



A R I D

Z O N E

A R C H A E O

L O G Y

8 2019

MONOGRAPHS

Papers from the 1st Workshop

Archaeology in Africa

Potentials and perspectives on laboratory
& fieldwork research

Edited by

Savino di Lernia and Marina Gallinaro

Arid Zone Archaeology, Monographs

Series Editor

Savino di Lernia, Sapienza Università di Roma, Italy

Editorial Board

Joanne Clarke, University of East Anglia, Norwich, UK

Mauro Cremaschi, Università degli Studi di Milano, Italy

Nick Drake, King's College, London, UK

Mario Liverani, Sapienza Università di Roma, Italy

Sonja Magnavita, Ruhr-University, Bochum, Germany

Giorgio Manzi, Sapienza Università di Roma, Italy

David J. Mattingly, University of Leicester, UK

Anna Maria Mercuri, Università di Modena e Reggio
Emilia, Italy

Peter Mitchell, University of Oxford, UK

Michael D. Petraglia, Max Planck Institute for the Science
of Human History, Jena, Germany

Karim Sadr, University of the Witwatersrand,
Johannesburg, South Africa

Mario Santana Quintero, University of Carleton, Ottawa,
Canada

Mustafa Turjman, Department of Antiquities, Tripoli, Libya
Robert Vernet, Institut Mauritanien de Recherches
Scientifiques, Nouakchott, Mauritania

Advisory Board

Piero Bartoloni, Università di Sassari, Italy

Matthew R. Bennett, Bournemouth University, UK

Alberto Cazzella, Sapienza Università di Roma, Italy

Paola Davoli, Università del Salento, Italy

Hédi Dridi, Université de Neuchâtel, Switzerland

Mhamed Hassine Fantar, Institut National d'Archéologie
et d'art à Tunis, Tunisia

Enrico Giorgi, Università di Bologna, Italy

Alessandro Jaia, Sapienza Università di Roma, Italy

Damiano Marchi, Università di Pisa, Italy

Lucia Mori, Sapienza Università di Roma, Italy

Oscar Mei, Università di Urbino, Italy

Lorenzo Nigro, Sapienza Università di Roma, Italy

Marc Mayer i Olivé, University of Barcelona, Spain

Gaëlle Tallet, Université de Limoges, France

ARID ZONE ARCHAEOLOGY

8 2019

MONOGRAPHS

Arid Zone Archaeology, Monographs

Series Editor

Savino di Lernia, Sapienza Università di Roma, Italy

Editorial Board

Joanne Clarke, University of East Anglia, Norwich, UK

Mauro Cremaschi, Università degli Studi di Milano, Italy

Nick Drake, King's College, London, UK

Mario Liverani, Sapienza Università di Roma, Italy

Sonja Magnavita, Ruhr-University, Bochum, Germany

Giorgio Manzi, Sapienza Università di Roma, Italy

David J. Mattingly, University of Leicester, UK

Anna Maria Mercuri, Università di Modena e Reggio Emilia, Italy

Peter Mitchell, University of Oxford, UK

Michael D. Petraglia, Max Planck Institute for the Science of Human History, Jena, Germany

Karim Sadr, University of the Witwatersrand, Johannesburg, South Africa

Mario Santana Quintero, University of Carleton, Ottawa, Canada

Mustafa Turjman, Department of Antiquities, Tripoli, Libya

Robert Vernet, Institut Mauritanien de Recherches Scientifiques, Nouakchott, Mauritania

