 423.

- 14. For the Canon of Blessing and Anointing of the Cross, see: Girk' Mec Maštoc' koč'ec'eal (Constantinople: i tparani Yohannisean Połosi, 1807), 204–213.
- 15. Yovhannu Imastasiri Awjnec'u Matenagrut'iwnk', 102.
- 16. "...the Greeks and the Georgians mostly worship images, and the Armenians [worship] the cross" (Mxit'ar Goš, twelfth-thirteenth centuries). See: A. Sahakyan, "MiJnadaryan patkerapaštut'yan haykakan tarberakə (The Armenian Version of Image Veneration in the Middle Ages)," *Historical-Philological Journal* 2 (1987): 155; Hakob K'yoseyan, "Patkerapaštut'yun (Veneration of Images)," in *Christian Armenia. Encyclopedia* (Yerevan: Armenian Encyclopedia Publishing, 2002), 853–854.
- 17. Aršak Ter-Mikelyan, *Hayastanyayc' surb ekelec'u k'ristoneakana. Jernark davanabanut'yan* (S. ĒЎmiacin: Mother See of Holy ĒЎmiacin, 2007), 536, 540–542 (first published Tp'xis: *tparan M. Šarayei*, 1900).
- 19. Langdale and Walsh, "Architecture," 20.
- 19. See also the contribution of Tomasz Borowski in this volume.
- 20. Bacci, "Armenian Church," 496–497; idem., "Patterns of Church Decoration," 249–250.
- 21. Ann Marie Yasin, "Prayers on Site: the Materiality of Devotional Graffiti and the Production of Early Christian Sacred Space," in *Viewing Inscriptions in the Late Antique and Medieval World*, ed. Antony Eastmond (New York: Cambridge University Press, 2015), 41.
- 22. Nicholas Coureas, "Non-Chalcedonian Christians on Latin Cyprus," in *Dei gesta per Francos. Etudes sur les croisades dédiées à Jean Richard* (Crusade Studies in Honour of Jean Richard), ed. Michel Balard, Benjamin Z. Kedar, Jonathan Riley-Smith (Aldershot: Ashgate, 2001), 353; idem., *The Latin Church*, 475.
- 23. Coureas, The Latin Church, 475.
- 24. The ritual of *Drnabac'ek'* also takes place during the celebration of Palm Sunday (Armenian *Caxkazard*).
- 25. For the canon, see: Girk' Mec Mastoc', 166-189.
- 26. The existence of the monastic complex can be justified by an Armenian manuscript colophon dating from 1317 and with a nineteenth-century illustration of Camille Enlart, where one can still observe the remains of a building, continued from the northeastern part of the main church. See: Kouymjian, "Armenian Church," 137–138, and in Chap. 3 in this volume; Enlart, *L'art*

- gothique, 365, Fig. 237. See also: Langdale and Walsh, "Architecture," 15–17; Thomas Kaffenberger, in Chap. 6 in this volume.
- 27. Bacci, "Patterns of Church Decoration," 245.
- 28. Ann Marie Yasin shows how the textual graffiti of Christian visitors "can render the site a recognizable space of prayer and communication," which can be relevant for the crosses of the Armenian Church as well. See: Yasin, "Prayers on Site," 51.
- 29. Enlart, L'art gothique, 352. For the image, see: Enlart, L'art gothique, Fig. 231; de Vaivre and Plagnieux, L'art gothique, 263, Fig. 3.
- 30. "Χρ. Ιησου (?) Θυ. ιυ." See: Enlart, L'art gothique, 352; de Vaivre and Plagnieux, L'art gothique, 262.
- 31. Yasin, "Prayers on Site," 40, 45.

BIBLIOGRAPHY

- Asarian, Levon. "Die Kunst der armenischen Kreuzsteine." In Armenien. Wiederentdeckung einer alten Kulturlandschaft. Museum Bochum und das Institut für Armenische Studien, Bochum, 109-113. Tübingen: Wasmuth Verlag, 1995.
- Bacci, Michele. "The Armenian Church in Famagusta and Its Mural Decoration: Some Iconographic Remarks." In Culture of Cilician Armenia. Antelias: Catholicosate of Cilicia, 2009. Hask hayagitakan taregirk' 11 (2007–2008): 489–508.
- Bacci, Michele. "La concepción del espacio sagrado en la Famagusta medieval." Studium Medievale. Revista de Cultura visual - Cultura escrita 3 (2010): 79-101.
- Bacci, Michele. "Patterns of Church Decoration in Famagusta (Fourteenth to Sixteenth Centuries)." In Famagusta, Art and Architecture, vol. 1. Edited by Annemarie Weyl Carr, 203–276. Turnhout: Brepols, 2014.
- Coureas, Nicholas. "Non-Chalcedonian Christians on Latin Cyprus." In Dei gesta per Francos. Etudes sur les croisades dédiées à Jean Richard [Crusade Studies in Honour of Jean Richard]. Edited by Michel Balard, Benjamin Z. Kedar, and Jonathan Riley-Smith, 349–360. Aldershot: Ashgate, 2001.
- Coureas, Nicholas. The Latin Church in Cyprus (1313-1378). Cyprus Research Centre. Nicosia: Theopress, 2010.
- Edwards, Robert W. "Ecclesiastical Architecture in the Fortifications of Armenian Cilicia." Dumbarton Oaks Papers 36 (1982): 155-176.
- Edwards, Robert W. "Ecclesiastical Architecture in the Fortifications of Armenian Cilicia: Second report." Dumbarton Oaks Papers 37 (1983): 123-146.

- Edwards, Robert W. The Fortifications of Armenian Cilicia. Washington D.C.: Dumbarton Oaks Research Library and Collection, 1987.
- The Encyclopedia of Christianity, vol. 1. Michigan: Brill, 1999.
- Enlart, Camille. L'art gothique et la Renaissance en Chypre, tome 1. Paris: Ernest Leroux, 1899.
- Francis, Robert B. The Medieval Churches of Cyprus. Vol. 2 (New Series), Part 1. London: The Ecclesiological Society, 1948.
- Girk' Mec Maštoc' koč'ec'eal. Constantinople: i tparani Yohannisean Połosi, 1807.
- Jacoby, David. "Citoyens, sujets et protégés de Venise et de Gênes en Chypre du XIII^e au XV^e siècle." Byzantinische Forschungen 5 (1977): 159–188.
- Jeffery, George. A Description of the Historic Monuments of Cyprus. Studies in the Archaeology and Architecture of the Island. Nicosia: Government Printing Office, 1918.
- Khatchadourian, Haroutioun, and Basmadjian, Michel. L'art des khatchkars. Les pierres à croix arméniennes d'Ispahan et de Jérusalem. Paris: Geuthner, 2014.
- Kouymjian, Dickran. "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, 133-146. Burlington: Ashgate, 2012.
- K'yoseyan, Hakob. "Xorhrdanšana Yovhan Ōjnec'u Matenagrut'ean mēď (Symbolism in the Matenagrut'iwn (bibliography) of Yovhan Ōjnec'i)." In Drvagner hay mi Inadaryan arvesti astvacabanut'yan [Issues in the Theology of Medieval Armenian Art], 133-144. ĒJmiacin: Mother See of Holy ĒJmiacin, 1995.
- K'yoseyan, Hakob, and Łazaryan, Artašes. "Xač' (Cross)." In Christian Armenia. Encyclopedia, 422-423. Yerevan: Armenian Encyclopedia Publishing, 2002.
- K'yoseyan, Hakob. "Patkerapaštut'yun [Veneration of images]." In Christian Armenia. Encyclopedia, 853–854. Yerevan: Armenian Encyclopedia Publishing, 2002.
- Langdale, Allan, and Walsh, Michael J. K. "The Architecture, Conservation History, and Future of the Armenian Church of Famagusta, Cyprus." Chronos: Revue d'Histoire de l'Université de Balamand 19 (2009): 7-25.
- Liungman, Carl G. Symbols: Encyclopedia of Western Signs and Ideograms. 3rd rev. and augmented English language edition. Stockholm: HME Publishing, 2004.
- van Loo, Katharina. "Zur Ikonographie des armenischen Kreuzsteines." In Armenien. Wiederentdeckung einer alten Kulturlandschaft, January 14-April 17, 1995, Museum Bochum und das Institut für Armenische Studien, Bochum, 115–118. Tübingen: Wasmuth Verlag, 1995.
- Mutafian, Claude. L'Arménie du Levant (XIe-XIVe siècle), tome II. Paris: Les Belles Lettres, 2012.

- Petrosyan, Hamlet. Khachkar: The Origins, Functions, Iconography, Semantics. Yerevan: Printinfo, 2007.
- Sahakyan, A. "Mijnadaryan patkerapastut'yan haykakan tarberakə [The Armenian Version of Image Veneration in the Middle Ages]." Historical-Philological Journal 2 (1987): 150-159.
- de Vaivre, Jean-Bernard, and Plagnieux, Philippe, eds. L'art gothique en Chypre. Paris: De Boccard, 2006.
- Ter-Mikelyan, Aršak. Hayastanyayc' surb ekelec'u k'ristoneakanz. Jernark davanabanut'yan. S. ĒJmiacin: Mother See of Holy ĒJmiacin, 2007.
- Xalp'axč'yan, Hovhannes. "Dproc'nern u gratnerz mijnadaryan Hayastanum [Schools and Libraries in Medieval Armenia]." *ĒĬmiacin* 4 (1964): 36–44.
- Yasin, Ann Marie. "Prayers on Site: the Materiality of Devotional Graffiti and the Production of Early Christian Sacred Space." In Viewing Inscriptions in the Late Antique and Medieval World, edited by Antony Eastmond, 36-60. New York: Cambridge University Press, 2015.
- Yovhannes III Awjnec'i, Tearn Yovhannu Imastasiri Awjnec'u Matenagrut'iwnk'. Venice: Mekhitarist Publishing House, 1834.

The Architecture of the Armenian Church and Convent

Thomas Kaffenberger

Until recently, the architecture of the Armenian Church has played a subordinate role in the study of the building, rather marginalized by the importance of the painted interior decoration as well as the intriguing historical context. The church is indeed modest in size, of a simple typology—a single, short nave with an apse—and only sparsely decorated with sculpted elements.

However, the elegance of the edifice as well as the high technical quality of the executed masonry tells a different tale. It testifies for the intended sophistication of the building, which was certainly more than a mere blank canvas for the (later) application of a painted cycle.² In consequence, a more in-detail appraisal of the architecture seems promising in several kinds of aspects. In its first part, this brief study intends to highlight the architectural characteristics of the church and their accordance or discordance with other churches of medieval Famagusta and the crusader territories. This evidence will then be used to evaluate previously proposed dates of erection. The second part will focus on the surrounding structures, today all but disappeared, and attempt the reconstruction of their

T. Kaffenberger (⋈) Department of Art History and Archaeology, University of Fribourg, Fribourg, Switzerland

layout with the help of historic photographs and the results of the recent Ground-Penetrating Radar (GPR) investigation.³

THE MAIN CHURCH

The Armenian Church is a building of roughly 7 m width and 11.50 m length, entirely constructed from typical, local limestone ashlars. It consists of a rather high, oblong nave and a lower, recessed semicircular apse (Fig. 6.1). The exterior walls are structured by four shallow buttresses,

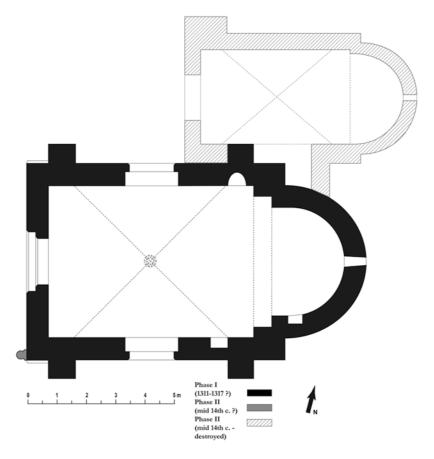


Fig. 6.1 Famagusta, Armenian Church, ground plan with reconstructed northern annex

which are placed symmetrically, ca. 70 cm off the building corners on the northern and southern walls (Fig. 6.3). Access to the interior can be gained through three portals, one each in the northern, western, and southern walls. A single window with hood mold is situated above each portal, the one in the west being slightly shorter than the others. Gables surmount the walls and a profiled cornice clasps around the whole structure, including the apse.

The inside is only sparsely decorated as well. A simple but very wellexecuted square groin vault covers the only bay of the nave. As the bay itself is rectangular in shape, the groin vault continues seamlessly into small barrel-vaulted segments in the east and west (Fig. 6.2). The apse is offset against the nave with a stepped double recess; a profiled stringcourse runs along the base of the semi-dome and continues onto the triumphal arch. Three niches are placed in the northern and southern nave walls and

Fig. **6.2** Famagusta, Armenian Church, interior toward east



on the southern side of the apse. While the latter are simple, rectangular openings, the one in the northern wall shows a rich decoration—we will come back to this below.

Restoration History

Today, the church is in a structurally sound and overall intact state.⁴ However, the western gable, which is trapezoid, not triangular like the others, makes us wonder about the originality of this state. A drawing of 1862, executed by the architect Edmond Duthoit, reveals that the gable originally ended in a shallow belfry with two or three arched openings (Fig. 7.1).⁵ This fact should be a reminder of the heavily altered state of many churches in Famagusta, thus the use of historic pictorial sources proves to be indispensable. While the Duthoit drawing is the oldest of these and shows a largely intact building, a number of photographs taken in 1896 by Camille Enlart (Figs. 6.3, 6.4, and 7.2) and in 1911 by Lucien Roy (Fig. 6.8) add further evidence for the bad state of the church before and during the first restoration works. 6 This is essential for the evaluation of building details, many of which had to be renewed or reconstructed.⁷ In 1896, both, northern and southern portals, had lost their jambs and corbels, the southern one also the lintel and parts of the archivolt, which were still in place in 1862. The western portal was still in a good state, while a gaping hole in the façade above bore testimony to the collapse of the belfry. All window frames were damaged and the apse vault had partly collapsed. The rapid deterioration of the building came to a halt in the early 1900s, when the northern and southern walls were repaired (without a reconstruction of the portals) and the western portal stabilized. The roof, however, remained untouched until the interventions from 1937 onward, directed by Theophilus Mogabgab, then director of the Antiquities Office in Famagusta.⁸ Mogabgab opened the lateral walls again and, partly using the scattered stone material, reconstructed both portals. Furthermore, his workers closed the gaps in the roof and façade and replaced weathered stones (Fig. 6.5). The cornice seems to have been entirely renewed, but based on the design of few remaining fragments. On the inside, this restoration left fewer traces. Only the new upper part of the apse vault and single stones in the nave vault originate in the 1930s rather than in the medieval period. The restoration was accompanied



Fig. 6.3 Famagusta, Armenian Church, from southwest, photograph by Camille Enlart (1896)

by an excavation of the surrounding building foundations, which was sadly not documented and is today only tangible through few photographs taken after the clearing of the site.

Typological and Stylistic Comparanda: Famagusta and the Crusader Levant

As has been remarked before, the Armenian Church, albeit in accordance with the general aesthetics of medieval church building in Famagusta, features several unique traits that need to be explained.9 Already the



Fig. 6.4 Famagusta, Armenian Church and Carmelite Church, from northeast, photograph by Camille Enlart (1896)

moderate size and the resulting single bay of the nave surprise. In Famagusta, only the southern church of the so-called Twin Churches is comparable in its proportions and typology; it also consists of a groin-vaulted nave and a semicircular apse.¹⁰ However, it lacks the elegance of the Armenian Church, as the exterior shows nothing but a plain cube without gables or buttresses. 11 The combination of gables and buttresses indeed stands out among the smaller churches of Famagusta. Most other buildings are, just like the southern Twin Church, entirely plain from the outside—even if gables adorn, among others, the churches of Saint Epiphanios and Saint Nicholas of the Greeks. 12 Only the church of Saint George Exorinos, originally a single nave church of three bays, features both buttresses and gables. 13 Especially the added northern aisle bears close resemblance to the situation of the Armenian Church: here, the buttresses are not placed at the building corners, but offset by half a meter. Furthermore, they possess weathering with drip molds, even if these are much more pronounced than in the case of the Armenian Church. In both cases, the gables only



Fig. 6.5 Famagusta, Armenian Church Repairs 1937, Theophilus Mogabgab archive

stretch between the buttresses and the whole building features a continuous cornice.

The similarities extend to the interior, which is groin vaulted in a similar way as the Armenian Church. Here, as well, the groin vault is understood as the combination of two interpenetrating barrel vaults, which results in the abovementioned longitudinal continuity of barrel-vaulted compartments and in a horizontal apex of the vault. Apart from the Armenian Church, Saint George Exorinos and the southern twin church, also Saint Epiphanios, Unidentified Church No. 18 (aisles), Saint Nicholas of the Greeks and the unidentified church adjacent to the Venetian palace possess this type of groin vaults.¹⁴ The so-called Tanners' Mosque, a few meters south of the Armenian Church, is also groin vaulted, but the technique for the execution of the ridges differs: while the other vaults utilize L-shaped stones to link longitudinal and transversal stone layers, here the equivalent stones are chamfered and do not interlock—resulting in a joint along the ridge. Furthermore, the vault apex forms a curve and the quality of execution is much worse. Remarkably, the superior aesthetics of the supposedly older type of groin vaults was copied here by applying fake joints, carved in regular intervals into the irregular vault stones. This rather elaborate imitation might well mean that the vault masonry of the Armenian Church, but also of other similar buildings, remained visible, probably only covered with a thin layer of translucent lime wash.¹⁵

The portals and windows of the Armenian Church draw a similar picture. The main portal is recessed by one step, which forms a pointed arch. The doorway itself is rectangular with small profiled corbels. The tympanum above is set back by a small chamfer that continues from the jambs onto the frame of the tympanum. Especially the simple arched recess is revealing as it is a rather uncommon type among the portals of Famagusta. The closest relative is the central-western portal of Saint George Exorinos, even if here the chamfer ends in extremely shallow profiled corbels below the tympanum. The Armenian's corbels share some features with those of the northern portal in Saint George Exorinos: a thin orthogonal line, setting off the corbel against the rest of the same ashlar, and a roll-and-hollow profile with thin quirks. The northern and (reconstructed) southern portals of the Armenian Church are much simpler: a rectangular doorway, surmounted by a lintel and an arched recess. Apart from the quarter circle corbels, also with the characteristic orthogonal frame, these portals imitate a traditional local type, which was widespread since the middle Byzantine period. For the windows, once more a look at the Exorinos church is helpful. Both edifices share simple, strongly chamfered window frames. The profiled hood molds of the Armenian Church find their counterpart in the main apse window of Saint George Exorinos, here slightly flatter but of a similar profile (roll-and-fillet/hollow/roll).

The same type of hood mold adorns the elaborate niche in the northern wall, which shows that here the original idea of an exterior feature (window, portal) was transferred onto this interior feature (Fig. 6.6). The damaged tracery that fills the pointed arch of the niche (with a single roll framing it) might be the only element of the church, which points toward a different group of buildings: it resembles the elegant tracery of the northern portals of the Latin cathedral of Saint Nicholas as well as of the northern Twin Church. The same type of cusped tracery was used occasionally as window filling in Famagusta (e.g., in the Unidentified Church No. 18) and other places. 16

The profile of the apse stringcourse, a simple quirk and hollow, in contrast, fits again well within the previously described context. Similar profiles are known from the side apses of Saint George Exorinos and the



Fig. 6.6 Famagusta, Armenian Church, decorated niche in the northern nave wall

cornice of Saint Epiphanios, but in both cases the cavetto motive is less explicit than in the Armenian Church.

For closer comparanda, we have to broaden the geographic horizon of the investigation. Already Michele Bacci has suggested the architecture of the Crusader Levant as possible inspiration for the groin vaults, especially those of Saint George Exorinos.¹⁷ However, he sees the main source for features such as the compact building type and the stepped bema/triumphal arch in the churches of Armenian Cilicia. ¹⁸ While it is certainly true that most known churches from Armenian Cilicia represent the compact single-bay type with apse, only a few of them indeed possess a stepped bema (Sis, Chapel U in Korykos). On the other hand, many of the larger churches in the Levant employ a stepped triumphal arch: for example, Notre-Dame in Tortosa and Saint John in Giblet, to name just the most prominent and best-preserved buildings.¹⁹ Apparently, also smaller (albeit aisled) churches made use of the same element, as is shown by the examples of Saint Phocas in Amioun and of the excavated parish church of Tall Qaimun.²⁰ In Amioun, we also encounter the quirk and hollow profile of the Armenian's apse stringcourse, here surrounding the nave piers.²¹ Furthermore, elements of the portals and windows are paralleled by examples in the Levant. A simple arched recess frames the northern portal of Notre-Dame in Tortosa; quarter circle corbels with a rectangular frame support its lintel. The southern portal, in contrast, is surmounted by a profiled hood mold, a feature that is relatively widespread in the Crusader Levant. Finally, this suggestion of a certain link of the Armenian Church with a portfolio of architectural forms from the Crusader Levant is strongly supported by a curious detail of the otherwise widespread groin vault (Fig. 6.7). On its apex, the vault features a sculpted keystone which shows a centrifugal foliage decoration. There is no second fourteenth-century example for a decorated keystone in a groin vault in Cyprus, whereas this type of decoration is prominently displayed



Fig. 6.7 Famagusta, Armenian Church, vault toward west

in six aisle bays in the church of Our Lady of Tortosa—some of these with comparable foliage patterns.²²

It is further worth noting that the small Armenian Church of the Savior in Jerusalem, despite not employing many of the decorative elements present in Famagusta (except for hood molds above the windows), bears a surprising typological resemblance. It is a single-space church as well, approximately 14 m long and 9 m wide, with a semicircular apse, a seamless groin vault (here not aligned with the lateral walls) and a (deeper) stepped arch separating the nave and the apse.²³

Overall, the centralized character and steep proportions of the building remind us of the Armenian building traditions, even if the church lacks a dome. In addition, the position of the niche in the northern wall finds numerous counterparts in Armenian Cilicia.²⁴ However, the building technique, and the decoration largely make use of elements deriving from the Levantine Crusader architecture—even if recombined in an unusual, entirely local manner.

Date and Historic Context: An Attempt

The last and maybe most complex issue that has to be raised during a formal analysis is the date of the building. Two differing suggestions have been made so far: Enlart, the first scholar who discussed the church in detail, refers to two pilgrim's accounts mentioning a wave of Armenian refugees arriving in Famagusta in 1335 and 1346.25 According to him, the erection of the church would have been a consequence of these events, thus placing it in the second half of the fourteenth century. Philippe Plagnieux and Thierry Soulard recently rejected this date and opted for the years 1311-17. This date is mentioned in a bulla (papal decree or charter) of Pope Clement V, which grants indulgences for the erection of an Armenian church dedicated to the "Virgin of Sorrows" (or, a less likely translation, "Sainte-Marie-Vert") during this timespan.²⁶ While Michele Bacci did not challenge this interpretation, first Allan Langdale and Michael Walsh, then more recently Michalis Olympios, tended toward a date later in the fourteenth century.²⁷ Olympios rejects the identification of the current building with the monastery mentioned in the sources, pointing out a certain insecurity due to the attested presence of further Armenian churches in the city (namely the cathedral, Saint Sergius, Saint Barbara, Saint Leonard).²⁸ He instead places the church within a group of buildings which show a strong "Crusader Revival" style, employing outdated twelfth and early thirteenth century forms from, according to his opinion, the mid-fourteenth century onward.²⁹

Crucial for the interpretation of the Armenian Church is, as we saw, the larger (Syriac) church of Saint George Exorinos—the date of which is also strongly disputed.³⁰ If we assume that Michele Bacci is right in placing the main nave in the late thirteenth century, as a direct result of the arrival of refugees from conquered Tripoli, the aisles would have been built not much later, probably during the first decades of the fourteenth century.³¹ If we then accept that the stylistic similarities are indeed significant enough to place the Armenian Church in the same period, the 1311–17 date seems far from improbable.³² It would indeed be rather early, especially with regard to the northern niche taking up on an absolutely contemporary tracery model and making use of a framing roll, a feature that is otherwise not attested for buildings of the 1310s. 33 However, a decisive element, which both churches have in common, supports the tendency toward an early date: external buttresses seem to disappear from the architectural canon of urban Famagusta already before the mid-fourteenth century, making place for entirely plain buildings such as the southern Twin Church.

Of course, this proposal of an early date is based rather on indications than on irrefutable evidence and leads to a number of further questions. First, how would the transmission of the style have functioned? Would it nevertheless have been a "Crusader Revival," thus a purposeful use of outdated forms only more known from drawings and/or older buildings in lost territories? Or rather, in this case, a "Crusader Survival," an afterlife of forms established in the Levant and brought to Cyprus by the refugees?³⁴ If we accept the early date in the 1310s, the latter might have been the case. This, however, does not explain conclusively, why the church is rather oriented toward the Latin architecture of the Levant and not traditional or contemporary Armenian architecture. Thus, we have to wonder, who was responsible for the design of the church. Perhaps, we will not go wrong to imagine a dynamic dialogue between the individual protagonists: a master mason, the patron(s), probably also the monastic community or the bishop, if not already among the patrons. In the multifaceted, dynamic environment of fourteenth-century Famagusta, it is hardly thinkable that Syrians, Armenians, and other smaller religious communities all entertained their own team of masons and workmen-after all, the erection of the individual buildings probably did not last longer than a few years and would not have required the constant attention of the more specialized masons. Thus, we would rather have to imagine "teams

of masons practicing a common stylistic idiom, yet working from a variety of different plans to suit the needs and wishes of their multi-ethnic and multi-creed patrons."35 Furthermore, it is probable that each site was guided by a specialized master mason with a specific training background. On the site of the Armenian Church, this (purely hypothetical) master mason may have still been familiar with the buildings in the Levant, or at least an earlier (now lost) building in Famagusta, and might have contributed the Levantine elements of design for this building, yet adapted to serve the specific needs of the Armenian community.³⁶

THE NORTHERN ANNEX: A FUNERARY CHAPEL?

In any case, several years after the completion, a second chapel was added onto the original building (Fig. 6.1). Today, nothing remains of this chapel except for few marks left on the masonry of the northeast corner of the main church. However, the chapel is still visible in a photograph taken by Camille Enlart (Fig. 6.4), who describes the structure as "a second chapel ... of which all that remains is an insignificant apse with Gothic mouldings on the cornice."37 Indeed, around 1900 the apse was still fully preserved. It was lower and smaller than the apse of the main church, but protruded further to the east. The eastern wall of the chapel nave seems to have been more or less aligned with the apex of the older main apse; it was surmounted by a low triangular gable. Slit-like windows pierced the apse as well as the gable above. Enlart's photograph still shows the precariously reduced rests of the northern wall of the chapel, plain without buttresses and surmounted by a triangular gable, which rose higher than the eastern one. A wall fragment further to the west seems not to be aligned with the rest of the wall but rather to be the rest of a protruding element.

Large fragments of plaster on the northeastern buttress of the main church as well as on a detached, crumbling pier next to it, reveal that the new chapel did not receive a continuous southern wall, but made use of parts of the older wall. In its southwestern corner, a new pier was built against the older wall to compensate the depth of the buttress next to it. This additional pier also explains the conspicuous change in color of the masonry of the wall behind, forming a vertical line. The pier, it seems, covered the original mortar of the joints and, perhaps, a light lime wash, which both vanished on other uncovered parts of the building. Even if already then nothing was left of the chapel's western wall, the line might well mark its position, directly east of the northern portal of the main



Fig. 6.8 Famagusta, Armenian Church and Carmelite Church, from northwest, photograph by Lucien Roy (1911)

church. In fact, the line is still visible and so are the fragments of the plaster on the buttress and few stones of the added pier.

All parts of the western end of the church had vanished in 1911, when Lucien Roy took several pictures of the complex (Fig. 6.8). One of these is the only one to show the inside and the remains of vaulting of the now further reduced—fragments of the chapel. On the southern wall, the imprint of a rather steep arch is visible, which spans over the buttress of the older church.

We can still see this arch imprint on the buttress today, ending in a gap in the buttress masonry: here a part of the older masonry had been removed to interlock it with the new vault. Next to this, a fragment of a curved vault remained, proving the existence of a groin vault of the usual type (i.e., with barrel-vaulted longitudinal extensions).

The rather unusual layout of a short, almost square, nave is confirmed by the recent GPR tests as well as historic images taken during the excavation of the site.³⁸ Here, the west wall of the chapel, indeed just east from

the older northern portal, is as easily discernible as the protruding apse and parts of the northern wall. The only problematic part of the structure is its northwestern corner. On the GPR images (Fig. 10.2), it seems that a rectangular annex was situated in the center of the northern wall, whereas the historic images reveal the solid foundations of a rectangular salient on the corner, matching the position of the wall fragments on Enlart's image. Strangely, no sign of an annex in the center of the wall is visible on the photographs. Until further excavations, it will not be possible to prove the extent and precise shape of the rectangular salient—was it just a buttress, perhaps added at a later date? The thought of a niche would be intriguing, but the location in the corner of the chapel more than unlikely. In any case, the evidence reminds us that GPR images require careful interpretation when it comes to building details.

Overall, the architecture of the chapel indicates a date somewhere in the mid- to late fourteenth century. Could this building be a consequence of the Armenian refugees from Layasso, arriving in Famagusta from 1335 onward, as suggested by Enlart for the main church? It is certainly possible, but the strict separation of the two structures surprises: the chapel was not built as an extension due to lack of space but to serve a distinct, separate purpose. It might be worth considering an interpretation of the chapel as a memorial building. In fact, there are several Cypriot examples for similar (but usually domed) chapels added onto an older church building, usually serving a specific commemoration or worship: Saint Anastasios in Peristerona or the Panagia Diakonousa in Prastio Avdimou to name but a few. Furthermore, separate chapels serving as martyria or mausoleums were extremely common in the Armenian monastic culture as well as in the context of episcopal sees.³⁹ Of course, this suggestion has to remain conjectural, as we neither know of a specific veneration of a saint nor of a prominent patron that could be connected to the Armenian community of Cyprus in the mid-fourteenth century.

THE MONASTIC PRECINCT: GATHERING THE FRAGMENTARY EVIDENCE

Even Enlart's photograph shows little more than foundation walls remaining of the surrounding monastic buildings (Fig. 6.4). These foundation walls vanished before 1911 but were uncovered in the late 1930s—and are again underground, as the results of the GPR analysis showed.

To the west of the church, the Mogabgab excavation uncovered a wall running parallel to the west façade of the church. To the south, it ended on the axis of the southeastern corner of the church. There, we can still see a curious feature: a semicircular respond, probably once supporting an arch above. The interpretation of Langdale and Walsh, who suggested a wooden porch and a corresponding respond on the northwestern corner, might need to be revised as the second respond most likely did not exist (neither can we find beam holes for the positioning of the porch roof in the façade). Probably, a second respond was instead attached to the uncovered wall which might have been part of a small courtyard. This courtyard would have been open toward the south and the arch might have marked the border between two separate areas of the precinct. Further west, Mogabgab's photographs show a paved area, but no door opening in the wall—was this the western end of the precinct and an adjoining road? To the north, the courtyard continued further than the church and perhaps opened up toward a second court in front of the later chapel—even if here neither the photographs nor the GPR prove to be helpful. The general situation east of the church seems clearer as the walls were in a better state at the beginning of the century (Fig. 6.9). A rectangular, corridor-like space, oriented in east-west axis, adjoins the apse of the main church. To the north of this, an obliquely positioned building contained at least three rooms with a smaller corridor (or separate small rooms?) to the west. To the south, two or three adjoining larger rooms in north-south axis are recognizable, followed by smaller rooms, which at a brief glance might also resemble a second corridor in east-west axis.

As we see in Enlart's photograph, this area was heavily disturbed by a modern access way in 1896, so even the 1930s restoration of the walls might not be entirely trustworthy. Furthermore, when the image suggests that the central smaller room was accessible from the north, the result of the GPR shows exactly the opposite, thus here the different parts of the evidence are irreconcilable. A large room adjoining the north wall of the Carmelite Church concludes the traceable structure to the south.

A detailed interpretation, or an attempt to assign functions to individual rooms, seems hazardous if based only on the presented evidence. A comparison with Armenian monasteries of the same period seems hardly fruitful: as Thierry underlines—here for the case of northeastern Armenia—there was no stringent building program for late medieval Armenian monastery compounds.⁴⁰ Furthermore, the preserved and thus studied evidence is mainly restricted to rural areas and spares out the

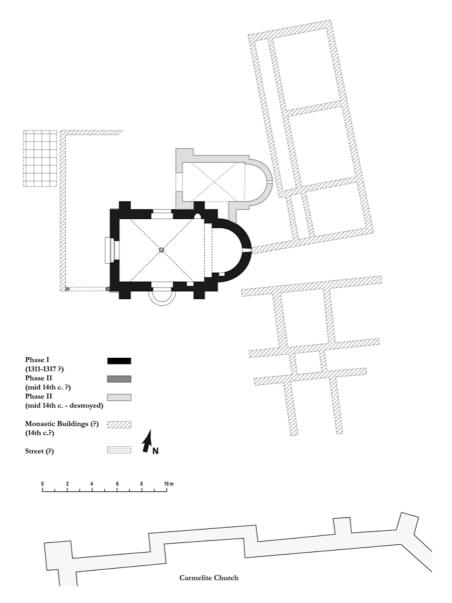


Fig. 6.9 Famagusta, Armenian Church and convent, site plan

territory closest to Cyprus: Cilicia. There, most of the large and famous late medieval monasteries are entirely lost, to the point that not even the location of some is known today. 41 The situation in the Levant is better, but here the constant change of the urban fabric in cities such as Jerusalem makes it almost impossible to grasp the original layout of the monasteries of, for example, the Holy Archangels or Saint Savior.⁴² In addition, as Enlart's images show, many of the remaining walls were fairly recent, stacked up from loose ashlars to mark the compound. Thus, it is impossible to evaluate if every wall that was uncovered and restored by Mogabgab indeed formed part of the medieval building complex. Furthermore, neither photographs nor GPR help to identify building phases or access ways.

Nevertheless, the evidence is comprehensive enough to suggest certain general patterns of usage (Fig. 6.9). The complex was irregular, resembling, for example, the well-studied unidentified monastery north of Omirou Street in the old town of Rhodes. 43 The Armenian precinct probably had several entrances, linking the buildings with the public streets. The main access might have been possible through the wider corridor or lane in the east, which could have led (through a gate room?) onto a courtyard south of the church. From there, one would have been able to enter the church through the southern portal (which possessed a monumental, semicircular flight of stairs in front) or proceed further into the monastic compound through the archway in the west. Following this assumption, the building northeast of the church could have been part of the inner monastery while the other structures further south would have served different, more public, purposes.

To conclude, before further excavations might shed more light on the remains, it only seems safe to claim that the surrounding buildings were integrated within a dense, urban pattern. If they were indeed part of a monastic establishment, and there is no specific reason to doubt this, it did not follow a regular plan but adapted to the available space in the densely populated walled city of Famagusta.

Notes

1. The most important contributions dealing with the architecture of the Armenian Church are: Camille Enlart, L'art gothique et la renaissance en Chypre, 2 vols. (Paris: Leroux, 1899), 365-8; Camille Enlart, Gothic art and the Renaissance in Cyprus [L'art gothique et la Renaissance en Chypre], trans. David Hunt (London: Trigraph in association with the A.G. Leventis

Foundation, 1987), 286-8; Philippe Plagnieux and Thierry Soulard, "Famagouste. L'architecture religieuse," in L'art gothique en Chypre, ed. Jean-Bernard De Vaivre (Paris: Boccard, 2006), 121-296, 257-60; Michele Bacci, "The Armenian Church in Famagusta and its Mural Decoration: Some Iconographic Remarks," Hask hayagitakan taregirk 11 (2009): esp. 490-91; Allan Langdale and Michael J.K. Walsh, "The Architecture, Conservation History, and Future of the Armenian Church of Famagusta, Cyprus," Chronos. Revue d'Histoire de l'Université de Balamand 19 (2009): esp. 19-21. I also wish to thank Michalis Olympios for valuable discussion and inspiring interchange.

- 2. Bacci, "Armenian Church," 490.
- 3. See Chap. 10 in this volume. I wish to thank Francisco Fernandes for sharing his results with me beforehand.
- 4. For the question of structural stability, see especially Chap. 11 of Andres Burgos Braga in this volume.
- 5. The drawing shows two arches and perhaps the springer of a third, destroyed arch—this is not entirely unequivocal. For Duthoit, see Lucie Bonato and Rita Severis, eds., Along the Most Beautiful Path in the World: Edmond Duthoit and Cyprus (Nicosia: Publisher, 1999), 195 and Chap. X of Lucie Bonato in this volume.
- 6. For Enlart see: Jean-Bernard De Vaivre, ed., Monuments médiévaux de Chypre: Photographies de la mission de Camille Enlart en 1896 (Paris: ACHCByz, 2012), 113-16; for Roy: Mediathéque du Patrimoine. The images of both are also discussed in detail in Chap. X of Lucie Bonato.
- 7. For a more detailed account of the restoration phases, see Langdale and Walsh, "Armenian Church," here 17-18.
- 8. Ege Uluca Tumer, "Twentieth-century restorations to the medieval and Renaissance monuments of Famagusta," in Medieval and Renaissance Famagusta: Studies in architecture, art and history, ed. Nicholas Coureas, Peter W. Edbury and Michael J.K. Walsh (Farnham: Ashgate, 2012), 217-34, here 228-30.
- 9. Plagnieux and Soulard, "Famagouste. L'architecture religieuse," here 260.
- 10. For the Twin Churches, see most comprehensively Jean-Bernard De Vaivre, "Identifications hasardeuses et datation de monuments à Famagouste le cas des 'églises jumelles des templiers et des hospitaliers'," Comptes rendus des séances de l'Académie des Inscriptions et Belles-Lettres 146 (2002).

- 11. The cemetery chapel in Dali, on the other hand, possesses buttresses and gables, but was originally covered by an oblong rib vault. Furthermore, the apse is polygonal and the overall proportions are rather squat. (Enlart, L'art gothique, 199-201; Enlart fails to recognize that the vaults and lateral gables are product of a nineteenth-century restoration.)
- 12. The name for Saint Epiphanios, the old church adjacent to Saint George of the Greeks, is not secured but used here in favor of the less likely "Saint Symeon." For this issue, see Thomas Kaffenberger, "Harmonizing the Sources: An Insight into the Appearance of the Hagios Georgios Complex at Various Stages of its Building History," in Coureas, Kiss, Walsh, Crusader to Venetian Famagusta: 'The Harbour of all this Sea and Realm,' 171-3.
- 13. For Saint George Exorinos most recently Thomas Kaffenberger, "Evoking a distant past? The chevron motif as an emblematic relic of Crusader architecture in late medieval Cyprus," in Proceedings of the MedWorlds Congress 2014 (forthcoming); Michele Bacci, "Syrian, Palaiologan, and Gothic Murals in the 'Nestorian' Church of Famagusta," Deltion tes Christianikes Archaiologikes Hetaireias 27 (2006); Michele Bacci, "Identity Markers in the Art of Fourteenth Century Famagusta," in Crusader to Venetian Famagusta: 'The Harbour of all this Sea and Realm,' eds. Coureas, Kiss, Walsh, 150–55; and Michalis Olympios, "The Shifting Mantle of Jerusalem: Ecclesiastical Architecture in Lusignan Famagusta," in Weyl Carr, Famagusta, 157-8. The chronological relation of nave and aisles, certainly executed in two or three phases, has not been sufficiently investigated until now.
- 14. On the question of early groin vaults in Cypriot churches, see also Olympios, "The Shifting Mantle," 103–105.
- 15. In Famagusta, the church of Saints Peter and Paul preserves rests of such a lime wash, combined with painted masonry joints (following exactly the factual ones), in the southwest of the interior.
- 16. Bacci's suggestion to see Latin piscinae as main inspiration is generally convincing (Bacci, "Armenian Church," 491). However, no piscinae in Famagusta resemble the niche in the Armenian Church: they are either not decorated with tracery at all, or the tracery is much more elaborate, as is the case in the Latin cathedral.

- 17. Bacci, "Armenian Church," 490; in Saint George Exorinos especially the elbow-shaped corbels, unique in Cyprus but frequently used in the Holy Land, prove the close relation: Bacci, "Syrian, Palaiologan, and Gothic," 209.
- 18. Bacci, "Armenian Church," 490, mainly referring to the castle chapels studied by Robert W. Edwards, "Ecclesiastical architecture in the fortifications of Armenian Cilicia," Dumbarton Oaks papers/ Dumbarton Oaks Center for Byzantine Studies 36 (1982); and Edwards, "Ecclesiastical architecture in the fortifications of Armenian Cilicia: Second report," Dumbarton Oaks papers/ Dumbarton Oaks Center for Byzantine Studies 37 (1983).
- 19. Curiously, a similar design can be reconstructed for the monastic church of Ain-Karim, which belonged to an Armenian community in the thirteenth century. Denys Pringle, The Churches of the Crusader Kingdom of Jerusalem: A corpus, 4 vols. (Cambridge, New York: Cambridge University Press, 1993–2009), vol. 1, 40-41. For Tortosa see Paul Deschamps, Romanik im Heiligen Land: Burgen und Kirchen der Kreuzfahrer (Würzburg: Zodiaque-Echter, 1992), 268–78, for Giblet: Deschamps, Romanik, 263–68.
- 20. Aimoun: Deschamps, Romanik im Heiligen Land, 279-80; Lévon Nordiguian and Jean Claude Voisin, Châteaux et églises du Moyen Age au Liban (Liban: Editions Terre du Liban; Editions Trans-Orient, 1999), 363-364; Tall Qaimun: Pringle, Churches of the Crusader Kingdom, vol. 2, 160.
- 21. Camille Enlart, Les monuments des croisés dans le royaume de Jérusalem: Architecture religieuse et civile, 4 vols. (Paris: P. Geuthner, 1925–1927), vol. 1, 93 and fig. 182.
- 22. Ibid., vol. 1, 63 and pl. 169.
- 23. Pringle, Churches of the Crusader Kingdom, 368-370. He dates the church to the mid-twelfth century, but admits that an erection after 1244 could be possible.
- 24. Bacci, "Armenian Church," 491; Edwards, "Ecclesiastical architecture 1," 164: "Frequently [in the chapels of Armenian Cilicia, T.K.], a niche will appear in the north wall of the nave (and occasionally in the south wall) near the junction with the apse."
- 25. Enlart, L'art gothique, 365-6.
- 26. Plagnieux and Soulard, "Famagouste. L'architecture religieuse," 258-60. On the question of the identification of the church through written sources and the translation of the name, see also Chap. X of Nicholas Coureas and Chap. X of Dickran Kouymjian in this volume

- 27. Bacci, "Armenian Church," 420; Langdale and Walsh, "Armenian Church," 15; Olympios, "The Shifting Mantle" 107, fn. 61.
- 28. For the issue of diverse Armenian Churches attested in sources of the thirteenth and fourteenth centuries, see also Chap. 3 of Dickran Kouymjian in this volume.
- 29. Olympios, "The Shifting Mantle," 105-120.
- 30. See Kaffenberger, "Evoking a distant past"; for a brief discussion of the issue and previously proposed dates.
- 31. Bacci, "Syrian, Palaiologan, and Gothic," 210.
- 32. Mentions of Armenian Churches before the early fourteenth century certainly refer to different buildings or an older structure on the same site—see Chap. 3 of Dickran Kouymjian for this aspect.
- 33. I wish to thank Michalis Olympios for pointing out this problematic fact.
- 34. Admittedly, the architecture of the second half of the thirteenth century in the Levant is hardly known, so referring to the Levantine architecture means discussing buildings, which were erected around a century earlier.
- 35. Michalis Olympios, "Saint George of the Greeks and Its Legacy: A Facet of Urban Greek Church Architecture in Lusignan Cyprus," in Weyl Carr, Famagusta, p 177.
- 36. This thought of a shared pool of masons, erecting churches for different denominations in a rather similar architectural language, could possibly be paralleled with the (later) situation concerning the painted decoration. Here, as well, the multilayered environment of the city became visible through the utilization of forms deriving from various traditions, also adapted to the specific situation. See Chap. 4 of Michele Bacci on the painted decoration of the church for a discussion of this aspect.
- 37. Enlart, L'art gothique, 367: "une seconde chapelle dont il reste une abside insignifiante avec moulure gothique à la corniche," translation quoted after Enlart, Gothic art, 287.
- 38. For the GPR images, see Chap. 10 of Francisco Fernandes in this volume. The historic images can be found in the Mogabgab Photographic Archive (especially A.7198, A.9599, A.10758).
- 39. This is observable in the Armenian mainland (e.g., Goschawank with three churches and four separate chapels, all dating from the twelfth to thirteenth centuries—see Jean-Michel Thierry, Armenien im Mittelalter, 1st ed., Die Welt des Mittelalters

- (Regensburg, Saint-Léger-Vauban: Schnell + Steiner; Zodiaque, 2002), p 230-32) as well as in the Armenian compounds of Jerusalem (e.g., Cathedral of Saint James the Great with the separate chapel of the Holy Apostles—see Pringle, Churches of the Crusader Kingdom, Vol III, 168-82).
- 40. Thierry, Armenien im Mittelalter, 207.
- 41. Ibid., 288—The ruins of the only partly preserved monastery, Akner, are hardly investigated. The remains of the church indicate a retrospective style rather resembling Late Antique structures, while the monastic buildings are all but gone.
- 42. On the churches, see Pringle, Churches of the Crusader Kingdom, vol. 3, 212–16, 367–71.
- 43. Giorgios Dellas, "Néa stoicheía gia éna monastíri sti mesaionikí póli tis Ródou: New Evidence on a Monastery in the Medieval City of Rhodes," Deltion tes Christianikes Archaiologikes Hetaireias 21 (2000). The monastery consists of an often-altered church and, to the east, a courtyard with surrounding buildings. One access leads directly into the church, while the two southern doorways link the monastic building with Omirou Street through narrow lanes.