Advisory Board

Piero Bartoloni, Università di Sassari, Italy

Matthew R. Bennett, Bournemouth University, UK

Alberto Cazzella, Sapienza Università di Roma, Italy

Paola Davoli, Università del Salento, Italy

Hédi Dridi, Université de Neuchâtel, Switzerland

Mhamed Hassine Fantar, Institut National d'Archéologie et d'art à Tunis, Tunisia

Enrico Giorgi, Università di Bologna, Italy

Alessandro Jaia, Sapienza Università di Roma, Italy

Damiano Marchi, Università di Pisa, Italy

Lucia Mori, Sapienza Università di Roma, Italy

Oscar Mei, Università di Urbino, Italy

Lorenzo Nigro, Sapienza Università di Roma, Italy

Marc Mayer i Olivé, University of Barcelona, Spain

Gaëlle Tallet, Université de Limoges, France

Volume funded by Sapienza Università di Roma,
Dipartimento di Scienze dell'Antichità – "Sezione Archeologia"
and SAIC "Scuola Archaeologica Italiana di Cartagine" – 2019

ISSN 2035–5459

ISBN 978-88-7814-944-1

e-ISBN 978-88-7814-945-8

© 2019, All'Insegna del Giglio s.a.s.

Edizione e distribuzione All'Insegna del Giglio s.a.s.

via Arrigo Boito, 50-52; 50019 Sesto Fiorentino (FI)

tel. +39 055 6142 675

e-mail redazione@insegnadelgiglio.it; ordini@insegnadelgiglio.it

sito web www.insegnadelgiglio.it

Stampato a Sesto Fiorentino, settembre 2019

BDprint

SAPIENZA UNIVERSITÀ DI ROMA
DIPARTIMENTO DI SCIENZE DELL'ANTICHITÀ

Papers from the 1st Workshop

Archaeology in Africa

Potentials and perspectives on laboratory
& fieldwork research

Edited by

Savino di Lernia and Marina Gallinaro

with contributions by

M. I. Ahmed, F. Altamura, B. E. Barich, A. Barili, J. Ben Nasr, J. Bogdani, Y. Bokbot,
G. Boschian, C.A. Buccellato, P. Buzi, E. Cancellieri, M. Cherin, A. Colonna, A. Dekayir,
S. di Lernia, E.B. Ichumbaki, D. A. Iurino, M. Gallinaro, M. Guirguis, E. Janulardo,
L.-I. Manfredi, G. Manzi, F. T. Masao, A. Mastino, S. Menconero, A.M. Mercuri, P. Mitchell,
J. Moggi Cecchi, S. Ribichini, I. Rossetti, C. Rossi, N. Santopuoli, S. Sarmati, S. Tusat

with foreword by S. di Lernia



All'Insegna del Giglio

*This book is dedicated to Sebastiano Tusa,
colleague and friend*

Contents

List of Figures and TablesIX
Foreword, by <i>Savino di Lernia</i>IX
1. Introducing the 1 st Workshop on “Archaeology in Africa”	1
<i>Savino di Lernia, Marina Gallinaro</i>	
2. <i>Carpe Diem</i> : building African archaeology in the twenty-first century	7
<i>Peter Mitchell</i>	
3. Holocene archaeobotany in Africa: not only ‘food and fuel’17
<i>Anna Maria Mercuri</i>	
4. Cultural Heritage in Africa – Worldwide perspective and a focus on the Sahara25
<i>Barbara E. Barich</i>	
5. Archaeological research in northern Sahara. Thoughts on the experience of a Tunisian-Italian research program (2014-2017) in post-revolutionary Tunisia37
<i>Emanuele Cancellieri, Jâafar Ben Nasr</i>	
6. Coastal archaeology of East Cyrenaica between sea and land47
<i>Sebastiano Tusa[†], Cecilia Albana Buccellato</i>	
7. Ancient mines in pre-roman Maghreb. Present and future of archaeological, geophysical and archaeometric researches. .63	
<i>Lorenza-Ilia Manfredi, Abdelilah Dekayir, Yousef Bokbot</i>	
8. The Egyptological research activities of Sapienza University of Rome. From archaeology to topography and beyond . . .73	
<i>Paola Buzi, Julian Bogdani, Angelo Colonna, Ilaria Rossetti</i>	
9. Filling the gaps: towards a comprehensive list of archaeological sites in the Kharga Oasis, Egypt’s Western Desert	89
<i>Corinna Rossi, Mohamed Ibrahim Ahmed</i>	
10. Egypt and the East. Flaubertian visions between writing and painting	101
<i>Ettore Janulardo</i>	
11. Central North Africa and Sardinian connections (end of 9 th -8 th century BC). The multi-ethnic and multicultural facies of the earliest western Phoenician communities111
<i>Michele Guirguis</i>	
12. Ichnology and archaeology in the African record: a complementary approach	127
<i>Flavio Altamura</i>	
13. New footprints from Laetoli (Tanzania, 3.66 Ma): discovery, analysis, inferences, research project and conservation plans. 141	
<i>Marco Cherin, Angelo Barili, Giovanni Boschian, Elgidius B. Ichumbaki, Dawid A. Iurino, Fidelis T. Masao, Sofia Menconero, Jacopo Moggi Cecchi, Susanna Sarmati, Nicola Santopuoli, Giorgio Manzi</i>	
14. The Italian Archaeological School of Carthage	149
<i>Attilio Mastino (with the contribution of Sergio Ribichini)</i>	

List of Figures and Tables

Fig. 1.1 – Map of Africa (modified, after Clark 1975)..	p. 2	Fig. 8.3 – The two sacred areas and the temples of Bakchias (© Joint Archaeological Mission of Bologna University and Sapienza University of Rome at Bakchias)..	p. 82
Fig. 1.2 – The artwork “The true size of Africa” (http://kai.sub.blue/en/africa.html)	p. 3	Fig. 8.4 – The mutual exchange of data in the Places section of the ‘PATHs’ database (© PATHs)..	p. 84
Fig. 1.3 – Map of Africa with location of the contexts presented and discussed during the workshop (empty circle) and those published in this volume (solid dot).	p. 4	Fig. 8.5 – Coptic graffito showing two crudely painted saints with upraised arms standing below the text of a prayer; north wall of the entrance corridor of KV 2 (Ramses IV), Valley of the Kings. The pharaonic tomb was reused as a chapel dedicated to Saint Ammônios and perhaps saint Abraham (© PATHs)..	p. 85
Fig. 3.1. Map with the research areas	p. 19	Fig. 9.1 – Map of Egypt showing the position of the Kharga Oasis, to the left, and satellite image of the central portion of the oasis showing the position of the sites described in this article to the right (C. Rossi).	p. 90
Fig. 4.1 – Forum for African Archaeology and Cultural Heritage: a session of the Seminar “ <i>State of the Pre-protolithic research in Africa</i> ”, Rome 1992 (Photo by B.E. Barich)..	p. 26	Fig. 9.2a – General view of the site of Ain Khalwa (Photo by the Kharga Inspectorate staff).	p. 92
Fig. 4.2 – Farafra Oasis, Western Desert. View of the internal arrangement in the Visitor Centre, Qasr Farafra (© Archaeological Mission in the Farafra Oasis)..	p. 28	Fig. 9.2b – Archaeological mound dug up by looters, showing mudbrick structures and one burnt wall (Photo by the Kharga Inspectorate staff)..	p. 92
Fig. 4.3 – A panoramic view of the White Desert, Western Desert (© Archaeological Mission in the Farafra Oasis).	p. 30	Fig. 9.3a – The central building on a stone basement resting over the flat mound of Ain Khousa (Photo by the Kharga Inspectorate staff).	p. 93
Fig. 4.4 – Farafra Oasis, Western Desert. The Wadi el Obeiyid Cave 1 seen from the wadi bottom (© Archaeological Mission in the Farafra Oasis)..	p. 32	Fig. 9.3b – The western side of the central building resting on a stone basement (Photo by the Kharga Inspectorate staff).	p. 93
Fig. 4.5 – Wadi Sura, Gilf el Kebir. Panoramic view of Cave of the Swimmers (to left) and Cave of Archers (to right) (© Gilf Kebir Conservation Project).	p. 33	Fig. 9.3c – The interior of the central building (Photo by the Kharga Inspectorate staff).	p. 93
Fig. 5.1 – Map of the research area. Dashed polygon represents the approximate extent of the field researches carried out between 2015 and 2017 (© The Archaeological Mission in the Sahara, Sapienza Università di Roma)..	p. 38	Fig. 9.4a – The mudbrick remains at Khanafis (Photo by the Kharga Inspectorate staff).	p. 94
Fig. 5.2 – General view of early Holocene site 15/6, Grand Erg Oriental (© The Archaeological Mission in the Sahara, Sapienza Università di Roma)..	p. 40	Fig. 9.4b – The devastated remains of a large stone building, probably a temple (Photo by the Kharga Inspectorate staff)..	p. 94
Fig. 5.3 – Tumuli of necropolis 15/11, Grand Erg Oriental (© The Archaeological Mission in the Sahara, Sapienza Università di Roma)..	p. 40	Fig. 9.4c – Detail of a stone block with dovetail emplacements and traces of plaster (Photo by the Kharga Inspectorate staff).	p. 95