BIBLIOGRAPHY

- Bacci, Michele. "Syrian, Palaiologan, and Gothic Murals in the "Nestorian" Church of Famagusta." Deltion tes Christianikes Archaiologikes Hetaireias 27 (2006): 207–20.
- —. "The Armenian Church in Famagusta and its Mural Decoration: Some Iconographic Remarks." Hash hayagitakan taregirk 11 (2009): 489-508.
- —. "Identity Markers in the Art of Fourteenth Century Famagusta." In Coureas; Kiss; Walsh, Crusader to Venetian Famagusta: 'The Harbour of all this Sea and Realm', 145-58.
- Bonato, Lucie and Rita Severis, eds. Along the Most Beautiful Path in the World: Edmond Duthoit and Cyprus. Nicosia, 1999.
- Coureas, Nicholas, Tamás Kiss, and Michael J. K. Walsh, eds. Crusader to Venetian Famagusta: 'The Harbour of all this Sea and Realm'. Budapest, 2014.
- De Vaivre, Jean-Bernard. "Identifications hasardeuses et datation de monuments à Famagouste le cas des 'églises jumelles des templiers et des hospitaliers'." Comptes rendus des séances de l'Académie des Inscriptions et Belles-Lettres 146 (2002): 45–55.
- —, ed. Monuments médiévaux de Chypre: Photographies de la mission de Camille Enlart en 1896. Paris: ACHCByz, 2012.

- Dellas, Giorgios. "Néa stoicheía gia éna monastíri sti mesaionikí póli tis Ródou: New Evidence on a Monastery in the Medieval City of Rhodes." Deltion tes Christianikes Archaiologikes Hetaireias 21 (2000): 43-54.
- Deschamps, Paul. Romanik im Heiligen Land: Burgen und Kirchen der Kreuzfahrer. Würzburg: Zodiaque-Echter, 1992.
- Edwards, Robert W. "Ecclesiastical architecture in the fortifications of Armenian Cilicia." Dumbarton Oaks papers / Dumbarton Oaks Center for Byzantine Studies 36 (1982): 155-76.
- -----. "Ecclesiastical architecture in the fortifications of Armenian Cilicia: Second report." Dumbarton Oaks papers / Dumbarton Oaks Center for Byzantine Studies 37 (1983): 123-46.
- Enlart, Camille. L'art gothique et la renaissance en Chypre. 2 vols. Paris: Leroux, 1899.
- ——. Les monuments des croisés dans le royaume de Jérusalem: Architecture religieuse et civile. 4 vols. Paris: P. Geuthner, 1925-1927.
- en Chypre (transl. by David Hunt)]. 1899. London: Trigraph in association with the A.G. Leventis Foundation, 1987.
- Kaffenberger, Thomas. "Evoking a distant past? The chevron motif as an emblematic relic of Crusader architecture in late medieval Cyprus." In Proceedings of the Med Wolds Congress 2014., forthcoming.
- —. "Harmonizing the Sources: An Insight into the Appearance of the Hagios Georgios Complex at Various Stages of its Building History." In Coureas; Kiss; Walsh, Crusader to Venetian Famagusta: 'The Harbour of all this Sea and Realm'.
- Langdale, Allan, and Michael J. K. Walsh. "The Architecture, Conservation History, and Future of the Armenian Church of Famagusta, Cyprus." Chronos. Revue d'Histoire de l'Université de Balamand 19 (2009): 7-31.
- Nordiguian, Lévon, and Jean C. Voisin. Châteaux et eglises du Moyen Age au Liban. Liban: Editions Terre du Liban; Editions Trans-Orient, 1999.
- Olympios, Michalis. "Saint George of the Greeks and Its Legacy: A Facet of Urban Greek Church Architecture in Lusignan Cyprus." In Weyl Carr, Famagusta, 143-202.
- —. "The Shifting Mantle of Jerusalem: Ecclesiastical Architecture in Lusignan Famagusta." In Weyl Carr, Famagusta, 75–142.
- Plagnieux, Philippe, and Thierry Soulard. "Famagouste. L'architecture religieuse." In L'art gothique en Chypre. Edited by Jean-Bernard De Vaivre, 121–296. Paris: Boccard, 2006.
- Pringle, Denys. The Churches of the Crusader Kingdom of Jerusalem: A corpus. 4 vols. Cambridge, New York: Cambridge University Press, 1993-2009.
- Thierry, Jean-Michel. Armenien im Mittelalter. 1st ed. Die Welt des Mittelalters. Regensburg, Saint-Léger-Vauban: Schnell + Steiner; Zodiaque, 2002.

Uluca Tumer, Ege. "Twentieth-century restorations to the medieval and Renaissance monuments of Famagusta." In Medieval and Renaissance Famagusta: Studies in architecture, art and history. Edited by Nicholas Coureas, Peter W. Edbury and Michael J. K. Walsh, 217-34. Farnham: Ashgate, 2012.

Weyl Carr, Annemarie, ed. Famagusta: Art and architecture. Volume 1. Mediterranean Nexus 1100-1700 2. Turnhout: Brepols, 2014.

The Armenian Church of Famagusta: Some Testimonies (Late Nineteenth–Early Twentieth Centuries)

Lucie Bonato

Located close to the Martinengo Bastion in the old city of Famagusta, the Armenian Church—identified as the church founded around 1310 ("Our Lady of Green"—"Sainte-Marie-de-Vert") and belonging to the Kanch'uor monastery—is today very well studied and known.¹ It was not always like that. Nevertheless, it is one of the identified churches of Famagusta (which is not the case with many of them) and this from the earliest works of the western archaeologists in Cyprus, especially those of the first French archaeological mission directed by Melchior de Vogüé in 1862.

WRITTEN TESTIMONIES: A CHURCH RARELY MENTIONED

Most of the Western travelers who visited Famagusta when the city became more accessible in the second half of the nineteenth century mentioned little or nothing about the Church of the Armenians,² the only example

Archéologies et Sciences de l'Antiquité (ArScAn UMR 7041), Maison de l'Archéologie et de l'Ethnologie René Ginouvès, CNRS, Université Paris Nanterre, Université Paris 1 Panthéon-Sorbonne, Paris, France

L. Bonato (\boxtimes)

of medieval Armenian architecture in Cyprus. For most of them, like Theophile Calas (n.d.–1935) who made a cruise in 1897, they wrote of the walls, the cathedral, and the Royal Palace because they were the closest places of interest from the port, and they included all the other ruined monuments in the same group:

We have visited and examined some of these churches in detail; entry is gained through gaping porches or over stone rubble from the collapsed walls; frescoes and mosaics can still be discerned on those portions still standing.³

Camille Enlart (1862–1927) was the first to give a complete description of the church including its interior wall decoration. Thereafter, if we refer to descriptions by the French travelers who visited Famagusta while on a cruise or during a longer stay, and they are few, we can include the abbot Félix Protois (cruise in 1906): "Still quite beautiful also, despite their ruins, are the church of the Armenians and Saint Mary of Carmel [...]."

The only one to refer in detail to the church was the man of letters Jean de Kergorlay (1860–1924) after his trip in 1912:

Finally, completely in the northwest corner, lies the last of these churches, or chapel, rather, due to the exiguity of its dimensions; it belonged to the Armenians and comprises a nave with a single bay and one apse, to which a second chapel has been added alongside at a later date. The vault reveals acoustic ceramics similar to those mentioned above.

M. Enlart dates it from the middle or late 14th century. Like the preceding ones, it was decorated on the inside with paintings. These are Byzantine and of poor execution. One of the panels deserves to be mentioned, however, as it represents the Nativity. [He then quotes Enlart extensively. In another chapter he continues on the formation of the Armenian colony of Cyprus.]

His description does not add much but is to be noted because accounts remain scarce. The church is also mentioned in the Joanne and Baedeker guides, at least in those following the publication of Enlart's book in 1899.⁷

ICONOGRAPHIC TESTIMONIES: THE DETERIORATION OF THE CHURCH

The iconographic documentation of the late nineteenth to early twentieth centuries is rare. It includes, as far as we know today, two drawings, one by Edmond Duthoit (1862) and one by Camille Enlart executed from a

photograph (1896). It is enriched by a few photographs taken by travelers and scholars interested in Gothic architecture.

The Drawing of Edmond Duthoit (Fig. 7.1)

The first drawing of the church of the Armenians was executed by the young architect Edmond Duthoit (1837-1889) during the first official archaeological mission organized by France to Cyprus in 1862.8 Regarded as the continuation of Ernest Renan's Mission de Phénicie, which played a role in the discovery of the Phoenician civilization and enriched French museums, it was directed by Melchior de Vogüé (1829-1916). This scholar was traveling to Jerusalem and Syria and had agreed to go to Cyprus to accommodate Renan who had been unable to complete his mission. Vogüé probably had another thought in mind; he wanted to see the monuments of the Middle Ages revealed by Louis Mas Latrie after his stay in 1845 and to which he had devoted a few pages in



Fig. 7.1 Drawing by Edmond Duthoit, 1862 (Musée de Picardie, Amiens)

his book *Les églises de la Terre Sainte*. He was also encouraged to visit Famagusta by Emmanuel Guillaume-Rey (1837–1916), who had made a trip to the island in 1859 in order to study the military architecture but had no time to include the Gothic monuments. Like Renan, Vogüé had brought with him a young architect, one of Viollet-le-Duc's favorite pupils, who was entrusted with the task of drawing the monuments he wanted to study.

Arriving in Larnaca on January 28, Vogüé and Duthoit, along with Henry William Waddington (1826–1894),¹⁰ left for Famagusta on February 1 and entered Famagusta two days later. During the following week, Edmond drew and measured about 20 Gothic churches. The drawings of Famagusta are part of a much larger collection realized during Duthoit's four-month stay. It consists of sketches—often made in haste, sometimes on horseback or while walking—made on pocket format notebooks, as well as more elaborate drawings for the monuments he judged the most important. Thus, for the same building exists: two or three drawings, one simple and the other (or others) more complete.

Duthoit no doubt had the idea of publishing them because, as he pointed out correctly, he was the only traveler to know the island perfectly. However, he was very busy in Viollet-le-Duc's workshop and then later in his own practice and so he never saw his drawings in print.

The drawing of the church of the Armenians, with the hundreds of drawings of Cyprus, is now kept in the Duthoit collection of the Musée de Picardie in Amiens. ¹² It was shown for the first time in 1999 in Nicosia and London for an exhibition of his works. ¹³

It should be noted that this drawing survived by chance because many of the artist's drawings have disappeared. When Enlart prepared his archaeological mission of 1896 to Cyprus, he asked Vogüé for Duthoit's drawings of the Gothic monuments. At that time, Duthoit had died, and it was from his family that Vogüé received "a box containing about 200 drawings, travel sketches." We do not know what happened to the drawings entrusted to Enlart, at least for most of them. ¹⁴ All the evidence suggests that they were scattered and were never returned to Vogüé and a fortiori to Duthoit's family. ¹⁵

Edmond Duthoit captured the Armenian Church in pencil, free hand, on plain paper, size 10.2×18.7 cm. It was not a sketch executed in haste, the young architect having stayed eight days in Famagusta. The drawing

bears the inscription: Église arménienne de Famagouste. This identification of the building was likely provided by Vogüé who recognized the Armenian inscriptions accompanying the paintings that remained at the time and is confirmed by his diary:

Armenian. Simple style. Ancient appearance. Trefoil credenza 13th century however.

Ext. Armenian Inscr. [Follows the description of the paintings.]¹⁶

The adopted angle of view, which shows the southern and eastern facades, is a sensible choice. Duthoit is precise and reproduces the essential features of the building: regularly laid courses of medium-size masonry, simple but well-visible molding (archivolts with hood-mold above the pointed windows, pointed arches above the doorways, molding all around the upper part of the building, and square buttresses with a drip-course half-way up). However, the traditional Armenian crosses that embellish the facade are not shown. This is not surprising as Duthoit was standing too far away from the church to distinguish them.

In 1862, the church seems relatively well preserved despite the injuries of time, especially on its south facade: the top of the buttress is partly destroyed as well as the door in its lower part. As for the somewhat elegant western facade, the drawing shows that the top of the angle with the north facade is in poor condition and some cornerstones having disappeared. It retains its small bell tower which had two bells while the molding that crowns the pediment is damaged on its right side. Clearly, the church is no longer in service.

This drawing has nothing in common with the matrices prepared for the engraving that Duthoit executed for the publication of his archaeological mission to Assos in 1865, 17 with the introduction of birds, plants, and figures to provide scale. Nevertheless, it is a testimony whose documentary value is of prime importance as well as Camille Enlart's drawing (Fig. 7.2) based on a photograph taken during his mission in 1896. Comparing these two drawings is easy since the angle of view is the same. ¹⁸ In 30 years, the building has deteriorated considerably. The south entrance is wide open, the lintel is visible on the ground, and the left buttress is partly destroyed above the drip-course. On the western facade, the small bell tower has fallen taking with it the higher window, and a wide crack goes down to the gate. Obviously, the building is threatening to collapse.

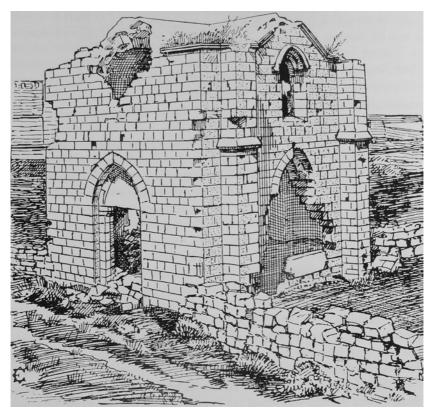


Fig. 7.2 Drawing by Camille Enlart, 1896 (from the book L'art gothique et la Renaissance en Chypre)

Some Photographs

The photographs of Camille Enlart preserved at the Médiathèque de l'Architecture et du Patrimoine (Saint-Cyr) were recently published. Two photographs show the church of the Armenians: the one mentioned above and a larger view that also shows St. Mary Carmel. As the view was taken from the walls of the city, we clearly see the stone cross-shaped roof, which appears intact. The camera angle is the opposite of the other photograph: it shows the northern facade whose portal is partly destroyed and the eastern facade with its small apse covered by a partly fallen semi-dome, which is threatening to collapse. On the north, also visible are the remains of a small room

with another apse covered with a semi-dome. Enlart indicated that it was constructed "when the Armenian colony of Famagusta had prospered." 20 It was dismantled in the early 1930s by George Jeffrey, then curator of ancient monuments of Famagusta, to restore the church to its original appearance.²¹

The image also shows that all around the east and south walls there remain elevations that undoubtedly belonged to the small monastic establishment. The restoration work undertaken between 1936 and 1938 uncovered the foundations and confirmed that the church was part of a monastery whose buildings were not maintained during the Ottoman period and disappeared, leaving only the church.²²

In the 1880s, Cyprus became a new territory to explore for professional photographers who came to take pictures of its sites and monuments. The most famous was Felix Bonfils who created in Beirut one of the largest photography workshops in the Near East. Professionals enriched their collections with hundreds of images whose prints, deposited in various places, were sold to scholars and tourists.

The Leventis Museum of Nicosia keeps an album by a British administrator showing a photograph of the Armenian church of Famagusta with the signature of Sédéfdjian (Fig. 7.3). We know very little about him²³ but, as an Armenian, he did not miss visiting the monument. The image also mentions: "Eglis arménian." It is certainly a contemporary of Enlart's photograph, as it shows the building in the same state of disrepair. This is even emphasized by the fact that one can see the light through the gaping holes of the west and south doors as well as by the lower part of the small room adjoining the eastern apse whose west wall has totally collapsed. This part of the building is clearly visible because the angle of view is staggered to the east and shows the western and northern facades.

An architect of the École des Beaux-arts of Paris, Lucien Roy (1850–1941)²⁴ traveled extensively throughout France, Europe, and the Mediterranean, from where he brought back a large collection of photographs of architecture and archaeology that he used as documentation in his professional activity. He bequeathed it to the Société française d'archéologie of which he was a member and it was entrusted in 1998 to the Médiathèque de l'architecture et du patrimoine (Saint-Cyr). The photographs he took in Famagusta in 1911 can be seen on the Médiathèque website. They are black and white negatives which may perhaps explain why they are in reverse. Six photographs give overall views of the Armenian Church, the architect having moved around the building with his camera. Three show the angle of the north and west facades, one of the south facade, one of the north facade and the east facade with the apse, and one of the angle of the south and east facades with the apse. The rubble that had been at the foot of the north and west facades has been removed and the holes in the collapsing walls have been summarily filled in. Some blocks were certainly used to close the north and south doors. On the western wall, the door has been reduced, ²⁵ and the crack has been stopped while the upper part continues to deteriorate.

These works of consolidation predate the first law (1912) that placed the Famagusta ancient monuments under the control and management of the Department of Antiquities (except for the churches which were converted into mosques).²⁶ They were undertaken in 1909 and they may be linked to the visit in 1906 of Bishop Petros, the future Katholikos of Cilicia, who addressed a formal request to the authorities to restore the church and return it to the Armenians.²⁷

Also from the same period is a magnificent panorama by an anonymous English photographer (Fig. 7.4).²⁸ Taken from the Martinengo Bastion,



Fig. 7.3 Photograph by Sédéfdjian, c. 1895 (Leventis Museum, Nicosia)



Anonymous photograph, c. 1910 (from an English album, private collection, Paris)

it shows the Armenian Church and St. Mary Carmel and further to the right, St. Anne's church. In the center of the image and in the background is St. Nicolas' cathedral and on to its right, the collapsed vaults of St. George of the Greeks.

The small Armenian church of Famagusta, next to its larger neighbor, was largely ignored by travelers for a long period. Perhaps this was because it was located far from the center of the city with its cathedral and Royal palace which were visited first by travelers in a hurry.

The few graphic documents presented here illustrate the history of the edifice. In relatively good condition in 1862, it had considerably deteriorated by 1896, was briefly consolidated in the early twentieth century, and then repaired in 1937–1938 by the Department of Antiquities after the decision was made in 1936 to restore this place to the Armenian worship²⁹ in Famagusta. The drawings and photographs belonging to this iconography allow one to imagine the reaction of the first travelers when entering Famagusta and their feelings at the sight of the ruins which inspired in them both poetry and poignant sadness.³⁰

Notes

1. Among the latest studies: Philippe Plagnieux and Thierry Soulard, "Famagouste. L'église des Arméniens (Sainte-Marie-de-Vert)," in L'Art gothique en Chypre, ed. Jean-Bernard de Vaivre and Philippe Plagnieux (Paris: IdF, 2006), 258-60; Michele Bacci "The Armenian Church in Famagusta and Its Mural Decoration," in Culture of Cilician Armenia, proceedings of the international symposium Antelyas, Armenian Katholicossate of Cilicia, January 14–18, 2008 (Antelyas: Catholicosate of Cilicia, 2009), 489–508; Dickran Kouymjian, "The Holy Mother of God Armenian Church in Famagusta," in Medieval and Renaissance Famagusta: studies in Architecture, Art and History, eds. Michael J. K. Walsh, Peter W. Edbury and Nicholas S. H. Coureas (Farnham: Ashgate, 2012), 133-46; Brunehilde Imhaus, "L'église arménienne de Famagouste. Description et historique de sa réhabilitation (XIVe – XXe siècle)," in La Méditerranée des Arméniens XII°-XV° siècle, ed. Claude Mutafian (Paris: Geuthner, 2014), 325-52; Andrés Alberto Burgos Braga, "Study of the Armenian Church in Famagusta" (Master's Thesis, University of Minho, 2014), accessed July 25, 2015,

http://www.msc-sahc.org/upload/docs/new.docs/2014_ ABurgos.pdf.

- 2. When the travelers refer to the population of Cyprus, they mention the Armenians as well as its two bishoprics, which coexisted during the medieval period in Nicosia and Famagusta.
- 3. Théophile Calas, En terre désolée, au pays des Croisés avec la Revue générale des sciences (Paris: Fischbacher, 1900), 85. "Nous avons visité en détail quelques-unes de ces églises; on y pénètre par des porches béants ou par les éboulis des pans de murailles abattues; sur les portions restées debout, on distingue encore fresques et mosaïques."
- 4. Archaeologist and expert in medieval architecture, Enlart, obtained a mission in Cyprus in 1896 to study the Gothic art. It resulted in a publication of reference in 1899: Camille Enlart, L'art gothique et la Renaissance en Chypre (Paris: Leroux, 1899), 365-68.
- 5. Félix Protois, Une croisière en Méditerranée orientale (Paris: Gabalda, 1907), 142. "Bien belles encore également, malgré leurs ruines, l'église des Arméniens et Sainte-Marie du Carmel."
- 6. Jean de Kergorlay, "En Chypre, Famagouste," Revue des Deux Mondes (September 1, 1913): 170-71; and Soirs d'épopée: Chypre et Rhodes (Paris: Plon-Nourrit et Cie, 1913), 65-66. "Enfin, tout à fait à l'angle nord-ouest, voici la dernière de ces églises, c'est plutôt une chapelle à cause de l'exiquité de ses dimensions; elle appartenait aux Arméniens et se compose d'une nef d'une seule travée et d'une abside, auxquelles on a accolé postérieurement une seconde chapelle. Dans la voûte, on retrouve des cruches acoustiques semblables à celles que nous avons signalées plus haut. M. Enlart la date du milieu ou de la fin du XIVe siècle. Comme les précédentes, elle était décorée, à l'intérieur, de peintures. Celles-ci sont byzantines et d'une pauvre exécution. L'un des panneaux mérite cependant d'être signalé, il représente la Nativité."
- 7. Joanne, De Paris à Constantinople (Paris, 1902), 439: "the Armenian Church with remaining of paintings -L'église arménienne avec des restes de peintures byzantines"; Baedeker, Palestine et Syrie (Paris: 1912), 397: "At the South [of Martinengo bastion] can be seen the ruins of an Armenian Church (Tabakkhane) and of St. Mary Carmel - Au Sud [du bastion de Martinengo] se voient les ruines d'une église arménienne (Tabakkhane) et de l'église S. Maria di Carmel."

- 8. For a complete publication of Duthoit correspondance: Lucie Bonato and Monique Dondin-Payre, *Voyages en Méditerranée d'Edmond Duthoit XIXe siècle* (Paris: Geuthner, 2017).
- 9. Lucie Bonato, "Chypre dans les archives de Melchior de Vogüé, II: La correspondance de l'année 1862," *Cahier du Centre d'Etudes Chypriotes* 29 (1999): 141–3. Guillaume-Rey was accompanied by the young Louis de Clercq (1836–1901) who had the mission to photograph the monuments. Both of them stopped in Larnaca and during their stay, Louis de Clercq realized the first photographs known until today of Famagusta, Nicosia, and Kiti.
- 10. Lucie Bonato "Chypre dans les archives de Melchior de Vogüé: Aux origines de la mission de 1862," *Cahier du Centre d'Etudes Chypriotes* 28 (1998): 104. French Orientalist, epigraphist, and numismatist, as well as politician, Waddington has been on an archaeological exploration in Syria for a few months and prompted Vogüé to join him.
- 11. Letter to his mother (Larnaca, July 1865) to be published in Bonato and Dondin-Payre, Voyages en Méditerranée d'Edmond Duthoit.
- 12. They are part of a donation made by two of Duthoit's grandchildren, Robert and André Duthoit, in 1982 and 1984.
- 13. Rita C. Severis and Lucie Bonato, *Along the Most Beautiful Path in the World, Edmond Duthoit and Cyprus* (Nicosia: Bank of Cyprus, 1999).
- 14. Two drawings of the Bellapais Abbey were published by Enlart (*L'art gothique*, vol. 2, t. 8 and 14). A photograph of a third drawing is today kept in the Médiathèque de l'Architecture et du Patrimoine in Saint-Cyr (Lucie Bonato, "Chypre dans les archives de Melchior de Vogüé, V: Fragment d'un carnet de voyage d'Edmond Duthoit (mission de 1865)," *Cahier du Centre d'Etudes Chypriotes* 31 (2001): 248). Two drawings of Buffavento castle and three of Kantara Castle were purchased at auction in London 20 years ago, they belong today to the Costas and Rita Severis Foundation in Nicosia (Severis and Bonato, *Along the most Beautiful Path*, 202–6).
- 15. Bonato, "Chypre dans les archives de Melchior de Vogüé, V," 210-12.
- 16. "Arménienne. Style simple. Apparence ancienne. Pourtant crédence trilobée XIIIème. Ext. Inscr. Arméniennes." Copy at the Musée du

- Louvre, unfortunately difficult to read. I was unable to find the original in the archives of Melchior de Vogüé.
- 17. Lucie Bonato, "La dernière mission archéologique française à Assos: le voyage d'Edmond Duthoit (1865)," Anatolia Moderna 10 (2004): 61-108.
- 18. Burgos Braga, Study of the Armenian Church, 11 and Imhaus, "L'église arménienne de Famagouste," 339.
- 19. Jean-Bernard de Vaivre ed., Monuments médiévaux de Chypre. Photographies de la mission de Camille Enlart en 1896 (Paris: ACHCBYZ, 2012).
- 20. Enlart, L'art gothique, 367.
- 21. Imhaus, "L'église arménienne de Famagouste," 347.
- 22. Ibid., 344.
- 23. We know that Arshg T. Sedefdjian had a photographic studio in Constantinople. Mona Khazindar et al., L'Orient des photographes arméniens (Paris: Cercle d'Art, 2007), 20.
- 24. He was a diocesan architect then a chief architect of historical monuments (architecte en chef des monuments historiques). In 1900, he was responsible for the French section of the World Exhibition in Paris.
- 25. A "strong gate" was put in (Kouymjian, "The Holy Mother of God Armenian," 138) that we do not see in the photograph.
- 26. On May 1, 1914, most of Famagusta churches were listed Historical Monuments under the control of the Département of Antiquities.
- 27. Imhaus, "L'église arménienne de Famagouste," 340.
- 28. Haris Yiakoumis Fund, Paris. First published in Lucie Bonato, Jacqueline Karageorghis, and Haris Yiakoumis, Chypre panoramique: voyage au pays d'Aphrodite du XIX^e au XX^e siècle (Paris: Kallimages, 2011), 114.
- 29. Imhaus, "L'église arménienne de Famagouste," 341.
- 30. See, for example: Lucie Bonato, "Charles Diehl and Famagusta: from the discovery of the city to the theater critic" in Famagusta: City of Empires (1571–1960), ed. Michael J. K. Walsh (Cambridge: Cambridge Scholars Press, 2013), 134-56.

BIBLIOGRAPHY

- Bacci, Michele. "The Armenian Church in Famagusta and Its Mural Decoration." In *Culture of Cilician Armenia*, proceedings of the international symposium Antelyas, Armenian Katholicossate of Cilicia, January 14–18, 2008. Antelyas: Catholicosate of Cilicia, 2009.
- Baedeker, Palestine et Syrie. Paris: 1912.
- Bonato, Lucie. "Chypre dans les archives de Melchior de Vogüé, II: La correspondance de l'année 1862." Cahier du Centre d'Etudes Chypriotes, 29 (1999).
- Bonato, Lucie. "La dernière mission archéologique française à Assos: le voyage d'Edmond Duthoit (1865)." *Anatolia Moderna*, 10 (2004): 61–108.
- Bonato, Lucie. "Charles Diehl and Famagusta: from the discovery of the city to the theater critic." In Famagusta: City of empires (1571–1960), edited by Michael J. K. Walsh, 134–156. Cambridge: Cambridge Scholars Press, 2013.
- Bonato, Lucie and Monique Dondin-Payre. Voyages en Méditerranée d'Edmond Duthoit XIXe siècle. Paris: Geuthner, 2017.
- Bonato, Lucie, Jacqueline Karageorghis, and Haris Yiakoumis, *Chypre pan-oramique: voyage au pays d'Aphrodite du XIX^e au XX^e siècle.* Paris: Kallimages, 2011.
- Braga, Andrés Alberto Burgos. "Study of the Armenian Church in Famagusta." Master's Thesis, University of Minho, 2014. accessed July 25, 2015, http://www.mscsahc.org/upload/docs/new.docs/2014_ABurgos.pdf.
- Calas, Théophile. En terre désolée, au pays des Croisés avec la Revue générale des sciences. Paris: Fischbacher, 1900.
- de Vaivre, Jean-Bernard, ed., Monuments médiévaux de Chypre. Photographies de la mission de Camille Enlart en 1896. Paris: ACHCBYZ, 2012.
- de Kergorlay, Jean, "En Chypre, Famagouste." *Revue des Deux Mondes* (September 1, 1913).
- de Kergorlay, Jean, Soirs d'épopée: Chypre et Rhodes. Paris: Plon-Nourrit et Cie, 1913.
- Enlart, Camille. L'art gothique et la Renaissance en Chypre. Paris: Leroux, 1899. Guides-Joanne, De Paris à Constantinople. Paris, 1902.
- Khazindar, Mona et al., L'Orient des photographes arméniens. Paris: Cercle d'Art, 2007.
- Kouymjian, Dickran. "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 W. Edbury and Nicholas S. H. Coureas. Farnham: Ashgate, 2012.
- Imhaus, Brunehilde. "L'église arménienne de Famagouste. Description et historique de sa réhabilitation (XIV^e XX^e siècle)." In *La Méditerranée des Arméniens* XII^e-XV^e siècle, edited by Claude Mutafian. Paris: Geuthner, 2014.

Plagnieux, Philippe and Thierry Soulard. "Famagouste. L'église des Arméniens (Sainte-Marie-de-Vert)." In L'Art gothique en Chypre, edited by Jean-Bernard de Vaivre and Philippe Plagnieux. Paris: IdF, 2006.

Protois, Félix. Une croisière en Méditerranée orientale. Paris: Gabalda, 1907.

Severis, Rita C. and Lucie Bonato. Along the Most Beautiful Path in the World, Edmond Duthoit and Cyprus. Nicosia: Bank of Cyprus, 1999.

Conservation, Education, and Diagnostics

Endangered Cultural Heritage in Unrecognized States

Alessandro Chechi

Introduction

Cyprus possesses a rich archaeological and artistic heritage reflecting its turbulent history. Each civilization has contributed towards shaping the heritage of Cyprus and the identity of its people. Nevertheless, the island has remained in the orbit of Greek civilization and Christianity. The marks of this influence can be traced in the Christian art—such as wall paintings, icons, and wood-carvings—that is discernible in monasteries and churches, including the Armenian Church of the Holy Mother of God in Famagusta. Regrettably, this rich cultural patrimony is in large part lost or crumbling as a result of decades-long tensions between Greek and Turkish Cypriots. Archaeological sites have suffered theft and spoliation, religious monuments have been demolished, vandalized, or abandoned, and the content of religious buildings, including icons and mosaics, have been stolen and illegally exported.

The origin of the coexistence of Cypriots of Greek descent and Greek-Orthodox faith with Cypriots of Turkish descent and Muslim faith dates

A. Chechi (\boxtimes)

Art-Law Centre, Faculty of Law, University of Geneva, Geneva, Switzerland

back to 1571 when the island fell under the rule of the Ottoman Empire. Since then the two communities lived, for the most part, in peace and mutual respect, tolerant of religious differences. This was possible because the Ottomans sought neither to establish a Turkish majority nor to set up a dominant Turkish economic class. The relationship between these communities began to deteriorate in 1878, when Cyprus became a British colony. The Greek Cypriots believed that the British would allow them to realize their ambition to unite the island with Greece. In contrast, the Turkish Cypriot minority supported the partition of the island and its annexation to Turkey. Tensions intensified in the 1950s—when violent attacks by extremist groups resulted in the death of many civilians and the wanton destruction of much property—and deepened in the 1960s—when violent inter-ethnic conflict broke out, provoking the displacement of both Greek and Turkish Cypriots.2 The United Nations (UN) Security Council in Resolution 186 (1964) defined the situation as a potential threat to international peace and security and requested the Republic of Cyprus (RoC)³ to take all "measures necessary to stop violence and bloodshed." Yet war broke out on 20 July 1974, when Turkish troops landed on the north coast of Cyprus and advanced to Nicosia. By late August 1974, Turkish military forces had extended their control over the northern 37 per cent of the island.⁵ The UN Security Council in Resolution 353 (1974) called upon all States to respect the sovereignty, independence, and territorial integrity of Cyprus and demanded an immediate end to foreign military intervention in the island.6 By contrast, Turkey regarded the intervention as a peace operation aimed at protecting the Turkish Cypriot minority and ensuring an end to their persecution by the Greek Cypriot majority. After the termination of hostilities, in February 1975, the "Turkish Federated State of Cyprus" was proclaimed in the northern part of the island occupied by Turkish forces, which became the "Turkish Republic of Northern Cyprus" (TRNC) in 1983. The UN Security Council defined as "legally invalid" the establishment of the TRNC, deplored the purported secession of part of the RoC, and called upon all States "to respect the sovereignty, independence, territorial integrity" of the RoC.⁷

The various attempts that have been made to resolve the so-called "Cyprus problem" since 1974 have all failed. As a result, today the island is divided ethnically, politically, and geographically by a tract of barbed wire controlled by UN troops (the "Green Line")8: the north is under control of the TRNC, the south is governed by the RoC. From an international law perspective, these two entities are different. The RoC is a State recognized internationally in the context of economic, diplomatic and treaty

relations, and the working of international organizations. By contrast, the TRNC is considered a de facto State, that is, an entity which displays some of the requirements of statehood but lacks international recognition. No country except Turkey has recognized the TRNC.

This chapter discusses the problem of the protection of the historical and artistic heritage situated in Turkish-held northern Cyprus by looking at two international law issues: statehood and State recognition. This chapter adopts an international law perspective with a view to describing the context within which conservation and restoration activities take place in Famagusta and elsewhere in northern Cyprus. Its purpose is threefold: to identify the entities that are internationally responsible for addressing the problem of the preservation of Cyprus' cultural heritage; to discuss the prospects for developing alternative approaches to the fight against the impoverishment of the cultural wealth of the island; and to contribute to the scholarly debate relevant to the eventual settlement of the "Cyprus problem" as the issue of cultural heritage protection is one of its key components.

DE FACTO STATES IN INTERNATIONAL LAW

States are the principal subjects of international law. They possess full legal capacity, that is, the ability to be vested with rights, powers, and obligations. As such, they exercise law-making and executive functions at both the national and international levels. In effect, international treaties and other legal instruments are developed through inter-State negotiation. In addition, State action is essential for the domestic implementation of international norms through legislation, monitoring and reporting procedures, judicial application, and sanctions. States, therefore, are the backbone of the international community.9 The international law system, however, comprises a number of entities that do not conform to the definition of State. These include de facto States (or unrecognized States or de facto regimes). In order to understand the difference between States and de facto regimes—and its implication for the cultural heritage situated in the territory controlled by these entities—it is necessary to examine two interconnected international law issues, namely statehood and State recognition.

Statehood

States are not created by international law, rather they emerge through the organized political action of a given community. Thus the role of international law is ex post facto, in the sense that it merely acknowledges a certain state of affairs which has already been put in place.¹⁰ Yet, it is possible to identify a number of characteristics that an entity must possess in order to be regarded as a State endowed with international legal personality. The most widely accepted formulation of the criteria of statehood is set out in Article 1 of the Montevideo Convention on Rights and Duties of States.¹¹ This treaty establishes that "[t]he State as a person of international law should possess the following qualifications: (i) a permanent population; (ii) a defined territory; (iii) government; and (iv) capacity to enter into relations with other States." This means that States must be capable of exercising effective control over a human community living in a given territory through State organs endowed with supreme authority. However, it must be emphasized that the territory should not belong, or should no longer belong, to any other sovereign State, that the members of the population do not owe allegiance to other outside authorities, and that State bodies are independent of any other State.¹²

At the roots of these criteria lays the principle of effectiveness. This principle requires that no entity should be regarded as a State within the meaning of international law unless it has a government that controls a defined territory and its inhabitants effectively and independently from any other State. The reason for this is that that entity can fulfil its duties under international law only if these conditions are satisfied.

In the light of these criteria, it becomes clear why the TRNC can be regarded as a de facto State. On the one hand, the TRNC controls the conquered territory and its political leadership receives popular support. Moreover, the TRNC has achieved sufficient capacity to provide governmental services to the population.¹³ On the other hand, the TRNC not only violates the territorial integrity of the RoC but it is also heavily dependent on the political, diplomatic, economic, and military support of Turkey. Indeed, Turkey was instrumental in the TRNC's establishment with the military intervention of 1974, and at present it ensures the TRNC's survival. 14 Thus, the TRNC cannot be regarded as an independent State. James Crawford put it as follows: "An entity ... which is subject to foreign domination and control on a permanent or long-term basis is not 'independent' for the purposes of statehood in international law."15 Consequently, the TRNC has failed to achieve widespread recognition and it is unable to enter into relations with other States. This means that, although the criteria for statehood are important, the existence of a State as a person of international law also depends on the attitude of existing States, as reflected in their recognition (or non-recognition). 16

Recognition

Recognition may be defined as a discretionary act issued by the government of a State acknowledging the existence of another State. 17 According to classical international law, there are two theories as to the nature of recognition. The declaratory theory maintains that recognition is a mere formality in the sense that States exist as a matter of fact and that the granting of recognition is merely an acknowledgement of that fact. In other words, an entity can be regarded as a State if it possesses the necessary attributes of statehood and not if it is recognized by other States. According to the second theory, the constitutive theory, it is the act of recognition by other States that creates a new State and endows it with legal personality. Thus, an entity can become a fully fledged subject of international law by virtue of the will and consent of already existing states. ¹⁸ The constitutive approach thus argues that recognition is a central element in the formation of a State. 19

These theories have been criticized on various grounds. The main problem with the declaratory theory is that it reduces recognition to an empty formality, ignoring the fact that it produces important legal effects. The disadvantage of the constitutive theory is that an entity cannot become part of the international community of States and cannot exercise its rights and duties, even if it meets the conditions of international law as to statehood, if it remains largely or totally unrecognized. This is in strident contradiction with the principle of effectiveness. This theory is also logically unsound for it implies that a certain entity is an international subject in relation to the States that have recognized it, while it lacks legal personality as far as other States are concerned.²⁰

However, neither theory of recognition prevails in modern State practice. This is demonstrated by the fact that, for example, States that have refused to recognize other States for political reasons—hence not because these entities do not meet the conditions of international law as to statehood—rarely contend that the latter are devoid of powers and obligations before international law. For instance, the Arab States that refuse to recognize Israel do not deny that the latter is bound by international law rules of non-aggression and non-intervention.²¹

The general refusal to recognize the TRNC is mainly related to the fact that it was set up as a result of the 1974 Turkish intervention in Cyprus, an act which is regarded as a gross breach of international rules, ²² particularly the principles of the prohibition of the threat or use of force, sovereign equality of States, and of peaceful settlement of international disputes. Consequently, the TRNC is isolated from the rest of the world. This is mostly due to the difficulty—or impossibility—of establishing diplomatic and economic relations with other States. In effect, the TRNC cannot easily receive foreign direct investments and loans, and the trade of goods, and the transit of peoples—including the material and experts necessary to ensure the conservation and restoration of historical monuments, buildings, and sites—are restricted. The engagement of foreign public institutions for conservation and restoration activities in northern Cyprus could be taken as an implied recognition of the TRNC by their State of nationality.

The illegality of origin can thus be taken as a ground for nonrecognition.²³ As a minimum, the obligation of non-recognition aims to prevent the validation of an unlawful situation by seeking to ensure that a fait accompli (something that has been done and cannot be changed) resulting from grave illegalities does not consolidate and crystallize over time into situations recognized by the international legal order.²⁴ This also means that recognition is important with respect to the question of statehood. The relationship between these items can be described as follows: the more overwhelming the scale of international recognition is, the less may be demanded in terms of the objective demonstration of adherence to the criteria of statehood; conversely, the more sparse international recognition is, the more attention will be focused upon proof of actual adherence to the criteria concerned.²⁵ It must also be noted that over the years, the factual conditions many States require for recognition have changed. Before the twentieth century, it was sufficient for the new State to exercise effective control over a territory and the community that lived therein. Since the 1930s, States have begun to require that the new State had not breached any international legal standard, such as the ban on wars and aggression. More recently, States have begun to require respect for human rights as a further condition for granting recognition.²⁶

THE CREATION OF THE TRNC: REACTIONS AND IMPLICATIONS

The analysis set out in the preceding sections has shown that the TRNC has not been recognized by the majority of States because it is not regarded to be independent of its parent State—Turkey—and because it was created as a result of a gross violation of international law. This general

view is reflected in various resolutions of the UN Security Council.²⁷ For instance, in Resolution 541 (1983) the Security Council called upon all States "not to recognize any Cypriot State other than the Republic of Cyprus." Moreover, in Resolution 1251 (1999) the Security Council called upon "all States to respect the sovereignty, independence and territorial integrity of the Republic of Cyprus." By the same token, the UN General Assembly condemned the 1974 Turkish action and demanded an immediate withdrawal of Turkish armed forces. It also affirmed the right of the RoC and its people to full and effective sovereignty and control over the entire territory of Cyprus.²⁸ Other condemnations of the Turkish intervention have come from the Council of Europe²⁹ and the European Court of Human Rights (ECtHR).

Since 1996, when it delivered its judgment in the Loizidou case, 30 the ECtHR has rendered numerous rulings on the problem of the Greek Cypriot properties in the Turkish-held area³¹ in the light of the European Convention on Human Rights (ECHR).³² With these judgments, the ECtHR found that: (1) Greek Cypriots applicants are the legal owners of properties abandoned and expropriated; (2) Greek Cypriots are prevented from having access to and from using their property and hence are entitled to financial compensation; (3) Turkey is responsible for the continuing violation of the right to property (Article 1 of Protocol No. 1 ECHR) and the right to respect for private and family life, home and correspondence (Articles 8 ECHR). The ECtHR attributed international responsibility for ECHR violations to Turkey on the ground that it exercises "effective overall control" over northern Cyprus. 33 Moreover, by ruling that the activities of the TRNC are imputable to Turkey, the ECtHR recognized that: (1) Cyprus is under Turkish military occupation³⁴; (2) the TRNC cannot be regarded as an independent State but as a mere satellite of Turkey; (3) the RoC is the only legitimate government.³⁵ The conclusion that Turkey exercises an "effective overall control" over northern Cyprus does not contradict the view that the RoC is the sole legitimate government of Cyprus: territorial conquest does not imply the transfer of sovereignty from the occupied State to the occupying State.³⁶

These instances of international practice testify to the general view that Turkey is responsible for the continuing division of the territory of Cyprus as a result of the violation of key rules of general international law, such as the prohibition of the use of force, and of the principles of sovereign equality of States and peaceful settlement of international disputes.³⁷ At the same time, Turkey can be held responsible for the fate of the cultural and religious heritage situated in northern Cyprus. In this respect, it is necessary to mention the 2006 Declaration of the Parliament of the European Union on the Protection and Preservation of the Religious Heritage in the Northern Part of Cyprus.³⁸ The Parliament affirmed the responsibility of the Turkish State by acknowledging that "more than 133 churches, chapels and monasteries that are located in the northern part of Cyprus and have been controlled by the Turkish army since 1974 have been desecrated, 78 churches have been converted into mosques, 28 are used as military depots and hospitals and 13 are used as stockyards ... whereas their ecclesiastical items, including more than 15,000 icons, have been illegally removed and their location remains unknown."³⁹

As far as cultural heritage is concerned, Turkey bears responsibility for acts against cultural property committed in contravention of the obligations contained in the treaties to which it was party at the time of the invasion⁴⁰ and the relevant principles of customary international law. These principles are the obligation to protect cultural heritage from the vicissitudes of armed conflict, the prohibition of acts of violence against cultural heritage, the prohibition of plundering artworks and the ensuing obligation of restitution. These principles have achieved the status of customary international law, thus they are binding on all States, irrespective of whether or not the State concerned has ratified the treaties regulating these issues. 41 Specifically, it can be argued that the Turkish State, Turkish commanders and TRNC's authorities have failed to: (1) refrain from using properties of cultural and religious importance and their immediate surroundings for purposes that were likely to expose them to destruction or damage⁴²; (2) avoid and prevent acts of hostility against such property not only by their own soldiers but also by the civilian population; (3) prohibit, prevent, and (if necessary) stop any form of theft, pillage, misappropriation, import, and export of cultural property⁴³; (4) prevent the alteration and change of use of the property located in the occupied territory; (5) allow religious communities living in the RoC and religious minority communities living in northern Cyprus access as well as the right to restore, maintain, and utilize places of worship and cemeteries that are located within the borders of Turkish military zones in northern Cyprus; and (6) establish criminal jurisdiction to prosecute individuals who have engaged in acts of destruction, desecration, and pillage.

Having established that Turkey is responsible for the desecration and loss of a great part of the island's cultural heritage located in the Turkish-held area, it is now time to focus briefly on the legal implications of such responsibility.

It is a recognized principle of international law that "every internationally wrongful act of a State entails the international responsibility of that State."44 An internationally wrongful act, which may consist of either an action or omission by a State, constitutes a violation of an international obligation and can be considered to have a continuing character if it extends for the entire period during which the causal conduct of a State continues and remains contrary to an international obligation.⁴⁵ When a State breaches an international legal obligation, there are three principles that come into play. First, the responsible State has a duty to perform the obligation breached. 46 Second, if the violation is ongoing, the responsible State has the obligation to cease the act⁴⁷ and to guarantee nonrepetition. 48 Third, the responsible State has to make full reparation. 49 The following are the main forms of reparations: restitution, compensation, and satisfaction.⁵⁰ With respect to former, material restitution should be distinguished from juridical restitution. Examples of material restitution include the return of property expropriated in breach of existing legislation. Juridical restitution requires the modification of a legal situation either within the legal system of the responsible State or in its legal relations with the injured State. Such cases include the revocation, annulment, or amendment of legislative provisions enacted in violation of international law or the reconsideration of judicial measures unlawfully adopted in respect of property of foreigners.⁵¹

AN OBJECT-ORIENTED APPROACH TO ENHANCE THE PROTECTION OF CYPRUS' CULTURAL HERITAGE

A lot of ink has been spilled on the question of the legality of the 1974 Turkish intervention in general and on the damage sustained by Cyprus' cultural heritage in particular. An in-depth analysis of these issues goes beyond the scope of this chapter. It is more important to emphasize that attacks against the historical, artistic, and religious heritage of the island were committed by both sides.⁵² On the one hand, as said, Turkey and the TRNC are responsible for the damage sustained by the Christian Orthodox heritage situated in the northern part of the island. On the other hand, the loss of Ottoman and Turkish monuments and Islamic antiquities at the hands of the Greek Cypriot extremists before and after 1974 should not be downplayed or denied, just as the responsibility of Greek Cypriot authorities for having permitted or tolerated such events should not be condoned. In other words, the recognition and condemnation of the desecration of the Greek Cypriot heritage call for the recognition and condemnation of the destruction of the Turkish Cypriot heritage.⁵³

Although it is not clear to what extent the Greek and Turkish Cypriot communities have actually acknowledged their responsibility in the loss and neglect of the island's rich heritage, it appears that in the last few decades they have increasingly resorted to cooperation in relation to cultural heritage issues. Two examples suffice to illustrate this point. The first relates to the Master Plan for Nicosia. Initiated in 1979 by the then mayors of the respective halves of Nicosia, it aimed to achieve the rehabilitation of certain areas with a view of revitalizing the city and developing tourism. Implementation of the plan began in 1989 with the development of a series of bi-communal projects.⁵⁴ As a result, many cultural heritage sites common to both communities within Nicosia have been conserved and have won Europa Nostra awards.⁵⁵ The second example relates to the establishment of a "Technical Committee on Cultural Heritage" (in 2008) and an "Advisory Board for the Preservation, Physical Protection and Restoration of the Immovable Cultural Heritage of Cyprus" (in 2009) by the leaders of the two communities following an initiative of the European Parliament. The Technical Committee was tasked with the implementation of practical measures for the maintenance, preservation, protection, and restoration of the immovable cultural heritage of Cyprus. The Advisory Board was created to focus only on the practical aspects of preservation, thereby leaving aside all political issues involved. The agreement on the establishment of the Advisory Board recognized a special role to the UN Development Programme Partnership for the Future (UNDP-PFF) in Cyprus. In effect, UNDP-PFF has become the coordinator of projects' implementation and the leader in fostering dialogue and cooperation between Greek Cypriots and Turkish Cypriots. In 2010, UNDP-PFF was asked by the European Union to support the Committee and the Board to carry out the programme "Support to Cultural Heritage Monuments of Great Importance for Cyprus," which was based on a "Study of Cultural Heritage in Cyprus." The objective of the programme is to implement conservation and emergency measures for important cultural heritage sites selected by the bi-communal Technical Committee. Since its start in 2012, various sites in the regions of Karpasia, Paphos, and Famagusta have benefited from emergency support measures and technical studies.⁵⁶

These and other initiatives demonstrate that cooperation in the field of cultural heritage is crucial for the success of post-conflict reconciliation processes. In this connection, an expert affirmed that "[o]ne of the biggest achievements of the Nicosia Master Plan was the development of excellent communication and joint decision meetings by the planners of the two communities."⁵⁷ The Technical Committee is another illustration of how Greek Cypriots and Turkish Cypriots can coexist and function together.⁵⁸ In an interview, the chairmen of the Committee emphasized that it constitutes a flourishing example of successful cooperation because it sets aside the political clashes that surrounds cultural heritage in order to bring about a common vision, namely that cultural heritage monuments and sites are not just stones and buildings either of Greek Cypriots or Turkish Cypriots but also they are the common cultural heritage of the island's population.⁵⁹

All in all, the foregoing analysis demonstrates that the best avenue for the protection of Cyprus' cultural heritage is the adoption of an objectoriented approach. 60 According to this approach, the RoC and TRNC should collaborate to abide by existing legal standards and hence to ensure the protection, conservation, and restoration of the heritage located within their de facto jurisdiction for the purpose of international appreciation and study—regardless of the question of the legality of the existence of the TRNC. In practical terms, the RoC in the south and the TRNC in the north should become the custodians of the heritage under their control.⁶¹ Ostensibly, an object-oriented approach can act as a catalyst for enhancing the relations between Greek and Turkish Cypriots, bridging divisions, reducing misconceptions and fears, and eroding the causes of the inter-communal conflict.62

Nevertheless, it should be clear that this option is a palliative that is suggested only because an agreement for the settlement of the "Cyprus problem" is not expected in the near future. In effect, resorting to an object-oriented approach makes sense for Cyprus only because of the enduring demographic and ethnic partition and the current diplomatic impasse. Otherwise, it would be pointless to pursue preservation for the sake of the objects and not for the sake of the people for whom they have a meaning.⁶³ As explained by the Greek Cypriot co-chairman of the Technical Committee, Takis Hadzidemetriou, the purpose of the bicommunal bodies working for the preservation and restoration of Cyprus' cultural heritage "is simply to pave the road, a process to save the cultural heritage. These things put us face to face with the reality but so much

more needs to be done. We are trying to overcome the obstacles raised by the 'Cyprus problem'. When it is resolved, forces will be unleashed that will make the work we are carrying out today, greater."⁶⁴

Notes

- 1. Clement Dodd, *The History and Politics of the Cyprus Conflict*, vol. 2 (New York: Palgrave Macmillan, 2010), 53–55.
- 2. Ibid.
- 3. The Republic of Cyprus became independent from the United Kingdom on 16 August 1960.
- 4. With Resolution 186 (1964) the UN Security Council established the UN Peacekeeping Force in Cyprus (UNFICYP) with the task of preventing "a recurrence of fighting and, as necessary, to contribute to the maintenance and restoration of law and order and a return to normal conditions."
- 5. Dodd, The History and Politics of the Cyprus Conflict, 110-28.
- 6. See also Resolutions 357 (1974), 365 (1974), 391 (1976), 422 (1977), and 430 (1978).
- 7. See Resolutions 541 (1983) and 550 (1984).
- 8. However, boundary restrictions have been relaxed in 2003, when the TRNC allowed the free movement of people on both sides of the divide, and in 2007, when the boundary between the RoC and the UN buffer zone was demolished in Ledra Street, in the heart of Nicosia. Paul Hamilos, "Hundreds Gather for Reopening of Divided Cyprus Street." *The Guardian*, 3 April 2008.
- 9. Antonio Cassese, *International Law* (Oxford: Oxford University Press, 2001).
- 10. Matthew Craven, "Statehood, Self-Determination, and Recognition," in *International Law*, ed. Malcom D. Evans (Oxford: Oxford University Press, 2010), 218, 240.
- 11. 165 LNTS 19, 26 December 1933.
- 12. Cassese, International Law, 48.
- 13. Nina Caspersen, *Unrecognized States* (Cambridge: Polity Press, 2012), 6.
- 14. On the economic dependency of the TRNC see Bonnot, *Des États* de Facto, 195.
- 15. James Crawford, *The Creation of States in International Law* (Oxford: Oxford University Press, 2006), 76.

- 16. Caspersen, Unrecognized States, 13.
- 17. Kaczorowska, Public International Law, 224.
- 18. Shaw, International Law, 445-54.
- 19. Caspersen Unrecognized States, 14.
- 20. Cassese, International Law, 48-49.
- 21. Shaw, International Law, 446-7.
- 22. This principle was confirmed by the International Court of Justice in its Advisory Opinion Legal Consequences of the Construction of a Wall in the Occupied Palestinian Territory, 2004 (paras. 87, 120-21). The obligation of non-recognition of an unlawful situation is also set out in Article 41(2) of the Articles of the International Law Commission on Responsibility of States for Internationally Wrongful Acts: "No State shall recognize as lawful a situation created by a serious breach" by a State of an obligation arising under a peremptory norm of general international law (UN GAOR, Supp. No. 10, UN Doc. A/56/10, 2001).
- 23. Crawford, The Creation of States, 74.
- 24. Legal Consequences of the Construction of a Wall in the Occupied Palestinian Territory, para. 121.
- 25. Shaw, International Law, 207-208.
- 26. Cassese, International Law, 50; and Caspersen, Unrecognized States, 16-20, 28-30.
- 27. See supra footnotes 6 and 7.
- 28. See, for example, Resolutions 3212 (XXIX) of 1 November 1974, and 37/253 of 13 May 1983.
- 29. See Resolution (83) 13 of 24 November 1983 of the Committee of Ministers of the Council of Europe.
- 30. Loizidou v. Turkey, Application No. 1518/89, ECtHR Judgment of 18 December 1996.
- 31. This problem relates to the properties (houses and agricultural, commercial, and industrial enterprises) that Greek Cypriots left behind in 1974 and that the TRNC government has expropriated and assigned to Turkish soldiers, Turkish Cypriots, or to the settlers that arrived from Turkey after 1974.
- 32. 4 November 1950, ETS No. 005.
- 33. Loizidou v. Turkey, paras. 39-64.
- 34. The Constitutional Court of the TRNC has implicitly admitted that the RoC is under Turkish military control in National Unity Party v. TRNC Assembly of the Republic (Judgment D 3/2006 of

- 21 June 2006). The Court recognized that the international law on occupation prohibiting the confiscation of private property by the invading belligerent applied in the TRNC.
- 35. In *Cyprus v. Turkey* (Application No. 25781/94, Judgment of 10 May 2001) the ECtHR affirmed that "it is evident ... that the international community does not recognise the 'TRNC' as a state under international law," and that "the Republic of Cyprus has remained the sole legitimate government of Cyprus," 10.
- 36. Crawford, The Creation of States, 73.
- 37. Augustinos, "The Protection of Cultural Heritage in the Event of Armed Conflict: The Cyprus Experience," 236. As a matter of fact, however, no concrete action has been taken to put to an end the unlawful occupation of Cyprus. Arguably, the configuration of the geopolitical interests in the region is such that the States sitting in the UN Security Council or in other international organizations do not want to pressure Turkey over the "Cyprus problem."
- 38. OJ EU C 305 E/92, 14 December 2006, http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2006:305E:0092:0093:EN:PDF.
- 39. Ibid. See also the information made available by the Ministry of Foreign Affairs of Cyprus, www.mfa.gov.cy/mfa/mfa2006.nsf/cyprus07_en/cyprus07_en?OpenDocument.
- 40. Turkey ratified the UNESCO Convention for the Protection of Cultural Property in the Event of Armed Conflict (14 May 1954, 249 UNTS 240) on 15 December 1965, and its First Protocol on 15 December 1965. The RoC ratified the 1954 UNESCO Convention on 9 September 1964, the First Protocol on 9 September 1964, and the Second Protocol on 16 May 2001. See at: http://portal.unesco.org/en/ev.php-URL_ID=12025&URL_DO=DO_TOPIC&URL_SECTION=-471.html.
- 41. See, for example, Henckaerts and Doswald-Beck, *Customary International Humanitarian Law*, 137; Francioni, "Au-delà des traités," 29; and Sandholtz, *Prohibiting Plunder*, 223, 256–257.
- 42. For instance, after the Turkish invasion of 1974 the Armenian Church of the Holy Mother of God in Famagusta became a military area. See the chapter by Werner Schmid in this volume.
- 43. Various reports—also by Turkish and Turkish Cypriot newspapers—have demonstrated that the Turkish and TRNC governments and military officials colluded or were bribed, and that

- antiquities have disappeared not only from archaeological sites and religious buildings situated within or nearby military zones but also from the places where they were taken for safekeeping. Augustinos, "The Protection of Cultural Heritage," 221, 223.
- 44. Article 1 of the Articles on Responsibility of States for Internationally Wrongful Acts (cit. n. 22).
- 45. Article 14 of the Articles on Responsibility of States for Internationally Wrongful Acts (cit. n. 22).
- 46. Article 29 of the Articles on Responsibility of States for Internationally Wrongful Acts (cit. n. 22).
- 47. Article 30(a) of the Articles on Responsibility of States for Internationally Wrongful Acts (cit. n. 22).
- 48. Article 30(b) of the Articles on Responsibility of States for Internationally Wrongful Acts (cit. n. 22).
- 49. Article 31 of the Articles on Responsibility of States for Internationally Wrongful Acts (cit. n. 22). The cornerstone of the international law of reparation is the judgment of the Permanent Court of International Justice (PCIJ) in the Factory at Chorzow case (Case Concerning the Factory at Chorzów (Jurisdiction), 1927, Series A, No. 9, 21). In 1927, the PCIJ affirmed that "[i] t is a principle of international law that the breach of an engagement involves an obligation to make reparation in an adequate form." In 1928, the PCIJ then added that "the essential principle contained in the actual notion of an illegal act ... is that reparation must, as far as possible, wipe out all the consequences of the illegal act and re-establish the situation which would, in all probability, have existed if that act had not been committed" (Case Concerning the Factory at Chorzów (Merits), 1928, Series A, No. 17, 47).
- 50. Articles 34-37 of the Articles on Responsibility of States for Internationally Wrongful Acts (cit. n. 22).
- 51. See commentary to Article 35 of the Articles on Responsibility of States for Internationally Wrongful Acts (cit. n. 22), 97–98.
- 52. Dodd, The History and Politics, 132.
- 53. Chechi, "Sacred Heritage in Cyprus," 314-18.
- 54. See Balderstone, "Cultural Heritage and Human Rights in Divided Cyprus," 234, 237.
- 55. See at: Europa Nostra, "The Voice of Cultural Heritage in Europe" website, http://www.europanostra.org/heritage-awards/.

- 56. See at: UNDP website, "Study of Cultural Heritage," http://www.cy.undp.org/content/cyprus/en/home/operations/projects/partnershipforthefuture/study-of-cultural-heritage-in-the-northern-part-of-cyprus.html.
- 57. Anna Caramondani, "Nicosia The Last Divided City in Europe," cited by Balderstone, cit. n. 50, 239.
- 58. The success of this project is demonstrated by the fact that its chairmen, Takis Hadzidemetriou and Ali Tuncay, will be awarded the European Citizen Prize 2015 of the European Parliament. See at http://www.europarl.europa.eu/news/en/news-room/content/20150604STO62606/html/European-Citizen%27s-Prize-honouring-engaged-Europeans.
- 59. Christofi, "Technical Committee on Cultural Heritage."
- 60. For a more general analysis of this solution, see Chechi, cit. n. 49.
- 61. This approach should comprise cultural heritage education for the youth of Cyprus. In this respect, see the chapter by Gül İnanç and Julie H. Liew in this volume.
- 62. Tocci, The "Cyprus Question," 18.
- 63. For instance, the adoption of an object-oriented approach can bring about the preservation and conservation of religious monuments and sites, but cannot help the Orthodox Church and its parishioners to have unrestricted access to the religious buildings located in northern Cyprus.
- 64. Christofi, Europa Nostra website.

BIBLIOGRAPHY

Augustinos, Nicholas. "The Protection of Cultural Heritage in the Event of Armed Conflict: The Cyprus Experience." In *The Recovery of Stolen Art*, edited by Norman Palmer, 217–60. Leicester: Institute of Art and Law, 1998.

Balderstone, Susan. "Cultural Heritage and Human Rights in Divided Cyprus." In *Cultural Diversity, Heritage & Human Rights*, edited by Michele Langfield et al., 226–42. London and New York: Routledge, 2010.

Bonnot, Maurice. Des États de Facto. Paris: L'Harmattan, 2014.

Caspersen, Nina. Unrecognized States. Cambridge: Polity Press, 2012.

Cassese, Antonio. International Law. Oxford: Oxford University Press, 2001.

Chechi, Alessandro. "Sacred Heritage in Cyprus: Bolstering Protection through the Implementation of International Law Standards and the Adoption of an Object-Oriented Approach." In *Between Cultural Diversity and Common* Heritage. Legal and Religious Perspectives on the Sacred Places of the

- Mediterranean, edited by Silvio Ferrari and Andrea Benzo, 293–318. Farnham: Ashgate, 2014.
- Christofi, Emilia. "Technical Committee on Cultural Heritage an Example of Bicommunal Cooperation." Cyprus News Agency, 18 June 2015. http://www. cna.org.cy/webnewsEN.asp?a=0f6a27a8639f46d4b504acfd1760bfe8.
- Craven, Matthew. "Statehood, Self-Determination, and Recognition." In International Law, edited by Malcom D. Evans, 203-251. Oxford: Oxford University Press, 2010.
- Crawford, James. The Creation of States in International Law. Oxford: Oxford University Press, 2006.
- Dodd, Clement. The History and Politics of the Cyprus Conflict. New York: Palgrave Macmillan, 2010.
- Francioni, Francesco. "Au-delà des traités: l'émergence d'un nouveau droit coutumier pour la protection du patrimoine culturel." Revue Générale de Droit International Public (2007): 19-41.
- Hamilos, Paul. "Hundreds Gather for Reopening of Divided Cyprus Street." The Guardian, 3 April 2008.
- Henckaerts, Jean-Marie, and Louise Doswald-Beck, eds. Customary International Humanitarian Law, Rules. Vol. 1. Cambridge: Cambridge University Press, 2003.
- Kaczorowska, Alina. Public International Law. 4th ed. London and New York: Routledge, 2010.
- Sandholtz, Wayne. Prohibiting Plunder. How Norms Change. Oxford: Oxford University Press, 2007.
- Shaw, Malcolm. International Law. Cambridge: Cambridge University Press, 2008.
- Tocci, Nathalie. The "Cyprus Question": Reshaping Community Identities and Elite Interests within a Wider European Framework. CEPS Working Document No. 154, 2000.

Armenians and the Christian Society of Famagusta: Evidence from Spatial Analysis

Tomasz Borowski

This chapter examines the spatial position of the Armenian church in the context of the wider urban development and arrangement of public spaces in medieval Famagusta. It makes use of four study techniques derived from the field of architectural studies and robotics: plan analysis, access analysis, visibility graphs, and agent analysis. The aim of the first method is to reconstruct the development of the medieval street network of Famagusta while the latter three serve to investigate how this network was used. The analysis points to the existence of a strict, spatially enforced hierarchy among major religious groups in the city and complements the study of art which, so far, has dominated modern discussion concerning the Armenian church as well as other medieval monuments in Famagusta.

Plan Analysis 1: Positioning the Armenian Church in the Layout of Pre-Ottoman Famagusta

The first step of the plan analysis is to identify three basic "plan elements" that made up the medieval city: plots, buildings, and streets. This chapter will focus only on the latter two elements because there is no reliable data

T. Borowski (⋈) Medieval gallery, Polish History Museum, Polish History Museum/ University of Reading, Warsaw, Poland

regarding medieval property boundaries in Famagusta.² In identifying pre-Ottoman streets, it can be assumed that if walls of two pre-Ottoman structures are aligned along the same modern street, then at least part of that street also dates from the Latin period. This is confirmed by the few medieval streets and piazzas that were excavated in the early twentieth century.³ Such an approach, however, creates a fragmented plan containing parts of merely 14, mostly unconnected spaces. A larger portion of the pre-Ottoman layout can be reconstructed by complementing archaeological data with the analysis of urban topography depicted on the late fifteenth or early sixteenth-century model of Famagusta preserved in the Arsenal Museum in Venice.⁴

The model in question is signed as Maina but shows substantial similarities with Stephano Gibellino's engraving of Famagusta from 1571 and with the nineteenth-century plan of the city by Camille Enlart⁵ which makes it clear that it depicts Famagusta, not Maina. Around 20 streets and 3 piazzas can be identified on both the nineteenth-century plan and the "Maina" model which indicate that their origin is pre-Ottoman.⁶ Combined with the recorded buildings, this allows for a reconstruction of a significant part of the Latin city, representing about 66 percent of its late medieval layout. The area where the Armenian church is located, however, in the north-western corner of the city, is poorly depicted and can only be reconstructed partially. A possible reason for this is that this part of the walled town was probably depopulated already after the Genoese sack of Famagusta in 1373 and never recovered fully. This is in line with Nicholas Coureas' observation that in the Italian period, the Armenian community in Famagusta declined.⁸ The partial abandonment of the north-western part of the city would also explain why buildings of the supposed Armenian monastery and other structures in proximity of the Armenian church are not preserved to this day, and why, sometime after the creation of the "Maina" model, the Venetian authorities replaced the northern medieval gate of Famagusta (known as the gate of the Cave) with a small postern in the new Rayelin. It is also possible that the Italian author of the model simply did not know the north-western area well because it was located far from the port and was inhabited by many non-Latins. 10

Plan Analysis 2: Morphological Analysis

The second step of the plan analysis is to identify and date the "plan units" of the medieval city: that is, groups of plan elements that demonstrate a degree of morphological unity. In Famagusta, there are three

such units.¹¹ The first unit corresponds to the position of an earlier Byzantine settlement. Its oldest structure, the eleventh-century church of St. Epiphanios, 12 is connected to the Limassol gate by a straight eastwest route, which follows the Byzantine trade route between the local harbor and Nicosia. The three later Greek churches in this area suggest that it continued to be inhabited by the Greeks throughout the Latin period. The second is the central unit that represents the core of the Latin city and can be dated, on the basis of its preserved monuments, particularly the Franciscan church, to the thirteenth century.¹³ It also depends on the east-west route to Nicosia but its location has shifted north which indicates that after the crusader conquest, the Latins established a new urban center in Famagusta instead of taking over the earlier Byzantine settlement.¹⁴

The Armenian church is located in the third, northern plan unit which most likely developed when the core could no longer accommodate new inhabitants. This occurred around 1310-1312 at the latest, as this is when the construction of the preserved Armenian church, its northernmost structure, is recorded.¹⁵ Other churches in this area confirm that it was inhabited by a mixture of Latins, Syrians, and Armenians, reflecting the range of refugee groups that settled in Famagusta at that time. The northern unit is aligned along streets following the north-south axis which, like the first east-west axis, is oriented toward St. Epiphanios suggesting that it too follows an earlier Byzantine route. This route formed the economic lifeline for the community living in the proximity of the Armenian church which correlates with Thomas Kaffenberger's suggestion that the main entrance to the Armenian compound was from the street to the south-east of the church.¹⁶ The north-south axis, however, does not provide direct access to the harbor which made the northern unit economically dependent on the Latin dominated central piazza. As a result, the area occupied by the Armenians was particularly vulnerable to the declining trade during the economic crisis after 1373. Unlike the previous two units, the northern neighborhood lacks its own piazza, which reflects the Middle Eastern urban tradition in which covered streets and bazaars served as principal commercial spaces, not central squares.¹⁷ This tradition was no doubt familiar to local, Levantine Christians and reflected the fact that the population of the northern unit did not form a unified religious community comparable to the Greeks and Latins.

The last stage of Famagusta's medieval growth was the development of a northern suburb indicated by the construction of Our Lady of Compassion in early 1360s. ¹⁸ It is worth noting that its formation most likely correlated with the enlargement of the Armenian church, namely the addition of the unpreserved, northern annex, which may have been commissioned by a prominent refugee from Armenian Cilicia.

Access Analysis 1: Streets and Piazzas

Access analysis is conducted by breaking continuous space into sets of interconnected areas that are represented as nodes on access diagrams.¹⁹ The position of each node is then quantified in the form of measured syntactic values reflecting the position of the given area within the analyzed layout. These values are depth, connectivity, control, and Real Relative Asymmetry (RRA). Here, they will be calculated with the help of computer software called Justified Analysis of Spatial System (JASS). The first step in the spatial analysis of Famagusta is to transform its public spaces into nodes (Fig. 9.1) which can be presented in the form of diagrams with different starting positions reflecting the perspectives of visitors from Nicosia (node 1), Karpas (node 11) and the sea (node 40), and inhabitants living in the southern (node 36), central (node 9), and northern (node 3) units (Fig. 9.2).

The depth value represents the number of spaces that need to be traversed to access one space from the starting point. The comparison of mean depths of spaces (Table 9.1) accessible from different starting points demonstrates that medieval Famagusta was more open to visitors approaching the city from the sea (4.4) than to travelers from the mainland, especially from the Karpas (5.38). This spatial arrangement reflects Famagusta's dependence on maritime trade and emphasizes the disadvantaged position occupied by the Armenians. It also complements Coureas' observation that despite Famagusta's role as "the lifeline" of the Armenian kingdom, local Armenians did not play a prominent role in the trade with Cilicia.²⁰ The low mean depth value of the Latin core (2.85) indicates that its inhabitants had easy access to most areas in the city, including spaces occupied by non-Latin groups. The inhabitants of the northern, as well as southern (Greek), neighborhoods were more segregated (4 and 4.06) and contact between them was spatially discouraged: Armenians and Syrians living in the north had to cross at least six architectural steps, through

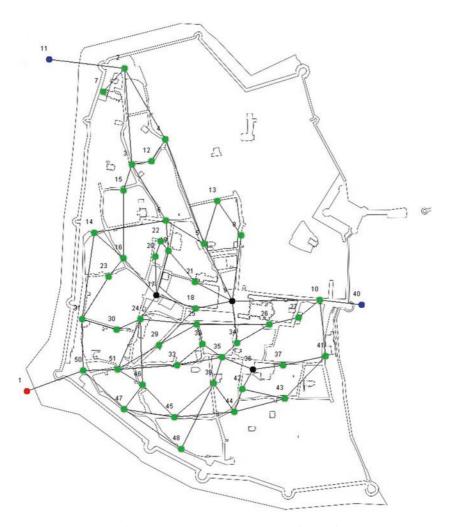


Fig. 9.1 Streets and piazzas in Famagusta represented as nodes

the main piazza, to visit the Greek neighborhood. This strengthened the dominant position of the Latins and embodied the divide et impera (divide and rule) principle adopted by Famagusta's Latin rulers. The area close to the Armenian church was one of the least integrated spaces in the layout (4.38) which may reflect the fact that the Armenians were one of the last

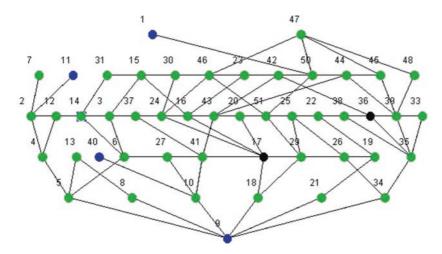


Fig. 9.2 Sample access diagram of Famagusta showing the city from the perspective of an inhabitant living in the proximity of the central piazza (right)

Table 9.1 Syntactical measurements showing mean depth values of Famagusta's spatial configuration from the perspective of the city's inhabitants and visitors

Mean depth of Famagusta's spatial configuration from the perspectives of:						
Visitor		Inhabitant				
Gate of the cave	5.38	Northern unit	4			
Limassol gate	4.51	Southern unit	4.06			
Harbor	4.4	Central unit	2.85			

groups to settle in Famagusta, and their position was little different from that of a visitor.

Connectivity value indicates the number of spaces that can be accessed from a given space and is related to control value, which signifies to what extent one space controls the spaces around it. A street which connects two piazzas, one of which is accessible from two other streets while the other can only be entered via the street in question, would have a control value of 1.33, representing its total control over one piazza and 33 percent control over the other. Famagusta has 10 spaces with control values

above 1.5. These are 31 (1.58), 50 (1.7), 2 (2.58), 3 (1.75), 16 (1.53), 17 (1.53), 35 (1.58), 9 (2.17), 10 (2), and 5 (2.83). Three of them (2, 3, and 5) are located in the northern plan unit with the Armenian church but, significantly, all of them are marked by Latin churches which ensured Latin control over the area. The construction of the Carmelite convent in 1311–1333²¹ embodies this policy well, as the edifice dominated two high control spaces and separated the Armenian church from the Syrian church of Agios Georgios Exorinos. As a result, local Armenians were separated not only from the Greeks to the south but also from other non-Latin communities in the northern neighborhood and did not benefit from the high control value of the streets in their proximity. It is worth noting that the southern, predominantly Greek neighborhood had only one space with high control value (35) and it is the lowest in the group which shows that the layout of medieval Famagusta diminished the importance of the area of the earlier, Byzantine settlement.

The RRA value combines two qualities of space: the shortest path which represents the minimum number of steps that have to be traversed to reach the given space from other spaces, and choice, or "ringiness," which measures the possibilities of accessing given space via alternative routes (rings). Combined, these two qualities present the most accurate measure of integration of spaces within a system. Low RRA indicates integration and high RRA signals segregation. The mathematical formula for calculating RRA has been discussed by Bill Hillier and Julienne Hanson and will not be presented here due to length limitation.²²

A full comparison between the RRA values of spaces related to the Armenian church and to churches belonging to other religious groups in Famagusta is impossible due to the high number of unidentified and unpreserved churches and incomplete reconstruction of the layout. The analysis, however, hints toward trends observed earlier (Table 9.2). The area related to the Armenian church was one of the most segregated spaces in Famagusta (1.08), though its position was only slightly worse than that of spaces related to Greek (1.03) and Syrian (0.84) churches. Areas related to Latin religious structures, on the other hand, were better integrated (0.79 average, 0.59 central piazza) which confirms that the spatial arrangement of Famagusta favored Latin establishments and discriminated against Armenians as well as other non-Latin communities.

Table 9.2 Syntactical measurements showing RRA values of Famagusta's public spaces dominated by religious architecture; letters in brackets mark the religious denomination of churches related to given space: Latin, Greek, Syrian (Maronite, Melkite, Jacobite, or Nestorian), and Armenian

RRA values of public sp	aces that	were visually dominated	by religi	ous architecture	
41 (L)	0.91	9 (central piazza) (L)	0.59	18 (L)	0.66
4 (S?)	0.94	39 (?)	0.88	30 (?)	0.87
2 (Armenian)	1.08	6 (S)	0.73	14 (S)	0.81
37 (G)	1.09	17 (L?, S?)	0.65	33 (?)	0.82
21 (L)	0.78	15 (L, S?)	1.01	24 (?)	0.67
27 (L)	0.93	5 (L)	0.7	19 (L)	0.72
43 (G)	1.02	3 (L, S?)	0.95	26 (L)	0.81
36 (Greek piazza) (G)	0.97	$7 (L, A)^{a}$	1.39	Average total	0.87
Average Latin	0.79	Average Greek	1.03	Average Syrian	0.84

^aThis space has been excluded from the analysis because its high segregation value results from the incomplete reconstruction of the street layout along Famagusta's western wall

Table 9.3 Syntactical measurements showing mean depth values of Famagusta's principal groups of churches from the perspective of the city's inhabitants and visitors

Mean depth of Famagusta's churches from the perspective of:

	Visitor			Inhabitant			
	Limassol gate	Gate of the cave	Port	Central unit	Southern unit	Northern unit	Average total
Latin churches	6.2	5.2	4.3	2.6	5.1	3.9	4.69
Greek churches	6.5	8.5	5	4.5	2.5	7.5	5.83
Syrian churches	5.5	3.75	5.5	3.5	6.5	2.25	4.98
Armenian church	8	3	7	5	8	3	6.62

Access Analysis 2: Buildings

The addition of 23 nodes representing churches to earlier access diagrams makes them difficult to read but values derived from them, particularly mean depth and RRA, are informative. The comparison of mean depths of identified churches (Table 9.3) from different starting points

indicates, unsurprisingly, that the Armenian church was one of the most segregated religious structures in the city (6.62 average total, 5 from the central piazza). Other non-Latin structures, also occupied inferior positions, though, once again, Syrian churches seem to be more privileged than Greek ones, which may suggest that Latin elites favored cooperation with refugees from the mainland Levant than with local Greeks. This spatial hierarchy of Famagusta's churches is also reflected in their RRA values (Table 9.4): the Armenian church is the least integrated in the sample; Syrian churches are better integrated than the Greek ones but are still less integrated than the Latin churches. These results take into account different entrances to individual buildings.

The disadvantaged position occupied by the Armenian church may have reduced its ability to attract visitors and, consequently, pious donations. Interestingly, surviving documents indicate that Armenians attempted to counter this trend and called upon the support of Rome, the jurisdiction of which they acknowledged. In response, in August 1311, Pope Clement V issued a document urging Christians to visit the Armenian church in Famagusta and to support it financially. As a reward, the Pope declared that all pilgrims visiting the shrine should obtain remission of penances for one year and a hundred days.²³ Thus, the Armenian church became a pilgrimage site which not only supported the local Armenian community but also

Table 9.4 Syntactical measurements showing RRA values of Famagusta's churches; letters in brackets mark the religious denomination of churches related to given space: Latin, Greek, Syrian (Maronite, Melkite, Jacobite, or Nestorian), and Armenian

RRA values of religious structures in Famagusta ^a						
Latin		Non-Latin				
The Carmelite church	1.42	St. George and St. Epiphanios (G)	1.05			
St. Anne	1.01	St. Nicholas of the Greeks (G)	1.35			
Hospitaller church (?)	0.86	St. Anne (S?)	1.01			
Templar church (?)	0.86	St. George the Exiler (S)	0.86			
St. Peter and St. Paul (Dominican?)	0.77	Nativity (?)	1.1			
St. Nicholas cathedral	0.7	Melkite church (S?)	1.05			
The Franciscan church	0.92	The Armenian church (A)	1.42			
Mendicant orders average	1.03	Greek average	1.2			
Latin average	0.93	Syrian average	1.01			

^aExcluding the supposed chapel of St. George because it is located within a house

provided raison de entrée, encouraging pilgrims to visit a peripheral part of Famagusta and, consequently, integrating a distant neighborhood with the core of the city's urban and religious network. Elevating the Armenian church to the status of a pilgrimage site alluded to a much older tradition of locating holy shrines on the outskirts of growing population centers, but the papal appeal must have been only partially successful as the church remained a modest structure and needed further support from Pope John XII between 1317 and 1318.²⁴ Some pilgrims, however, seem to have visited the Armenian church which is indicated by numerous crosses carved on its external walls (see Fig. 5.1). These crosses are commonly identified as Armenian decorative khatchkars, 25 but there is no reason to deny the possibility that some of them are pilgrim crosses similar to those carved on the walls of the chapel of St. Helena in the Holy Sepulchre. This seems likely as comparable carved crosses, albeit fewer, decorate the interiors of other, non-Armenian churches in the city including the Carmelite church, Aya Zoni, the unidentified church known as "the Stavros church" and the southern of the so-called Twin churches.

ISOVIST GRAPHS AND VISIBILITY ANALYSIS

The level of visual exposure in spatial systems can be studied with the help of DepthMap. It is a software platform created by Alasdair Turner at the Virtual Reality Centre for the Built Environment at University College London, Barlett School which performs space syntax analysis on the basis of vector plans in which all spaces are closed.²⁶ First, the program creates a linear Isovist graph representing sets of points that are visible from other points in the system and can be used for determining its view areas. Next, DepthMap replaces this line map with a grid of points that create a plan in which highly visible spaces are marked with bright colors while spaces which are visible from fewer points are darker. The exposure of individual nodes within the grid is quantified by DepthMap and shown in numbers which makes it easier to compare spaces with little differences in visibility.²⁷

The analysis of visibility graphs is based on an observation that visibility invites movement because people tend to follow routes that they can see from a distance.²⁸ The principal obstacle in the analysis of Famagusta (Fig. 9.3) is that the areas close to the city gates cannot be reconstructed with precision and thus, they are unsuitable for study. Nonetheless the darker colors of the northern plan unit clearly indicate that visually, this was the most internally divided part of Famagusta.

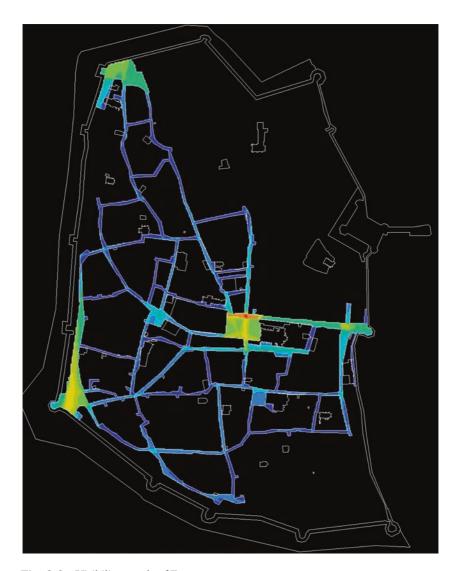


Fig. 9.3 Visibility graph of Famagusta

The principal streets connecting the Armenian church with the central piazza have visibility values of around 160, while streets in the central and southern units have visibility values ranging from 210 to 700 (the street connecting the central piazza with the harbor). Visual seclusion of different public spaces in the northern neighborhood results partially from the absence of northern piazza and, as it was already noted, it is one of the traits characteristic for Middle Eastern urbanism. Consequently, the area occupied by Armenians, together with Syrians and Latins, in the north of Famagusta offered a very different visual experience from other parts of the city: one in which narrow, winding streets and covered markets obscured the skyline and field of vision.²⁹ Furthermore, limited intervisibility of public spaces ensured a degree of privacy for local Armenian and Syrian communities and, again, recalled the religiously diverse environment of Middle Eastern cities.³⁰ It is worth noting that the urban character of the northern neighborhood in the fourteenth century, as a densely populated, built-up area, though supported by the results of the recent Ground Penetrating Radar investigation, remains in stark contrast to its modern outlook as today it is one of the least populated parts of historic Famagusta that is largely covered by open fields, playgrounds, and grassland.

AGENT ANALYSIS

Agent analysis graphs are created by DepthMap on the basis of visibility graphs.³¹ The program releases agents, representing individuals, within the studied space and simulates their movement based on the earlier assumption that people have a vision-based model of the world that inclines us to move toward spaces which we can easily see.³² Different components of agent analysis graphs can be manipulated as DepthMap allows researchers to control the number of released agents, the location of their release, their field of vision, and the number of steps after which they change the direction of their movement as well as the number of steps which they make in total.

This chapter includes one agent analysis graph showing the movement of agents representing inhabitants living in the proximity of the Armenian church (Fig. 9.4). The parameters set for the analysis are that of 50 agents making 1000 steps. The number of steps after which agents change the direction of their movement is 3 and their set field of vision (bins) is that of 15, which corresponds to 170 degrees, which has been proven to reflect natural movement best. 33

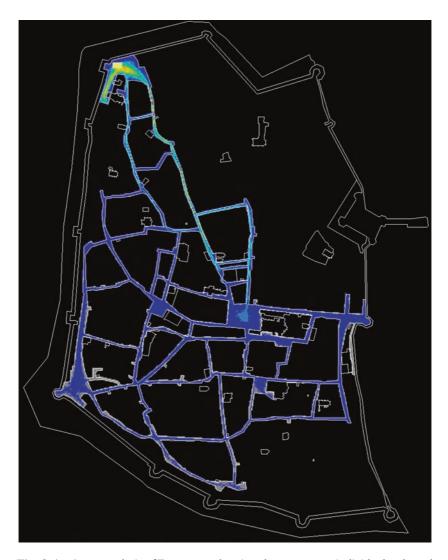


Fig. 9.4 Agent analysis of Famagusta showing the movement individuals released in the proximity of the Armenian church and the gate of the Cave

The simulation is obscured by the imprecise reconstruction of the areas close to the city gates and walls. Also, long sight lines incline agents to walk toward centers of large open spaces while in real life, people tend to move along the edges of such areas.³⁴ Such limitations aside, the graph shows trends that are consistent with earlier observations. Most of the agents released near the Armenian church ventured toward the central piazza but few reached the southern (Greek) neighborhood. Interestingly, out of the two routes connecting the Armenian church with the central piazza, agents preferred to use the one to the east which avoided the Syrian church of Agios Georgios Exorinos. This observation demonstrates that contact between non-Latin groups in the city was spatially discouraged, both on the level of a single neighborhood and in the city as a whole. The analysis also confirms the important role of the harbor in Famagusta as agents more often visited the port than the area close to the Limassol gate.

CONCLUDING REMARKS

The results of the four study techniques applied in the analysis of medieval Famagusta are surprisingly consistent and envisage characteristics that are not immediately visible when looking at its plan. They demonstrate that the Armenian church was located in a neighborhood which was spatially and visually different from other parts of Famagusta and shared some of the traits characteristic for contemporary, religiously diverse cities of the Middle East. The chapter also revealed a degree of social tensions and discrimination expressed through visual concealment and physical segregation of the non-Latin religious groups in the city. The underlying theme of this discovery is that the image of Famagusta based on the analysis of space can radically differ from the one conveyed by its art and related historical sources. The case of the Armenian church illustrates this well as its practical segregation and discrimination stand in striking contrast with some of the narratives concerning its art which emphasize cooperation between teams of artists and the mixing of gothic, Byzantine, and Armenian elements in its frescoes and architecture.³⁵ Spatial analysis, therefore, is a promising new venue of study that may significantly contribute to the modern understanding of the internal dynamics of past societies.

It also forms an excellent starting point for discussion regarding the identity and agency of those responsible for the planning of public spaces in medieval Famagusta. There is evidence that Lusignan rulers such as King Henry II or usurper Amaury of Tyre were occasionally involved in

the planning of some of the streets and fortifications.³⁶ As a preliminary suggestion, however, I would like to suggest that the identified differences in the spatial arrangement of principal urban areas in the city indicate that such practice may have been an exception and it is likely that the creation and design of public spaces in medieval Famagusta were negotiated between architects, local Christian communities, and religious as well as secular authorities.

Notes

- 1. This technique was developed by Lilley on the basis of an older method known as the Conzenian Morphology of towns: Keith Lilley, "Mapping the Medieval City: Plan Analysis and Urban History," in Urban History 27, no. 1, (2000): 5-30; M. R. G. Conzen, Alnwick, and Northumberland: A Study in Town Plan Analysis (London: George Philip, 1969).
- 2. The only work that has attempted to identify the medieval plots of Famagusta is by Mimar Ege Uluca, "Gazimağusa Kaleiçi'non Tarihsel süreç İçindeki Kentsel Gelişimi Ve Değişimi" (PhD diss., Istanbul Technical University, 2006); her identification, however, is based solely on the assumption that the boundaries of properties date from the same period as oldest structures located within them. This is not always true as it possible that a pre-Ottoman structure simply happened to be located within a modern property.
- 3. For example, the street following the north wall of St. George of the Greeks or the triangular piazza in front of St. Epiphanios: J. R. Hilton, "Repairs to Ancient Monuments," in Reports of the Department of Antiquities Cyprus (1936): 1-5.
- 4. This model has been restored in the nineteenth century but preserves its original design: George Jeffery, A Description of the Historic Monuments of Cyprus: Studies in the Archaeology and Architecture of the Island (Nicosia: The Government Printing Office, 1918) 115–16.
- 5. Camille Enlart, Gothic art and Renaissance in Cyprus, ed. and trans. David Hunt (London; Trigraph, 1987).
- 6. For a detailed analysis, see Tomasz Borowski, "The Role of Religion in the Shaping of Identity and Social Relations in Crusader Famagusta, Cyprus, 1191-1489" (PhD diss., University of Reading, 2015), 92-109.