Fig. 5.4 – A view of Wadi Lazalim. In the background, the Middle Stone Age site 15/1 (© The Archaeological Mission in the Sahara, Sapienza Università di Roma)..	p. 41	Fig. 9.4d – Ancient water source surrounded by potsherds near the temple (Photo by the Kharga Inspectorate staff).	p. 95
Fig. 6.1 – Map of Cyrenaica with some sites identified (Elaboration by C.A. Buccellato).	p. 48	Fig. 9.5a – View of the mound of Ain Hessein, located close to an inhabited area (Photo by the Kharga Inspectorate staff)..	p. 96
Fig. 6.2 – Hanyeh, section of the remain of the structures (Photo by C.A. Buccellato).	p. 49	Fig. 9.5b – The interior of the mound of Ain Hessein exposed by looters by means of a heavy vehicle (Photo by the Kharga Inspectorate staff).	p. 96
Fig. 6.3 – Ras Etteen, partially submerged structures inserire prima del punto (Photo by C.A. Buccellato)	p. 52	Fig. 9.6a – The remains of Muteibakh engulfed by sand (Photo by the Kharga Inspectorate staff).	p. 98
Fig. 6.4 – Braknota 1, structure for oil production (Photo by S. Tusa).	p. 54	Fig. 9.6b – Buried structures of Muteibakh exposed by looters (Photo by the Kharga Inspectorate staff).	p. 98
Fig. 6.5 – El Maracheb Island, circular structure (Photo by C.A. Buccellato).	p. 57	Fig. 10.1 – Adrien Dauzats (1804-1868), <i>A Cairo Bazaar</i> , 1839, Oil on canvas, 9 3/4x7 in. (24.8x17.8 cm), Gift of Kenneth Jay Lane, 2018, The Met, New York, https://www.metmuseum.org/art/collection/search/441356 , Public Domain.	p. 102
Fig. 6.6 – Wrecksite of ship <i>Tigre</i> (Photo by C.A. Buccellato)..	p. 61	Fig. 10.2 – Maxime Du Camp (1822-1894), <i>View of Egypt</i> , 1849-1851, Salted paper print, 6x8 5/16 in. (15.3x21.1 cm), Gilman Collection, Museum Purchase, 2005, The Met, New York, https://www.metmuseum.org/art/collection/search/291433 , Public Domain.	p. 103
Fig. 7.1 – Geo-referenced map of the twenty-four ancient mining sites identified during the prospects carried out between 2012 and 2013 (GIS processing by A. Celauro and graphic elaboration by F. Susanna).	p. 64	Fig. 10.3 – Maxime Du Camp (1822-1894), <i>Great Colonnade of the Palace, Luxor</i> , 1849-1851, Salted paper print, 6 7/16 x 8 9/16 in. (16.4 x 21.7 cm), Gilman Collection, Museum Purchase, 2005, The Met, New York, https://www.metmuseum.org/art/collection/search/291427 , Public Domain.	p. 105
Fig. 7.2 – Plan of the fortress of Ighram Aousser (graphic elaboration of © Google Earth Image by P. Merola, F. Susanna).	p. 66	Fig. 10.4 – Maxime Du Camp (1822-1894), <i>Palais de Karnak. Sculptures extérieures du sanctuaire de granit</i> , 1849-1851, Salted paper print, 6 7/16x8 7/16 in. (16.3x21.4 cm), Gilman Collection, Museum Purchase, 2005, The Met, New York, https://www.metmuseum.org/art/collection/search/291428 , Public Domain.	p. 106
Fig. 7.3 – Fortress of Ighram Aousser. The excavation of the 2014 mission: angular tower outside the circuit of the citadel walls reused in the Almohad era as the foundation of the boundary wall of the fortified city (Photo by L.-I. Manfredi)..	p. 67		
Fig. 7.4 – Fortress of Ighram Aousser. The excavation of the 2014 mission: Detail of the angular tower USM 100 (Photo by L.-I. Manfredi).	p. 67		
Fig. 7.5 – Fortress of Ighram Aousser. The excavation of the 2015 mission: the access arch to the citadel (USM 202), the citadel wall (USM 204 and USM 205) and the most recent phase wall (USM 206) (Photo by L.-I. Manfredi)..	p. 67		
Fig. 7.6 – The eastern area of Algeria: Punic sanctuaries and mining areas (graphic elaboration by F. Susanna).	p. 69		
Fig. 8.1 – The Fayyūm area (Elaboration by J. Bogdani)..	p. 75		
Fig. 8.2 – General plan of Bakchias (© Joint Archaeological Mission of Bologna University and Sapienza University of Rome at Bakchias)..	p. 78		