- In 1394, Nicholas Martoni visited the nearby Carmelite church and observed that almost a third of Famagusta is depopulated: Claude Cobham, trans. and ed., Exerpta Cypria: Materials for a history of Cyprus (Cambridge: Cambridge University Press, 1908), 22.
- 8. See Chaps. 3, 12, and 13, this volume.
- 9. For discussion regarding the remains of the supposed Armenian monastery, see Chaps. 4 and 14, this volume.
- 10. Overrepresentation of Westerners, particularly Italians, is a common feature in Western sources concerning Famagusta, for example, see: Peter Edbury, "Famagusta in 1300," in *Kingdoms of the Crusades from Jerusalem to Cyprus* (Aldershot: Ashgate, 1999), 346.
- 11. For a detailed analysis, see Borowski, "The Role of Religion," 104.
- 12. Thomas Kaffenberger, "Harmonizing the sources: an insight into the appearance of the Hagios Georgios complex at various stages of its building history," in *The Harbour of all this Sea and Realm Crusader to Venetian Famagusta*, eds. Michael Walsh, Tamás Kiss and Nicholas Coureas (Budapest: Central European University Press, 2014), 172.
- 13. For discussion regarding the dating of the Franciscan monastery, see George Jeffery, "The Franciscan Church in Famagusta," in *Proceedings of the Society of Antiquaries of London* 24 (1912): 301–313; and Michalis Olympios, "The Franciscan Convent of Famagusta and Its Place Within the Context of Early Fourteenth-Century Cypriot Gothic Architecture," in Κυπριακαὶ Σπουδαὶ 73 (2009): 119–20.
- 14. Similar practice has been observed in Nicosia where the Latin cathedral was built in a new location to the north of the earlier, Byzantine Hodegetria; for discussion, see: Tassos Papacostas, "Byzantine Rite in a Gothic Setting: Aspects of Cultural Appropriation in Late Medieval Cyprus," in *Towards Rewriting?: New Approaches to Byzantine Archaeology and Art*, eds. Piotr Grotowski and Sławomir Skrzyniarz (Series Byzantina 8, 2010): 119.
- 15. It has been postulated that an Armenian church, or even two churches, existed in Famagusta already in the thirteenth century but it is unclear whether earlier sources, such as the Armenian colophone

- from 1280, refer to the preserved structure. For discussion, see Chaps. 4, 7, and 8, this volume.
- 16. See Chaps. 6, 13, and 14, this volume.
- 17. T. Greenshields "'Quarters' and Ethnicity," in The Changing Middle Eastern City, eds. Gerald Blake and Richard Lawless (London: Croom Helm, 1980), 121.
- 18. Nicholas Coureas, The Latin church in Cyprus 1313-1378 (Nicosia: Cyprus Research Centre Text and Studies in the history of Cyprus 65, 2010), 452.
- 19. This technique was first described and promoted by Bill Hillier and Julienne Hanson, Social logic of Space (Cambridge: Cambridge University Press, 1984).
- 20. See Chaps. 3, 9, and 10, this volume.
- 21. Michalis Olympios, "Networks of Contact in the Architecture of the Latin East: The Carmelite Church in Famagusta, Cyprus and the Cathedral of Rhodes," in Journal of British Archaeological Association 162 (2009): 45.
- 22. Hillier and Hanson, "Social logic"; for more recent discussion, see: Eva Mol, Hidden Complexities of the Frankish Castle: Social Aspects of Space in the Configurational Architecture of Frankish Castles in the Holy Land, 1099-1291 (Leiden: Leiden University Press, 2012), 212.
- 23. Papal support may have been obtained by the Armenian ambassador at papal curia, Gerrard of Laiazzo, whose family is said to have invested in the Armenian church in Famagusta; for discussion, see Coureas, The Latin church in Cyprus, 475.
- 24. Ibid., 476.
- 25. Michele Bacci. "The Armenian Church in Famagusta and its Mural decoration: Some Iconographic Remarks," in Hask hayagitakan taregirk'11, 2007-2008 (2009): 490.
- 26. Alasdair Turner, Depthmap 4 A Researcher's Handbook (London: Bartlett School, UCL, 2004), 11.
- 27. For a discussion regarding the process of transformation of Isovist graph representations into visibility graphs, see Alasdair Turner, Maria Doxa, David O'Sullivan, and Alan Penn, "From Isovist to Visibility graphs; a Methodology for the Analysis of Architectural Space," in Environment and Planning B: Planning and Design 28 (2001): 103-21.

- 28. Alasdair Turner and Alan Penn, "Encoding Natural Movement as an Agent Based System: an Investigation into Human Pedestrian Behaviour in the Built Environment," in *Environment and Planning B: Planning and Design* 29 (2002): 473–90.
- 29. For historical evidence regarding the presence of covered streets in medieval Famagusta, see Edbury, "Famagusta in 1300," 345.
- 30. For a discussion regarding religious diversity and ethnic quarters in Middle Eastern cities, see: John Wagstaff, "The Origin and Evolution of Towns; 4000 BC to AD 1900," in *The Changing Middle Eastern City*, eds. Gerald Blake and Richard Lawless (London: Croom Helm, 1980), 11–33.
- 31. The author is grateful to Dr. Hanna Stöger from Leiden University for her help in using the JASS and DepthMap software.
- 32. Turner and Penn, "Encoding Natural Movement," 480.
- 33. Al Sayed and Alasdair Turner, *Agent Analysis in DepthMap 10.141* (London: Bartlett School, UCL, 2012), 8.
- 34. This inaccuracy was already observed in Mol, *Hidden complexities*, 83; it probably results from the fact that agent analysis was tested in the case study of Tate gallery in London which is a closed space where people behave differently than pedestrians in public squares.
- 35. Examples of non-Armenian elements include external buttresses or piscina decorated with pointed arch and tracery identical to the one preserved in one of the southern chapels of the Latin cathedral of St. Nicholas. For discussion, see Chaps. 4, 6, and 7 in this volume.
- 36. Edbury, "Famagusta in 1300," 337-8.

BIBLIOGRAPHY

PRIMARY SOURCES:

Excerpta Cypria: *Materials for a History of Cyprus*, translated by Claude D. Cobham. Cambridge: Cambridge University Press, 1908.

SECONDARY SOURCES:

Bacci, Michele, "The Armenian Church in Famagusta and its Mural decoration: Some Iconographic Remarks." In *Hask hayagitakan taregirk* 11, 2007–2008 (2009).

- Borowski, Tomasz. "The Role of Religion in the Shaping of Identity and Social Relations in Crusader Famagusta, Cyprus, 1191–1489." PhD diss., University of Reading, 2015.
- Conzen, M. R. G. Alnwick, and Northumberland: A Study in Town Plan Analysis. London: George Philip, 1969.
- Coureas, Nicholas. The Latin church in Cyprus 1313-1378. Nicosia: Cyprus Research Centre Text and Studies in the history of Cyprus 65, 2010.
- Edbury, Peter. "Famagusta in 1300." In Kingdoms of the Crusades from Jerusalem to Cyprus. Aldershot: Ashgate, 1999.
- Enlart, Camille. Gothic art and Renaissance in Cyprus, translated and edited David Hunt. London: Trigraph 1987.
- Greenshields T. "Quarters' and Ethnicity." In The Changing Middle Eastern City, edited by Gerald Blake and Richard Lawless. London: Croom Helm, 1980.
- Hillier, Bill and Julienne Hanson. Social logic of Space. Cambridge: Cambridge University Press, 1984.
- Hilton, J. R. "Repairs to Ancient Monuments." In Reports of the Department of Antiquities Cyprus. 1936.
- Jeffery, George. A Description of the Historic Monuments of Cyprus: Studies in the Archaeology and Architecture of the Island. Nicosia: The Government Printing Office 1918.
- Jeffery, George. "The Franciscan Church in Famagusta." In Proceedings of the Society of Antiquaries of London 24 (1912).
- Kaffenberger, Thomas. "Harmonizing the sources: an insight into the appearance of the Hagios Georgios complex at various stages of its building history." In The Harbour of all this Sea and Realm Crusader to Venetian Famagusta, edited by Michael Walsh, Tamás Kiss and Nicholas Coureas. Budapest: Central European University Press 2014.
- Lilley, Keith. "Mapping the Medieval City: Plan Analysis and Urban History." In Urban History 27.1 (2000).
- Mol, Eva. Hidden Complexities of the Frankish Castle: Social Aspects of Space in the Configurational Architecture of Frankish Castles in the Holy Land, 1099-1291. Leiden: Leiden University Press 2012.
- Olympios, Michalis. "The Franciscan Convent of Famagusta and Its Place Within the Context of Early Fourteenth-Century Cypriot Gothic Architecture." In Κυπριακαὶ Σπουδαὶ 73 (2009).
- Olympios, Michalis. "Networks of Contact in the Architecture of the Latin East: The Carmelite Church in Famagusta, Cyprus and the Cathedral of Rhodes." In Journal of British Archaeological Association 162 (2009).
- Papacostas, Tassos. "Byzantine Rite in a Gothic Setting: Aspects of Cultural Appropriation in Late Medieval Cyprus." In Towards Rewriting?: New Approaches to Byzantine Archaeology and Art, edited by Piotr Grotowski and Sławomir Skrzyniarz. Series Byzantina 8, 2010.

- Sayed Al and Alasdair Turner. Agent Analysis in DepthMap 10.141. London: Bartlett School, UCL, 2012.
- Turner, Alasdair. Depthmap 4 A Researcher's Handbook. London: Bartlett School, UCL, 2004.
- Turner Alasdair and Alan Penn. "Encoding Natural Movement as an Agent Based System: an Investigation into Human Pedestrian Behaviour in the Built Environment." In *Environment and Planning B: Planning and Design* 29 (2002).
- Turner, Alasdair, Maria Doxa, David O'Sullivan and Alan Penn. "From Isovist to Visibility graphs; a Methodology for the Analysis of Architectural Space." In Environment and Planning B: Planning and Design 28 (2001).
- Uluca, Mimar E. "Gazimağusa Kaleiçi'non Tarihsel süreç İçindeki Kentsel Gelişimi Ve Değişimi." PhD diss., İstanbul Technical University, 2006.
- Wagstaff, John. "The Origin and Evolution of Towns; 4000 BC to AD 1900." In The Changing Middle Eastern City, edited by Gerald Blake and Richard Lawless. London: Croom Helm, 1980.

Ground Penetrating Radar and Mapping the Monastery Complex

Francisco M. Fernandes

Photographs taken at the beginning of the twentieth century show traces of walls, foundations, and even partially erected walls that clearly demonstrate that the existing buildings were part of a much larger complex, whether a monastic complex or, according to Camille Enlart, merely a group of buildings. Today, no traces of these remains are visible with the exception of some alignments of stones (floor level) at the facades of both buildings and evidence of perpendicular walls between them. However, it is a fact that this complex once existed.

To allow a better understanding of how this complex once was, a prospecting campaign was organized, and prepared considering two strong limitations. One is the impossibility to dig on site. The second is associated with the logistics of transporting material and equipment to an unrecognized state. Due to this, the area around the Armenian Church was mapped with Ground Penetrating Radar (GPR), which is a nondestructive and nonintrusive inspection technique² used worldwide in the field of archaeological prospection.³ This technique allowed us to rapidly map and detect underground features and remains without disturbing the soil. The

F.M. Fernandes (⋈)

ISISE—Institute for Sustainability and Innovation in Structural Engineering; Faculty of Engineering and Technologies, University Lusíada—Norte, Vila Nova de Famalicão, Portugal

survey of the area around the Armenian Church was planned very carefully in order to take into account the time and the number of people available. To simplify the acquisition and the process of interpretation, four rectangular areas were set up around the Armenian Church (Fig. 10.1). These took into consideration the area available to survey as a lot of debris and small hills prevented the extension of the area toward north. Additionally, because nothing was known about the final location of the Armenian Church in the monastic/building complex, the survey of the area around the building allowed an understanding of its relative position.

The antennas used were the 800 and the 500 MHz antennas, and the GPR system was the RAMAC/GPR CU II from MALA Geosciences. Only one antenna was used at a time in each area, and linear profiles separated by 0.5 m were carried out. The areas 1, 2, and 3 were mapped with

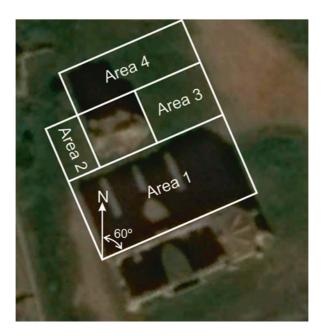


Fig. 10.1 Location of the areas around the Armenian Church surveyed with GPR

the 800 MHz antenna (time window > 20 ns) while in area 4, a 500 MHz antenna (time window > 30 ns) was used. However, this change didn't affect the results due to the shallow depth at which the remains were located (< 1 m).

The localization of the profiles was carried out manually using a compass and two measuring tapes which served as reference lines. For each area, two lines were placed along and perpendicular to a wall. Then, to carry out lines parallel and perpendicular to both reference lines, a rope was placed in every location and used to guide each profile. Both ends were fixed to stones in order to maintain the rope under tension. While one extremity was positioned over one of the measuring tapes, the other end was carefully dragged successively from the previous position. The parallel translation was carried out by two people who executed a displacement of 0.5 m. Therefore, the execution of the profiles, although fairly simple, demanded a rather slow process of repositioning the rope at both ends.

The large amount of data obtained was processed in a specific software dedicated to archeological prospection developed by Dean Goodman,4 which has been giving very good results elsewhere.⁵ This software interpolates the various parallel profiles, analyzing the signals with similar depth and intensity, allowing amplitudes distribution patterns to be obtained. The output results are shown as time-slices that show the amplitude distribution of the signals in function of depth. The results obtained in each area will be described in detail separately.

The results from the "area 1" show a reasonable amount of information. In the east, a group of several lines, parallel and perpendicular to the walls of the Armenian Church, can be perceived as the foundations of walls once erected in this place. Some of these walls seem to be separated by 4 m or more, while others are much closer (2 m). In fact, the geometrical patterns observed seem to correspond in some parts to the photograph of ruins.

The second location in this "area 1" can be found on the opposite side, in the west, where two 4 m long and 3 m apart horizontal signals run parallel to the walls of the Armenian and Carmelite churches. In that same location, a long oblique signal that follows the line of the facades of both churches is observed. It can then be deduced that the space between these two churches was a closed space (limited by the churches bodies and the wall connecting both buildings and accessed through stairs located in the center of that wall).

The "area 2" is localized right in front of the façade of the church. The results show a rectangular structure in front of the façade, roughly suggested by a photograph of the same area showing a wall in that same location. This structure was also corroborated by Thomas Kaffenberger (see Chap. 6).

Furthermore, the results from "area 3," located behind the church, are less well pronounced than in others areas. Nevertheless, it is possible to observe a series of small divisions close to the building as well as larger divisions further away. The results show that only part of the divisions perceived remain underground. In particular, some of the time-slices show rectangular figures close to the church and that the depth attained by the walls is distinct. In fact, shapes close to the building seem to have shallower foundations than the ones further away from the building. In particular, a shape at more than 12 m from the church is still detected at a very large depth, relative to the signals closer to the church. Similar information is obtained from the measurements carried out in the perpendicular direction. In particular, it confirms that the structures buried close to the church are at shallower depths, up to 0.4 m, than objects further away from the church. This difference in foundations depth could indicate that these structures located at more than 10 m-12 m from the church could belong to another structure.

Finally, "area 4," adjacent to the church's north-/northwest-oriented wall, was carried out using the antenna with a central frequency of 500 MHz. In general, a significant number of squared divisions are perceived aligned with the structures detected in area 3 and not following the Armenian Church. Two large rectangular divisions as well as several smaller others, although more attenuated, develop toward the northwest of the church's wall, in an oblique fashion. A small structure is located in front of one of the doors (now closed) of the Armenian Church. Also, several elements seem to have rather deep foundations. The results in the perpendicular direction to the main axis of the Armenian Church mostly confirm the previous information. It is possible to perceive very highattenuated signals from other smaller divisions in the top area of the radargrams which show that the complex extended for, at least, 15 m toward the north from the Armenian Church. Additionally, most time-slices show an oblique and a very large wall (which seems to be at least 1 m thick and almost 8 m long) to the east, at the end of the squared divisions.

Due to its thickness, it might correspond to an external/defensive wall of the complex.

Finally, Fig. 10.2 gives an overview of the tests carried out and the correspondent results in order to have an idea of the aspect and size of this complex.

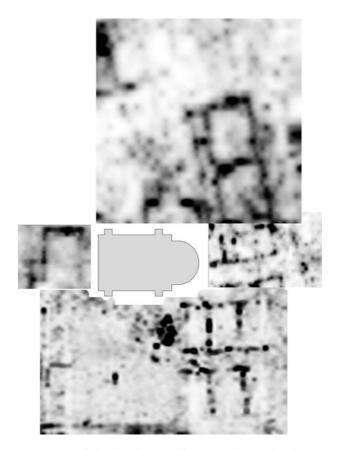


Fig. 10.2 Overview of the distribution of remains detected with GPR as well as the aspect and size of the complex around the Armenian Church

Notes

- 1. Camille Enhart, L'art gothique et la renaissance en Chypre. 2 vols. (Paris: Leroux, 1899).
- 2. David J. Daniels, Ground Penetrating Radar, vol. 1, 2nd edn. (London: IEE, 2004).
- 3. Lawrence B. Conyers and Dean Goodman, Ground-penetrating radar: An Introduction for Archaeologists (Walnut Creek, California: Altamira Press, 1997); Dean Goodman, "Ground-penetrating radar simulation in engineering and archaeology," Geophysics 59, no. 2 (1994): 224-32, DOI: 10.1190/1.1443584; Goodman and Yasushi Nishimura, "A ground-radar view of Japanese burial mounds," Antiquity 67 (1993): 349-54.
- 4. Goodman, "Ground-penetrating radar," 224-32.
- 5. Goodman and Nishimura, "A ground-radar view of Japanese burial mounds," 349-54; Conyers, and Goodman, Ground-penetrating radar; X. Núñez-Nieto, M. Solla, A. Novo, and H. Lorenzo, "Three-dimensional ground-penetrating radar methodologies for the characterization and volumetric reconstruction of underground tunneling," Construction and Building Materials 71 (2014): 551-60.

BIBLIOGRAPHY

- Conyers, Lawrence B. and Dean Goodman. Ground-penetrating radar: An Introduction for Archaeologists. Walnut Creek, California: Altamira Press, 1997. Daniels, David J. Ground Penetrating Radar, volume 1, 2nd edition. London: IEE, 2004.
- Goodman, Dean. "Ground-penetrating radar simulation in engineering and archaeology." Geophysics 59, no. 2 (1994): 224-232. DOI: 10.1190/1.1443584.
- Goodman, Dean and Yasushi Nishimura. "A ground-radar view of Japanese burial mounds." Antiquity 67 (1993): 349-54.
- Núñez-Nieto, X., M. Solla, A. Novo, and H. Lorenzo. "Three-dimensional ground-penetrating radar methodologies for the characterization and volumetric reconstruction of underground tunneling." Construction and Building Materials 71 (2014): 551-60.

In-situ Investigation and Stability Analysis of the Armenian Church in Famagusta

Andrés Burgos Braga, Paulo B. Lourenço, Nuno Mendes, and João M. Pereira

Introduction

The walled city of Famagusta might very well have been one of the richest cities in the world in its day. Today, however, it is in an internationally isolated region, yet housing a myriad of historical monuments, many of which are in an advanced state of deterioration and threatened by numerous factors including abandonment and neglect.

The seismicity of Cyprus is a potential threat affecting the heritage of Famagusta. The island is situated in an area where three tectonic plates assemble—the Eurasian Plate on the north, the African Plate on the south, and the Arabian Plate on the east—and their movements have been the cause of various earthquakes in the past. Furthermore, according to the Seismic Hazard Map of Cyprus, ¹ the most earthquake-prone area of the

A.B. Braga (⊠)

Institute of Theoretical and Applied Mechanics, AS CR, The Czech Republic

P.B. Lourenço • N. Mendes • J.M. Pereira Department of Civil Engineering, ISISE, University of Minho, Guimarães, Portugal island is the southern and western coastal zone where Famagusta belongs. The vulnerability of the city is also increased by the ground conditions, as it is situated over loose terrace deposits which can intensify the impact of earthquakes.² In particular, two seismic events damaged Famagusta, in 1924 and 1941, each with magnitudes of about 6.0.

This chapter focuses on the condition and structural stability of the Medieval Armenian Church in Famagusta. Particular attention is directed to the old and current damage of the structure, and, for this purpose, various aspects required in a conservation project are addressed, including a historical photographic survey, visual inspection, and non-destructive insitu tests. Moreover, the structural performance and safety of the Church have been assessed based on a tridimensional numerical model, using advanced non-linear analysis which allowed the behavior of the structure under gravity and seismic loadings to be studied. Finally, some suggestions for future conservation works are provided.

PHOTOGRAPHIC SURVEY, VISUAL INSPECTION, AND IN-SITU TESTING OF THE CHURCH

The Armenian Church is a modest building in size, made of limestone ashlar masonry and datable to the fourteenth century. It is located inside the city walls, and it was likely part of a monastic complex which no longer exists. Architecturally, its layout is very simple, consisting of a one-bay nave, covered by a groin vault, with a semicircular, semi-domed apse at the east end. The exterior bears few notable features such as gables at the top of each side of the edifice and lintels and relieving arches above the north and south portals (for a detailed architectural review, refer to Chap. 6). Figure 11.1 shows a plan of the Church with its main approximate dimensions, which were obtained from available laser scans of the edifice (see Appendix 1).

Photographic Survey

The Church seems to have suffered significant damage from mid- to late nineteenth century. Two drawings of the edifice (refer to Figs. 7.1 and 7.2 in Chap. 7), made in 1862 and 1896 by Edmond Duthoit and Camille Enlart, respectively, illustrate how the damage spread during a period of 34 years. In particular, one can observe the total failure of the south portal and the partial ruin of the vaulting, including the loss of the belfry that used to be at the top of the west façade.

After the British took over Famagusta in 1878, work started on the Armenian Church. A photograph (see Fig. 7.4) shows the edifice

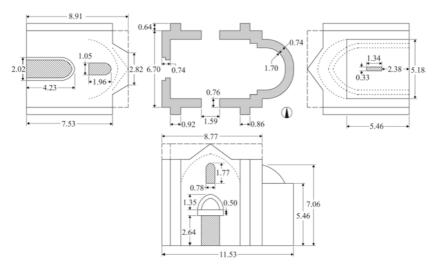


Fig. 11.1 Plan of the Armenian Church with main approximate dimensions (meters). Dashed lines show the shape of the vault and of the double-arch leading to the apse

in 1911 after some stabilization work which can be identified by the light-colored stone. Subsequently, from 1937 to 1945, a detailed restoration of the building took place. The roof and portals were reconstructed and consolidated, the deteriorated masonry was rebuilt, and the north entrance was closed with brick masonry. It is important to note that the last strong earthquake that affected the city occurred in 1941, some years before the works were finished. Finally, other photographs display how the current condition of the Church has not visibly changed since 1945.

Visual Inspection

Figure 11.2 depicts the main external damage of the Armenian Church based on an in-situ visual inspection carried out in June 2014. The edifice is distinguished by: (a) cracks located between openings and above the dome, some of which were probably filled in during previous restoration works; (b) stone deterioration, mostly at the bottom part of the edifice, most likely due to splashing rain and raising damp; (c) loose stone units that need to be consolidated; (d) biological activity such as vegetation at the base and roof level; (e) windows without proper protection against environmental elements and invasion of birds; (f) inefficient buttressing

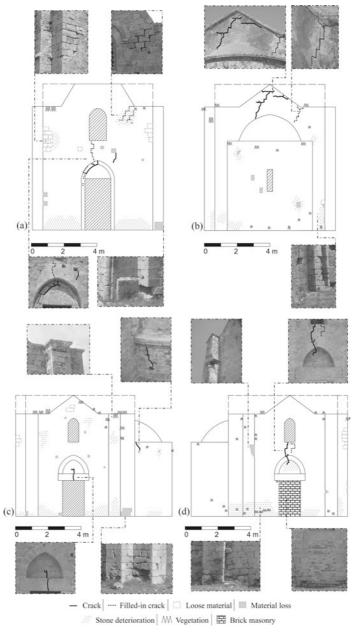


Fig. 11.2 External damage maps of the (a) west, (b) east, (c) south, and (d) north sides

due to material loss; (g) deteriorated mortar joints in several areas that need to be repointed; and (h) presence of voids and cavities in the walls, some of which were originally used for the placement of scaffolding and should be kept as they are, while others are the result of disrepair and need to be filled in. Concerning the top of the roof and dome, due to the presence of plaster, no important cracks are visible; however, some plants and lichens are present.

Likewise, the interior of the Church is mainly characterized by deteriorated stone and mortar joints. The vault seems in a particularly bad condition, which may be the result of inefficient protection against water infiltration. Moreover, cracks are also visible in the interior of the building. As with the external ones, cracks are mostly located between openings and at the top of the double-arch that connects to the dome. It is important to note that other damage may also be hidden under the plaster that largely covers the internal walls. Figure 11.3 shows the state of the vault and highlights the position of the internal cracks.

In-situ Testing

Built heritage requires a major investment of national resources as it permanently accumulates damage due to deterioration of materials, repeated loading, and exceptional events. As a result, conservation, repair, and strengthening are often necessary. Within this process, inspection and diagnosis techniques play a major role in the definition of adequate remedial measures.³ As part of these techniques, sonic tests and dynamic identification are particularly helpful thanks to their non-destructive nature. Their results provide important qualitative and quantitative information that can be correlated with essential properties of the structure allowing a better understanding of the system behavior. These two tests were applied to the Armenian Church and are briefly explained next.4

Sonic Testing

Sonic testing is based on the propagation of elastic waves through solid materials. By knowing the distance between two points of a structure and by measuring the time that a generated sonic impulse takes to travel this distance, the velocity of the elastic waves can be calculated. The variation of this parameter, measured at different points of the structure, is useful to qualitatively assess its morphology by detecting the presence of voids,

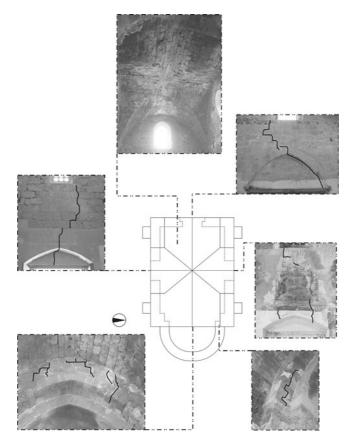


Fig. 11.3 Condition of the vault and position of internal cracks (highlighted in bold lines)

cracks, and different materials. This test also allows estimation of the elastic modulus of the materials used in the building.

At the Church, two locations were studied with this technique, that is, next to the south entrance and on the southwest buttress (Fig. 11.4a). At each location, a testing grid, composed of two columns (A and B) and four horizontal levels, was applied. On each point of the grid, a hammer was used to induce an impulse next to one sensor (transmitter), while the other sensor (receiver) was placed at a known distance at the opposite side of the masonry. The sensors were connected to a laptop using a data-acquisition system with the purpose of recording the measurements.

The measured sonic velocities are presented in Fig. 11.4b. Regarding the south wall, the sonic velocity ranged from 1170 to 2140 m/s and the average values in A and B were 1810 and 1550 m/s, respectively. Column A presented predominantly higher values which can be a sign that the masonry around the entrance was likely rebuilt with new stone units during past restorations. As to the southwest buttress, the sonic velocity ranged from 1240 to 2260 m/s, and the average values in A and B were 1360 and 1920 m/s, respectively. The outer masonry layer shows a better condition than the internal section indicating again that it might have been replaced in the past. Moreover, the internal section presents similar velocity values that point out a homogeneous distribution of voids.

Dynamic Identification

Dynamic identification is a procedure that combines vibration testing techniques and analytical methods to determine modal parameters of a structure, namely frequencies, mode shapes, and damping coefficients. One of its main goals is to understand how a structure responds dynamically

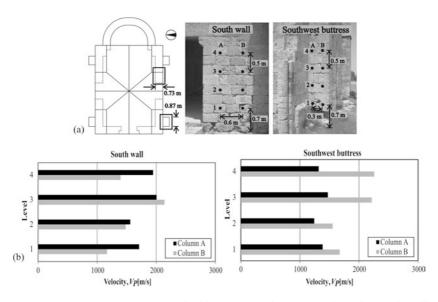


Fig. 11.4 Sonic testing. (a) Studied locations and testing grids at the south wall and southwest buttress and (b) measured sonic velocities

to vibratory events such as earthquakes.⁵ This procedure was applied to the Armenian Church and its results served to validate the computational model of the structure, which is discussed in the following section.

Four sensors were used to quantify accelerations of the building. They were positioned at roof and window levels with the aid of an elevating work platform and were connected to a laptop by means of a data-acquisition system. The edifice was naturally excited with ambient vibrations while the accelerations of the Church were recorded. Six natural frequencies of the structure, below 20 Hz, were identified with values ranging from 5.7 to 16.4 Hz. The standard deviation of this parameter was low, indicating an accurate estimation.

STABILITY ANALYSIS OF THE ARMENIAN CHURCH

A stability analysis of the Church was done with the aim of studying the vulnerability of the edifice against gravity and seismic loadings. With this purpose, a tridimensional computational model of the Armenian Church was built by means of the Finite Element Method and advanced non-linear analyses were performed. The properties of the model were adopted based on literature⁶ and on the previous study of another Famagusta building.⁷ These properties were validated accounting for the results of the dynamic identification.⁸

First, the safety capacity of the Church against gravity loads was evaluated. The building was subjected to its self-weight and, then, the gravity loads were increased until the failure of the structure. The results of this analysis indicated a notable safety level of the Church as it was able to withstand above five times the standard gravity loads. Moreover, the structural collapse occurred only due to the localized failure of the apse, while the rest of the edifice stayed in an overall good condition (Fig. 11.5a). This can be credited to the high stiffness and load-bearing capacity of the masonry walls.

In a second stage, the seismic performance of the Church was studied using two methods proposed by the Eurocode, that is, non-linear pushover and non-linear time-history analysis. Within the second method, artificial accelerograms were constructed taking into account the seismic characteristics of Famagusta, and the computational model was subjected to virtual earthquakes of various intensities. Figure 11.5b shows the damage of the Church after an event with a peak ground acceleration (PGA) of 0.35g (g: gravity acceleration), which corresponds to the code ground

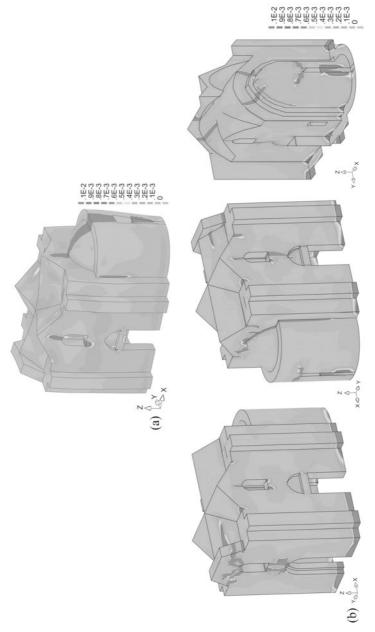


Fig. 11.5 Stability analysis. (a) Deformed shape (highly magnified) and damage of the Church at failure, due to excessive vertical loading and (b) results of the time-history analysis showing the accumulated damage of the Church after an earthquake with a PGA of 0.35g. The darker grey color indicates the crack openings due to high tensile stresses

acceleration of Famagusta increased by the ground conditions. Here, the damage (highlighted in dark gray color) is mainly located between openings, above windows, in the connection of the apse, and at the base of the structure. Note that the cracks are not enough to generate a global structural collapse; however, the localized failure of some elements, for example, the west gable, is possible.

DISCUSSION OF THE CHURCH DAMAGE, SAFETY ASSESSMENT, AND FUTURE WORKS

The stability analysis of the Armenian Church shows that the structure possesses a notable safety level in terms of both gravity and seismic loadings. Moreover, based on these results, various old and current damage features of the Church can be justified and attributed to seismic actions. In particular, by comparing Fig. 11.5b with respect to the condition of the Church in Figs. 11.2, and 11.3, good accuracy of the damage location was obtained on the west and east sides, namely the simulation of the current cracks around the west window and above the dome, as well as the damage at the top of the internal double-arch that leads to the apse. Likewise, the past failure of the dome and of the section above, and the collapse of the west gable, can also be estimated. Concerning the north and south walls, the current cracks between the openings can be justified, as well as the historical partial collapse of the north entrance. Finally, regarding the damage at the base visible in Fig. 11.5b, at present, the bottom part of the Church is highly affected by other factors such as vegetation and deteriorated stone; thus, it is difficult to ascertain which damage is consequence of past seismic actions.

Despite the damage that could be attributed to seismic events, it is worth noting the good overall present state of the Armenian Church in comparison to other Famagusta edifices. While many Famagusta monuments are in a ruined condition, with only parts of the structure still standing, the Armenian Church is today characterized by less critical but not negligible issues. This outcome can be attributed to the simplicity and regularity of the building, both in plane and in elevation. The Church is a very sturdy structure, distinguished by thick walls and a moderate height, aspects that improve its structural behavior, preventing local damage and decreasing torsional effects in the event of an earthquake.

Future conservation works on the Armenian Church should address the damage discussed above. In particular, repair of the structure should include filling cracks, treating deteriorated stone, reinforcing loose stone units, and replacing material loss. Also, considering the importance of the fresco paintings in the interior, the vault should be treated to prevent water infiltration, and windows should be properly protected to guard the interior from rain, dust, animals, and other undesirable agents. Finally, in order to revitalize the appearance of the building, a detailed study of the north portal should be carried out with the aim of reopening the entrance.

Conclusion

This chapter presents the results of the in-situ investigation and structural analysis of the Armenian Church in Famagusta. A broad characterization of the condition of the building was done, including a photographic survey, damage mapping, and the application of non-destructive tests, namely sonic testing and dynamic identification. A stability analysis of the Church allowed a study of its structural performance against gravity and seismic loading. The results indicated a considerable safety level of the edifice, which can be attributed to the regularity of the structure, its moderate height, and sturdiness. Moreover, numerous important damage features of the Church were justified and attributed to seismic actions. Finally, suggestions for conservation works were given.

Notes

- 1. CYS EN 1998-1:2004, 2010, National Annex to Eurocode 8: Design of structures for earthquake resistance—Part 1: General rules, seismic actions and rules for buildings.
- 2. Unit of Environmental Studies, Cyprus geological heritage educational tool. The seismicity of Cyprus (Cyprus: Research and Development Center, 2014), accessed April 6, 2014, http://www. cyprusgeology.org/english/index.htm.
- 3. P. B. Lourenço and L. F. Ramos, "An inspection of three of Famagusta's churches," in Medieval and Renaissance Famagusta: Studies in Architecture, Art and History, eds. M. J. K. Walsh, P. Edbury, and N. Coureas (Farnham: Ashgate Publishing Limited, 2008), 255-64.

- 4. Burgos Braga, A. "Study of the Armenian Church in Famagusta," (SAHC Master's thesis, University of Minho, Guimarães. 2014), http://www.msc-sahc.org/upload/docs/new.docs/2014_ABurgos.pdf.
- 5. Lourenço and Ramos, "An inspection of three of Famagusta's churches," in *Medieval and Renaissance Famagusta*, 255–64.
- 6. P. B. Lourenço, "Recent advances in masonry modeling: micromodelling and homogenization," in *Computational and Experimental Methods in Structures*, vol. 3, *Multiscale Modeling in Solid Mechanics*, eds. U. Galvanetto and M. H. Ferri Aliabadi, (London, Imperial College Press, 2010), 251–94.
- 7. P. B. Lourenço, A. Trujillo, N. Mendes, and L. F. Ramos, "Seismic performance of the St. George of the Latins church: Lessons learned from studying masonry units," *Engineering Structures* 40 (2012): 501–18.
- 8. A. Burgos Braga, "Study of the Armenian Church in Famagusta."
- 9. EN 1998-1, 2004, Eurocode 8: Design of structures for earthquake resistance—Part 1: General rules, seismic actions and rules for buildings.

Acknowledgments The authors acknowledge the support from Dr. Michael Walsh and the Nanyang Technological University of Singapore. Further credits are given to Solvotek Engineering, from Turkey, which performed the laser scans of the Church.

During the realization of this study, the first author was a European Commission Erasmus Mundus grant holder of the Advanced Masters in Structural Analysis of Monuments and Historical Constructions, as well as grant holder of the Mexican Secretariat of Public Education (SEP) and the Mexican government.

BIBLIOGRAPHY

- CYS EN 1998-1:2004 [2010] National Annex to Eurocode 8: Design of structures for earthquake resistance Part 1: General rules, seismic actions and rules for buildings.
- Unit of Environmental Studies [2004] Cyprus geological heritage educational tool. The seismicity of Cyprus. Research and Development Center. Information retrieved on April 06, 2014, from: http://www.cyprusgeology.org/english/index.htm
- Lourenço, P. B. and Ramos, L. F. [2008] "An inspection of three of Famagusta's churches" in Medieval and Renaissance Famagusta: Studies in Architecture, Art

- and History, eds. Walsh, M. J. K.; Edbury, P. and Coureas, N. (Ashgate Publishing Limited), pp. 255–264.
- Burgos Braga, A. [2014] Study of the Armenian Church in Famagusta. SAHC Master's thesis, University of Minho, Guimarães. Available at http://www. msc-sahc.org/upload/docs/new.docs/2014_ABurgos.pdf.
- Lourenço, P. B. and Ramos, L. F. [2008] "An inspection of three of Famagusta's churches" in Medieval and Renaissance Famagusta: Studies in Architecture, Art and History, eds. Walsh, M. J. K.; Edbury, P. and Coureas, N. (Ashgate Publishing Limited), pp. 255–264.
- Lourenço, P. B. [2010] "Recent advances in masonry modeling: micromodelling and homogenization," in Computational and Experimental Methods in Structures - Vol 3, Multiscale Modeling in Solid Mechanics, eds. Galvanetto, U. and Ferri Aliabadi, M.H., pp. 251–294.
- Lourenço, P. B.; Trujillo, A.; Mendes, N. and Ramos, L. F. [2012] "Seismic performance of the St. George of the Latins church: Lessons learned from studying masonry units," Engineering Structures 40, pp. 501–518.
- Burgos Braga, A. [2014] Study of the Armenian Church in Famagusta. SAHC Master's thesis, University of Minho, Guimarães. Available at http://www. msc-sahc.org/upload/docs/new.docs/2014_ABurgos.pdf.
- EN 1998-1 [2004]. Eurocode 8: Design of structures for earthquake resistance Part 1: General rules, seismic actions and rules for buildings.

Conserving the Fourteenth-Century Wall Paintings of the Armenian Church in Famagusta

Werner Schmid

Introduction

This chapter is a brief account of the findings of two conservation campaigns held in 2013 and 2014, thanks to a generous support from the World Monuments Fund (WMF), New York, Nanyang Technological University, Singapore, and the Municipality of Famagusta.¹ It provides information from the viewpoint of the conservator who had the privilege of spending considerable time in close contact with the heritage. The historical debate regarding the church and its paintings is treated only marginally as it is the subject of other contributions to this publication.

A condition survey that investigates aspects, such as original construction and painting techniques, phases of execution, later modifications, and decay mechanisms, is the first step in the conservation process. As prerequisite for this survey, it is important to know the current understanding of the monument and to have access to existing graphic and photographic

W. Schmid (⋈) Rome, Italy

records.² Observations made first through visual examination and then during hands-on trials and the conservation intervention itself allow to gain a thorough insight into the material evidence of the heritage and to collect new information which in turn may contribute to advance historical and art-historical research.³

Archival Documentation, Former Conservation/ Investigation Activities, and Recent History

In 1862, Edmond Duthoit made a pencil drawing of the church which, apart from major masonry damage around the south portal, appeared to still be in relatively good condition (Fig. 7.1). Also, the bell tower on top of the west facade was still in place. In 1890, the French architectural historian Camille Enlart made photographs and a drawing of the church showing that the decay of the building was accelerating (Figs. 6.3, 6.4, and 7.2). The bell tower had collapsed leaving a large hole in the roof, another two cave-ins had formed in the vaulting of the apse, and above the west pediment the masonry decay on the south side had advanced. The church had become a partial ruin not unlike the adjacent Carmelite Church. A stone enclosure on the west side seems to indicate its use as a sheep-fold. Another photograph documents the sacristy-like round structure on the north side of the apse (Fig. 6.7).

Starting in 1937, the Cypriot Department of Antiquities, directed by Theophilus Mogabgab, undertook the architectural repair of the building restoring it to its present condition. Minor excavations revealed some of the subsidiary structure around the church. Numerous photographs now kept in the Mogabgab Archive, Famagusta, document the intervention. In 1937-1938, the British conservator Monica Bardswell treated the wall paintings. The intervention included the application of a wax-based coating and of large number of fills which were, in part, reintegrated by means of full-tone retouching and color glazes. Mrs. Bardswell also took three photographs of the paintings which are important references for evaluating the decay that has occurred since.4 On April 22, 1945 the restored church was inaugurated with a religious service (Fig. 1.2). The event is documented by a photograph of the Armenian Community with their patriarch posing at the west portal. During subsequent civil unrest, the church was used as a dwelling by refugees. In 1974, almost the whole Syrian quarter became a military area and the church interior was divided by a screen wall. The walls of

the western space were white-washed up to a height of about 2.5 m covering all painted surfaces in this area.

Preliminary Considerations on Execution TECHNIQUES OF WALL PAINTINGS AND OTHER DECORATED SURFACES

Probably from the time of construction, there remains a carefully executed stucco finish of the limestone masonry. It consists of slightly projecting, about 3 cm wide, bands of light-colored lime plaster which embellish and regularize the mortar joints, leaving the stone surface visible in the remaining parts. This masonry decoration, also found in other churches, is well preserved in the unpainted higher part of the west wall where it extends onto the portal and can be seen on the north and south walls in places where the painted plaster has fallen off. It is also found on the outside facades where larger areas are preserved in the north and in the tympanum of the west portal below the few remains of painted plaster.

Later, when the church interior was gradually adorned with wall paintings these were applied directly onto this first architectural finish. Large fragments of these wall paintings (in total about 33.5 m²) are still preserved in the church and allow one to reconstruct the original extension of the painting scheme (Fig. 12.1).

The north wall was completely painted, probably including the lunette around the window, where a fragment of well-smoothed plaster with traces of color exists. As is suggested by the few remaining fragments, the apse was also fully decorated. The south and west walls were painted only in the lower part up to about the height of the doors. Residues of plaster and color suggest that architectural elements, such as the two pilasters of the triumphal arch, the small niches on the north and south wall, and the cornice marking the beginning of the semi-dome in the apse, were also decorated.

From a stylistic point of view, all paintings seem to be done in the course of the fourteenth century (see Chap. 4 in this volume). However, technical differences such as plaster composition, palette, and surface texture show that at least five different workshops have intervened.

The present condition of the paintings allows only for preliminary considerations on aspects of stratigraphy and painting. Further visual and scientific investigations to be carried out during conservation (especially

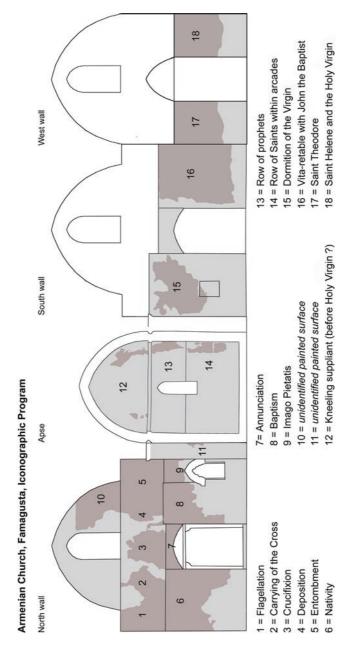


Fig. 12.1 Light gray areas correspond to originally painted wall surfaces. Dark gray areas are those still preserved. Areas left in white do not show any evidence of painting

after cleaning and white-wash removal) will add data for a more thorough evaluation of these issues. On the north wall are at least three different decoration phases. The earliest is the Passion scheme on the second register to which might belong also the Nativity and the Annunciation on the lower register. Clearly, later is the Baptism panel as its plasters superimposes onto the Annunciation above the doorway. Probably still later is the panel with the Imago Pietatis (Man of Sorrows), which superimposes on the Baptism panel and is clearly distinguished from the other paintings by a different plaster, characterized by a pure white color and diffused shrinkage cracks (Fig. 12.2). Another scheme which uses a very characteristic plaster, containing huge amounts of vegetable fibers, is the one occupying the apsidal conch.⁵ The plaster is different to that used in the paintings in the semi-dome and apparently does not exist anywhere else in the church. First cleaning trials on the panel with the Dormition of the Virgin have revealed a very elaborate painting with details, such as monochrome angels painted in the reddish mandorla (an ancient symbol of two circles coming together), which makes it different from all the others (Figs. 4.4 and 4.5).



Fig. 12.2 North wall—Detail with the Baptism and the *Imago Pietatis* panels on the lower register. Arrows indicate the direction of overlap of plasters

Samples taken from the Christ cycle on the north wall, mainly with the purpose of investigating the nature of surface deposits, also gave some interesting results with regard to painting techniques. The plaster is lime-based and characterized by a large amount of binder and few fine inerts (sand). Calcium carbonate was also identified as the binder of the paint layer indicating that the pigment was either applied directly onto the fresh plaster (fresco technique) or mixed with lime milk as an additional binder. Direct incisions, visible on the same Christ cycle, seem to indicate that the painter started his work when the plaster was still fresh. It is also very likely that the techniques of the other painting schemes are lime based. The continuation of the project will also include a thorough technical-scientific investigation into original manufacturing techniques and painting materials which will allow us to identify the *modus operandi* (standard methods) of different workshops and provide data for comparison with paintings in other churches.

SITE PROTECTION

At the start of the conservation campaign, the church was found in basically the same condition as during the first survey carried out by the author in May 2010.6 The heavy iron doors installed by the military after 1974 were unlocked, the wire net on the west window was still in the same precarious position, and the south window had lost most of the round glass plates. The latter is the only preserved window of the type used by Mogabgab on many historic monuments. These nicely designed windows were made by using a plaster of paris cast with glassed circular openings. The few remains of the window on the north wall, still in place in 2010, had collapsed, probably due to the failure of the water-sensitive material of which they were made. For at least the last three years, the church remained open, allowing for uncontrolled access at any time, day or night. It was therefore a surprise to see that most of the many incised graffiti on the paintings are not recent but appear to be made by visitors between the nineteenth and the early twentieth century, including several foreign travelers. The other severe problem was pigeons nesting in the church and covering the wall surfaces with excrement. Providing better site protection was considered a top priority of the project. In 2014, the iron doors were replaced with more efficient and aesthetically pleasing wooden ones and as a temporary solution, all windows were closed with iron-mesh frames (Fig. 12.3).