Fig. 10.5 – Jean-Léon Gérôme (1824-1904), <i>Prayer in the Mosque</i> , 1871, Oil on canvas, 35x29 1/2 in. (88.9x74.9 cm), Catharine Lorillard Wolfe Collection, Bequest of Catharine Lorillard Wolfe, 1887, The Met, New York, https://www.metmuseum.org/art/collection/search/436482 , Public Domain.	p. 108
Fig. 10.6 – Jean-Léon Gérôme (1824-1904), <i>Café House</i> , Cairo, 1884 or earlier, Oil on canvas, 21 1/2x24 3/4 in. (54.6x62.9 cm), Bequest of Henry H. Cook, 1905, The Met, New York, https://www.metmuseum.org/art/collection/search/436481 , Public Domain.	p. 109
Fig. 11.1 – Central Mediterranean district with the settlements mentioned in the text (drawing by the Author).	p. 111
Fig. 11.2 – Phoenician red-slip plates/dishes from the archaic levels of Sulky (US 3882, 3873, 3867) – Croniario area, Locus III, filling of the <i>silos</i> US -3840 (photos & drawings by the Author, with Antonella Unali & Rosana Pla Orquín).	p. 116
Fig. 11.3 – Phoenician plates from Carthage (A, 1-3 from Núñez 2014: figs. 4, 5; 5, 1-2; 6, 3) and Cádiz (B, 1 from Torres Ortiz <i>et al.</i> 2014: fig. 4, f; B, 2 from: Ruiz Mata <i>et al.</i> 2014: fig. 7).	p. 117
Fig. 11.4 – Images of the Locus III in the Croniario area of Sulky with selection of pottery from US 3882, 3873, 3867 (photos & drawings by the Author, with Antonella Unali & Rosana Pla Orquín).	p. 119
Fig. 11.5 – <i>Impasto</i> big containers from Sulky (1-2 from Unali 2012: fig. 4; Pompianu & Unali 2016: fig. 8, 6; 3 from the lowest level US 3882 in the <i>silos</i> US -3840: drawings by the Author, with Antonella Unali & Rosana Pla Orquín) and Althiburos (4-5 from Sanmartí <i>et al.</i> 2016: 105, n. 202; 106, n. 212; pl. 3.1).	p. 120
Fig. 11.6 – <i>Impasto</i> trays from Sulky (1 from Pompianu 2011: fig. 7; 2 from Bartoloni 2018: fig. 35; 3 from US 3867 in the <i>silos</i> US -3840: drawing Rosana Pla Orquín), Carthage (4 from Mansel 2010: fig. 9, 3), Althiburos (5 from Sanmartí <i>et al.</i> 2016: fig. 3.11) and El Hkayma (6 from Sghaier 2017: fig. 8).	p. 121
Fig. 12.1 – Gombore II-2. Sectioned bioturbation structures (hippo tracks) on the southern excavation cut made in 2013 (0.7 Ma) and their schematic representation (inset). Note the features typical of tracks: walking surface, track infill, true tracks and undertracks (Photo by the Author, Italian Archeological Mission at Melka Kunture and Balchit).	p. 128
Fig. 12.2 – The oldest known hominin-footprint sites in Africa (Pliocene-Middle Pleistocene). Simplified stratigraphic column of the upper part of the Gombore gully at Melka Kunture (late Early Pleistocene and Middle Pleistocene; modified after Mussi <i>et al.</i> 2016).	p. 130
Fig. 12.3 – The southern excavation cut at the Gombore II OAM site at Melka Kunture (ca. 0.85 Ma). Many bioturbation structures (footprints), cross-sectioned vertically, are located at the contact surface between the silt and fine-sand layers (Photo by the Author, Italian Archeological Mission at Melka Kunture and Balchit).	p. 133