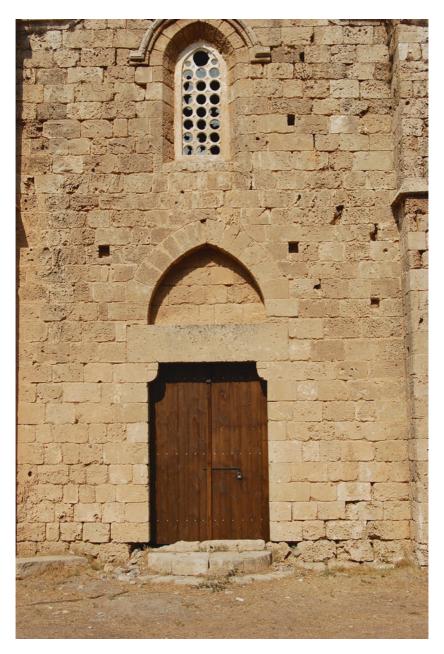


Fig. 12.3 New door, fitted in 2014

Preliminary Building Survey

The building structure of the church is complete and apparently sound. However, weeds growing on the roof indicate a prolonged lack of building maintenance. Problems related to defective water-proofing of the roof can be seen in two places which show evidence of active water-seepage: (1) the lunette on the north wall to the right of the window where a stain of green algae is visible and whitish deposits on the masonry seem to indicate salt problems and (2) in the semi-dome of the apse where both the original plaster and the ones applied during the 1930s' restoration are heavily eroded. In this area, percolating water has "cleaned" part of the larger painting fragment (i.e., washed off the blackish surface deposits) and started to erode what remains of the color. Repeated episodes of water infiltration in the past (i.e., before the restoration in the 1930s) are likely to be the reason for the almost total loss of painted surfaces in the apse. On an archival photograph taken during Monica Bardswell's intervention, it is possible to make out the remains of another full-figure saint on the lower register of the apsidal conch where today remain only a few small fragments of decayed plaster. Rising damp of dispersed rainwater seems to be the reason for the total loss of painted plasters up to a height of about 1.2 m above the floor and the advanced instability of those directly above. As part of the next working season, it was planned to carry out a building survey focusing on moisture problems. Possible need for better protection of the church interior and its precious mural decorations were set to include (1) exterior water-proofing of the vaults, (2) the construction of a drainage trench around the building, and (3) the re-pointing of open masonry joints on the exterior facades.

On the north wall, in the area under the window, the painting is disconnected due to the movement of stone blocks. The fissures, also visible from outside, were filled during the 1930s intervention, but cracks along the fills indicate that the masonry has slightly moved since. This area of potential structural instability was inspected by a civil engineer sent by the Municipality of Famagusta who did not express concern, mainly because the outside lintel is not cracked. He suggested however to monitor the situation and to carry out more thorough investigations in case the north portal should be reopened by removing the modern masonry fill.

STABILITY OF PLASTERS

Both exposed and lime-washed paintings showed severe problems of adhesion. Generally, detached plasters had a sound surface but were mechanically weak at the interface with the wall. This lack of internal cohesion was probably the main reason for their separation from the masonry. It was also observed that, especially in the lower part of the walls, the masonry joints were almost completely lost and, where still existing, the mortar was sanding off. Probably, water seeping through open masonry joints was, and still is, an important factor for the decay of internal surfaces.⁷ The advanced deterioration and partial loss of the lime-plaster fills applied around the edges of fragments in the 1930s indicated that plaster detachment is an ongoing decay process.

The situation was particularly dramatic in the lower part of the north wall where large areas of painted plaster are bulging and the lower edges are lifted off, crumbling at the slightest touch. In many places also the underlying remains of masonry decoration were detached and the mortar joints were sanding. In the upper part of the north wall, the areas lacking adhesion are more confined with the exception of a larger detachment in the fragment with the Carrying of the Cross and a severely bulged area which includes most of the Deposition scene.

The two small fragments on the left side of the semi-dome of the apse were almost completely detached. The fragments on the right side showed severe lack of adhesion, mainly concentrated along the edges. The lower more legible part of the fragment with the kneeling figure in the semi-dome of the apse was completely separated from the masonry and held in place only by the fills applied in the 1930s. In addition to detachments aggravated by the erosion of mortar joints, the fragments of fibercontaining plaster in the conch were severely lacking cohesion. Two small pieces belonging to this scheme were found in the small niche. Their original position could be established with a photograph taken in 2008.8 Plaster detachments on the south and west walls were relatively few and localized.

STABILITY OF THE PAINT LAYER

The paint layer is generally stable. However, the more thickly applied paint has a tendency to detach from the plaster surface as is shown by numerous recent losses that appear as white spots. This phenomenon is probably related to the presence of the wax coating applied in the 1930s which on one hand provided stability to the paint layer and on the other formed an impermeable film on top of a highly porous plaster and encouraged its detachment especially in the presence of moisture. Also on the basis of this observation, the white plaster surface exposed in the *Imago Pietatis* panel seems to relate to recent losses of the paint layer. The only area showing extensive flaking of the paint layer is the fragment in the upper register of the apsidal conch.

THE 1939s RESTORATION: PRE-EXISTING ENCRUSTATION, WAX COATING, AND OTHER OPERATIONS

The 1920s and 1930s in England saw the widespread use of wax and/or wax-resin preservatives on wall paintings. Known recipes from the workshop of E.W. Tristram, to which Monica Bardswell was related, indicate both composition and application techniques. Laboratory analysis carried out by the Art Diagnostic Laboratory of the University of Bologna on a series of samples taken from the paintings of the Armenian Church confirms that the coating contains beeswax (see Chap. 13). Visual examination of the treated surfaces indicates that the wax was applied in solution (normally turpentine was used as a solvent) by brush. An interesting area of observation is below the Flagellation panel. Here, like in other areas, the coating was not applied on the whole surface and splashes suggest its rather thin consistency. The wax film also covers the numerous small fills made at the same time, and it is likely that it was applied as a sort of varnish by the end of the restoration process. Mainly, not only due to the absorption of dust and soot but also because of the discoloration of the coating itself, the wax film has taken up a dark, blackish hue which strongly reduces the legibility of the paintings.

The Crucifixion panel is covered by an opaque layer which almost totally hides the remains of the painting underneath. As a result of the analysis of samples taken in this area, what appeared to be a more thickly applied and heavily altered wax coating turned out to be an encrustation consisting mainly of calcium oxalates. This inorganic compound produced by microorganisms that release oxalic acid was probably formed by consistent microbiological attacks during the long period of neglect and abandonment of the church.¹⁰ Calcium oxalate was identified as a component of the surface deposit also in samples taken from areas of the painting

that are not hidden by an opaque crust (e.g., samples taken from the Flagellation panel). In this case, it is found in admixture with fatty esters (like beeswax), gypsum, and silicates. It is unclear if, or to what extent, Bardswell cleaned the painted surfaces. When she started her work, calcium oxalate deposits were certainly already obfuscating the paintings, and the application of a wax coating probably produced a better legibility due to the so-called wet effect.

The visual examination of the painted surfaces allowed identification of other operations carried out by Bardswell:

- 1. In two places, there is evidence that a wax-resin material was injected to re-establish adhesion between plaster layers. A roundish patch of a yellowish-brown substance was found in the area of the Imago Pietatis panel. The material, strongly adhering to the fragment of masonry decoration, had become visible when the painted plaster fell off. Probably it was injected hot, just like a modern hot-melt glue. Further proof for the use of this curious method of plaster consolidation is a roundish loss in the Dormition of the Virgin, which preserves residues of the same material between the lifted edges of the painted plaster and the wall. Laboratory analysis has shown that it consists of a mixture of beeswax and a natural resin. Further investigations are necessary to establish the exact nature of the resin but it may well be that it is a copal resin as mentioned in the recipes by E.W. Tristram. Although no resin was found in the wax coating applied on the painted surfaces, it cannot be ruled out that the same wax/resin material was used for this purpose. It is beyond the limits of the already sophisticated scientific investigations carried out on the samples (elemental and molecular spectroscopic analyses) to identify small amounts of organic compounds in very thin layers and mixed with other substances such as calcium oxalates, gypsum, and silicates.
- 2. Smaller losses in the paintings were filled with a lime-based mortar. In the Flagellation panel and other more decayed areas, these fills are left with a rough surface, which often exceeds the level of the painted surface. In other areas, they are more carefully smoothed. These fills contain a huge amount of inerts, including crushed brick, and have a very hard consistency. Laboratory analysis shows that they contain a fatty substance, probably oil. Deeper holes were first filled with a lime-rich plaster. The fills were toned in

- either with color glazes or in better preserved areas with full-tone retouching.
- 3. Large neutral fills were made in the areas originally occupied by the painting schemes with the intention to suggest their former extension. The plastering is made with a rather hard, probably cement containing mortar, which was well smoothed and reaches the level of the painted surfaces. Due to its inadequate color and conformation, it is aesthetically detracting. During partial removal of these fills, it became clear that they were done in a second moment, after the edges were already filleted with a different mortar.

BLACKISH DEPOSITS

Blackish deposits, which heavily obscure the exposed paintings, are due to smoke-producing combustion in the church interior which probably occurred at different periods of time. During the period of use of the church, the burning of incense and candles is likely to have formed a first soot layer, probably not removed during the 1930s restoration of the paintings. A second period of soot deposition was probably in the early 1970s, when the church was used as a dwelling and there was a need for heating during the winter months and for non-electricity-powered lighting. This soot was absorbed by the wax coating. The absence of soot deposits on the lime wash seems to indicated that no (or only a little) combustion occurred during the military period.

LIME-WASH COVERING

The white-wash applied by the military after 1974 consists of pure lime without any additional binders such as casein or synthetic resin emulsion. As a consequence, it is mechanically weak and can easily be removed by mechanical means. In some places, it forms a thick layer while in others it is so thin that the color can be seen in transparency, especially when the coating is wetted (Fig. 12.4 Halo of St. Theodore). First, uncovering trials have shown that the paintings underneath are sound where the wax coating was still preserved when the lime was applied. In places where the wax coating was already missing, the painted surface is more delicate and has a tendency to flake off along with the lime layer. The most critical areas are those where the lime wash was applied on powdering pigment.



Fig. 12.4 Halo of St. Theodore before white-wash removal

GUANO

Pigeon droppings are found in all places where birds are nesting and especially under the three windows and the cornice in the apse. Nests, corresponding to areas with intense droppings, were found in the scaffolding hole above the Flagellation scene and in the opposite one above the white-washed panel with John the Baptist. Another two nests were on the pilasters supporting the triumphal arch. Thick deposits of guano were removed from the floor at the beginning of the work. Due to the closure of the windows in 2014, the church interior is now pigeon-free.

ACHIEVEMENTS OF THE FIRST CONSERVATION CAMPAIGN

The first conservation campaign concentrated mainly on a condition survey and emergency stabilization of painted plasters. In addition, different cleaning agents and techniques were tested and some first wax coating and lime-wash removal trials were made. Hüseyin Kuçuksu, archaeologist from the Municipality of Famagusta, provided valuable logistical support and directed the installation of new wooden doors and a temporary protection for the window openings.

EMERGENCY STABILIZATION OF PAINTED PLASTERS

All painted plasters in the church were stabilized except for (1) the fragment of plaster with traces of color to the right of the window on the north wall because it was above the height that could be reached with the available mobile scaffolding; (2) the white-washed paintings on the south and west wall, which showed only localized detachments and will be stabilized during and after the removal of the lime coat; and (3) the residues of painted plaster on the outside tympanum of the west portal because of high summer temperature that might have compromised the treatment.

The following methodology was applied (1) removal of sanding mortar joints and localized re-pointing with a lime mortar which matches the color and texture of the stone ashlars; (2) sealing of loose and lifted edges of painting fragments and of lacunae with a lime mortar which matches the color and texture of the abraded original plasters; (3) selection of suitable injection points, giving preference to places were no paint layer exists; (4) drilling of injection holes by using a hand drill with a 1.8 mm drill head and absorption of loose material from inside the gap; (5) injection of a mixture of water and alcohol in order to pre-wet the backside of the loose plaster and the surface of the masonry; (6) injection of a strongly diluted acrylic micro-emulsion in order to strengthen both the backside of the painted plaster and the surface of the stone masonry; (7) injection of a pre-manufactured hydraulic grout in order to fill the gap between the detached plaster and the masonry and to re-establish adhesion (Fig. 12.5). The grout was used at low viscosity in order not to "inflate" the detachments; and (8) application of pressure supports to reduce the gap between detached plaster and masonry and to improve adhesion. A temporary facing had to be applied in the area of the dangerously bulged plaster on the north wall in order to secure it during grouting.

CLEANING TRIALS ON EXPOSED PAINTINGS

A broad range of different cleaning agents and techniques were tested to remove the darkened wax coating applied in the 1930s. Initial trials were made on the Flagellation panel and in the not white-washed upper part of the panel with John the Baptist. Strong expectations were based on a solvent gel that was used successfully in England on wall paintings which had been waxed in about the same period by the workshop of E.W. Tristram, with which Monica Bradswell was affiliated.¹¹ The gel was tested in different areas but finally the method was abandoned because



Fig. 12.5 During emergency stabilization. Injection of a pre-manufactured hydraulic grout in order to fill the gap between the detached plaster and the masonry and to re-establish adhesion

of insufficient solubilization power and technical difficulties in clearing it completely from the uneven surface of the paintings. Good results were obtained with locally available nitrocellulose thinner which dissolves the wax coating instantly (Fig. 12.6). Cleaning tests in 2014 showed that these results can be further improved by using a less toxic mixture of ethyl alcohol, thinner, and a slightly alkaline solution of ammonium bicarbonate. Along with the wax coating also the blackish deposit is removed, which actually consists of soot absorbed by the same wax. However, the cleaned surface remains water-repellent, indicating that residues of wax remain within the surface.

The same cleaning methodology applied to Crucifixion panel on the north wall and to the Dormition of the Virgin on the south wall did not provide satisfactory results. Analysis carried out on samples taken from the Crucifixion panel indicates that the thick opaque layer, which has normally a brownish, but in some places also a yellow color, mainly consists of calcium oxalates, a chemically almost irreversible mineral compound. The deposit has various thicknesses, ranging from a true crust which completely hides the painted surface to a thin veil as it probably exists on the Dormition panel, where the cleaning of wax coating provokes the



Fig. 12.6 Detail Flagellation with trial for wax removal

whitening of the surface. The removal of calcium oxalate deposits from a delicate painted surface is a difficult task. Further trials, including more specific chemical agents and laser cleaning, were planned for following seasons.

REMOVAL OF LIME WASH

Trials for the removal of white-wash were made in three different areas: (1) the right upper corner of the panel with John the Baptist (south wall), which allowed us to evaluate the continuity with the exposed upper part of the painting; (2) the panel with St. Theodore (west wall) which is documented by an archival photograph by Monica Bardswell taken after her treatment; and (3) the Nativity panel (north wall) which was also documented photographically before it was covered and presented an already exposed stripe in the upper part. Different to the others, the lime layer on this panel is very thin.

The removal of lime wash has proved to be a very delicate and timeconsuming operation due to the instability of the paint layer in broad areas and the presence of numerous incised graffiti. The discontinuous condition of the painting underneath includes probably a majority of not only stable areas protected by wax coating but also areas with powdering pigment where the wax coating has decayed or was not applied. In general, the only feasible method is careful mechanical removal with a small blade scalpel, controlled by the use of magnifying headwear. Practical experience has shown that: (1) the lime layer is weak and can be easily consumed by mechanical means; (2) further softening of the lime coat is achieved through the application of water-containing poultices which, however, in delicate areas seem to also decrease the mechanical resistance of the painted surface¹²; (3) that the paint layer is generally stronger where the wax coating applied by Bardswell is preserved; (4) thin layers of lime can be removed directly by means of cotton swabs soaked in water where the painted surface is still protected by wax coating; (5) particularly delicate areas must be circumscribed during the uncovering process and left behind for separate treatment¹³; (6) upon removal of the lime wash, the painted surface must be cleaned by chemical means (wax removal)¹⁴ (Fig. 12.7); and (7) especially in the lower parts, the paint layer is lacking cohesion and must be consolidated with a low concentration of acrylic micro-emulsion before chemical cleaning.

As a pilot intervention, it was decided to carry out the complete uncovering of the panel with St. Theodore on the west wall of which a Conway photograph exists (Fig. 16.3). The painting was almost completely covered, but due to its location in a lower, moisture-exposed, part of the wall, it was evident that it had suffered decay between Bardswell's restoration and the later moment when it was lime washed. This is also indicated by the discontinuity of the wax coating and the fact that much of the soot deposit is in direct contact with the paint layer. The chemical removal of wax and soot would further improve the legibility of the image.

ACHIEVEMENTS OF THE SECOND CONSERVATION CAMPAIGN

The main focus of the second conservation campaign was the complete uncovering of the panel with the Holy Virgin and St. Helene (Fig. 12.7) on the west wall and of the Vita-retable with John the Baptist (Fig. 4.7) on the south wall. The uncovering process was particularly exciting because neither of the two paintings were documented by archival photographs, and the only references were descriptions provided by C. Enlart (1899), G. Jeffery (1918), M. Bardswell (1937), and D. Kouymjian (1974) (Fig. 12.8).15



Fig. 12.7 Detail Imago Pietatis. Cleaning trial

On the John the Baptist, special care was taken with the uncovering of the *vita* panels and of the two vertical bands with a coat of arms. Unfortunately, the panels preserve only residues of green, black, and a reddish color which do not allow us to make out any significant iconographic detail. Monica Bardswell reported that all these scenes "are perished." It is likely that they were the last items to be painted when the plaster was already dry and the painter had to use a less durable secco technique.

The upper part of the panel with the Holy Virgin and St. Helene is astonishingly well preserved, emphasizing the high quality of this painting characterized by a rich palette and fine decorative details. Its full potential will be revealed only after chemical removal of the wax/soot layer, as it was possible to demonstrate through some first cleaning trials.

In order to demonstrate the full potential of conservation, the lower right corner of the panel with St. Theodore was chosen for a trial of complete treatment, including the final aesthetic presentation of the painting.¹⁶

The trial area was cleaned by using the solvent mixture developed for the removal of the wax/soot deposit. The numerous fills applied by Monica Bardswell were removed and replaced with new lime mortar. The fills from the 1930s restoration were rather hard, coarsely done, and



Fig. 12.8 West wall—Panel with the Holy Virgin and St. Helene. Intermediate state during removal of lime wash

overlapping in many places the surface of the painting. The best way to remove them was by using a micro-drill with a round diamond-coated grinding head. The new fills, composed of lime putty and crushed limestone, were kept with a rough texture and slightly below the painted surface. New fills and losses in the paint layer, both showing the white surface of the original plaster, were toned back with a neutral water-color glaze, imitating the brownish-gray color of the original patina found in many abraded areas. Micro losses in the paint layer (diameter: up to about 1 mm) were inpainted in order to create more consistent micro fragments and to reduce the visual "noise" generated by them. This pictorial reintegration methodology follows the minimal-intervention concept. It aims at reducing the visual disturbance of losses and at presenting in the best possible way what is left of the original painting without reconstructing pictorially any of the missing parts.

Conclusion

In little more than two months, it was possible to complete the condition survey of the church and to solve the most urgent issues such as the site protection and stabilization of painted plasters. Moreover, about 80 percent of the lime-washed panels were uncovered and a cleaning methodology for the chemical removal of the altered wax coating and soot deposits developed. The cleaning trials made in 2014 showed that it is possible to retrieve much of the artistic and chromatic values of the paintings even where they are almost totally obscured. Results are striking and were highly appreciated by scholars and the general public who visited the conservation worksite. Eventually, a minimal-interventionbased final presentation will reveal their full potential by eliminating visual interference and enhancing painting fragments. All data is now available to carry out an informed and respectful conservation of the church and its precious decorated surfaces. The next conservation campaign must give priority to architectural conservation and address moisture problems that continue to be a factor of decay for the wall paintings. The church interior can then gradually be restored, taking care not only of the painted fragments but also of the exposed stone masonry, which is part of the architectural context and plays an important role in terms of visual perception.

Notes

- 1. The two conservation campaigns covered a total of about ten weeks (July 17-20, 2013 and June 4-July 14, 2014).
- 2. The complete archival documentation including historical records, art-historical research, and archival photographs was provided by Professor Michael J.K. Walsh.
- 3. The condition survey was greatly facilitated by the availability of scaled ortho-photographs of both the interior of the church and the outside facades, produced by Banu and Bora Sayin, SolvoTec, Istanbul.
- 4. The following observations indicate that photographs were taken upon completion of the treatment: (1) the paintings have a very good legibility, (2) the numerous holes on the Flagellation panel and the lacunae on the St. Theodore are already filled and toned in. The photographs are kept by the Conway Archive, Courtauld Institute, London.
- 5. Morphologically, the fibers appear to be sections of a thread (diameter: ca. 0.8 mm); scientific investigations carried out on a sample taken in 2013 have shown that it is a natural, cellulosic fiber, either cotton, linen, or hemp; the "Hermenaia" by Dyonisus of Fourna (ca. 1670–after 1744) refers about the making of lime plaster with straw as a rough plaster and with hemp as a fine plaster.
- 6. W. Schmid, "WMF MISSION REPORT Famagusta, North Cyprus, 13-20 April 2010, Condition assessment of medieval mural paintings in six churches." Mission carried out on behalf of the WMF, New York.
- 7. Careful conservation of the outer facades, including the re-pointing of decayed masonry joints, will be of crucial importance for preventing further damage to the paintings.
- 8. The fragments were reattached to the wall in their original position.
- 9. Tobit Curteis, "An Investigation of the Use of Solvent Gels for the Removal of Wax-Rased Coatings From Wall Paintings," (PhD diss., Courtauld Institute of Art/Getty Conservation Institute, Conservation of Wall Paintings Department, 1991).
- 10. The crucifixion panel is situated in the area where, as it is documented by C. Enlart's drawing from 1896, the vault had broken in and remained like that until the restoration in the 1930s.

- 11. Curteis, "An Investigation," 1991.
- 12. Especially problematic areas were those painted with yellow color due to the lack of cohesion of the pigment. The particular weakness of the yellow areas is a common feature of all paintings in the church. The phenomenon might be caused by a not well-washed pigment which due to an excessive clay content did not combine well with the lime matrix (i.e., the original binding system of these fresco-lime paintings). Also, thickly painted details or areas with multilayered paint are very fragile due to their weak adhesion to the base color. In these areas, the wax coating, due to low penetration and formation of a hardened outer surface, seems to have aggravated the phenomenon.
- 13. In cases where the lime coat is less thick, it was possible to prestrengthen the paint layer through the lime wash by using a silicabased consolidant. Laser cleaning will be tested in areas where no other method is feasible.
- 14. The painted surfaces below the lime wash are randomly covered with altered wax coating and soot deposits of variable intensity.
- 15. C. Enlart, L'art gothique et la Renaissance en Chypre, 2 vols., trans. D. Hunt (Paris, 1899; London, 1987), 286–8; G. Jeffery, A Description of the Historic Monuments of Cyprus: Studies in the Archaeology and Architecture of the Island (1918; repr. London: Publisher 1983); Dickran Kouymjian, "The Holy Mother of God Armenian Church in Famagusta," in Medieval Famagusta: Studies in Art, Architecture and History, eds., M. Walsh, N. Coureas, and P. Edbury (Farnham: Ashgate Press, 2012).
- 16. The lime wash covering the panel had been removed already during the 2013 campaign.

BIBLIOGRAPHY

- Curteis, Tobit, "An Investigation of the Use of Solvent Gels for the Removal of Wax-Rased Coatings from Wall Paintings," PhD dissertation for a post-graduate diploma, Courtauld Institute of Art/Getty Conservation Institute, Conservation of Wall Paintings Department, 1991.
- Enlart, Camille. L'art gothique et la Renaissance en Chypre. 2 vols. Paris: 1899.
 English trans. by D. Hunt, Gothic Art and the Renaissance in Cyprus. London, 1987.
- Jeffery, A. Description of the Historic Monuments of Cyprus: Studies in the Archaeology and Architecture of the Island (Nicosia: 1918), repr. London, 1983.

Kouymjian, Dickran. "The Holy Mother of God Armenian Church in Famagusta," in Medieval Famagusta: Studies in Art, Architecture and History, edited by M. Walsh, N. Coureas, P. Edbury. Farnham: Ashgate Press, 2012.

Schmid, W, "WMF - MISSION REPORT Famagusta, North Cyprus, Condition assessment of medieval mural paintings in six churches." Mission report carried out on behalf of the World Monuments Fund, New York. April 13-20, 2010.

Scientific Examinations of the Armenian Church Wall Paintings in Famagusta

Rocco Mazzeo, Giorgia Sciutto, Irene Bonacini, and Silvia Prati

INTRODUCTION

Analytical investigations were carried out on samples collected from the Armenian Church in Famagusta. In particular, the research was aimed at providing the wall painting conservator with information related to the painting materials' constitution with particular reference to the identification of binding media, pigments, and protective coatings applied on the occasion of previous restoration interventions. To this aim, the analytical strategy was based on both elemental and molecular spectroscopic analyses applied directly on the paint cross-sections in order to characterize the paint components and their spatial location within the paint stratigraphies.¹

In particular, laboratory analyses of paint micro samples were carried out by means of Fourier transform infrared (FTIR) and Raman molecular spectroscopies, while elemental investigation has been performed through scanning electron microscopy (SEM) with energy dispersive X-ray

R. Mazzeo (☒) • G. Sciutto • I. Bonacini • S. Prati Microchemistry and Microscopy Art Diagnostic Laboratory, University of Bologna, Department of Chemistry "G.Ciamician", Bologna, Italy

FAC8

spectroscopy (EDS). New sample preparation methods aimed at gaining stratigraphic spatially resolved molecular characterization of both the inorganic (pigments, inerts) and organic (binders, organic coatings) materials have been developed.²

In addition, stratigraphic chemical mapping of both original and restoration materials has been obtained, increasing the understanding on the painting technique (secco or fresco), the state of conservation, and the presence and structure of paint layers hidden by the lime and cement covering layers (scientific examination).

EXPERIMENTAL

List of Samples

All the investigated samples are reported in Table 13.1, with a brief description of the sampling area.

Sample Preparation

Samples were previously embedded in Potassium Bromide (KBr). Briefly, the micro fragment was placed in a macro-micro pellet die where a previous KBr pellet-bed (2 tons for 1 minute) was prepared, covered with additional KBr and then pressed (3 tons for 2 minutes). Afterward, the pellet was reduced in the external part and submitted to the polyester resinembedding procedure. The dry polishing approach was carried out using silica abrasive cards (Micro-Surface Finishing Products Inc., Wilton, IA) with grit from 1000 to 12,000 to obtain a high-quality surface in terms of planarity and roughness. A polishing sample holder has been employed in order to ensure a high level of surface planarity.

Sample	Color	Sampling area description
FAC1	Red-purple	North wall, Upper register, Crucifixion.
FAC2	Red-purple	North wall, Upper register, Crucifixion.
FAC3	Black	North wall, Upper register, Crucifixion.
FAC4	Red-purple	North wall, Upper register, Flagellation.
FAC5		North wall, Upper register, Flagellation
FAC7	Brown	North wall. Pietas

Apse

Table 13.1 Description of the investigated sample and the sampling area

Optical Microscopy

A dark field observation was performed with an Olympus (Olympus Optical, Tokyo, Japan) BX51 microscope equipped with an Olympus DP70 digital scanner camera. A 100-Watt halogen projection lamp and an Ushio Electric (USHIO Inc., Tokyo, Japan) USH102D ultraviolet (UV) lamp were employed for the acquisition of visible and fluorescent images, respectively.

Micro ATR-FTIR Analysis

Micro FTIR (µFTIR) mapping and single point measurements were performed both in attenuated total reflection (ATR) modes, using a Thermo Nicolet iN™10MX raster scanning microscope, fitted with a mercury cadmium telluride (MCT) detector cooled by liquid nitrogen and a conical germanium crystal. Spectra were recorded in the range 4000–675 cm⁻¹. Data collection and post-run processing were carried out using the OMNIC Picta™ software (Thermo).

Macro ATR-FTIR Analysis

A Thermo Nicolet Nexus 5700 spectrometer coupled with a diamond ATR Smart Orbit™ accessory (from Thermo Optec) in the mid-infrared (MidIR) region was used. The diamond crystal has a refractive index of 2.4, with a single bouncing refractive infrared beam at 45° angle of incidence. Analyses were performed on samples powder with a spectral resolution of 4 cm⁻¹.

SEM-EDS analyses

EVO 50 EP (ZEISS) SEM with an OXFORD INCA350 EDS (working in low vacuum) was employed to acquire magnified topographic images of each sample and to study its local elemental composition. The applied voltage employed for all measurements was 20 kilo electronvolt (KeV). Data were processed using the INCA software.

Micro Raman analyses

Raman spectra were collected with a Bruker Santerra Raman microscope equipped with a charge-coupled device (CCD) detector and using an excitation source emitting at 785 nanometers (nm) with a power of about 10 milli Watt (mW) and an acquisition time of 10 second(s) focusing on the paint layer with an Olympus 20X or 50X microscope objective.

RESULTS

Sample FAC1

The sample was collected from the Crucifixion at the upper register of the north wall.

The painting layer in this area was covered by a particularly thick opaque deposit. The restorer hypothesized a wax-based or natural resin protective coating possibly applied on the paint surface on the occasion of past restoration interventions. Stereo microscope observations showed the presence of a yellow-brown layer covering a purple paint layer.

Optical microscope observations (Table 13.2) of the cross-section highlighted the presence of a red-purple paint layer (layer 1) over which a brown irregular layer (layer 2) was observed.

µATR-FTIR mapping analyses were performed on a portion of the FAC1 stratigraphy containing the three different layers, spanning an area of $150 \times 140 \mu m$. A step of 10 μm in the x-y direction and an objective aperture of 60 × 60 µm were used, relative to an investigation area of about $15 \times 15 \mu m$ for each point of analysis. A total of 240 spectra were acquired. Chemical maps of paint components were built by codification—by means of a color scale—of the intensity of diagnostic absorption bands, chosen as a marker for each specific compound. The distribution of

Table 13.2	Stratigraphic des	cription of sample FAC1
Layer	Thickness	Color

Layer		Thickness µm	Color	Comments	
				VIS	UV
0	Preparatory ground		White	Irregular brown crystals within a white matrix	White-blue fluorescence
1	Paint layer	30	Red- purple	Dark red and purple particles presenting irregular shapes	Light fluorescence
2	Superficial layer	20	Brown	Thick and homogeneous layer	Brownish fluorescence

such a compound within the paint stratigraphies is, therefore, obtained.³ In particular, it was possible to identify the presence of calcium carbonate only in layers 0 and 1. In fact, FTIR microscopy analysis allowed to localize in layer 2 the presence of calcium oxalate (thanks to the diagnostic band at 1313 cm⁻¹) and silicates (band at 1032 cm⁻¹).

Fewer amounts of calcium oxalate were identified also in layers 0 and 1 and, as expected, the presence of silicates was also detected in both the ground and paint layers.

The identification of a binding medium in paint layer 1 was not possible even though the presence of a weak band at 1732 cm⁻¹, which can be associated to fatty ester material (C=O stretching band), was recorded. The chemical map produced by integrating the above-mentioned band allowed the localization of this component in the uppermost layer 2. Finally, traces of gypsum were detected within both layers 1 and 2.

SEM-EDS analyses indicated the presence of heavier chemical elements in correspondence with the black/red particles within the redpurple paint layer. Elemental mapping showed the presence of calcium distributed overall on the entire paint stratigraphy. Indeed, as confirmed by µATR-FTIR analyses, its presence has to be related to the presence of calcium carbonate and calcium oxalates in the ground and paint layers and to calcium oxalates and gypsum in the uppermost one. Silicon was mainly detected in the uppermost layer 2, even if some traces were also detected in the paint and ground layers.

The red-purple pigments were characterized by the presence of iron, which can be associated with iron-based pigments. To better clarify the composition of such a reddish pigment, further molecular analyses were needed. Thus, micro Raman spectroscopy was conducted on sample FAC2 that showed an identical stratigraphic morphology (outcomes are reported below).

Sample FAC2

The sample was collected from the Crucifixion at the upper register of the north wall in a cleaned area. Information collected from the restorer revealed that the area of sampling was partially cleaned with organic solvent in order to remove a protective layer. However, after the cleaning, there was still a yellow layer remaining above the paint layer, which was supposed to be white. Stereo microscopy observations clearly highlighted the presence of an external homogeneous yellow layer. Similarly to sample

Layer		Thickness	Color	Comments	
		μm		VIS	UV
0	Preparatory ground		White	Irregular brown crystals within a white matrix	White-blue fluorescence
1	Paint layer	30	Red- purple	Dark red and purple particles presenting irregular shapes	Light fluorescence
2	Superficial layer	20	Yellow- brown	Thick and homogeneous layer	Brownish fluorescence

Table 13.3 Stratigraphic description of sample FAC2

FAC1, optical microscope observations of the cross-section highlighted the presence of a red-purple paint layer (layer 1) over which a yellowish-brown irregular layer was observed (Table 13.3).

As mentioned above, this sample was submitted to further molecular analyses by means of micro Raman spectroscopy in order to better characterize the composition of the red-purple pigments. Raman spectra collected from the ground layer highlighted the presence of calcium carbonate. On the other hand, the Raman spectrum is characterized by the presence of peaks located at 217, 284, 402, 493, 603, 658, and 1017 cm⁻¹. Comparing this spectrum with known spectra of *caput mortuum*, red ochre, pure Fe₂O₃, and mineral hematite, it can be noticed that the peak at 658 cm⁻¹ is absent in pure Fe₂O₃ but is present in both *caput mortuum* and mineral hematite. ⁴ *Caput mortuum* is a highly prized form of red hematite (Fe₂O₃) which provides a deep purple color to red ochres in Byzantine hagiography. ⁵ Red-purple colored pigments were clearly visible in cross-sections of samples FAC1, FAC2, and FAC3. However, it was not possible to identify the red pigment unambiguously. Thus, red ochres and *caput mortuum* were probably used in a mixture.

Sample FAC3

The sample was collected from the Crucifixion at the upper register of the north wall from the same red-purple mantle of sample FAC1, but in an area without the waxy protective layer, even if the area was not cleaned. The restorer suggested the possible presence of an acrylic emulsion recently applied for consolidation purposes.

Layer		Thickness	Color	Comments		
		μm		VIS	UV	
0	Ground		White- gray	Irregular brown, gray, and black crystals within	White-blue fluorescence	
1	Pigment layer	30	Red- purple	a white matrix Red and black crystals in a purple matrix	Light fluorescence	
2	Surface layer	25	Brown	Thin and discontinuous layer	Brownish fluorescence	

 Table 13.4
 Stratigraphic description of sample FAC3

Stereo microscope observations of the selected sample clearly showed the presence of a grayish layer, hiding a purple paint layer. Similarly to sample FAC1 and FAC2, optical microscope observations of the cross-section highlight the presence of a red-purple paint layer (layer 1) over which a yellowish-brown irregular layer (layer 2) is observed (average thickness $25 \mu m$) (Table 13.4). The main differences can be related with the presence within the paint layer of black pigment particles, which should be responsible for the darker red tonality of the painted surface from which the sample has been collected.

μATR-FTIR mapping analyses were performed on the three layers above described. An area of $130 \times 170 \, \mu m$ was investigated using a step of 10 μ m in the x-y direction and an objective aperture of 60 \times 60 μ m relative to an investigation area of about 15×15 µm for each point of analysis. A total of 253 spectra were acquired. FTIR microscopic investigation allowed to identify calcium carbonate as the principal constituent of the ground thanks to the detection of the marker band at 875 cm⁻¹ and to localize its presence also in the paint layer 1 (Fig. 13.1a). The latter, in particular, was characterized by the contemporary presence of calcium carbonate, calcium oxalates (Fig. 13.1b), and silicates (Fig. 13.1c).

Interestingly, in the uppermost layer 2, it was possible to clearly identify an intense band associated with the carbonyl stretching vibration at 1730 cm⁻¹. The examination of the spectrum extracted from this area of the chemical map (Fig. 13.1f) allowed the association of this band to the presence of an acrylic component. In fact, in this case, the peculiar shape and the relative intensities of C-H stretching bands (2983, 2950, and 2919 cm⁻¹) seem to exclude the presence of a wax, which is usually characterized by strong C-H absorption bands at 2917 and 2850 cm⁻¹, typical of

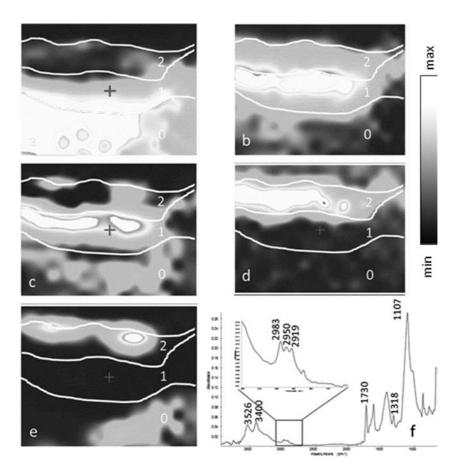


Fig. 13.1 ATR mapping of sample FAC3: FTIR false-color plots representing: (a) calcium carbonate (peak area 875 cm⁻¹), (b) oxalates (peak area 1318 cm⁻¹), (c) silicates (peak area 1025 cm⁻¹), (d) gypsum (peak area 3400 cm⁻¹), (e) ester (peak area 1730 cm⁻¹), and (f) spectrum extracted from layer 2 of the chemical map (e)

long-chain hydrocarbons. Gypsum (Fig. 13.1d) and calcium oxalates were also detected in the same external layer. Both elemental (SEM-EDS) and molecular (µATR-FTIR, micro Raman) analyses give rise to results, which are the same as the one showed by samples FAC1 and FAC2. Table 13.5 summarizes the overall results achieved.

Layer	μATR-FTIR mapping analysis, micro Raman	SEM-EDS	Identified components
2	Gypsum, esters, calcium oxalates	S, Ca, Si	gypsum, acrylic components, calcium oxalates, traces of silicates
1	Calcium oxalate, silicate, calcium carbonate	Ca, Fe, Si	calcium carbonate, calcium oxalate, red ochre, <i>caput mortuum</i> , silicates
0	Calcium carbonate, silicates, esters	Ca, Si	calcium carbonate, silicates

Table 13.5 Sample FAC3, summary of results

Sample FAC4

The sample was collected from the Flagellation at the upper register of the north wall.

Stereo microscope observations highlighted the presence of an external dark reddish layer while optical microscope investigation revealed the presence of a whitish preparatory ground (layer 0) over which a light brown paint layer was observed (layer 1). As in samples FAC1, FAC2, and FAC3, a thin red-purple paint layer was present (layer 2). The more external layer 3 had a gray-brown color and when observed in UV light, it showed a bright fluorescence. Table 13.6 summarizes the optical microscope observations.

μATR-FTIR mapping analyses of sample FAC4 were performed within an area of 150×175 µm. A step of 10 µm in the x-y direction and an objective aperture of 60×60 µm were used, relative to an investigation area of about 15 μ m \times 15 μ m for each point of analysis. A total of 256 spectra were acquired. Mapping investigations allowed the characterization and spatial location of calcium carbonate present within both the ground (layer 0) and the paint layers 1 and 2. The presence of silicates has also been detected in both the paint layers 1 and 2. The external layer 3 showed the clear presence of oxalates (peak marker at 1319 cm⁻¹) and ester compounds (C=O stretching band of lipids at 1734 cm⁻¹). The examination of the spectrum extracted from the false-color chemical map suggested the presence of a fatty ester material, such as beeswax, thanks to the peculiar aliphatic C-H absorption bands at 2915, 2850 cm⁻¹, and the characteristic 730 and 720 cm⁻¹ double bands (ascribable to the C-H rocking). In addition, gypsum was identified through its specific absorption band at 1113 cm⁻¹ (SO₄²⁻ stretching) and traces of silicates. SEM-EDS analyses highlighted the presence of calcium in all the investigated

Laye	er	Thickness µm	Color	Comments	
				VIS	UV
0	Ground		White	Irregular crystals embedded into a white matrix	White-blue
1	Pigment layer	20	Yellow	Yellow particles with irregular shape	Pale fluorescence
2	Pigment layer	33	Red- purple	Red particles with irregular shape in a purple matrix	Pale fluorescence
3	Superficial layer	30	Gray- brown	Translucent gray- brown color	Bright white fluorescence

Table 13.6 Sample FAC4, summary of the optical microscope observations

layers and can be associated to the different components already identified by means of $\mu ATR\text{-}FTIR$ and micro Raman analyses in particular to calcium carbonate in the ground and paint layers and to calcium oxalate in the uppermost one. Silicon was observed in the paint layers, in the external layer as well as the main component of the big green pigment particle, probably green earth, observed in stratigraphy. The presence of iron was detected in correspondence to the dark red particles scattered all over the purple-red and yellow layers.

Sample FAC5

Two samples were collected from a plaster (probably applied during a previous restoration intervention) located in the Flagellation at the upper register of the north wall. The two samples presented a different structure and morphology. The inner plaster (sample FAC5A) showed a white and homogeneous matrix with brown crystals, while the uppermost plaster (sample FAC5B) is characterized by a yellowish surface layer with black and brown particles embedded into a white ground matrix. Macro ATR-FTIR analyses performed on both samples showed the presence of mostly calcium carbonate in sample FAC5A thanks to the characteristic absorption bands of carbonate at 1400 cm $^{-1}$ (CO $_3^{2-}$ stretching) and 875 cm $^{-1}$ (CO $_3^{2-}$ out-of-plane bending).

On the other hand, sample FAC5B was characterized by the contemporary presence of calcium carbonate, silicates, and a fatty substance (spectral

bands at 1730 cm⁻¹ corresponding to C=O stretching vibration of lipids, bands at 2917 and 2847 cm⁻¹ corresponding to C-H aliphatic stretching, and the band at 1163 cm⁻¹ corresponding to C-O stretching). Such features can suggest the presence within the plaster of a siccative oil.

Sample FAC7

The sample was collected from the Pietas on the north wall. The restorer suggests the sample as being constituted of an organic substance probably injected in the wall to reestablish the plaster adhesion to it. µATR-FTIR single point analysis allowed the identification of a natural wax (most probably beeswax) thanks to its peculiar absorption bands related to long-chain hydrocarbons (C-H stretching absorption bands at 2917 and 2849 cm⁻¹) and esters (C=O absorption at 1735 cm⁻¹). Moreover, the characteristic double bands at 730 and 720 cm⁻¹ (ascribable to the C-H rocking) were a further confirmation of the waxy nature of the analyzed sample. Moreover, the contemporary presence in the recorded spectrum of a strong absorption band at 1699 cm⁻¹ (COOH carboxylic band) suggests the use of a natural resin added to the organic adhesive.

Sample FAC8

The sample was collected from the apse. The plaster of this area is characterized by the presence of a large amount of fibers. The sample was submitted to macro ATR analysis in an attempt chemically characterize the fiber. The obtained IR spectrum revealed the presence of a polysaccharide component (thanks to the presence of a strong absorption band at 1026 cm⁻¹, ascribable to the C-O stretching, together with a broad peak at 1618 cm⁻¹ related to the bending vibration of O-H groups). This result suggested the use of cotton fibers embedded into the plaster. Moreover, it has been possible to identify the contemporary presence of calcium carbonate and calcium oxalates embedded or absorbed onto the analyzed fiber.

Conclusions

Conclusions are presented in the form of answers to the questions raised by the restorer responsible for the restoration intervention.

Sample FAC1:

- 1. The render was mainly constituted of calcium carbonate with a small amount of silicate inert material. Vegetable fibers were not present in the sample provided by the restorer.
- 2. The binder of the paint layer consisted of calcium carbonate without any trace of an oily binder. This may lead to the use of both a fresco (to be confirmed with visual observations by raking light in order to identify the possible presence of "giornate") and a lime-wash painting technique.
- 3. Red ochres and the possible contemporary presence of caput mortuum pigments were identified in the red-purple paint layer.
- 4. A clear presence of a wax-based protective coating cannot be confirmed. On the other hand, an external yellowish layer mainly constituted of calcium oxalate (which is also present in smaller amounts in the underneath layers) was clearly identified.
- 5. The presence of a wax-based protective coating penetrated into the paint layer can be excluded even though trace amounts of fatty ester materials, more probably associated with the presence of a siccative oil, have been identified and located in the external brown layer.

Sample FAC2:

Scientific results showed a situation similar to the one observed in sample FAC1.

- 1. As with sample FAC1, the external yellow layer was constituted of calcium oxalate which is also present in small amounts in the underneath paint layer.
- 2. It seems that the original paint layer is a purple paint layer similar to that of sample FAC1. The only white layer is that of the preparatory ground.
- 3. Red ochres and the possible contemporary presence of caput mortuum pigments constitute the red-purple paint layer.
- 4. The presence of a wax-based surface protective coating can be excluded.

Sample FAC3:

- 1. The plaster was constituted of calcium carbonate with small amounts of silicates and trace amounts of an acrylic component. No fibers were present in the sample provided by the restorer.
- 2. Calcium carbonate represents the binder of the red-purple paint layer without any trace of an oily binder.
- 3. Red ochres and the possible contemporary presence of caput mortuum pigments constitute the red-purple paint layer.
- 4. No waxy protective coating has been detected. On the other hand, the suggested presence of an acrylic emulsion recently applied for consolidation purposes has been confirmed.