Fig. 12.4 – Gombore II-2. Detail of the 0.7 Ma track surface 2015 excavation (Photo by the Author, Italian Archeological Mission at Melka Kunture and Balchit).	p. 134
Fig. 12.5 – Gombore II-2. Orthophoto plane of the western portion of the fossil hippo trail (0.7 Ma) found on top of an ignimbrite layer. At the bottom of the channel-like trackway are large sand-filled bioturbation structures. Inset: a natural track cast of a hippo footprint obtained by freeing the infill from the surrounding matrix (photos by the Author, Italian Archeological Mission at Melka Kunture and Balchit; orthophoto plane elaborated by Kristian D'Août).	p. 135
Fig. 12.6 – Gombore II-2. Detail of the track surface (0.7 Ma) during excavation (top) and after removal (bottom) of the track infills (Photos by the Author, Italian Archeological Mission at Melka Kunture and Balchit).	p. 136
Fig. 13.1 – Geographical location of Laetoli within the Ngorongoro Conservation Area, Northern Tanzania, about 50 km south of Olduvai Gorge.	p. 142
Fig. 13.2 – Tanzanian-Italian research group working in Laetoli Site S in 2015. The renowned footprint Site G discovered by Mary Leakey and colleagues in the 1970s is located about 150 m to the north of Site S, that is, near the central right part of the picture (Photo by Raffaello Pellizzon).	p. 143
Fig. 13.3 – Test-pit L8 at Laetoli Site S. In the northern part of the test-pit (at the top), the Footprint Tuff is severely damaged (Photo by Raffaello Pellizzon).	p. 146
Fig. 13.4 – Test-pit TP2 at Laetoli Site S. In the northern part of the test-pit (right side), the Footprint Tuff is particularly altered, damaged by plant roots and dislodged along natural fractures (Photo by Raffaello Pellizzon).	p. 147
Fig. 14.1 – Tunis, Bardo Museum. The flight of Aeneas from Troy on the altar of the <i>Gens Iulia</i> (Photo by the Author).	p. 150
Fig. 14.2 – Tunis, Bardo Museum (Photo by the Author).	p. 151
Fig. 14.3 – Tunis, Italian Cultural Institute, 17 th March 2017 (Photo by S. Ganga).	p. 152
Fig. 14.4 – Tunis, AMVPPC. The Moscati Library during the fitting out (Photo by the Author).	p. 153
Fig. 14.5 – Carthage, the large inscription of Marcus Aurelius and Antoninus Pius in the maritime baths (Photo by the Author).	p. 155
Fig. 14.6 – Sassari University, Aula Magna. Defence of theses by Dahou Hind (From Cirta to Constantine), Maziz Zahia (Connections between Arab Ifriqiya and Sardinia) and Djedid Hanane (Algerian Cultural Heritage; photo by the Author).	p. 156
Fig. 14.7 – Thignica, Ain Tounga (Photo by the Author).	p. 157
Opening of the 1 st Workshop on "Archaeology in Africa": from the left, the late Prof. Enzo Lippolis, former Director of the Dipartimento di Scienze dell'Antichità, Prof. Savino di Lernia, organizer of the workshop with Dr. Marina Gallinaro, and Prof. Eugenio Gaudio, Rector of Sapienza Università di Roma (Photo by A. Zerboni).	p. XI
Tab. 4.1 – Different phases of the Gilf Kebir conservation project (from: Barich <i>et al.</i> 2018).	p. 34