Sample FAC4:

- 1. Calcium carbonate represents the binder identified in both yellow and red paint layers, without any trace on an oily binder.
- 2. The yellow paint layer contains yellow ochres, whereas the redpurple layer contains red ochres and the possible contemporary presence of caput mortuum pigments. An external layer mainly composed of wax (probably beeswax) and calcium oxalates has been identified. The presence of silicates can be ascribed to deposition materials whereas gypsum can result from both a deposition material or sulphatation processes.
- 3. The waxy external layer seems to be confined just to the external paint surface.

Sample FAC5:

1. The inner plaster (5a) is constituted of almost pure calcium carbonate whereas the external plaster (5b) contains, besides calcium carbonate, silicates and a siccative oil.

Sample FAC7:

1. The organic substance was constituted of wax (probably beeswax) with the addition of a natural resin.

Sample FAC8:

1. The fiber has a polysaccharide backbone which can be ascribed to a cotton fiber. Moreover, it has been possible to identify the contemporary presence of calcium carbonate and calcium oxalates embedded or absorbed into the analyzed fiber.

Notes

- 1. D. Pinna, M. Galeotti, and R. Mazzeo, Scientific examination for the investigation of paintings. A handbook for conservator-restorers (Firenze, Centro Di, 2009).
- 2. S. Prati, G. Sciutto, E. Catelli, A. Ashashina, and R. Mazzeo, "Development of innovative embedding procedures for the analyses of paint cross sections in ATR FITR microscopy," Anal Bioanal Chem 405 (2013): 895.
- 3. R. Mazzeo, E. Joseph, S. Prati, and A. Millemaggi, "Attenuated Total Reflection-Fourier transform infrared microspectroscopic mapping for the characterisation of paint cross-sections," Analytica Chimica Acta 599 (2007): 107.
- 4. D. Bikiaris, Sister Daniilia, S. Sotiropoulou, O. Katsimbiri, E. Pavlidou, A. P. Moutsatsou, Y. Chryssoulakis, "Ochredifferentiation through micro-Raman and micro-FTIR spectroscopies: application on wall paintings at Meteora and Mount Athos, Greece," Spectrochimica Acta Part A 56 (1999): 3.
- 5. L. F. C. de Oliveira, H. G. M. Edwards, R. L. Frost, J. T. Kloprogge, and P. S. Middleton, "Caput mortuum: spectroscopic and structural studies of an ancient pigment," Analyst 127 (2002): 536.

BIBLIOGRAPHY

- Bikiaris, D., Sister Daniilia, S. Sotiropoulou, O. Katsimbiri, E. Pavlidou, A.P. Moutsatsou, and Y. Chryssoulakis. "Ochre-differentiation through micro-Raman and micro-FTIR spectroscopies: application on wall paintings at Meteora and Mount Athos, Greece." Spectrochimica Acta Part A 56 (1999).
- de Oliveira, L. F. C., H. G. M. Edwards, R. L. Frost, J. T. Kloprogge, and P. S. Middleton. "Caput mortuum: spectroscopic and structural studies of an ancient pigment." Analyst 127 (2002).

- Mazzeo, R., E. Joseph, S. Prati, and A. Millemaggi. "Attenuated Total Reflection-Fourier transform infrared microspectroscopic mapping for the characterisation of paint cross-sections." Analytica Chimica Acta 599 (2007).
- Pinna, D., M. Galeotti, and R. Mazzeo. "Scientific examination for the investigation of paintings." A handbook for conservator-restorers, Firenze, Centro Di, 2009.
- Prati, S., G. Sciutto, E. Catelli, A. Ashashina, and R. Mazzeo. "Development of innovative embedding procedures for the analyses of paint cross sections in ATR FITR microscopy." Anal Bioanal Chem 405 (2013).

Teaching the Heritage of "Others" and Making It "Ours": The Power of Cultural Heritage Education

Gül İnanç and Julie H. Liew

Imagine a group of primary school pupils standing in front of a newly restored fourteenth-century fresco in a historical church with their curious eyes wide open, listening to their teacher as she asks "[w]hich story do you think this fresco is telling us? The story of Saint George or Saint Theodore?" Students, mostly Muslim, and who have been told the stories of St. George and St. Theodore previously, compete with each other to be the first to answer "Aziz Theodore öğretmenim, Aziz Theodore öğretmenim." This was what Julie H. Liew, an undergraduate arts student from Singapore, imagined while she was designing a book on cultural heritage education for students who live thousands of miles away from her, in perhaps one of the most historic cities of the Mediterranean, and yet in an unrecognized country. The student activity book, entitled "Hidden Stories in the Walls," is the first volume of the *Cultural Heritage Education Series: The Rich History of My Beautiful City, Famagusta* which was rolled out in selected schools in April 2016. This chapter examines the

G. İnanç (⋈) • J.H. Liew School of Art, Design and Media, Nanyang Technological University, Singapore

book, the ideas, and the hopes of the project in terms of *global cultural* heritage education.

Official historiography in Cyprus, based as it is on essentialist interpretations of history, steadfastly refuses to take into account the wider notion that "history constitutes the totality of human actions," and insists instead on providing the moral justification of deeply ingrained nationalist policies. Even though these essentialist interpretations face each other head on, and the slogan "I will not forget" is bandied in both Greekand Turkish Cypriot communities, very little objective analysis is sought for "remembering" events other than those that conform to the existing nationalist ideologies. Though divisive nationalisms characterized political rhetoric in both communities, Turkish Cypriot authorities took an important step in 2004 toward the rewriting of history education to accommodate the idea that at some point in the future, a reunification might yet be possible with the Greek Cypriot community.² One of the most important achievements was to introduce the concept of multiperspectivity, perhaps for the first time, in a shift away from a solely bicommunal, and therefore myopic perspective. Take, for example, the following classroom activity which appeared in the new textbooks: "Imagine a Maronite, a Greek Cypriot, and a Turkish Cypriot soldier from the same village, as POWs during the Second World War (they would have served in a British regiment). Write an imaginary conversation and make them talk about their homesickness." The main aim in this exercise was to make the students acknowledge the fact that Greek- and Turkish Cypriots are not the only two ethnic communities for whom the island is home. The students were encouraged to think about the status of Maronites, Armenians, Arabs, and more recently Filipinos in the south, and Kurds in the north of the island. They were therefore led to consider whether one needed to be a Greek- or a Turkish Cypriot in order to love this country. In the bigger, global picture, the concept of citizenship, community, love of one's country—irrespective of ethnic origin—was emphasized. As the author of the textbook, I strongly believed that official history writing in Cyprus needed more "others," and children needed to be taught that the past is not a simple phenomenon, rather a complex, intricate web of histories, memories of different cultures.

Hannah Arendt wrote half a century ago in her brilliant article on Karl Jaspers, "Citizen of the World": "it is true, for the first time in history all peoples on earth have a common present: no event of any importance in the history of one country can remain a marginal accident in the history

of any other. Every country has become the almost immediate neighbor of every other country, and every man feels the shock of events which take place at the other side of the globe. But this common factual present is not based on a common past and does not in the least guarantee a common future."4 Arendt was referring to the ironic global unity that the dangerous Cold War politics had made possible. Nearly a century later, have we reached the stage of creating a common past? Will cultural heritage education be used for this new political cause? Are we finally at the stage of trying to undo what nationalist education systems had or have been doing since the nineteenth century—but this time by creating new positive "others" and by imagining new global communities?

As we move further into the twenty-first century, we can foresee the trends that will dominate education worldwide, at least for the near future. Among these trends cultural heritage education is one that challenges important received ideas of the past, offering a new type of identitybuilding process for global youth. So often in the twentieth century citizens and scholars have watched in despair as heritage has been misappropriated to serve nationalist aims and nation-building projects, leading to a hefty corpus of literature on the subject. But today, in a globalizing world, and with the understanding that heritage is universal and does not belong to a modern nation state per se, there must surely be room for reinterpretation. This is especially true for multicultural societies. In addition to this there is also the ever-growing appreciation that cultural heritage does not always have to be tangible. When we talk of culture, surely we refer to more than bricks and mortar, paint and canvas, and the contents of neatly organized museums. "Culture" incorporates society in toto—the politics, religion, songs, literature, economics, tradition, costume, drama, cuisine, and the like—and so it is this which needs protecting. The Council of Europe began to address this in 2005 when it made the following attempt at definition within the Faro Framework Convention on the Value of Cultural Heritage for Society:

Cultural heritage is a group of resources inherited from the past which people identify, independently of ownership, as a reflection and expression of their constantly evolving values, beliefs, knowledge, and traditions.⁵

Later, the United Nations Educational Scientific and Cultural Organization (UNESCO) emphasized the importance of "living expressions and the traditions that countless groups and communities worldwide have

inherited from their ancestors and transmit to their descendants, in most cases orally (UNESCO 2012)." It is this, therefore, which needs to be taught in schools to children who live in rapidly evolving, and multicultural societies.6

This leads us to the question of cultural heritage education in an unrecognized state. It also makes us consider cultural heritage education which is designed for ethnically homogenous societies rather than multicultural ones. Can cultural heritage education play an important role in global citizenship identity formation? Is there a need for this? In which ways would an unrecognized state prefer to protect, remember, cherish, and perpetuate its past within this understanding? Rather than answering these complex questions, which requires thorough interdisciplinary research on the topic, we have asked ourselves a simpler question: How can we spark an interest in art and architecture conservation, based on an understanding and appreciation of wider notions of global cultural heritage, yet on a local scale, for the students who live in Famagusta? The answer came with a student activity book, designed and created as part of an educational project in Singapore and partially financed by the Municipality of Famagusta in north Cyprus.

Nanyang Technological University (NTU) Undergraduate Research Experience on Campus (URECA) is a university-wide program to cultivate research culture among undergraduates. The opportunity to undertake URECA is by invitation and extended only to the most academically able second- and third-year undergraduates. Julie H. Liew was one of those students who was invited to apply to URECA, and she chose to work on the topic of conservation of Medieval and Renaissance Architecture in the walled city of Famagusta. Her URECA project was created as part of the heritage conservation efforts in Famagusta and constituted the third stage, which is creating educational outreach materials (Fig. 14.1).

STUDENT ACTIVITY BOOK (JULIE H. LIEW)

I was first introduced to the conservation efforts of Dr. Michael Walsh and his team through his art history lectures at the School of Art, Design, and Media (ADM), where he discussed the protection of Medieval and Renaissance Architecture in the walled city of Famagusta, beginning with St. Peter and St. Paul's Church, and followed by the Armenian Church. My URECA-ADM project constituted the third stage of these efforts, whereby the information gathered from earlier stages was used to design

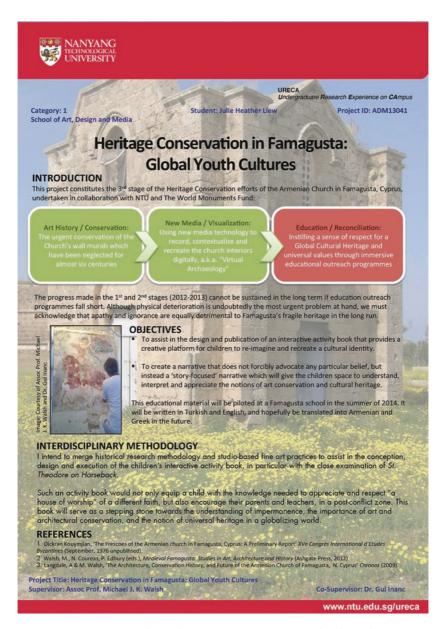


Fig. 14.1 URECA Undergraduate project, Nanyang Technological University, Heritage Conservation in Famagusta: Global Youth Cultures by Julie Heather Liew

an interactive activity book, providing the children of Famagusta with a creative platform to reimagine their cultural identity. I began working on this with Dr. Gül İnanç, also an ADM faculty member.

Growing up in 1990s Singapore, I am all too familiar with the futility of what I term "nostalgia following neglect," but the inside jokethat Singapore's enduring legacy is the ever-present construction site—is wearing thin, especially in the face of increasing demolitions and redevelopment despite the public's growing interest in heritage conservation. Additionally, I have always believed children are inherently kind and curious, and these qualities are crucial in developing an understanding and appreciation of cultural heritage, whether of their own or of others. The children of Famagusta may represent the gateway to peace and stability in the region, and education is the key to empowering them to make lasting changes in their society.

There have been extraordinary achievements to date, given the fragile nature of the socio-political terrain in northern Cyprus, but there is still much to be done for awareness to take root. Although the conflict itself is over, many people remain resentful and divided. The need to address the destiny of the city's monuments nevertheless falls on the shoulders of both Greek Cypriots and Turkish Cypriots, and the educational outreach component is seen as a crucial part of bringing the two communities together.

In his essay "Regionalism, Nationalism and Other Pyrrhic Victories in the Time of Globalization,"9 Michael Walsh outlines how the region's socio-political gridlock has proven detrimental to heritage management and conservation efforts. To make matters worse, gaps in the education system, especially pertaining to art history and cultural heritage, mean that the youth are raised in a social climate that fails to engage and stimulate in this area:

Fundamental respect could be instilled through education even as early as the elementary schools of the region... If so, such a curriculum component and associated text book needs to be written and would be a fascinating, and meaningful, project for an education expert to undertake.

My URECA-ADM research project aimed to be one such stepping stone in this direction and the focus of the first volume was on St. Peter and St. Paul's Church and the Armenian Church. These were just two of many important pieces of Famagusta's cultural heritage, and like many other buildings in the walled city, were in desperate need of preservation.

The population of Famagusta is largely comprised of Turkish and Turkish Cypriots, but their tangible culture comes from a host of other influences, including Greek, Lusignan, Venetian, Ottoman, and British. Now, in a modern unrecognized state, much of the population are indifferent, or feel powerless to protect, these Medieval and Renaissance treasures. There is a need to learn the significance and the vulnerability of this inheritance before embracing their role in relation to their city's unique heritage. The next generation of conservationists, historians, and inhabitants of Famagusta need to be introduced to their cultural history in an engaging and meaningful way. If they understand and enjoy the process, they will better grasp the importance of the task that lies ahead.

After discussions with Dr. Gül İnanç, we agreed that the activity book should focus on the key murals found on the interior walls of each of the churches, and use them as a segue into more activities related to art, architecture, and history. With my background in fine art studio practice and art history, it was also crucial to adopt an interdisciplinary approach by combining art history research methodology and studio-based fine art practices in the conception, design, and execution of the activity book.

The activity book thus begins with an introduction to the mural of St. Theodore on Horseback in the Armenian Church and ends with the Forty Martyrs of Sebaste from St. Peter and St. Paul's Church. When designing it, I did not wish to depend solely on factual evidence and scientific reports, but needed to turn to relevant references for the actual children's activity book's style and format. For that, I explored an entire genre of children's books designed to educate young children on the various styles of artists, art movements, art history, and conservation. A great example was educational material published by or in association with the van Gogh Museum in Amsterdam, to introduce young children to the biography and artistic style of Vincent van Gogh and his seminal contributions to the world of art. Growing up, I was especially fond of this particular activity book¹⁰ which included abridged descriptions of his paintings and accompanying art activities. The activities were tailored to the themes present in his paintings and invited the children to take on a more investigative role; if one has seen the painting in question, one would understand and enjoy the activity even more.

The layout of the activity book was carefully considered with the need to capture a child-like sense of wonder and mystery. For the illustrative style of the activity book, I relied on key characteristics of several art movements that have made their marks on Famagusta's art and culture in one way or another, including Byzantine painting styles, Gothic architecture, and photographs of the actual churches in Famagusta. For the Maze activity in particular, I was inspired by an image of the topography of Palestine from the Byzantine period, 11 and studied its unique sense of perspective, form, and color. The two-dimensional quality of the painting and figures really lent itself well to the design of a maze, and the final activity for the children to solve has proven enjoyable and educational in equal measure.

Overall, the illustrative style of the book needed to encourage children to develop an interest in the medium as well as in the subject of art and art history. In a nutshell, the book's activities can be categorized as having one or more of the following elements:

1. Reference: Featuring art/architecture

2. Re-creation: Hands-on art and craft activity

3. Reflection: Art History journals

An activity with Reference is characterized by its inclusion of the actual art and/or architecture featured. The child may be introduced to an image of the work in the book, and/or view it first-hand during an excursion to the monument itself. This allows the child to familiarize him/herself with the city's art and history, providing an eve-opening experience.

The *Re-creation* portion of an activity invites the children to creatively express themselves through art and craft. To avoid a stagnation of the learning process, the physical participation of drawing or creating something is crucial in keeping things light and fun for the children. The key purpose of the educational material remains to instill a sense of awareness and responsibility and the chance for Reflection on each activity. After completing the activities the children are invited to write about their own experiences, and reflect on the underlying message.

Although the activity focuses on both churches the activity book begins with an introduction to the St. Theodore on Horseback mural in the Armenian Church. The actual mural was found to have a layer of whitewash over it which had to be carefully removed in order for the painting to be restored. To mirror this experience we decided to design a scratch-card image of the St. Theodore mural for the children to "uncover," allowing them to step into the shoes of the art conservationists and physically uncover the beautiful painting themselves. This activity should also invite students to consider the effects of graffiti and other destructive behavior born of apathy and impulse, and hopefully will be a valuable lesson that turns them away from vandalizing historical monuments in the future (Fig. 14.2).

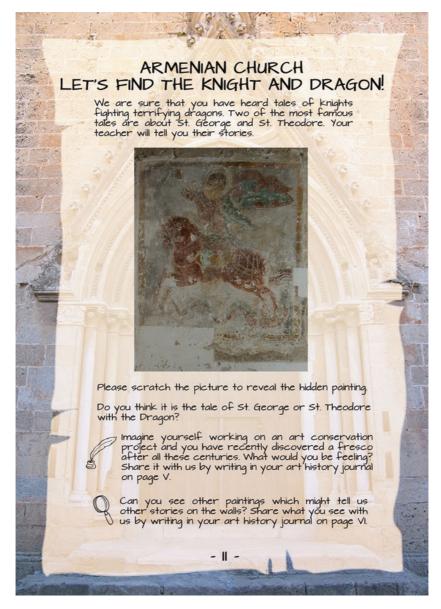


Fig. 14.2 Scratch card exercise, St. Theodore, from "Hidden Stories in the Walls" Cultural Heritage Education Series: The Rich History of My Beautiful City, Famagusta

One other issue we were faced with was the city's turbulent history of conflict, and the veneration of military saints like St. George¹² or St. Theodore, holding weapons and standing over the bodies of men or beasts they have killed. We made the decision to eliminate the use of weapons and halos in the portrayal of horseback riders for this activity, in order to remove the layer of religious-motivated violence. Such themes can, and should, not be fully removed from history altogether, but can perhaps be reintroduced at a later stage in the child's life when he or she is better equipped to understand the nature of war and conquest of past civilizations.

In my research I also discovered that horseback riders as the subject matter of paintings was not limited to Christian iconography, and so decided that this would be a great opportunity to introduce the children to the horseback riders of other cultures.¹³ It was a wonderful opportunity to tie the lesson back to the "horse rider" fresco in the Armenian Church, and we drew inspiration from examples found in Asian, Medieval Eastern Christian, and Islamic art influences. From studies and sketches made of these images came the next activity, "Match the Rider."

"Match the Rider" encourages children to study the separate images of horses and riders, and match them according to their artistic styles. This not only provides students with the chance to study differences in artistic movements and styles but also increases their awareness and acceptance of other cultures outside their own (Fig. 14.3).

The book's activities are designed to be carried out in tandem with excursions to the actual historical sites. Doing so is crucial to the children's understanding of the importance of art and architectural conservation and hopefully to wider notions of global heritage. One activity that embodies this is the sundial exercise where students are asked to locate a medieval sundial on an outer wall of the church and then recreate one using their activity books and pencils, recording the time of day as people once did in medieval times (Figs. 5.1 and 14.4). This simple activity is a great ice-breaker to introduce the child to the world of medieval architecture and encourages them to pay attention to the smallest, simplest details.

The most crucial part of the entire experience is for the children to reflect on the lessons behind each activity and understand how the church came to be in such a state. Dr. Gül İnanç has eloquently written, in both English and Turkish versions of the activity book, a page explaining the terms *Culture*, *Heritage* and *Cultural Heritage*. Along with several blank "journal" pages scattered throughout the book, this page is crucial is tying

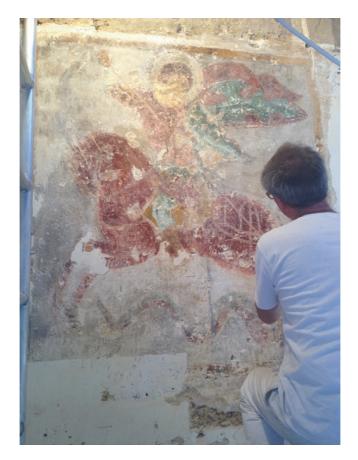


Fig. 14.3 The stabilized image of St. Theodore used in the "Match the Rider" exercise

every experience together for the children and giving them the space to pen their thoughts and observations. Something as simple as "it makes me sad to see that nobody took care of the building and paintings" marks the beginning of them acknowledging the neglect and problems surrounding cultural heritage, and warms them up to the notion of a global heritage where they, as inhabitants of Famagusta, share in the rich history of the city despite their backgrounds and current status.

Overall, the activity book prototype was a successful endeavor and its activities captured the balance between education and recreation we were

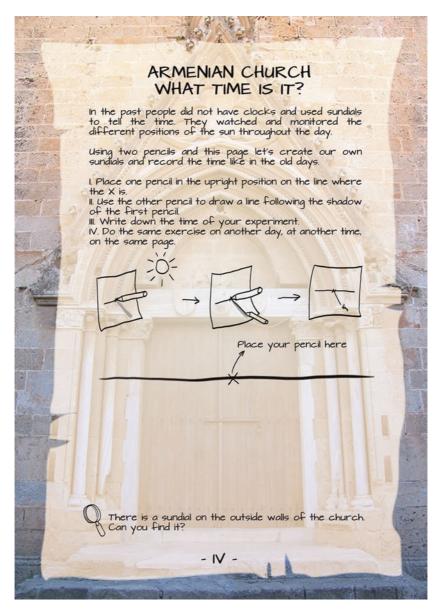


Fig. 14.4 Sundial Exercise from "Hidden Stories in the Walls" Cultural Heritage Education Series: The Rich History of My Beautiful City, Famagusta

striving for. We were pleased with the resulting illustrative style and activities which ultimately complemented underlying values and lessons we had hoped to impart. Depending on the reception and response derived from the April 2016 trials, the activity book and future educational material may be published in more than just English and Turkish, perhaps translated to Greek and Armenian, to reach communities of other cultures not only in Famagusta but also around the world.

Notes

- 1. "Saint Theodor, Ms./Sir," referring to their teacher.
- 2. Gül İnanç and Niyazi Kızılyürek, "Imagining the Future and Rewriting the Past: Turkish Cypriots' 'New History,'" Turkish Policy Quarterly (Ankara: 2009): 2.
- 3. Kıbrıs Tarihi, 3. Kitap, Ortaokullar için Tarih Kitabı [The History of Cyprus, Book 3, History Book for Middle Schools/Grade 5-8] KKTC Milli Eğitim ve Kültür Bakanlığı (Lefkoşa: 2004), 6.
- 4. Hannah Arendt, Men in Dark Times (New York: Harvest Book, Harcourt Brace & World Inc., 1968), 81–94.
- 5. S. Smith, P.M. Messenger and H.A. Soderland, eds., Heritage Values in Contemporary Society (California: Left Coast Press, 2011), 33.
- 6. Gül İnanç, "Between Remembering and Forgetting," Controversial History Education in Asian Contexts, ed. Mark Baildon, Loh Kah Seng, Ivy Lim, Gül İnanç, and Junaidah Jaffar (UK: Routledge, 2014), 65–66.
- 7. George S. Ballard and Stephen W. Kemp, "An Assessment of the Structural Fabric of the Church of Saints Peter and Paul: A Case Study in Historical Record and Structural Appraisal," in Medieval and Renaissance Famagusta: Studies in Architecture, Art and History, eds. Michael J. K. Walsh, Peter W. Edbury and Nicholas S. H. Coureas (Farnham: Ashgate, 2012), 265–74.
- 8. Dickran Kouymjian, "The Holy Mother of God Armenian Church in Famagusta," in Medieval and Renaissance Famagusta: Studies in Architecture, Art and History, eds. Michael J. K. Walsh, Peter W. Edbury and Nicholas S. H. Coureas (Farnham: Ashgate, 2012), 133-46.
- 9. Michael J. K. Walsh, "Regionalism, Nationalism and Other Pyrrhic Victories in the Time of Globalization," in Knowledge Differences

- and Identity in the Time of Globalization: Institutional Discourse and Practices, ed. James Kusch (Cambridge: Scholars Press, 2011), 13-14.
- 10. Ceciel de Bie and Martijn Leenen, Vincent Van Gogh: See and Do Children's Book (The Netherlands: Van Gogh Museum, 1998).
- 11. Yuri Piatnitsky, "Divine Light of the Faith and Power," in Pilgrim Treasures (Byzantium to Jerusalem) From the Hermitage Amsterdam, ÎU. A. Piatnitskii, et al., (The Netherlands: Lund Humphries in association with Hermitage Amsterdam, 2005), 60-61.
- 12. Eva Haustein-Bartsch, ICONS, ed. Norbert Wolf (Cologne: TASCHEN GmbH, 2008) 52-53.
- 13. Sarah Kuehn, The Dragon in Medieval East Christian and Islamic Art (The Netherlands: Brill, 2011).

BIBLIOGRAPHY

- Arendt, Hannah. Men in Dark Times. New York: Harvest Book, Harcourt Brace & World Inc., 1968.
- Ballard, George S. and Stephen W. Kemp. "An Assessment of the Structural Fabric of the Church of Saints Peter and Paul: A Case Study in Historical Record and Structural Appraisal." In Medieval and Renaissance Famagusta: Studies in Architecture, Art and History, edited by Michael J. K. Walsh, Peter W. Edbury and Nicholas S. H. Coureas. Farnham: Ashgate, 2012.
- Haustein-Bartsch, Eva. ICONS, edited by Norbert Wolf. Cologne: TASCHEN GmbH, 2008.
- İnanç, Gül, "Between Remembering and Forgetting." In Controversial History Education in Asian Contexts, edited by Mark Baildon, Loh Kah Seng, Ivy Lim, Gul Inanc, and Junaidah Jaffar. United Kingdom: Routledge, 2014.
- İnanç, Gül and Niyazi Kızılyürek. "Imagining the Future and Rewriting the Past: Turkish Cypriots' 'New History.'" Turkish Policy Quarterly. Ankara: 2009.
- Kıbrıs Tarihi, 3. Kitap, Ortaokullar için Tarih Kitabı [The History of Cyprus, Book 3, History Book for Middle Schools/Grade 5-8]. Lefkosa: KKTC Milli Eğitim ve Kültür Bakanlığı, 2004.
- Kouymjian, Dickran. "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 W. Edbury and Nicholas S. H. Coureas. Farnham: Ashgate, 2012.
- Kuehn, Sara. The Dragon in Medieval East Christian and Islamic Art. The Netherlands: Brill, 2011.

- Piatnitsky, Yuri. "Divine Light of the Faith and Power." In Pilgrim Treasures (Byzantium to Jerusalem) From the Hermitage Amsterdam, edited by Yuri Piatnitsky, et al. United Kingdom and The Netherlands: Lund Humphries in association with Hermitage Amsterdam, 2005.
- Smith, S., P. M. Messenger, and H. A. Soderland, eds. Heritage Values in Contemporary Society. California: Left Coast Press, 2011.
- Walsh, Michael J. K. "What Lies Beneath: A Contemporary Survey of the Surviving Frescoes of the Churches in the Syrian Quarter of Famagusta." In Medieval and Renaissance Famagusta: Studies in Architecture, Art and History, edited by Michael J. K. Walsh, Peter W. Edbury and Nicholas S. H. Coureas. Farnham: Ashgate, 2012.

Emerging Computer Technologies for Cultural Heritage: The Armenian Church, Famagusta

Dan Frodsham and Duncan Rowland

In order to have some idea as to how computer systems might benefit a research area, it is important to have a clear understanding of what computer systems are and what they can do. Without wanting to patronize the reader—who is surely familiar with the current day-to-day use of computers—computer systems can, in essence, do only two things. It is perhaps worth, then, illustrating these as our first principles. First, computer systems act like a notebook, one that is being rapidly passed around. The notebook is read from, and written to, by multiple individuals, often simultaneously. Unlike a standard notebook, though, it

D. Frodsham (⋈) Independent Filmmaker and Researcher, UK

D. Rowland School of Computer Science, Lincoln University, Lincoln, UK

can contain all manner of media (audio, video, text, and data). However, this is something of an illusion as ultimately these are all represented by digital bits (1s and 0s), much as the words in a notebook are all written in pencil. This data (the video, notes, etc.) can all be freely changed, added to, edited, and deleted simply by changing 0s to 1s and vice versa, just as one might erase and rewrite a note in a book. Second, computer systems process the information stored within them according to a set of rules. The result of this is that the information is changed, often in a way that depends upon the information itself. These two elements combine with various input/output mechanisms (that enable the data to be experienced by humans and for it to be collected and submitted) to provide the rich feature-set of modern-day computing. However, it should be noted that this is all they do. They do not create meaning themselves since they still require a human to perceive the data in order to make sense of it. In the same way a book does not understand the story on its pages, neither does any computer understand the data it contains. In addition, unless a computer is provided with a well-defined set of rules to process the data, it will be a case of "information in" but "garbage out." A set of rules (or program) that does something as complex as discerning the content of a fresco (beyond the most trivial aspects) is far beyond that which is currently definable. Humans, though, are perhaps uniquely able to perform exactly this sort of task (and maybe this is unsurprising given the creative origin of the fresco). The human visual system far surpasses the complexity of even the most advanced artificial intelligences (AI), and with the appropriate knowledge is the only mechanism available that could readily interpret images with any conceptual depth. In the long term, and with enough training (e.g., through the copying of the processes by which humans make their decisions [AI programming], and through the automated processing of correlations detected in previous datasets [AI learning]) it may be possible to replicate or surpass human ability in any number of tasks. However, whether computers will ever "make sense" of data in the same way that humans do is a philosophical point, but for the moment (and likely the foreseeable future), the human individual is still best placed to process information to extract high-level concepts.

With this in mind, three pilot projects were conducted that sought to examine the current capabilities of computer systems, how these might be augmented with the abilities of the human, and be best employed in the domain of conservation research.

The research consisted of a pilot study into the use of mobile pattern recognition technologies to support the work of conservationists, art historians, and educationalists in their efforts to highlight and conserve the frescos of Famagusta, north Cyprus, and in similar contexts. The study was undertaken in 2013 in association with the Lincoln School of Computing at the University of Lincoln and was accomplished with the aid of three undergraduate students' bursaries, funded by Nanyang Technological University, Singapore, as a component part of its research project entitled "Heritage Conservation, Visualization and Education: Protecting Regional Culture of Universal Significance in a Globalizing World."

BACKGROUND

While pattern recognition technologies are, in the popular imagination, linked to the identification of faces using Closed Circuit Television (CCTV) cameras or at airport passport control, there has been a rapid proliferation in their use. The latest development is their availability as a downloadable application for use in mobile devices such as the iPhone. One version of "the next big thing" is that mobile image recognition will form the basis for a new way to browse the internet, augmenting the things we see around us with information from the vast database of the web. Google, Bing, and NEC have recently brought or are soon to bring their versions of such "apps" to the market.

However, only very recently has thought been given to how these new tools might be applied to the field of cultural heritage. The Visual Support to Interactive Tourism in Tuscany project (VISITO Tuscany) uses image recognition and k-Nearest Neighbors (k-NN) classification algorithms to provide tourists to the Tuscany region with a tool to identify and augment their experience of architectural landmarks through use of a mobile application. Pattern recognition software compares photographs taken by users with a database of images to identify landmarks and provide further information and images via their smart phones. Similarly, the CLAROS project has been experimenting with the use of pattern recognition as a field tool for archeologists and art historians to aid in the identification of classical vases.² Users are able to submit photographs of vases taken with an iPhone, which are then cross-referenced with a database of vases from the Beazley Collection in Oxford.³ This works by identifying similarities in the shape of vases to produce a shortlist of possible matches, thus automating or at least shortcutting the laborious manual process of cross-referencing images against catalogs of thousands of vases. Both VISITO Tuscany and CLAROS have been successful in cross-matching images on the basis of relatively simple shapes. However, the application of image recognition to art history presents a higher degree of complexity since shapes and patterns may be less distinct and defined. A team at Heidelberg University has been using pattern recognition to identify categories of objects such as swords and crowns in a collection of medieval manuscripts.⁴ This has even been successful at identifying manuscripts produced by specific workshops. However, the Heidelberg team worked from a dataset of images that is marked by an "exceptional homogeneity concerning its date of origin, its provenance and its technical execution" and one that is limited to the output from just four workshops. The promise is that the process of cross-referencing and identifying artworks can become less laborious and even more precise, but, thus far, the use of image recognition in this context has had a limited scope.

Image recognition in the field of cultural heritage has, then, focused on two key areas:

- 1. How it can be used to augment the experience of cultural heritage, particularly through the use of smart mobile devices "in the wild" (e.g., VISITO Tuscany).
- 2. How it might be used in conjunction with online databases of images and produce a tool for cross-comparison and identification (e.g., COMPVIS) and especially in the field, through the use of mobile devices (e.g., CLAROS).

Aims of the Research

Taking the Armenian church of Famagusta as a test case, the aim of the research was to explore how pattern recognition technologies might be applied to art history, conservation, and education in relation to wall paintings. It thus builds on existing research into the use of image recognition for art historical purposes. Specifically, it considers how these technologies might assist within an ongoing program of conservation, rather than solely as part of efforts to produce tools that access archives in novel ways, either for academic or tourism purposes. Using the frescos that were undergoing conservation in Famagusta provided a number of other challenges. The untreated frescos were poorly preserved and often only faintly visible and so this presented significant practical difficulties in the application of image recognition technologies. In addition, sparse documentation of the frescos and their provenance made it especially difficult to readily identify databases of images to which cross-reference might be made.

The research was envisaged as a scoping exercise to explore a number of possible avenues for further research and development. The aim of the project was not, therefore, to develop a software application but to test a specific set of research questions that might suggest future directions for research and for the possible development of an application or set of tools. The key research questions were as follows:

- 1. How might mobile pattern recognition technologies be used to locate frescos in situ by matching images seen through the camera of a mobile device with images in a database of frescos? In this guise, the mobile device becomes a locating tool and virtual guide, leading the user to a particular fresco that has been pre-selected. Since the frescos are very faint and worn, this would (technologically) be no small feat, and with immediate practical value, but beyond assisting in the very real task of locating these frescos, the method has distinct advantages in educational terms, particularly when targeted at young people, in that its novelty and sheer "technicity" may invigorate the process of seeking out the wall paintings by providing additional goals and rewards. These possible benefits aside, the development of a "recognizing" and locating tool is a prerequisite for other functions, as addressed in research questions 2 and 3 below.
- 2. How might wall paintings be visually augmented with additional information tailored for both researchers in the field and for educational purposes? This information might consist of images of the fresco "before" its conservation or images of similar frescoes for cross-comparison, as well as information in the form of text concerning the painting's provenance, the story it depicts, and so on. For educational purposes, this might also entail the giving of instructions and the setting up of tasks, or even introducing game elements, to engage the user in the discovery of information about the fresco or the building in which it is contained. A particularly intriguing test would be to find a means to superimpose on the present-day view of frescos, as seen by a user in the Armenian church in Famagusta, photographs taken in the 1930s, before portions of the walls were obliterated by whitewash.

3. How might mobile pattern recognition supply a tool whereby researchers in the field can cross-reference an image taken of a fresco with a database of other wall paintings? Most dating and interpretation of frescos is based on this kind of cross-comparison but while there are a number of online databases of medieval wall paintings, this is currently a manual process that is time-consuming and laborious. To apply pattern recognition technologies to this task might accelerate the process, particularly as this facility might be made available, with the click of a smartphone camera, to researchers in the field. This research question also required consideration of the ways in which such a research tool might either be integrated with existing databases, or, particularly in the case of Famagusta, lead to the development of its own database. This, beyond purely technical considerations, involved discussion of what links and opportunities for collaboration might be forged with others working in this field of art history.

The above three points formed the main research questions, each of them linked into other strands of the project and drawing on the expertise of other participants. Clearly, it was necessary that this strand of the project work especially closely with those focused on educational components, but there were also opportunities to collaborate with others on the team. In particular, there was the prospect that image recognition might provide tools adapted to the needs of the conservator; for example, by using its capacity to superimpose images so as to provide a ready "before" and "after" comparison of ongoing conservation work or to assist in the location of hidden frescos by superimposing images taken of the church walls in the 1930s, before they were whitewashed. The research also aimed to remain open to wider debates about issues of ownership and the building of trust in relation to the Famagusta project by thinking about ways in which digital tools might contribute to the building of a wider community of concern for cultural heritage.

INVESTIGATION

As a cost-effective means to explore a wide range of technologies and approaches, three student bursaries were awarded to undergraduate students recruited from the School of Computer Science at the University of Lincoln. During summer 2013, each of the students investigated one of the three main research questions, as detailed below.

Investigation Area 1: How might mobile pattern recognition technologies be used to locate frescos in situ by matching images seen through the camera of a mobile device with images in a database of frescos?

An android mobile phone application was developed using OpenCV, an open source computer vision library, to match the live feed from the phone's camera to a database of pre-encoded images. Existing solutions are already very well optimized at performing this task (e.g., Aurasma) and so the aim of this investigation was to attempt further algorithmic optimization in the context of the conservation project in Famagusta. The chief area of difficulty (and, indeed, this impacted the professional Aurasma software too) was the comparative paucity of visual features in both the pre-encoded sample images and the live video. Combining this with the dimly lit environment of church interiors meant that it did not prove possible to approach the effectiveness of the professional solution and little, if any, meaningful optimization of the algorithms for this specific context could be achieved. This is, however, still a key finding and any future projects will need to consider carefully how to extract enough visual information from church walls to enable a successful match. Indeed, it could be that there is simply not enough variation for this to be a reliable solution and other mechanisms will need to be sought. For example, fiducial markers (as used in the second investigation) are a possibility, although these rely upon occluding the natural view of the wall. Alternatively, if the location of the mobile device is known precisely (e.g., by requiring the user to stand in a specific place), then the orientation of the phone or tablet, rather than the camera's view, could be used to calculate which part of the wall is being referred to. This second technique is commonly used in astronomy apps though it does not allow the precise visual matching that augmented reality requires.

Investigation Area 2: How might the wall paintings be visually augmented with additional information that is tailored for both researchers in the field and for educational purposes?

Tablet and mobile phone augmented reality systems work by processing the live video feed from a device's camera to include computer graphic elements in real-time. A set of known visual features are first detected in the live feed and these are used to align a piece of media content (e.g., a photo, video, or 3D model) which is subsequently added to the display overlaying part of the live feed. This gives the illusion that the media asset is "locked" to the scene, because as the camera moves about, so does the virtual asset in correspondence with the real items in the scene. The

Aurasma authoring tool and display platform provides a simple way to create these overlays (or "auras") and was used to create a prototype augmented reality experience for a Famagusta church wall. In order for this to be developed in Lincoln, a visual mock-up of the wall was created using a high-resolution poster produced from a scaled photograph. This was attached to a wall in Lincoln allowing the experience of using the app in Famagusta to be approximated (see Fig. 15.1).

As with the first investigation, the lack of visual features discernible by the software made creating a set of known visual markers problematic. However, as this aspect was not a chief component of this particular investigation, paper glyphs (fiducial markers created from sample images) were affixed over the poster to denote areas with Aurasma content so that, when a specific glyph was detected, the Aurasma software augmented the video feed with the corresponding content which it then tracked and aligned until the marker went out of view. Several types of content were incorporated, including still images and videos, and used in a number of ways. For example, a photograph of a church wall from the 1930s (before the church was partially whitewashed) was superimposed over a presentday image to demonstrate what lay beneath the whitewash. The professional Aurasma solution was used to allow the focus of this investigation to be the content and its spatial relationship to the wall (in other words, overlay type and position). During development it became apparent that



Fig. 15.1 The Aurasma application displaying a film clip on a smart phone, the playing of which has been triggered by "recognizing" the paper glyphs attached to the poster

sensitivity to light changes, and the relative blankness of the walls, may not make Aurasma a reliable solution for further projects in this area. Given that the first investigation was unable to improve on the Aurasma solution, it is evident that significant effort would be needed in this area. In addition, the use of glyphs highlights a specific issue regarding this type of AR technology. The feature-set used to identify a location maps a set of known visual features to a piece of content. It does not map a set of known visual features to the location within a piece of content. So, for example, with existing software it would not be possible to have an image of the entire wall and select locations within that image using a location on the real wall. The difference is subtle, and could be overcome with development effort, but existing solutions do not currently provide for this type of interaction.

Investigation Area 3: How might mobile pattern recognition supply a tool whereby researchers in the field can cross-reference an image taken of a fresco with a database of other frescos?

Citizen science provides a mechanism by which the general public can be engaged with experiments and their enthusiasm used to generate meaningful results. For example, the Galaxy Zoo project allows participants to label images of various types of galaxy and this information, in combination with that provided by hundreds of other participants, is used to create reliable classifications. A follow-on project is Zooniverse, where the same citizen science methods are used via a reusable platform that allows multiple tasks and projects to be created that tap into the same pool of enthusiastic volunteers. For example, in the order of one million participants have contributed to a study into the lives of the ancient Greeks using the Oxyrhynchus Collection in which human and computer effort is combined to identify known texts and documents. Advertising itself as open source, the Zooniverse platform appeared the ideal host for a project using citizen science to identify images of frescos and through which to build an indexable database. Unfortunately, part way through the development it was discovered that only part of the solution was open source, with the remainder at the time being proprietary. In light of this, a simpler solution was developed using Microsoft's Azure servers with the focus being to develop a series of discriminating questions that non-expert participants could use to help identify the fragments of a fresco. These questions, on which ultimately the database would be built, are key, and the prototype solution created here did not arrive at a fully useful set that could be easily answered by a non-expert. In addition to creating a useful database, two

aligned goals of these final investigations were to consider the possibility of, firstly, creating pedagogic tasks that school children could accomplish (thereby turning their participation in the citizen science project into a learning experience), and, secondly, to use the same mechanisms to label an existing database of images. Although practically implementing either of these is beyond the scope of the activities presented here, some consideration was given to these aspects and both are problematic and hence require further work. Task design is the key to a useful citizen science project; in other words, finding a task that is easy enough to do, but that still yields valuable information. Much more effort will need to be placed on the creation of these tasks. The availability of database images was also not as expected. Although databases do exist, the images are often unsorted, unlabeled, and generally not in a format that could be easily (semiautomatically) incorporated into a study. So, while live images can be policed to some extent to ensure that they conform to an appropriate format, this investigation, at least, shows that existing images are more difficult to source and efforts to build a coherent database will need specifying more definitively.

SUMMARY

The preliminary work presented here clearly shows that this fascinating area of research has a long way to go before it can be deployed more widely, with each of the three investigations certainly creating more questions than they answered. From the first investigation, we examined the fallibilities and limitations of computer vision techniques when applied to this area (specifically issues relating to the paucity of visual features) and whether other tracking technology might be better suited. The second investigation highlighted the problems with existing off-the-shelf solutions, including the limitation of the current feature-set approach to content indexing. The final investigation highlighted the complexities of hosting a citizen science project, both technologically and in terms of task design and image sourcing. Ultimately, then, each of these investigations has given useful insights into their specific areas and future work will benefit greatly from the improved understanding of the issues surrounding these cross-cutting areas of technological deployment and cultural research.

Returning, then, to the original opening analogy of a notebook, it is clear that, as expected, the definition of a set of rules by which higher

meanings can be usefully extracted from an image is still a long way from being a practical solution. While the state-of-the-art in the area of image recognition does perform well in some specific cases (e.g., face recognition), it does so only in the most perfunctory fashion. Any useful processing to extract higher concepts is far beyond the scope that computer systems could offer contemporary conservation practices. An orchestrated "passing of the notebook," so that those individuals with the appropriate training and experience can be engaged to make up for this short fall in automated ability, does appear more likely to offer immediate rewards, and this may well offer opportunities for educational engagement as well. Overall then, appropriate expectation management needs to be a key consideration in all interdisciplinary projects and well considered shared metaphors help here. Nevertheless, when exploring the space of technological innovation, Joi Ito (Director of MIT's Media Lab) suggests that compasses should be preferred over maps; to focus thought on exploration of the new, rather than contain it with familiar patterns. The development of novel computing solutions for new areas of deployment (e.g., augmented reality for conservation work) is a considerable undertaking though the direction is sound. While the project presented here represents merely a toe-in-the-water, and the opportunities are apparently vast, the undertaking to deliver on this early promise would also need to be comparatively large. Incremental projects, making small steps in a sensible direction, each building on previous work is the established modus operandi of science, but, as the technology develops, so will the understanding of how it can be applied to the domain, and as the domain changes as a result, so will the requirements of the technology. It is important therefore that as the ground is shifting beneath our feet, a firm grip is held of the notebook and pencil, for if any solutions do not work there, they will not work anywhere.

Notes

- 1. Giuseppe Amato, Paolo Bollettieri, and Fabrizio Falchi, "Landmark recognition in VISITO: VIsual Support to Interactive TOurism in Tuscany," in Proceedings of the 1st ACM International Conference on Multimedia Retrieval, Trento, April 18-20 (New York: ACM, 2011).
- 2. "CLAROS: The World of Art on the Semantic Web," CLAROS, http://www.clarosnet.org/XDB/ASP/clarosHome/#, accessed March 4, 2016.

- 3. Donna Kurtz et al., "CLAROS Bringing Classical Art to a Global Public," in e-Science '09: Proceedings of the 2009 Fifth IEEE International Conference on e-Science, Oxford, December 9-11 (Washington: IEEE Computer Society, 2009), 20–27.
- 4. "Visual object recognition in datasets of pre-modern images," COMPVIS (Computer Vision Group-Heidelberg Collaboratory for Image Processing), http://hciweb.iwr.uni-heidelberg.de/compvis/ research/se/, accessed March 4, 2016.
- 5. Pradeep Yarlagadda et al., "Towards a Computer-Based Understanding of Medieval Images," in Scientific Computing and Cultural Heritage: Contributions in Computational Humanities, eds. Hans Georg Bock, et al. (Heidelberg: Springer, 2013), 92.
- 6. "Joi Ito's 9 Principles of the Media Lab," https://vimeo. com/99160925, accessed March 4, 2016.

BIBLIOGRAPHY

- Amato, Giuseppe, Paolo Bollettieri, and Fabrizio Falchi. "Landmark recognition in VISITO: VIsual Support to Interactive TOurism in Tuscany." In Proceedings of the 1st ACM International Conference on Multimedia Retrieval, Trento, April 18-20. New York: ACM, 2011.
- CLAROS. "CLAROS: The World of Art on the Semantic Web." Accessed March 4, 2016. http://www.clarosnet.org/XDB/ASP/clarosHome/#.
- COMPVIS (Computer Vision Group Heidelberg Collaboratory for Image Processing). "Visual object recognition in datasets of pre-modern images." Accessed March 4, 2016. http://hciweb.iwr.uni-heidelberg.de/compvis/ research/se/.
- Ito, Joi. "Joi Ito's 9 Principles of the Media Lab," Accessed March 4, 2016. https://vimeo.com/99160925.
- Kurtz, Donna, Greg Parker, David Shotton, Graham Klyne, Forian Schroff, Andrew Zisserman, and Yorick Wilks. "CLAROS - Bringing Classical Art to a Global Public." In e-Science '09: Proceedings of the 2009 Fifth IEEE International Conference on e-Science, Oxford, December 9-11, 20-27. Washington: IEEE Computer Society, 2009.
- Yarlagadda, Pradeep, Antonio Monroy, Bernd Carque and Björn Ommer, "Towards a Computer-Based Understanding of Medieval Images." In Scientific Computing and Cultural Heritage: Contributions in Computational Humanities, edited by Hans Georg Bock, Willi Jäger, and Michael J. Winckler. Heidelberg: Springer, 2013.

The Application of Virtual Reality Technology to Heritage Conservation in Famagusta's Armenian Church

Yuan Yi and Ender Jiang Shutao

OVERVIEW

Virtual Reality (VR) is a technology which generates 360-degree artificial environments for users to immerse themselves in and possibly also to interact with. The recent advancement of VR technology has enabled content viewers to visualize and interact with the virtual world more intuitively. As a result, developers across the globe are exploring meaningful ways to apply this trending technology. Understanding that the world's heritage sites are facing constant risks from numerous factors which could damage the sites irrevocably, and that environmental, cultural, and political obstacles have prevented us from exploring certain places in the world, Hiverlab is collaborating with Professor Michael Walsh from Nanyang Technological University to apply the latest VR technology to heritage

Y. Yi (⋈) • E.J. Shutao Hiverlab Pte Ltd, Singapore conservation and to study its pedagogical and storytelling potential. The project aims at creating long-lasting impactful digital content of historical sites and bridging the gap between academia and the general public. This article discusses the pilot VR project on the Armenian Church of Famagusta, the possible future applications of similar projects, existing challenges for execution, as well as the meaning and vision of such practices in the long run.

VIRTUAL REALITY

Though VR is not a new technology, it is only with the latest developments in computing devices that it has been able to realize its potential more convincingly. VR devices nowadays allow users to view two sideby-side images of the same object from each eye via headsets while giving them the freedom to explore the panoramic worlds displayed in the virtual domain. The smart-phone-based solutions such as Samsung Gear VR and Google Cardboard can easily run 4000 360-degree videos and low-polygon animated content, whereas computer-based solutions such as Oculus Rift and HTC Vive can support content with high resolution or high mesh density. Mobile-based solutions are cheaper and more portable, whereas computer-based solutions can display models with more explicit details and support more accurate position-tracking and motion-tracking functions. Given the pros and cons, different devices should be recommended for different use case scenarios. In general though, the development of hardware has significantly improved the quality of immersion, increased the accessibility of VR content, and driven down the cost for experiencing such content. Research and development is ongoing in the nascent VR industry to further improve the technological aspects of the devices such as the field of view, the refresh rate, the size, and the weight. Interface and interaction design are also expected to evolve in this new medium.

Virtual heritage, the notion of recreating historical sites virtually, has been used to facilitate historical research for many years. It allows research findings to go beyond the traditional formats of text and film and with the recent advancement in VR technology opens up new pedagogical and storytelling possibilities. In 2016, a pilot project based on the Armenian Church of Famagusta was conducted by Hiverlab in collaboration with Professor Walsh to explore the marriage of cutting-edge technology with historical research and heritage conservation.

VIRTUAL HERITAGE CONTENT PRODUCTION

The Armenian Church of Famagusta VR experience is the first test case of Hiverlab's long-term independent project named Timescape. Timescape aims to create a four-dimensional interactive virtual domain where viewers can maneuver across space and time, meaning, not just different places in the same era but also the same geographical space over time, so as to see how history has generated irrevocable changes to buildings, paintings, sculptures, cultures, and people's lives. It is a way to permanently archive the historical sites in the digital format. Professor Walsh, the Principal Investigator of Timescape, offers extensive academic resources and research findings, while Hiverlab, the production house, contributes expertise in areas of technology, interactive media, storytelling, and distribution. Our unifying aim is to tell meaningful stories to a wider, more general, audience. In this section, we use the Armenian Church of Famagusta VR experience as an example to explain the production aspects including 3D modeling, texture mapping, and interactive design.

3D Modeling

The principle of 3D modeling is to digitize the real world in a sustainable way while preserving as many details as possible. We collaborated with team SolvoTek from Istanbul, who conducted 3D laser scanning and collected point cloud data of many churches in Famagusta. We converted this point cloud data into textured mesh and generated photo-real 3D mesh models which could then be displayed via the latest VR headsets such as HTC Vive and Samsung Gear VR. The 3D models converted directly from the original point cloud data are extremely heavy however, and so we decided to export models with fewer polygons for the pilot project (Fig. 16.1). A polygon number of 200,000 works sufficiently well for both the software and high-end hardware at this moment, though it is worth bearing in mind that with the point cloud data we will be able to export more comprehensive models in the future for long-term applications. This will be discussed further in section "Challenges" of this chapter.

In addition to 3D laser scanning, 3D models can also be generated using photogrammetry technology or modeled manually from scratch. There are pros and cons for each: 3D laser scanning might be able to capture a lot of data, but it is currently more costly and requires more time and human labor to modify the models in order to deliver something that is readily

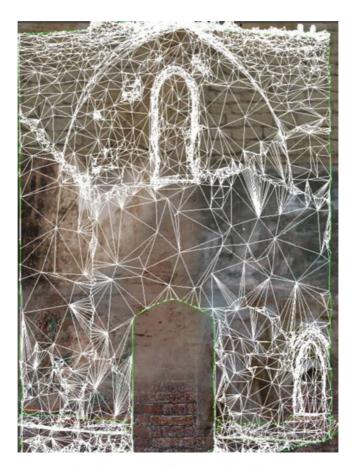


Fig. 16.1 Textured mesh converted from point cloud data

usable. The UV mapping automatically generated by the 3D scanner is scattered irregularly, which makes it extremely hard to accurately map the frescoes onto the UV.1 More information about the texture-mapping challenges will be discussed in section "Texture Mapping." In comparison, photogrammetry is faster, cheaper, and less complicated for users to pick up.² However, the resolution of the model might be limited in the long run and the quality is severely affected if the architecture is partially blocked by vegetation. Therefore, in the near future, the combination of

3D laser scanning and photogrammetry followed by manual adjustment might become the most reliable practice to digitize sites. Geographical information systems and digital maps are also useful.

Texture Mapping

The appearance of the walls changes over generations due to human factors such as vandalism or renovation, as well as natural factors such as damage caused by rainwater or growth of fungus. Based on academic resources such as research articles and photographs, we nevertheless mapped the frescoes onto the respective walls and exported several texture maps according to their appearances at different times in history. In the case of the Armenian Church of Famagusta we started with the years 1974, 2007, and 2014. In 1974, Kouymjian took photographs of the church's interior shortly before the invasion of Cyprus.³ During the years that followed, white paint was applied to the walls of the Armenian Church. In the year 2007, half of the frescoes in the Armenian Church were still covered under the whitewash, while by year 2014, the whitewash had been removed, new frescoes had been discovered, and conservation work had started (Fig. 16.2).⁴ The general idea of the VR experience is to create several texture maps showing how living spaces such as this change over time as users move along a timeline. Moving on, we will integrate more visual data of the church's interior and exterior into the models with reference to earlier texts or image materials such as paintings and sketches.

We have also come across several limitations. As previously mentioned in section "3D Modeling," the UV mapping automatically generated by the 3D scanner is scattered irregularly which makes it extremely difficult to map the photographs of the frescoes onto the UV. Additionally, decades ago, it would have been almost impossible for researchers and scholars to imagine that their photographs would one day be directly used for virtual reconstruction of historic spaces. As a result, some of their photographs were taken from slanted angles, some with information partially missing, and most in black and white. In short, they do not best represent what exactly the architecture, the frescoes and the sculptured decoration looked like. But it is too late to change and so we have to be content to polish the models and textures as much as possible. With more time, we will revisit the site to capture high-quality data and give the content more substance through interactive design such as infographics.



Fig. 16.2 Accurate mapping of painted images to interior wall surfaces

Interactive Design

Interactivity is an important element in holistic VR experiences to engage the audience, and it is enabled by game engines. As the industry standard is yet to be established, proper design thinking is crucial to deliver a good VR package. In the case of the Armenian Church of Famagusta, user interface is designed in Adobe Illustrator and Autodesk 3Ds Max, and interactive functions are applied through Unity. We developed one Gear VR fly-through version for collective viewing and presentation purposes and another HTC Vive stand-alone version with more comprehensive models and more interactive functions. There are currently various interactive methods for VR, such as gazing, tapping on a touchpad, and interacting with controllers. In this section, we discuss the design of the movement and interactive infographics in the HTC Vive version.

The key components of an HTC Vive are two sensors, two controllers, and a headset which can be attached to a Vive ready computer. HTC Vive requires a minimum area of 2 m × 1.5 m for room-scale setup.⁵ Its lighthouse room tracking detects the location and movement of the VR explorer within the game play area. Our design allows users to literally walk in the virtual environment as they mimic walking gestures in real life (Fig. 16.3). In the case where there is limited walking



Fig. 16.3 Interactive Armenian Church VR Experiences

space in the real environment, instant teleportation functions can be enabled so the explorers "jump" from one virtual geographical spot to another. Explorers can see interactive buttons located nearby each of the frescoes on the wall. When they touch the button with one of the controllers, infographics containing descriptions of that particular fresco pop up. The design resembles the text panels of the exhibits in museums. Other interactive infographics at this stage include the dimensions of the church, relevant research data visualization, a timeline for explorers to choose which year they want to time travel to, and recording of real human characters with motions captured by depth cameras. Infographic overlays are designed to create an augmented virtual reality environment. The entire system automatically optimizes the refresh rate as the interaction happens.

The Armenian Church VR project is a valuable model of a scholarly tool and one for VR storytelling. The frescoes are a good case in point, being both valuable and endangered (many of the paintings that Enlart could see in the late nineteenth century are nowadays only faintly visible).6 It is important to bear in mind that 3D is not meant to replace everything as 2D content may still be more suitable for macroscopic analysis and abstract thinking. Content of different kinds of format should also be used to supplement each other. For storytelling, we have therefore selected St. Anne's Church, the Church of St. Peter and Paul, and the Carmelite Church of St. Mary, to further enrich the Famagusta VR experiences. Lastly, VR is not a simple extension of "films" or "games." Content and system development with VR requires us to think more expansively and learn from other disciplines: sound, visual, and even live

performances can be taken into consideration to break the boundaries of geography and time and deliver messages through this new medium effectively.

POTENTIAL APPLICATIONS

Historians constantly refer to scripts, sketches, paintings, and photographs to look for evidence when they investigate historical questions. By documenting such research information in virtual space, we aim to create a package that is useful for historical analysis—a virtual 3D library where researchers and scholars can conveniently share their research information and effectively look for the resources they need. Moving on, we hope to not just focus on the tangible aspects of history but also the intangible aspects such as stories, music, dance, and even emotions.

Meanwhile, we aim to maximize the impact of the existing research findings by bringing relevant content to the general public. The existing package can potentially be redeveloped into educational resources which bring minds a little closer to real life. It can be used for virtual tourism experiences which enable both exploration and conservation or even turned to public entertainment programs such as room escape games or detective adventure stories. The primary goal for the moment however is advocacy and awareness creation of an endangered cultural heritage in the Eastern Mediterranean.

CHALLENGES

VR is an emerging industry and so any hardware and interactive method applied today will soon become obsolete. Content produced today needs to be compatible with next-generation hardware and software systems for it to have a longer life span. Our current solution is to utilize the point cloud data collected by 3D scanners because it contains a great amount of detail which can be converted to high-polygon 3D models. Such highquality models might be able to give us more flexibility when migrating content from VR to future Augmented Reality (AR) and Mixed Reality (MR) platforms. As technology evolves, constant follow-up and continuous self-innovation are obviously required to maintain a sustainable system.

Closely associated with the industry standards are the legal and academic standards, as legislation for practice needs to keep up with technological development. Documents like the London Charter and the UNESCO's Charter for the Preservation of Digital Heritage⁸ have provided some guidelines for the computer-based visualization of cultural heritage, but these were last updated in 2009 and 2003 respectively. As the methodology of digital heritage conservation matures, it is crucial to implement a standard to determine what kind of information captured is acceptable, to filter out unsatisfactory scholarship and to conserve as much as possible from this day forth.

There are other factors which we should give thought to as well. For example, how should we better simulate chemical analysis and seismic analysis in the virtual environment? If we are to make Timescape an open platform for academia one day, should the system support input from different parties simultaneously, and what if there are conflicting opinions offered by different scholars? This is both a challenge and an opportunity.

MEANING AND VISION

Heritage sites may eventually disappear with the passage of time. However, with the principle of digitizing heritage sites in a reliable and sustainable way while aggregating and preserving as much as information as possible, we can at least bring this universal inheritance of humanity to a timeless and borderless domain in virtual space that is open to everyone. With storytelling elements and intuitive interactive design, we can make heritage sites relatable to the general public, enabling exploration without exploitation, and creating greater social impact by bringing the rich research findings to a wider audience. Future generations can reexperience what civilizations preceded them had lived and died for and learn about their roots and identities for better understanding of their present and future.

This long-term project is a cross-disciplinary collaboration between academia, content producers, and technology developers. It will serve too as a bridge between academia and the general public, and connect people and cultures across space and time. VR will possibly change the way future generations perceive the world and conceive the world. But the future is not set, just as the past was not. We welcome more visionaries with different backgrounds to join us, lead the 3D mapping of heritage sites, and explore the future of the past.

Notes

- 1. UV mapping is also known as the texture unwrapping, with UV itself being a full term instead of a short term. "U" and "V" are the names of the axes of a 2D plane.
- 2. 刘建国、<考古遗址的超低空拍摄与数据处理>、《考古》2015年第 11期。
- 3. 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 W. Edbury, and Nicholas S. H. Coureas, (Farnham: Ashgate, 2012), 133.
- 4. Werner Schmid, "Famagusta, North Cyprus, The Conservation of the 14th-century Wall Paintings of the Armenian Church, Technical Report of the 2nd Working Campaign, 4 June–14 July 2014".
- 5. "How-tos," HTC, https://www.htcvive.com/us/support/howto/ 720448.html, accessed September 9, 2016.
- 6. Dallan Langdale and Michael J. K. Walsh, "The Architecture, Conservation History, and Future of the Armenian Church of Famagusta, Cyprus," in Chronos (2009): 21.
- 7. The London Charter for the Computer-based Visualization of Cultural Heritage (2009).
- 8. "Charter for the Preservation of Digital Heritage (2003)," UNESCO, http://portal.unesco.org/en/ev.php-URL_ID= 17721&URL DO=DO TOPIC&URL SECTION=201.html, accessed September 9, 2016.

BIBLIOGRAPHY

- "Charter for the Preservation of Digital Heritage (2003)," UNESCO, http://portal. unesco.org/en/ev.php-URL_ID=17721&URL_DO=DO_TOPIC&URL_ SECTION=201.html, accessed September 9, 2016.
- Allan Langdale and Michael J. K. Walsh, "The Architecture, Conservation History, and Future of the Armenian Church of Famagusta, Cyprus," in Chronos (2009): 21.
- 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 W. Edbury, and Nicholas S. H. Coureas, (Farnham: Ashgate, 2012), 133.

- HTC, https://www.htcvive.com/us/support/howto/720448. html, accessed September 9, 2016.
- The London Charter for the Computer-based Visualization of Cultural Heritage (2009).
- Werner Schmid, "Famagusta, North Cyprus, The Conservation of the 14thcentury Wall Paintings of the Armenian Church, Technical Report of the 2nd Working Campaign, 4 June - 14 July 2014".
- 刘建国,<考古遗址的超低空拍摄与数据处理>,《考古》2015年第11期。

Complexity and Heritage: Future Research Perspectives

Toward a Complexity Framework for Heritage Futures: Famagusta, its Armenian Church and SHIFT

Andrea Nanetti and Siew Ann Cheong

Introduction

This chapter presents a research agenda for a new science of heritage drawing strengths from complexity theory. The starting point is the conference organized and chaired by the two authors in Singapore on "Heritage Science as a Complex System" (Nanyang Technological University, January 6–7, 2014). In this conference we established common ground between the people who work directly on heritage-related problems and those who work on complexity theory. As a working definition, we consider heritage as the treasure of human experiences (in other words, the

A. Nanetti (⋈)

School of Art, Design and Media, Nanyang Technological University, Singapore

S.A. Cheong

School of Physical & Mathematical Sciences, Nanyang Technological University, Singapore

© The Author(s) 2017 M.J.K. Walsh (ed.), *The Armenian Church of Famagusta and the Complexity of Cypriot Heritage*, Mediterranean Perspectives, DOI 10.1007/978-3-319-48502-7_17

comprehensive storage system of human knowledge and values). To make heritage organized, accessible, and useful in our increasingly complex society we envision a new science of heritage, seen as a state-of-the-art multidisciplinary domain, which investigates and pioneers integrated action plans and solutions in response to, and in anticipation of, the challenges arising from heritage issues in society: conservation, capturing, access, interpretation, and management. To tackle these real-world challenges we need an integrated effort, but as of now scholars of different disciplines work in silos, partly for career advancement based on the results of independent and individual disciplines, and partly because they lack a common language. We propose, in this chapter, and in keeping with the spirit of the entire collection, to use the language of complexity as a lingua franca and observe heritage through the lens of complexity to study emergent properties in human-heritage-landscape systems that typically have many strongly interacting players. Under the programmatic title Sustainable Heritage Impact Factor Theory (SHIFT), we aim to investigate and identify how heritage data can be distilled into knowledge, so as to support political decision-making with scientific methods and evidence to reinforce the identities and values of all stakeholders. Here we consider the case study of Famagusta and its Armenian Church—at the interface of a complex system of agents interacting across time and space.

The theoretical starting point of this conversation has been trialed by Andrea Nanetti and his interdisciplinary research team, from various syntropic and complementary perspectives: with Siew Ann Cheong and Mikhail Filippov (Complexity Science) in 2013 in Kyoto at the Culture and Computing conference, with Francesco Perono Cacciafoco (Linguistics) and Mario Giberti (Architecture and Mapping) in 2014 in Glasgow at the International Congress of Onomastic Sciences,² with Siew Ann Cheong in 2015 in Jinan at the International Congress of Historical Sciences,³ with Angelo Cattaneo (History of Cartography), Siew Ann Cheong, Keng We Koh (Maritime Trade in Asia) and Chin-Yew Lin (Computer science) in 2015 in Singapore at the Congress of the Asian Association of World Historians⁴ and in Rio de Janeiro at the International Cartographic Conference,⁵ and with Anna Simpson (Social Media Studies) in 2015 in Barcelona at the International Conference on Social Media Technologies, Communication, and Informatics.⁶ But, here instead of working on the implementation of automatic narratives to acquire knowledge from the historical landscape (Kyoto and Jinan papers), or mapping and visualizing already acquired knowledge (Glasgow, Singapore, and Rio de Janeiro

papers), or the role of cultural heritage to effectively support collaborative future visioning in multiuser sharing platforms (Barcelona paper), we aim to address the question of how this acquirable knowledge can be linked to action (policy- and decision-making) by public and private institutions (local communities, government agencies, international organization, corporations) in the framework of a new science for the systematic study of principles and use of heritage through observation and experimentation, in this case, Famagusta.

Today we are at a turning point because of the sheer volume of digital information available. Big data has always been recognized as a problem by scientists (e.g., Renaissance Italy, Enlightenment, Idealism, Positivism), and the solution has always been to select something at the detriment of something else kept in latency or deleted. This is also what we are doing today in the digital era. In a sense, the problem and the theoretical solution remain the same. The novelty that can determine a huge shift for the advancement of learning (via digital data mining, knowledge aggregation, and visual representation) is the power of the user-driven factor in terms of the quantity of processable data, speed of processing, and reversibility of the process, all in real time, and available anywhere for visual reasoning. In the last couple of years, the international scholarly community has tuned in to this problematic as presented, for example, by Russell Staiff, who proposes to see heritage beyond the logic of things.⁷

The dialogue between visitors and heritage places has been too focused on learning outcomes, and so heritage interpretation has become dominated by psychology and educational theory, and over-reliant on out-dated thinking.8

Using his background as an art historian and experience in teaching heritage and tourism courses, Staiff weaves personal observation with theory to recognize that the "digital revolution" has changed forever the way that people interact with their environment and that, as a consequence, a new approach is needed.9 The critical question is whether heritage is there simply to be understood. I think that, like works of art, heritage is not there just to provide knowledge in a direct way, rather it is about a whole series of interconnections and networks that encourage a multitude of responses and experiences, deepened reflections and heightened senses. Heritage is more than logical things and more than the logic of things. As Andrew Prescott said in his contribution to a plenary panel of the European Policy on Intellectual Property Conference at the University

of Glasgow in September 2015, "the ubiquity of data" is one of the key revolutionary aspects of big data in our contemporary society¹⁰:

For pre-modern governments data was something gathered with enormous clerical and administrative effort, which had to be carefully curated and safeguarded. They were one of their primary assets. Even later on, only large organisations such as governments or railroad companies had the resources to process these precious data—indeed one of the changes that is very evident is the shift in processing power, and perhaps we should be talking more about big processing rather than big data. Data were used in order to govern and were integral to the political compact. Now data are ubiquitous and comparatively cheap to acquire and process. This framework of trust no longer applies. Moreover, the types of organisations deploying data have changed. In particular, it is noticeable that the driving forces behind the development of big data methods have frequently been commercial and retail organisations: not only Google and Amazon, but also large insurance, financial and healthcare corporations. This is a contrast to earlier developments, both analogue and digital, where governments have been prominent and private sector involvement more limited.

A similar concept forms the basis of a program called Culture Analytics scheduled for the period March 7-June 10, 2016 by the UCLA Institute for Pure and Applied Mathematics.¹¹

The explosion in the widespread use of the Internet and social media and the ubiquity of low cost computing have increased the possibilities for understanding cultural behaviors and expressions, while at the same time have facilitated opportunities for making cultural artifacts both accessible and comprehensible. The rapidly proliferating digital footprints that people leave as they crisscross these virtual spaces offer a treasure trove of cultural information, where culture is considered to be expressive of the norms, beliefs, and values of a group. This program encourages the exploration of the unsolved mathematical opportunities that are emerging in this cultural information space.

In this wide context, our focus is on improving heritage impact assessments for heritage planning, which, as Harold Kalman declared sought to "manage change wisely, not to prevent change." In his 2014 book Heritage Planning. Principles and Process, which provides a comprehensive overview of heritage planning as a professional practice, he defines "heritage planning (aka preservation planning, historic preservation planning, conservation planning, or heritage conservation planning)" as the "application of heritage conservation within the context of planning," where "heritage conservation (called historic preservation in the United States) is the broad discipline that addresses all aspects of retaining and enhancing historic places—a term that describes buildings, towns, landscapes, archaeological sites, and other places that hold heritage significance (in other words, historical, aesthetic, cultural, social, spiritual, and/or scientific meaning to the community)."12 Here, the peculiarity of Famagusta's situation (heritage in a legal vacuum) demands an emblematic and virtually unique investigation pertaining to the complexity of the community experience.¹³

To go from centralized heritage planning in the data-scarce years gone by to tackling heritage issues in the data-rich environment of today and tomorrow, we must acknowledge that neither one person, nor one group of people, has a view that is broad enough to solve these problems. We urgently need to harness processing power to tap into a large range of spatially distributed data that is present in considerable volumes, then continue to generate at high velocities while working on solutions in parallel. Our vision is that with the Cloud and smart mobile devices we are ready to let each person of goodwill link to and take advantage of the treasure of human experiences anywhere and anytime, at the exact level of scientific depth that is needed and required by the situation (no less and no more) to propose sensible solutions. This is something that Dan Frodsham and Duncan Rowland allude to in their chapter in this collection (Chap. 15). However, simply connecting brain power to the data in a participatory planning framework is not enough for us to arrive at solutions that work globally because ultimately individuals can only grasp a limited aspect of the larger problem, and the creative solutions they propose will frequently only solve the problem locally. For participatory heritage planning to work, we must close the process by providing a feedback loop for individuals to evaluate the viabilities of their proposed solutions within the global context formed by a network of local problems and local solutions, and if necessary propose new local solutions compatible with the global context. This is particularly dichotomous in the case of Famagusta where "borders" have created the crisis and condemned all solutions to the status of local or regional, yet where global solutions are now sought in the borderless domain of cyberspace. In an environment where "collective" cannot be applicable because of the "exclusion" of the country politically from the international network of nations (with the exception of Turkey), individualism is paramount.

We believe this feedback loop comes in the form of a complexity theory of heritage, which provides individuals with not only an awareness of the interconnections between local problems and local solutions, but also a complexity science toolkit for incorporating innovation and creativity into the core processes of a living heritage as the treasure of human experiences. To accomplish this closure between individual innovation and collective wisdom, the role of multiuser sharing platforms to support collaborative visions for the future cannot be understated.¹⁴

HERITAGE AS THE TREASURE TROVE OF HUMAN EXPERIENCES

Our society has built up the technological capacity to organize and retrieve myriad records of human experiences at any time and from any digitally connected place, and apply the elements of this treasure trove to any kind of future design process, traditional and/or generative. Thus empowered, we are able to conscientiously and responsibly select from the past and apply to the future, bearing in mind how the past has shaped the present with much less data and information flow.¹⁵ Despite the inherent difficulties associated with defining "heritage," we nevertheless suggest a pragmatic definition based on the notion that it is the treasure of human experiences (in other words, the comprehensive storage system of human knowledge and values), for which in our increasingly complex society we need an efficient (organized, accessible, and useful) trove ("a store of valuable or delightful things" as defined in the New Oxford American Dictionary). Our belief is that today we need a science for this heritage, considered as the thesaurus of human experiences, which is embedded in human artifacts and in nature as interactively experienced by different cultural communities, and biologically perceived by the human brain. Of course, as in the case of the Armenian Church in Famagusta, we do not know what the next generation will need, value, and like, but our responsibility is to display and discuss what humans in the past needed, valued, and liked—and the reasons why. It demands a multidisciplinary or interdisciplinary approach, the sum of which adds up to a fractured, yet surprisingly complete, picture of the past. Such academic pooling can also make provision for the future as we consider what the fates of Famagusta's heritage might be in the event of: (a) no solution or (b) a solution.

"Heritage poses the challenge of innovation in a new way: How does the new integrate with the old?" This was the key question raised by Helga Nowotny (cofounder and former president of the European Research Council) in her keynote address "The embarrassment of complexity: A phase of transition?" given at the first Singapore Heritage Science Conference "Heritage science as a complex system" held on January 6–7, 2014.¹⁶ In this way, heritage is closely linked to the history and identity of communities.¹⁷ In our case study, we examined the communities that created the Armenian Church in Famagusta and then the communities who lived with it for centuries after. 18 The study attempted to understand not only the origins of the Armenian community in Famagusta therefore, but also their social, aesthetic, and theological practices, and the nature of their existence within Lusignan, Genoese, Venetian, Ottoman, and British administrations. Lastly, we embraced the notion that the church was a living space up until the 1970s, neither uniquely for Armenians nor indeed for Christians (Fig. 1.4). There are, therefore, many communities associated with a monument which has survived seven centuries of change. Despite the intentions of its builders seven centuries ago, it has, with the ebb and flow of history, been a living space for people of many diverse backgrounds. As clearly demonstrated in this book, it has been necessary to take into account knowledge and values acquired in all relevant disciplines; from arts and humanities (conservation, philosophy, ethics, history, and art history, as presented in Part I of this book, on the interpretation and analysis of historical Famagusta), to fundamental sciences (chemistry, physics, mathematics, biology, as presented in Part II of this book, on conservation, education, and diagnostics of cultural heritage), and in addition economics, sociology, media studies, computer sciences and engineering, as exemplified in this chapter. Yet this has only been an indication of what is yet possible—a hint at what might yet be achieved. For example, work is only now underway in musicology to find the relevant aural heritage associated with the structure and those who worshipped within it.

In the second Singapore Heritage Conference "Heritage and the Creative Industry" held on January 15–16, 2015, scholars wrestled with the tensions that exist between age-old practices and our modern digital lifestyles. In particular, there was a sense that we might be losing our humanity as our lives become more and more digital. Scholars related their experiences reaching back into the past, drawing from it creative inspiration for the future, and in so doing reiterated that human qualities like ethics, empathy, identity, and spirituality are connective qualities that serve to bind people together.¹⁹ In Cyprus this is a particularly fascinating notion and one that has been gaining traction for some time as Walsh outlines in his "Introduction." The ethics of reporting current affairs has received much attention, but the emphasis has been on the present-day implications and the need to assume responsibility for past events: a stance shaped by notions of justice rather than acknowledge of design agency. More attention is now given to the ethics of shaping the future, and the politics of heritage selection is part of this process.²¹ In this way, the social media experience is entering that same field of "intangible cultural heritage" that UNESCO (and with it 153 countries) defines as²²:

the practices, representations, expressions, knowledge, and skills—as well as the instruments, objects, artefacts and cultural spaces associated therewith—that communities, groups and, in some cases, individuals recognize as part of their cultural heritage. This intangible cultural heritage, transmitted from generation to generation, is constantly recreated by communities and groups in response to their environment, their interaction with nature and their history, and provides them with a sense of identity and continuity, thus promoting respect for cultural diversity and human creativity.

Thus, according to the UNESCO charter, the preservation of intangible cultural heritage requires the active collaboration of the people or community, within which the heritage resides. This, in turn, requires protection of the processes that allow traditions and shared knowledge to be passed on to future generations, along with art, science, problem-solving, and invention.²³ But what happens when a city is emptied of its inhabitants (or at least of one ethnicity), and replaced by residents from another country as is the case for Famagusta? And what happens when a big university opens up, such as Eastern Mediterranean University in Famagusta and brings in hundreds of students from Iran and Nigeria as well as the steady flow from mainland Turkey? Famagusta may very well be a historic living space, but its population and community has been engineered.

Umberto Eco, in the conclusion of one of his most renowned "recent" essays, pointed out how the power of knowledge has always been useless without "a selective system," because overwhelming and disorganized data cannot be used 24

If cultures survive, one reason is because they have succeeded in reducing the weight of their encyclopaedic baggage by placing so many notions in

abeyance, thus guaranteeing their members a sort of vaccination against the Vertigo of the Labyrinth.

And at the same time we agree with the author that the real problem, however.

is not the fact that cultures pare down their encyclopaedias (which is, in any case, a physiological phenomenon), but rather that what has been placed in abeyance can always be recovered. For this reason the regulatory idea of a Maximal Encyclopaedia is a powerful aid to the Advancement of Learning and having to confront ever and anon the Vertigo of the Labyrinth is often the price we must pay for calling into question the laziest of our ontologies.²⁵

That *Maximal Encyclopaedia* is the "truly virtual encyclopaedia" to which every encyclopedia refers back "through a series of cross-references." 26 It is

the sum total of everything that was ever said, or at least of everything that could in theory be discovered, to the extent to which it has been expressed through a series of materially identifiable interpretants ... a sort of World Wide Web far richer that the one to which we have access through the Internet.27

In Famagusta, one might argue, there is again an intriguing case whereby the pared-down encyclopedia takes the form of essentialist nationalist rhetoric. There is no true quest for an impartial understanding of the past—the past instead is controlled and taught in a non-negotiable and politically acceptable way. The silences are often deafening in a city where even street names have been changed to erase the past and create a future.

In this context, besides cancellation and cross-reference, a key concept is the "latency of knowledge" as presented by Elena Esposito in 2001.²⁸ Following the comments by Umberto Eco, it seems that we do not need to design and develop a new maxi encyclopedia, because

it is not as if the information *in excess* (the object of Specialized Encyclopedias...) is actually forgotten. It is, so to speak "frozen," and all the expert has to do is to take it out of the freezer and put it in the microwave to make it available one again, at least as much as is needed to understand a given context. This latency is represented by the model of the library or the archive (or even the museum)—containers always available even though no one may currently be using them, and even if they haven't been used for centuries.²⁹

We have already synthetically and metaphorically defined this immense repository of knowledge which is all around us, embodied in real objects and embedded in computer programs, as a sort of "treasure trove of human experiences." In the past, human societies embedded their knowledge in complex interactions of written, pictorial, sculptural, and architectural records, oral memories, and performed rituals. These were their media and in this form they transmitted to us their arts and science (see Chap. 4, in which Michele Bacci decodes the medieval murals of the Armenian Church of Famagusta). Despite what modern ideologies have become, we still have, embedded in these images, something more complex, that needs to be coaxed off the walls after centuries of silence or possibly suppression. That is its inherent importance and that is why Michael Walsh used Sorensen's quote as the epigraph for this book when he talked about the role of cultural heritage in "retriev[ing] the complex." In a post-conflict zone things are very different, and art and architecture, one might argue, become even more important.

Now, information and communication technologies (ICTs) have opened a new frontier for the advancement of data sharing even if they are not yet ready to support a new and substantial advancement of knowledge. Indeed, the exponentially growing volume of data is a solution and a problem at the same time, as Sandra Rendgen recently highlighted in an iconic way³⁰:

Data are the new raw material. Today, infinite amounts of new information can be accessed in seconds and across large distances. However, raw data in themselves are of negligible value—they need to be filtered and evaluated. That's why professional data and information management will be a central cultural tool in the decades to come.

The project on the Armenian Church was aligned with such thinking as it set out on a process of collection, filtration, evaluation, and then anticipation. Our society is very close to having a fully digital and sustainable access to all information encapsulated in monuments, museums, galleries, libraries, live performances, and archives anywhere in the world and in any language. Famagusta's is not. Despite its rich history, the city does not have a museum, let alone a public library or an archive. Whatever evidence there is of its past is scattered around the world, principally in France or Italy, or lying in ruins in the city itself.

But to distill data into knowledge, a new generation of scholars needs to discuss, test, and implement ICT tools and solutions in relation with the centuries-old results of each discipline, which contributes to the domain of heritage science (in humanities, social sciences, architecture, life sciences, engineering, and computer science). As Alberto Cevolini pointed out in 2006, however, the treasure of human experiences can help, because³¹

this was precisely what the medieval encyclopedia ... aspired to, not only through the topical arrangement of knowledge, but also, more concretely, by means of diagrams, miniatures, illuminated initials, and so on. With a single image it was possible to embrace the whole of being, from God to the angels, from man to the stones, and retain it in the memory thanks to the power of the imagination.

COMPLEX SYSTEMS

Before we can outline a complexity theory of heritage we need to explain what a complex system is, and most importantly to explain how it is frequently confused with a complicated one. A simple system like the Newton's cradle consists of few parts, and exhibits simple and highly predictable behavior. A complicated system like the car consists of a large number of parts (30,000 for an average car). However, its behavior is still simple and highly predictable (e.g., the car turns right when we turn the steering wheel to the right). A complex system like the human crowd also consists of a large number of parts. Unlike simple or complicated systems however, the behaviors of a complex system are frequently hard to predict, and in turn, hard to control. Although there is not yet a widely agreedupon definition of a complex system, experts all agree that its constituent parts interact strongly and non-linearly.³² These strongly non-linear interactions give rise to emergent macroscopic properties that cannot easily be deduced from the microscopic behaviors of its constituents. Frequently, we find a hierarchy of emergent behaviors from the smallest to the largest. Nobel Laureate in Physics Philip Anderson coined the phrase "more is different" to describe this feature of complex systems, and argued that in a complex system "the whole is more than the sum of the parts." Some complex systems (e.g., ecological systems and human societies) possess the capacity to learn from their histories, modify their microscopic interactions, to arrive at better macroscopic outcomes. We call these complex adaptive systems.³⁴ Experts also mostly agree that the constituent parts of a

complex system do not interact equally strongly with each other. A typical constituent will interact strongly with some constituents, and weakly with others. Interactions within a complex system frequently form a complex network. 35 The complex network underlying a complex system tells us what interactions are possible and what interactions are impossible. Because we have left out details of the interactions it becomes easier to visualize how interactions play out in time on the complex network. For complex adaptive systems the structure of the complex network can also change with time. And this, we feel, is particularly relevant to Famagusta and its Armenian Church as a case study. Because of its peculiar political status it does not function within a predicable framework in which international norms can be applied as Alessandro Chechi so amply demonstrated in his chapter in this volume (Chap. 8). To compare Famagusta to, say, Rhodes, therefore is almost meaningless (or for that matter Limassol). One exists within a politically and economically predictable framework, while the other does not. However close their histories may be, their presents are different, and their futures are, for the moment, on different trajectories. In our case study, without the regulatory influence of international best practice, law, and UNESCO directives, Famagusta becomes "random"—the "constituent parts" are indeed more difficult to predict, more regional and more "internal." There is still a "system" but it is unique to the place (and as often as not changes with local elections) and has had to be navigated by the team that makes up this book. We move away from the notion of sweeping legislation of one-size-fits-all, to deal with what should be done, and then what can be done in the tailor-made environment referred to in the closing sentences of the "Introduction."

Unlike simple systems or complicated systems, where a continuously varying external force produces a continuous change in the behavior of the system, a continuously driven complex system can frequently change, discontinuously. This sudden change is called a regime switch or phase transition. A complex system can have multiple regimes or phases, and switch back and forth between these. A regime that has a long lifetime is said to be resilient or robust, whereas a regime that has a short lifetime is said to be fragile. In an unrecognized state like Northern Cyprus, such resilience is hard to find.³⁶ It can really only be found in the parent state or perhaps in religious institutions. It can also be found in the inhabitants of the city many of whom have stayed. They are the constants—theirs are the memories. Finally, in the words of John H. Holland³⁷ and William Brian Arthur,³⁸ "complex systems are characterized by their dependence

on contingencies, for example, event B happens because event A happened in the past, but not event C. These contingencies, also called path dependences, make the study of global histories highly bewildering, because of the concatenation of conditional probabilities."³⁹ The Armenian Church in Famagusta, as demonstrated in this book, provides sets of mostly unstructured data, that can now be structured and woven together using a complexity approach.

THE MAGIC POWER OF HERITAGE. HUMAN-HERITAGE-LANDSCAPE COMPLEX SYSTEMS OF TANGIBLE AND INTANGIBLE CULTURAL HERITAGE AND IDENTITY **ISSUES**

To understand how heritage should be carefully handled in policy- and decision-making, one might refer to Johann Wolfgang von Goethe's magic broom, as presented in his 1797 fourteen-stanza ballad Der Zauberlehrling ("The Sorcerer's Apprentice"), 40 inspired by an episode of the Φιλόψευδης (Philópseudēs, "Lover of lies") written about 150 CE by Lucian of Samosata (today's Samsat in Turkey).41

Goethe's poem begins as an old sorcerer departs his workshop, leaving his apprentice with chores to perform. Tired of fetching water by pail, the apprentice enchants a broom [a pestle in Lucian's work] to do the work for him—using magic in which he is not yet fully trained—. The floor is soon awash with water, and the apprentice realizes that he cannot stop the broom because he does not know how. The apprentice splits the broom in two with an axe, but each of the pieces becomes a whole new broom and takes up a pail and continues fetching water, now at twice the speed. When all seems lost, the old sorcerer returns and quickly breaks the spell. The poem finishes with the old sorcerer's statement that powerful spirits should only be called by the master himself.42

This poetic story teaches us that knowledge and wisdom are needed to wield powerful magic. Indeed, heritage is powerful magic. In the hands of an inadequately trained apprentice, heritage is also a complex system fraught with unintended consequences. To properly tap into the power of heritage, we need trained masters guided by a robust science, who can meld massive heritage input data using scalable digital processes, to navigate unexpected and undesired emergencies and critical points. The use

and misuse of heritage in Cyprus is well understood and yet still central to internationally sanctioned "community building" ⁴³ projects on the island. Along these same lines, the work published in 2000 by Janet Blake provides the key reference to introduce the complexity of cultural heritage, in practice, when one wants to make use of tangible and intangible cultural heritage being aware that its conceptual values change and evolve across time and space.44 In defining cultural heritage in an international and comparative law perspective, Famagusta tests this contention to the extreme.

First, in the sense that it is a form of inheritance to be kept in safekeeping and handed down to future generations. Another important aspect of cultural heritage is its linkage with group identity and it is both a symbol of the cultural identity of a self-identified group, be it a nation or a people, and an essential element in the construction of that group's identity...In this way, cultural heritage is less of an objective, physical existence than the range of associations, which accompany an object or monument and which provide the sense of being part of a group.

In the same work, Blake informs us about possible dangers and problems, then provides cautionary advice based on European Union policies. 45 This is also why Gül İnanç and her research to diffuse the symbols of "power and controversy of heritage education" have been central to the project from the outset.

The role of cultural heritage as a vehicle for the expression and even construction of a nation or group's cultural identity is a double-edged sword which can act both for the good and for the bad. It can lead to an aggressive assertion of identity, whether national or ethnic, which may cause and certainly foster armed conflict in which the destruction of cultural monuments—the symbols of the cultural identity of one of the parties to the conflict—often becomes a weapon of war. It also has great potential for creating cohesion within a group, be it a self-identified ethnic minority within a state, a nation state, or even a supranational body.

Both the Council of Europe 2005 Framework Convention on the Value of Cultural Heritage for Society⁴⁶ and the 2014 "communication from the European Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, Towards an integrated approach to cultural heritage for Europe"

(the state-of-the-art in Europe now)⁴⁷ have sought to recruit cultural heritage, in so far as it reflects pan-European characteristics, as a vehicle for the construction of a sense of European identity. But still

the choice of the Bronze Age in Europe as the subject for an awareness raising campaign on archaeology within the Council of Europe in 1993 illustrates the political character of such decisions—it was seen as one of the few periods in history or prehistory of the "Greater Europe" when it was culturally inter-connected without the controversy of imperialism and conquest.⁴⁸

UNESCO instruments also illustrate the way in which the rhetoric relating to cultural heritage reflects a political view of the organization. The Preamble to the 1970 UNESCO Convention states⁴⁹:

Considering that for interchange of cultural property among nations for scientific, cultural and educational purposes increases the knowledge of the civilization of Man, enriches the cultural life of all peoples and inspires mutual respect and appreciation among nations.

Michel Batisse (1923–2004)—UNESCO Assistant Director-General for Science from 1972 to 1984 and one of the founding fathers of the 1972 World Heritage Convention who played a critical role in the preparation and negotiation of this Convention by guaranteeing the rightful place of natural heritage—described some of the principal obstacles that had to be overcome before the Convention was adopted and ratified by the international community, in a work published with his colleague Gérald Bolla, in French in 2003⁵⁰ and in English in 2005⁵¹ by the Association des Anciens Fonctionnaires de l'Unesco (Association of Former Unesco Staff-AAFU).

After framing the problem of heritage management as the mastering of its magic powers, we consider human-heritage-landscape systems to flesh out a complexity theory of heritage. To do so, let us consider the complex network of geographically situated agents (Fig. 17.1).

This complex network evolves with time as old agents are removed and new agents are added. Existing links between agents can also be removed and new links added. As these social changes are happening we can also have the removal of old landmarks and the addition of new landmarks. Patterns of interactions between agents that are widespread can become persistent through transmission and replication. When this happens, such patterns of interactions that came into existence in the past and continue

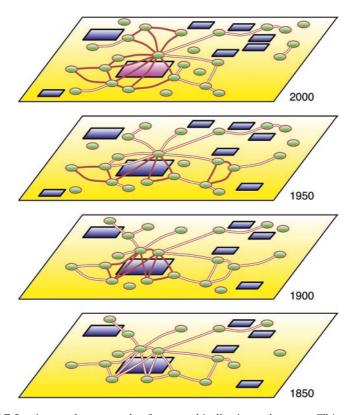


Fig. 17.1 A complex network of geographically situated agents. This network evolves with time, as (1) old agents are removed and new agents are added, (2) new links are added, and (3) landmarks are removed or added. Patterns of interactions between agents ($filled\ links$) that are widespread in the network, and persist through replication and transmission become intangible cultural heritage

to occur in the present become *intangible cultural heritage*. A land-mark that concentrates social interactions to accelerate or maintain this transmission and replication acquires significance beyond its physical use and value (e.g., as a train station). Over time it becomes a *tangible architectural heritage*. Throughout centuries of imperial change in Famagusta, from the Lusignans in the twelfth century through to the hasty evacuation of the old city and Varosha/Maraş in 1974, Famagusta must surely

be considered a perfect laboratory to test such an emergent ideology. To return to Fig. 17.1, competing growth and death processes shape both tangible and intangible heritages. If transmission is strong, perhaps facilitated by a tangible heritage element, an intangible heritage component grows. The intangible heritage component dies and thereafter the facilitating tangible heritage elements also lose their significance. New tangible and intangible heritage can also emerge. From this perspective, heritage components are alive: they evolve through time in response to the environment and have finite lifespans. Unless we are prepared to maintain the transmission mechanism at all costs (after the utility and benefits have been exhausted), we should not expect a heritage component to last forever. Nevertheless, we find ourselves lamenting the loss of golden ages that the disappearing heritage components symbolize. The study of history points us to many golden ages when magnificent achievements were attained in relatively brief periods. Famagusta in the fourteenth century is one such example.⁵² These societies created monuments and buildings, art and music that continue to fire our imagination even today. We cling on to these dving heritage components in the hope that through them we may find glorious moments of our own. Or we convert them—the coronation place of the Kings of Jerusalem, the Cathedral of St. Nicholas in the square of Famagusta has been a mosque since 1571; the square itself is now named after a nineteenth-century Ottoman intellectual, Namık Kemal; the medrese is a restaurant and the Franciscan Monastery a bar and disco.

Having said all this, we observe that it is not uncommon to find the heroes of today inspired by the heroes of yesterday. Triumphant stories of the past help us develop the drive to write success stories of the future. And though the details change with time, every heritage component tells a story of an enduring and universal human spirit. We believe a complexity theory of heritage can be constructed precisely because of these universal elements. Indeed, there are many questions we are anxious to ask of a complexity theory of heritage. How do we enhance the robustness of a heritage we are committed to keeping alive? How is heritage a resource that can be drawn upon to generate better futures?

In such a theory, however, heritage is also dynamic, and changes in time. This change can be abrupt, that is, a regime shift, or it can be continuous, but perceived as abrupt. In the former, the social interactions themselves change qualitatively over a short time. This has happened to Famagusta several times—in the twelfth, the fourteenth, the sixteenth, and the nineteenth centuries, and most recently with the Turkish military action which divided the island in 1974 and led to the subsequent self-declaration of the TRNC in 1983. This is a regime shift in social interaction patterns and corresponds to the loss of part of the intangible cultural heritage (the loss of Greek/Armenians in Famagusta and indeed many of the Turkish Cypriot inhabitants who moved to London). And what of the new populations that did come even after the international isolation of the fledgling state—Anatolian settlers, Russian businessmen, Israeli property developers, British pensioners—they are all real and they are now "inhabitants" of Famagusta. There is thus an additional cognitive dimension to intangible cultural heritage that we must recognize, as our perception of how valuable this intangible cultural heritage is affects how motivated we are at preserving it.

SHIFT: Sustainable Heritage Impact Factor Theory

Through the lens of complexity theory, we obtain three key insights to the human-heritage-landscape system.

- 1. Symbiotic relationship between intangible and tangible heritage. The intangible creates the tangible, and the tangible sustains the intangible. Through this feedback between intangible and tangible heritage, not only do buildings, monuments, and mountains rise above the profanity of day-to-day human interactions, but art, music, dance, and theater can also become sacred. Even food and culinary practices become associated with places or peoples.
- 2. Transmission, replication, and transformation of intangible heritage. Unlike buildings and mountains, humans have short lives. This means that intangible cultural heritage must be passed down from one generation to the next. Such transmission and replication processes can take place on top of formal social institutions like laws, religions, and schools, but they can also happen in informal social institutions like families or identity groups. Even when formal institutions exist to serve transmission and replication, these processes are not perfect. "Errors" creep in. Within this complexity theory of human-heritage-landscape systems, we must learn not to reject these as "errors," but instead, accept such changes as part of the very nature of human societies. In this sense, transformation is inevitable.

- Transformation does not always lead to the disappearance of a heritage (a regime shift that is frequently accompanied by the emergence of a new heritage), although this frequently happens. Sometimes transformation leads to the reuse, reimagining, and repositioning of heritage.
- 3. *Value of heritage lies in the creation of a better future.* If we adopt the reality that all humans die, and thus the story of humanity is merely the story of a graveyard, we will be led to the conclusion that all struggles are futile and in vain. Alternatively, we can also adopt the optimistic view that because of the hard work and sacrifices of our forefathers, humanity enjoys a present that is more peaceful and more prosperous than the past. Even though we cannot predict the future, one thing is for sure: humanity cannot move toward a better tomorrow if we do nothing today. All great feats in the past required dedication and sacrifice. It could not be otherwise for us today. Ironically, part of this sacrifice might be the heritage that we hold dear. We must consume to grow, and must destroy to create something new. Many transformations are already happening, albeit at imperceptible rates for most. But should we take deliberate steps to change?

Based on these insights, we realized therefore that we should:

- 1. identify the complex associations between intangible and tangible heritage;
- 2. measure the transmission and replication strengths, and at the same time, measure the transformation rates;
- 3. measure the impact of heritage as the value it may add in the future.

In a sense, the above three points can be considered to be ordered from the easiest to the most challenging. However, as we are still fleshing out how complex associations can be identified and measured in scientifically rigorous ways, we will not go into details on how points one and two can be accomplished in this chapter. We will, however, discuss how the future value of heritage may be assessed. Naturally, this is difficult to do, because the future is not here yet. Therefore, a proxy for the future value of heritage would be how much commitment and sacrifice we are already making or are willing to make in the present. Specifically, if we have yet to make sacrifices to conserve a piece of heritage, we propose a simple test: swap a

heritage building with our home, or swap the heritage practices for work. We understand the values of our home and our work, because we understand the sacrifices we have to make to have them. If we swap our home for a heritage building, and feel that we have profited immensely, then the heritage associated with the building is truly alive and well. If we feel that we have to put in additional resources to feel that the swap is worth it, but are willing to do so, then the heritage is likely to be in danger, but can generate future benefits with acceptable levels of investment at the present. If after the swap, we feel that the heritage building is useless to us, and we are unwilling to put in any present or future investments, then the logical conclusion we should arrive at is that we should also not wish this burden on anyone else. Similar arguments can work for the swap between heritage practices and work. In fact, this simple swap test is a good starting point to talk about the sustainability of heritage. Knowing that heritage has a finite lifetime, partly because of the transformation, and partly because of consumption, how do we talk about sustainability? Should we conserve at all cost? Are there future rewards if we do? As we understand from the swap test, heritage is ultimately sustainable if it is able to pay for itself, one way or another. For example, a heritage building can pay for its upkeep and conservation if it continues to be used. Reuse and new uses are therefore important dimensions to sustainability. Naturally, if people are willing to pay a tax to keep a building unused, this is fine too. However, we must be wary of wishing misery upon others in so doing. Famagusta is a fascinating case in point because of the reuse already mentioned but also because it is attracting the contemplation of new heritage models for sustainability as seen in Carlos Jaramillo's recent doctoral study entitled "Famagusta: A Third Way in Cultural Heritage."

HERITAGE SCIENCE AS A CONSEQUENCE OF ENGINEERING HISTORICAL MEMORY

Engineering Historical Memory⁵³ is an experimental methodology and an ongoing research project for the organization of historical data in the digital age.⁵⁴ Engineering Historical Memory is helping to develop heritage studies as a science in response to, and in anticipation of, the exponential growth of knowledge—encoded/embodied in complex interactions of written, pictorial, sculptural, and architectural records, oral memories, practices, and performed rituals—in our global society. What

sets it apart from other approaches is a focus on developing and applying computationally intensive techniques (e.g., pattern recognition, data mining, machine learning algorithms derived from other disciplines, and visualization solutions) to achieve this goal. It entails the creation and advancement of databases (relational, graph, and hybrid), algorithms, computational, statistical, and complexity techniques and theories to solve formal and practical problems arising from the study, interpretation, conservation, and management of cultural heritage data. The basic problem has been clearly framed by Larry Page in his TED talk "Where's Google going next?" given on March 21, 2014⁵⁵:

Google mission is to organise world's information and make it universally accessible and useful. People keep on asking: "Is it what you guys are still doing?" I think at it on myself and I am not quite sure about what to answer. Actually, when I think about *search*, it is such a deep thing for all of us: to really understand what you want, to understand the world's information... And we are still very much in the early stages of that. And it is totally crazy! We have been out for 15 years already, but it is not at all done.

In September 2015 Apple welcomed users to its News App using the following advertisement⁵⁶:

The best stories from sources you love, selected just for you. The more you read, the more personalised your News becomes.

To start the application the user is required to select a list of preferred sources. But there is no tool to cross the information and validate the single news. On September 23, 2015, Wired published an article by Julia Greenberg referring to Facebook 360 videos in News Feed⁵⁷ saying that "over time the types of stories that people want to tell each other and the types of content they want to share with each other will get richer and more immersive." Facebook's Vice President of product Will Cathcart wrote "so just as we have seen an evolution from text to photos, we are seeing a pretty big jump to video in the last couple of years. We think that's only going to continue." From a media perspective, the challenge is to have a system that works on a visual base to be tested in two parallel experiences: one with the scholars (historians and art historians interested in data mapping and visualization) to investigate as deep as possible at a global cultural scale the concepts of "provenance" and "validation" of sources and their interpretation; and another in the social media to approach the actual shift from texts, to photographs, videos, and 360°-immersive spaces in the community sharing processes. From an augmented reality perspective our aim is to promote the use of wearable technologies (e.g., smart glasses) to enhance heritage into every aspect of life: buying food at the supermarket, visiting a museum, walking in the rainforest, and so forth. In this way, the entire world could really be "humanly" connected, closing the "loop" for lay people as SHIFT does for the heritage experts. More importantly, we think of the application of data-driven narratives to cultural heritage as a conceptually very progressive way to approach our dynamic heritage. With modern ICT it is possible to show that the nature of cultural heritage is a living system, and very much complex. Here, data visualization can contribute a great deal, as it builds from research data representations that we can understand and study further. Today, digital tools (e.g., Google Daydream VR, Oculus Rift, or HTC Vive, and easy-to-handle 360° cameras), facilitate the capture of surround experiences with increasing levels of immersion and their sharing effortlessly. Even odors could be seized and circulated, by means of the announced "oPhone." The project with the Armenian Church in Famagusta touched upon this potential, stating optimism in online platforms as tools for educational purposes; platforms to inspire the following generations to appreciate and protect the art and architecture of its own community. It was always embedded within the project to encourage children to respect the tangible heritage of societies that preceded their own and yet were ideologically and aesthetically distant. The results are not only transnational or transcultural, they are transgenerational. Innovative interactive experience also stimulates how we learn, not just what we learn, as students acquire an understanding of the multifaceted and interdisciplinary nature of human knowledge and interpretation. Serious games should contain the same volume of information as the most weighty of books, which, in any case, no child is likely to read. New media and technology instead can create a virtual classroom, can grant students and scholars the ability to not only read about their history but to experience it in an immersive manner, then interact with it. One can only imagine the potential of a creative platform that allows young minds to discover and to reimagine their cultural identity, adopting a narrative style that does not forcibly advocate any particular religion or belief. What might the outcome be of adopting a story-focused narrative that gives the children space to understand and appreciate different cultures and simultaneously spark an interest in art and architecture conservation, even if Famagusta is to remain within an unrecognized state?⁵⁸

CONCLUSION AND FUTURE WORK

Heritage is considered as the thesaurus of human experiences (as in the comprehensive storage system of human knowledge and values) embedded in human artifacts and in nature as interactively experienced by different cultural communities, and biologically perceived by the human brain. In this way, heritage issues become the key factor for innovation in the Anthropocene era, during which human activity is becoming the dominant influence not only in climate and the environment but also in the human genetic, epigenetic, and political evolution. Our society is at the very beginning of a global transformation process in the human-heritagelandscape relationships. To cope with this transformation we need to rethink the very basic concept of heritage (what has been inherited from the past and might be passed to future generations) in order to decide what parts of heritage can sustainably fit into the future that we envisage as a community (local, national, religious, global). We do not know what the next generation will need, value, and like, but we can display and discuss what humans needed, valued, and liked—and the reasons why they did it—using the results to make better decisions. In order to become able to manage change wisely, we need a new science of heritage to support policy and decision-making. By including people in our SHIFT, we aim at a synthesis between knowledge and empathy. The former implies reasoning and understanding while the latter implies an ethic of respect beyond the boundaries of the different values (universal and/or culturaldependent), their origins, and transmissions. And it is this wisdom that we want to develop to steer the world and to make it a better place to be. For Famagusta this is a necessity—an alternative intellectual proposal that we must consider seriously.

Acknowledgment We are grateful to Jan Wouter Vasbinder, founding director of the Nanyang Technological University (NTU) Complexity Program, for having made possible the academic collaboration between the authors by introducing us to each other on the occasion of the 2013 NTU Complexity Conference. The Complexity Program, which accomplished is mission in 2014 establishing the NTU Complexity Institute, finds an alternative continuity in today's NTU Para Limes (Beyond Boundaries). All these NTU institutions have been supporting in various ways this research, providing not only financial support, but also and mainly a highly inspiring international community of scholars from different disciplines.

Notes

- 1. A. Nanetti, S. A. Cheong, and M. Filippov, "Interactive Global Histories. For a new information environment to increase the understanding of historical processes," in Proceedings of the International Conference on Culture and Computing 2013 (Kyoto, Ritsumeikan University, Sept. 16-18, 2013). (Los Alamitos, CA: IEEE Computer Society, 2013), 104–110, doi:10.1109/ CultureComputing.2013.26.
- 2. A. Nanetti, F. Perono Cacciafoco, and M. Giberti, "Mapping and Visualising Linguistic and Territorial Convergent Data: Imola And Its Environment as a Case Study," (Proceedings of the XXV International Congress of Onomastic Sciences: Names and their Environment, Glasgow, UK, August 25–29, 2014), forthcoming.
- 3. A. Nanetti and S. A. Cheong, "Web-Based Automatic Narratives for Interactive Global Histories. The Maritime Silk Roads 1205-1533," (Proceedings of the 22nd International Congress of Historical Sciences, PRC, Shandong, Jinan, August 23-29, 2015, Major Theme 4-History, New Media and the Digital Turn), distributed as a CD.
- 4. A. Nanetti, ed., "Revisiting the World of Fra Mauro's Map and the Morosini Codex in an Artificial Intelligence Perspective," The Asian Review of World Histories 4, no. 1 (January 2016), [published on May 7, 2016] Special Issue (authors: Andrea Nanetti, Angelo Cattaneo, Koh Keng We, Lin Chin-Yew, Cheong Siew Ann), http://thearwh.org/index.htm. This special issue is based on the panel chaired by A. Nanetti on Sunday, May 31, 2015, for the third triennial Congress of the Asian Association of World Historians held in Singapore, Nanyang Technological University, College of HASS, on May 29-31, 2015.
- 5. A. Nanetti, A. Cattaneo, S. A. Cheong, C. Y. Lin, "Maps as Knowledge Aggregators: from Renaissance Italy Fra Mauro to Web Search Engines," in The Cartographic Journal 52, no. 2 (May 2015), [published on November 26, 2015], 159–67.

- 6. A. Nanetti and A. Simpson, "Sharing our Heritage to Shape our Future. How Effective Are Multi-User Sharing Platforms in Supporting Collaborative Visioning for the Future, and why is Heritage Centre-Stage?," (The Fifth International Conference on Social Media Technologies, Communication, and Informatics, Barcelona, Spain, November 15-20, 2015), published on November 15, 2015 by IARIA XPS Press, 2015, pp. 82-90, http://www.thinkmind.org/index.php?view=article&articleid=so tics 2015 4 20 60070 http://www.proceedings. and com/28525.html
- 7. R. Staiff, Re-imagining heritage interpretation: enchanting the past-future. (Farnham: Ashgate, 2014). Contents: (1) Anecdotes and observations, (2) Tilden: beyond resurrection, (3) The somatic and the aesthetic: embodied heritage experiences, (4) Visual cultures: imagining and knowing through looking, (5) Narratives and narrativity: the story is the thing, (6) Digital media and social networking, (7) Conversing across cultures, (8) Enchantment, wonder and other raptures: imaginings outside didacticism.
- 8. Ibid., 68.
- 9. See the online description of the book on the Routledge website at https://www.routledge.com/Re-imagining-Heritage-Interpretation-Enchanting-the-Past-Future/Staiff/p/book/ 9781409455509 (accessed on May 31, 2016).
- 10. A. Prescott, "Big Data: Some Historical Perspectives," (European Policy on Intellectual Property conference organized by CREATe, University of Glasgow, September 2015), see: http://www. epip2015.org, http://www.create.ac.uk, and http://digitalriffs. blogspot.sg/2015/09/big-data-some-historical-perspectives. html, all sites accessed on May 31, 2016.
- 11. Available from the UCLA website: http://www.ipam.ucla.edu/ programs/long-programs/culture-analytics, accessed on May 31,
- 12. H. Kalman, Heritage planning. Principles and processes. (London and New York: Routledge, 2014), 4-5, fig. 1.4 (Process chart for understanding the historic place) at 7, fig. 1.4 (Process chart for managing change) at 9, 281–90 (Heritage Impact Assessment).
- 13. See, in this book, the "Introduction" and Chap. 9, in which Tomasz Borowski makes a spatial analysis of the Armenian Church of Famagusta in medieval times.

- 14. See Nanetti, et al., Proceedings of the International Conference, "Introduction," "Conclusion."
- 15. See Nanetti, et al., Proceedings of the International Conference, 104–105.
- 16. The conference was organized and chaired by Andrea Nanetti and Siew Ann Cheong at Nanyang Technological University Singapore for the Complexity Program and the School of Art, Design and Media, to pioneer a new science of heritage, as a state-of-the-art multidisciplinary domain able to investigate and discover integrated action plans and solutions in response to, and in anticipation of, the challenges arising from cultural heritage issues in society.
- 17. The complete video recorded conference is available from: http:// www.paralimes.ntu.edu.sg/Pages/Home.aspx, accessed on May 31, 2016.
- 18. See, in this book, Chaps. 2, 3, 7, and 11 by Nicholas Coureas, Dickran Kouymjian, Lucie Bonato, and Andres Burgos Braga, respectively.
- 19. The complete video recorded conference is available from: http:// www.paralimes.ntu.edu.sg/NewsnEvents/ HeritageandtheCreativeIndustry/Pages/Video%20Gallery.aspx, accessed on May 31, 2016.
- 20. See, in this book, the "Introduction," 20–21.
- 21. It has been recently demonstrated by Andrea Nanetti and Anna Simpson at SOTICS 2015 in Barcelona. See here above the paper cited in footnote 6.
- 22. UNESCO Charter for the Safeguarding of Intangible Cultural Heritage, 2003, Art. 2.
- 23. See, in this book, the "Introduction," pp. 18–19.
- 24. U. Eco, From the tree to the labyrinth. Historical studies on the sign and interpretation, trans. A. Oldcorn. (Cambridge Ma and London: Harvard University Press, 2014), 93 (originally published as U. Eco, Dall'Albero al Labirinto. Studi storici sul segno e l'interpretazione. [Milano: Bompiani, 2007], 96). For a previous version of the same text, see also U. Eco, "Dictionary vs. Encyclopedia," chap. 2, in Semiotics and the philosophy of language (Bloomington and Indianapolis: Indiana University Press, 1983), 46-86.
- 25. Eco, From the tree to the labyrinth, 94.

- 26. Eco, From the tree to the labyrinth, 88.
- 27. Eco, From the tree to the labyrinth, 94.
- 28. Eco, From the tree to the labyrinth, 70. See E. Esposito, La memoria sociale: mezzi di comunicare e modi di dimenticare (Roma-Bari: Laterza, 2001), chap. 4, especially paragraph 4.4.
- 29. Eco, From the tree to the labyrinth, 87-88.
- 30. S. Rendgen and J. Wiedemann, Information Graphics (n.p.: Tashen, 2013), 9.
- 31. A. Cevolini, De arte excerpendi': imparare a dimenticare nella modernità (Firenze: Olschki, 2006), 96.
- 32. See J. D. Sterman, "Learning in and about complex systems," System Dynamics Review 10, nos. 2-3 (1994): 291-330; M. Mitchell, "Complex systems: Network thinking," Artificial Intelligence 170, no. 18 (2006): 1194-1212; H. A. Simon, "The organization of complex systems," in Models of Discovery and Other Topics in the Methods of Science, Idem (Dordrecht: D. Reidel Publishing Company, 1977), 245-61; and W. Weaver, "Science and complexity," in G. J. Klir, Facets of Systems Science (New York: Springer US, 1991), 449-56.
- 33. P. W. Anderson, "More is different," *Science* 177, no. 4047 (1972): 393-96.
- 34. J. H. Holland, "Complex adaptive systems," Daedalus, 121/1, Winter 1992, 17–30.
- 35. See A. L. Barabási, Linked. How everything is connected to everything else and what it means for business, science, and everyday life (New York: Basic Books, 2014); and M. E. J. Newman, Networks: An Introduction (Oxford and New York: Oxford University Press, 2010).
- 36. See, in this book, the "Introduction," 16–18.
- 37. J. H. Holland, Emergence: From Chaos to Order (Oxford: Oxford University Press, 2000).
- 38. W. Brian Arthur, Increasing Returns and Path Dependence in the Economy (Ann Arbor: University of Michigan Press, 1994).
- 39. Available from: http://ehmazure.cloudapp.net, accessed on May 31, 2016.
- 40. Available with German text and English translation from: http:// germanstories.vcu.edu/goethe/zauber dual.html, accessed on May 31, 2016.

- http://www.sacred-texts.com/cla/luc/wl3/ 41. Available from: wl315.htm, accessed on May 31, 2016.
- 42. The plot is available from Wikipedia: https://en.wikipedia.org/ wiki/The Sorcerer%27s Apprentice (accessed on May 31, 2016).
- 43. See Michael Walsh's Introduction, where he notes, but does not endorse, it as he claims that it is reinserting heritage into a political forum—which is exactly the opposite of what we should be doing. If possible, we should be extracting it.
- 44. J. Blake, "On defining the cultural heritage," The International and Comparative Law Quarterly 49, no. 1 (January 2000): 61-85.
- 45. Blake, "On defining the cultural heritage," 84.
- 46. Available from: http://conventions.coe.int/Treaty/en/Treaties/ Html/199.htm (accessed on May 31, 2016).
- 47. COM(2014) 477 final, dated Brussels, 22.7.2014, is available from: http://ec.europa.eu/culture/library/publications/2014heritage-communication en.pdf (accessed on May 31, 2016).
- 48. Blake, "On defining the cultural heritage," 84, fn. 105.
- 49. UNESCO conventions are available from: http://whc.unesco. org/en/conventiontext, accessed on May 31, 2016.
- 50. M. Batisse and G. Bolla, "L'invention du 'patrimoine mondial," Les Cahiers de l'Histoire-Regards sul l'action de l'Unesco par des acteurs et des témoins 2 (2003): 13-17.
- 51. M. Batisse and G. Bolla, "The Invention of World Heritage," (History papers: UNESCO action as seen by protagonists and witnesses, Paper 2. Paris: Association of Former UNESCO Staff Members, 2003).
- 52. See, in this book, Chap. 6 by Thomas Kaffenberger on the architecture of the Armenian Church.
- 53. Available from: http://ehmazure.cloudapp.net (accessed on May 31, 2016).
- 54. Andrea Nanetti was Visiting Scholar at Princeton University in 2007, and further developed it when he was Visiting Full Professor at the University of Venice Ca' Foscari in 2012. Since 2013 he is carrying on the research at Nanyang Technological University Singapore at the intersections of humanities and data science/visualization. The project was awarded best conference paper at 2013 Culture and Computing (Kyoto, Japan), and has been funded by Microsoft Research and Microsoft Azure (2014–2016).

- 55. Available from: https://www.ted.com/talks/larry_page_where_s_ google_going_next?language=en, accessed on May 31, 2016.
- 56. Available from: http://www.apple.com/news, accessed on May 31, 2016.
- 57. Available from: http://www.wired.com/2015/09/facebooklaunches-360-video-immersive-star-wars-clip, accessed on May 31, 2016.
- 58. S. Norris, M. Walsh and T. Kaffenberger, "Visualising Famagusta: Interdisciplinary Approaches to the Study of the Orthodox Cathedral of Saint George of the Greeks in Famagusta, Cyprus," Participatory Archives in an World of Uniquitous Media, eds. Natalie Pang, Kai Khiun Liew and Brenda Chang (Routledge, 2015); M. Walsh and G. Inanc, "Conservation, visualisation, education, reconciliation," in International Council of Museums, ed. J. Bridgland (Paris: ICOM-CC, 2014).

Afterword

New Delhi, Famagusta and Beyond

Sharon Evelyn Little

This book is a stunning testimony of how a dedicated professional, in this case, Professor Michael J.K. Walsh, can make an enormous contribution towards the safeguarding of cultural heritage. Despite national and international obstacles he was able to motivate the devoted academic/professional authors of this book, secure funding, coordinate in situ examinations/documentations and conduct conservation-restoration treatments of cultural heritage—all within the problematic context of a territory where there is political controversy. For him, and the many team players, it has been 13 years of constant struggle, towards stimulating a realistic risk management project for Famagusta.

S.E. Little (⊠)

Fondation Little/Ragusich (Bogie, Fee, Drewry, Little, Ragusich) Managed by: Gérée par la Fondation Québec Philanthrope Québec, QC, Canada

New Delhi

My first awareness of the complexity involved in safeguarding Famagusta came in 2007. At this time, I was well into the fifth year of my six-year mandate as Coordinator of the Working Group, Legal Issues in Conservation (LIC), affiliated with the International Council of Museums—Conservation Committee (ICOM-CC), UNESCO. In a response to my call for LIC academic/professional papers for the ICOM-CC Triennial Conference 2008, to be held in New Delhi, India, Professor Walsh submitted his paper, Collective Insecurity: Nationalism, Internationalism and the Fate of Famagusta. Since 2002, Professor Walsh had been fighting for the safeguarding of Famagusta because it "is one of the most precious specimens of medieval fortification left in the world" and "has already been largely neglected for over three decades." He was also fighting to "encourage the international community to follow the World Monuments Fund and accept its responsibility to this endangered city." But Famagusta was located within the Turkish Republic of Northern Cyprus, declared in 1983, and it was this territorial designation that isolated it academically from the rest of the world, cutting it off from international resources for conservation-restoration, for many years to come.

An example of such academic isolation was further illustrated by ICOM-CC in 2007. LIC had recommended the "formal" presentation of the academic paper by Professor Walsh, as well as its publication in the preprints of the ICOM-CC Triennial Conference 2008, New Delhi, India. The goal was to increase the awareness of the difficulties involved in safeguarding various types of cultural heritage in territories where there is political controversy. Following consultation, Foreign Affairs, Trade and Development Canada, considered the paper of Professor Walsh to be academic in nature mainly because ICOM-CC is recognized as an academic/professional membership, further supporting my recommendation. Unfortunately, the ICOM-CC Editorial Committee denied both the "formal" presentation of the paper and its publication, deeming the paper to be "heavily political." Fortunately, the official time slot of the LIC meeting at the ICOM-CC Triennial Conference 2008, New Delhi, India, provided sufficient time for the academic presentation of "non-formal" papers. As Professor Walsh was unable to attend the conference, I personally read his paper. A healthy discussion followed and many attending colleagues expressed their shock at the extent of the various conservation-restoration issues and revulsion toward the obstacles that hampered immediate and ethical interventions.

Overall, the general LIC consensus was that urgent risk management was required to safeguard the cultural heritage of Famagusta, even if it was located within a territory where there is political controversy.

FAMAGUSTA

The first major success for Professor Walsh came in 2008, when the World Monuments Fund Watch List classified Famagusta as an Endangered Site. As we have read throughout the meticulously written chapters of this book and observed the beautifully documented video, The Forty: Saving the Forgotten Frescos of Famagusta, this international accreditation precipitated the development of his team of experts.

... AND BEYOND

Finally, the combined successes of this small group of devoted professionals caught the attention of the United Nations (UN), culminating in the UN undertaking the management of the project in 2015. So what began as an "academic/professional" project for the safeguarding of cultural heritage within a territory where there is political controversy has now, since 2015, migrated to the "political" international arena. It is nevertheless hoped that this new status of Famagusta will urge all local, national and international politicians to heed our professional warnings and create adequate laws to safeguard Famagusta and beyond, for the global community at large. Indeed, within the present context of so many international crises that threaten the longevity of global cultural heritage, this is a book that offers us all a glimmer of hope. It is an example of how a small group of ethically devoted academic/professionals, operating against all odds, even sometimes acting independently, can create positive change, even within territories where there is political controversy.

Sharon E. Little

President: Foundation Little/Ragusich

Coordinator, LIC, ICOM-CC, UNESCO, 2002–2008

NOTE

1. From original application made by Michael J. K. Walsh.

Appendix 1: Laser Imaging in the Armenian Church

Bora Sayin and Banu Sayin

Laser imaging (3D laser scanning) is an advanced and high-tech form of 3D surveying as it uses sophisticated hardware and software to calculate range and angular measurements. Sometimes it is compared to terrestrial photogrammetry since the survey methods are very similar and they are used to create 3D data. Even though it was initially developed to be used for as-built surveys of industrial plants, the technology is now being used in many different areas including archeology, architecture, tunnel and mine surveys, visual effects creations for movies, crime scene investigation for police work, city modeling, and so on.

Compared to traditional total station surveys, the laser imaging method has many advantages: the data capture speed is up to ten times faster; it reduces the risk of returning to the site since it measures in a complete way rather than point by point, and it lays out thousands of 3D points over the surface and therefore helps to identify the smallest details.

CAD Systems Director in Solvotek Engineering Solvotek Mühendislik ve Bilişim Hiz. Tic. Ltd. Şti.

B. Sayin Istanbul, Turkey

B. Savin

The laser scanner uses continuously rotating laser beams to survey its surroundings. While the laser mirror rotates vertically it also turns by 180 degrees horizontally with small angular steps. Resulting data is a dense cloud of coordinated points called a "point cloud."

Laser imaging technology (3D laser scanning) for cultural heritage objects is recognized as the most accurate and reliable method of digital documentation and archiving. It is used to document objects by their dimensions and locations with regard to other objects in the environment. The range of the laser scanner varies on the size of object to be surveyed. For example, for objects in centimeter dimensions a close-range scanner is needed and objects like a kilometer-wide terrain or a city needs to be surveyed with a long-range scanner.

For the Armenian Church of Famagusta we employed a midrange laser scanner since the range to be dealt with was within 50 meters. This midrange scanner was a phase-based Z+F Imager 5010C. Due to its "Phase-Based" measurement algorithm, the resulting point clouds are of very high resolution/high density (Figs. A.1 and A.2).



Fig. A.1 Scanning the exterior of the Armenian church

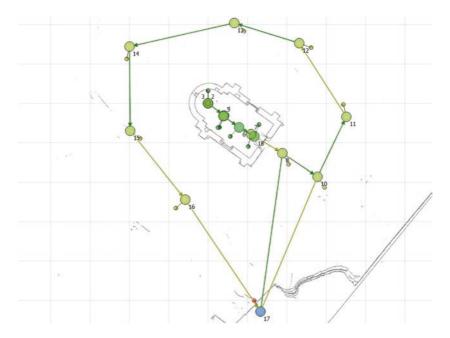


Fig. A.2 Diagrammatic scan plan of Armenian complex

Since the first priority was documenting the frescos on the walls, the work started inside the church; a special elevated tripod was used in order to access higher parts of the wall. There were 16 scans in total: 7 scans for the interior and 9 scans for the exterior of the church (Fig. 1.6).

The Z+F Imager 5010C is an excellent 3D laser scanner for architectural and archeological documentation; in addition to its high-density, high-accuracy data capture, it also has an integrated HDR camera for coloring the point cloud data. This HDR camera (i-cam) takes 42 images for a full panoramic image and the resulting image is as big as 80 MPixel.

The HDR-colored point cloud data is almost like a high-resolution photograph.

At the end of the project a registered and colored point cloud data was used to create scaled ortho-images which can be used for architectural drawings. The data is also rendered as a fly-through movie for visualization purposes (Fig. A.3).



Fig. A.3 Exterior scan of western façade of the Armenian church, Famagusta

INDEX

A	Annunciation, 80
Advisory Board for the Preservation,	Flagellation panel, 254, 255
Physical Protection and	kneeling donor, 103
Restoration of the Immovable	Nativity, 25, 80
Cultural Heritage of Cyprus, 196	Passion, 80
Agios Georgios Exorinos, 105, 106,	Armenian Kingdom of Cilicia,
112–14, 211, 218	55n7, 63, 82, 83, 91n67,
Alexandria, 4, 47, 48	92n73, 93n86, 93n90, 130,
Anderson, Philip W., 337	132
Annan Plan of 2004, 11–12, 14	Armenian refugees, 67–9, 153, 157
Annemarie Weyl Carr, 7, 24, 25n4,	Armenian scribes, 44, 64, 83
28n18, 135n2	Art Diagnostic Laboratory of the
apse, 33n74, 69, 70, 72, 100, 101,	University of Bologna, 254
103, 105, 114, 136n10, 144-6,	·
148, 150–3, 155, 157, 158,	
162n11, 163n24, 170, 174-6,	В
232, 233, 238, 240, 246, 247,	Babgen Gulesserian (Bishop), 71
252, 253, 257, 279	Balderstone, Susan, 16, 31n55,
Arbel, Benjamin, 25n2	201n54, 202n57
arched tympana, 125	Bardswell, Monica, 10, 71-8, 80, 246,
Archimandrite Krikor Bahlavouni, 10	252, 254, 255, 260–2
Arendt, Hannah, 286, 287, 297n4	Beirut, 4, 8, 45, 175
Armenian Church frescoes	Bonfils, Felix, 175

365

Note: Page numbers followed by 'n' refer to foot notes.

M.J.K. Walsh (ed.), The Armenian Church of Famagusta and the Complexity of Cypriot Heritage, Mediterranean Perspectives,

© The Author(s) 2017

DOI 10.1007/978-3-319-48502-7

Corroyer, Édouard, 7, 28n18 Bruyn, Cornelis de, 9, 29n29, 29n30 the Council of Europe, 14, 17, 32n63, budded cross, 126 buttress, 66, 126, 129, 144, 148, 149, 193, 287, 340, 341 Council of Europe's Parliamentary 154-7, 162n11, 173, 222n35, Assembly, 14, 17, 32n63 233, 236, 237 Crawford, James, 190, 198n15 Crucifixion panel, 254, 259, 265n10 \mathbf{C} Crusader Levant, 147-53 Cypriot Armenians, 100, 120n43 Calas, Theophile, 170, 179n3 Canon of Blessing and Anointing of the Cypriot Department of Antiquities, 246 Cross, 130 Carmelite Church of St. Mary, 9, 33n75, 105, 113, 148, 156, 158, D 213, 214, 220n7, 221n21, 227, Declaration of the Parliament of the 246, 319 European Union on the Carrying of the Cross, 92n72, 104, Protection and Preservation of 105, 253 the Religious Heritage in the Northern Part of Cyprus, 194 carved crosses, 126, 131, 132, 214 Caspersen, Nina, 13, 14, 30n41, de facto States, 30n40, 189-92 deposition, 74, 78, 104, 105, 253, 198n13 Cathedral of St. Nicholas, 4, 222n35, 256, 281 de Vogüé, Melchior, 169, 181nn16 Catholicos Grigor VII, 63 Dodekaorton, 103 Catholicos of Cilicia, 6 Dormition of the Virgin, 72, 80, 106, chapel of Zoravač, 100 249, 255n1, 259 Christ cycle, 74, 75, 80, 250 Drummond, Alexander, 9 Duke of Tuscany, 9 Church of Agia Marina in Pyrga, 114 Church of Agios Georgios Exorinos, Duthoit, Edmond, 9, 146, 161n5, 105, 112, 113, 211, 218 170-3, 180n13, 232, 246 Church of Baron T'oros I, 130 dynamic identification, 235, 237-8, Church of Our Lady of Carmel, 103, 241 112, 114 Church of Saint Anne, 105 Church of Saint Epiphanios, 148, 149, \mathbf{E} 151, 162n12 ECtHR. See European Court of Church of Saint George Exorinos, Human Rights (ECtHR) 148–51, 154, 162n13, 163n17 Enlart, Camille, 9, 62, 66, 68, 70, colophons of Armenian manuscripts, 72-5, 77, 78, 80, 85n6, 103, 133, 137, 138n26, 146-8, 153, 63, 86n17, 86n21 consecration cross, 127, 132 155, 157, 158, 160n1, 163n21, Constable Smbat's Church in Paperon, 170, 172–5, 206, 219n5, 225, 232, 246, 261, 265n10, 266n15 130

Eurocode, 238 European Court of Human Rights (ECtHR), 193, 199n30, 200n35	Jeffery, George, 10, 29n35, 29n36, 62, 71, 72, 85n6, 137n11, 219n4, 220n13, 261, 266n15 Jephonias, 110, 119n31
F Faro Framework Convention on the Value of Cultural Heritage for Society, 287 Forty Martyrs of Sebaste, 26n11, 291 G gables, 145, 146, 148, 155, 162n11, 232, 240 gate of the Cave, 206, 210, 212, 217 Gibellino, Stephano, 8–9, 206	K Kanch'owor, 65, 66, 101 Kassinis, Elizabeth, V., 18, 24, 32n67 Katholikos Gregory Taghay, 113 Kergorlay, Jean de, 170, 179n6 Kertogh, Vrtanes, 105 Khach'atur the scribe, 64 khatchkars, 99, 100, 136n5, 214 Killebrew, Ann E., 16 King T'oros I, 100
GPR. See Ground Penetrating Radar (GPR) Greek Cypriots, 15–16, 18, 46, 106, 188, 193, 195–7, 199n31, 286, 290 Ground Penetrating Radar (GPR), 10, 144, 156–8, 160, 164n38, 216, 225–30 Guillaume-Rey, Emmanuel, 172, 180n9	Kukucsu, Hüseyin, 257 L Langdale, Allan, 16, 31n53, 33n72, 70, 72, 73, 90n54, 91n66, 91n68, 92n70, 93n84, 126, 128, 133, 136n2, 137n11, 138n19, 139n26, 153, 158, 161n1, 161n7, 164n27
H Hadzidemetriou, Takis, 197, 202n58 I Imago Pietatis, 80, 249, 262 in-situ testing, 232, 235	laser imaging, 21, 361–4 laser imaging technology, 362 laser scanner, 362, 363 Latrie, Louis Mas, 171 Layasso, 67, 157 Leventis Museum, 175, 176 Life of Christ cycle, 74, 75, 80 Limassol, 46, 49, 63, 70, 338 Limassol gate, 207, 210, 212, 218 Lusignan, Stephen de, 8
J Jaramillo, Carlos, 15, 31n48, 31n49, 34n79, 346 Jaspers, Karl, 286	M Mamluk, 43, 44, 46–9, 52, 64, 67, 100, 130, 132

Master Plan for Nicosia, 196 0 Ojnec'i, Yovhannes, 100 maštoc', 130–2 Maundeville, Sir John, 5 Organization of the Islamic Médiathèque de l'architecture et du Conference, 14 patrimoine, 174, 175, 180n14 Ottoman Empire, 8, 99, 188 Mendicant orders, 101, 105, 213 Our Lady of Compassion, 208 Meziérès, Philippe de, 4, 47, 68, Our Lady of Green, 101, 169 89n39 Özkutlu, Seyit, 8, 28n21 miaphysite, 54, 100 Mogabgab Photographic Archive, 10, 20, 164n38 Palaiologans, 34n82, 106, 108, 109, 114, Mogabgab, Theophilus, 146, 149, 158, 160, 246, 250 119n41, 131, 162n13, 163n17 Møller, Michael, 16 Paraskeve, 74, 111, 114 Montevideo Convention on Rights Pavli, Michael, 10 and Duties of States, 190 Petros (Bishop), 10, 69, 176 Municipality of Famagusta, 245, 252, Petros the scribe, 64 257, 288 photographic survey, 20, 232-8, 241 mural of Saint John, 44, 65, 72, 73, pilgrims, 4, 5, 45, 62, 67, 105, 131, 78, 92n69, 110, 112–14, 116, 132, 134, 153, 213, 214 152 Pope Clement V, 45, 61, 131, 137n10, 153, 213 Musée de Picardie, 171, 172 Pope John XXII, 45, 46, 49, 53, 62, 214 Protois, Félix, 170, 179n5 N Nanyang Technological University (NTU), 2, 20, 242, 245, 288, R 289, 303, 313, 327, 349, 350n4, Renan, Ernest, 171, 172 352n16, 354n54 respond (architectural feature), 158 nave, 70, 103, 112, 114, 143-6, 148, Roy, Lucien, 146, 156, 175 151-6, 162n13, 163n24, 170, niche, 72, 74, 103, 106, 145, 150, S 151, 153, 154, 157, 162n16, Şahoğlu, Vasýf, 17, 32n61, 32n66 163n24, 247, 253 Saint Demetrius in Peć, 108 Nicosia, 8, 16, 22, 33n74, 34n80, 46, Saint George of the Greeks, 33n77, 52-4, 62, 64, 67-9, 85n7, 103, 106, 113, 162n12, 164n35, 87n22, 90n49, 172, 175, 176, 355n58 179n2, 180n9, 180n14, 188, Saint Helena in the Holy Sepulchre, 214 196, 197, 198n8, 207, 208, Saint John in Giblet, 152 219n4, 220n14 Saint Nicholas of the Greeks church, Notre-Dame in Tortosa, 152 148, 149

Saint Phocas in Amioun, 152 Saint Pierre Thomas, 68 Saint Theodore on Horseback-fresco, 291, 292 Sanudo, Marino, 43, 50, 55n1 Scham, Sandra A., 16 Schildtberger, Johannes, 99, 116n1 Sédéfdjian, 175, 176, 181n23 Seismic Hazard Map of Cyprus, 231 Sepulchre, 19, 105, 106, 134, 135, 214 Şevketoğlu, Müge, 17, 32n61, 32n66 Sophocles Hadjisavvas, 17 Sørensen, Marie Louise Stig, xn1, 336 Step'annos Goynerits'ants', 65, 81, 87n29 Stewart, Basil, 8, 28n25 Stratilates, Theodore, 110	U Uluca, Ege, 9, 29n33, 161n8 UN Development Programme Partnership for the Future (UNDP-PFF), 196 United Nations (UN), 11, 16, 18, 188, 359 United Nations Education, Science, and Cultural Organization (UNESCO), 2, 15, 17, 18, 23, 34n79, 200n40, 287, 288, 321, 334, 338, 341, 352n22, 354n51, 358, 359 UN Security Council, 29–30n30, 188 193, 198n4, 200n37
Study of Cultural Heritage in Cyprus, 196 Support to Cultural Heritage Monuments of Great Importance for Cyprus, 196 synod of Manazkert, 100, 105	V Vaivre, Jean-Bernard de, 62, 84n2, 89n34, 137n10, 137n11, 139n29, 139n30, 161n1, 161n6, 161n10, 178n1, 181n19
T Tanners' Mosque, 149 Technical Committee on Cultural Heritage (TCCH), 16, 18, 23, 196	Vardapet, Yohannes, 45, 65 Verona, Jacobus de, 5, 27n14 Viollet-le-Duc, 172 Vita-icons, 114
Tristram, E. W., 254, 255, 258 Tuncel, Riza, 17, 32n61, 32n66 Turkish Cypriots, 15, 17–19, 187, 188, 196, 197, 199n31, 200n43, 286, 290, 291, 344 Turkish Republic of Northern Cyprus (TRNC), 11, 13–15, 188–97,	W Waddington, Henry William, 172, 180n10 World Monuments Fund (WMF), 2, 20, 245, 265n6, 358, 359
198n8, 198n14, 199n31, 199–200n34, 200n35, 200n43, 344, 358 twin churches, 148–50, 154, 161n10, 214	X xač'k'ars cross-stones, 127 Y Vohannēs the scribe, 64
tympanum, 125, 150, 247, 258	Yohannēs the scribe, 64