8. The Egyptological research activities of Sapienza University of Rome. From archaeology to topography and beyond

Paola Buzi, Julian Bogdani, Angelo Colonna, Ilaria Rossetti

Abstract. The Egyptological research of Sapienza Università di Roma includes a variety of activities and fieldworks: from the archaeological expedition at Bakchias (26th dynasty-Late Antiquity), a settlement located in the Fayyūm region, to the study of the transformation of religious space from pharaonic to Christian period, to the realization of a digital archaeological atlas of Coptic literature that aims at exploring and representing the process of production, copying, usage, dissemination, and storage of Coptic works in relation to the geo-archaeological contexts of origin of both the texts themselves and their related writing supports. This article summarizes the main goals of all these projects and the main scientific results achieved until now.

Key Words. Fayyūm; Bakchias; Archaeological Atlas of Coptic Literature; spaces of cults.

P.B. Dipartimento di Storia Antropologia Religioni Arte Spettacolo, Sapienza Università di Roma, Italy
paola.buzi@uniroma1.it

J.B. Dipartimento di Storia Antropologia Religioni Arte Spettacolo, Sapienza Università di Roma, Italy
julian.bogdani@uniroma1.it

A.C. Dipartimento di Storia Antropologia Religioni Arte Spettacolo, Sapienza Università di Roma, Italy
angelo.colonna@uniroma1.it

I.R. Soprintendenza Archeologia, Belle Arti e Paesaggio delle Marche (SABAP), Italy
ilaria.rossetti@beniculturali.it

Authors' contribution. Paola Buzi is co-Director of the Joint Archaeological Mission of Bologna University and Sapienza University of Rome at Bakchias and PI. of the ERC Project *PATHs* and the MIUR Project *Sacri Lapides Aegypti*. Her contribution to this article concerns the archaeological research carried out in Egypt and the project *Sacri Lapides Aegypti* that is devoted to the transformation of spaces of cult, identity and memory from pharaonic and Graeco-Roman Egypt to Christian Egypt. She wrote § 1.1 and 3. Julian Bogdani is an archaeologist and a specialist of Digital Humanities applied to Archaeology. His contribution to this article regards the Information System of the relational database of the *Archaeological Atlas of Coptic Literature* and, more in general, the methodology used in the *PATHs* project. He wrote § 2.1. Angelo Colonna is an Egyptologist and a collaborator of the *PATHs* project. His contribution to this article concerns the Places-Database of the *Archaeological Atlas of Coptic Literature* and the contribution of archaeology to the study and representation of landscape in Late Antique Western Thebes. He wrote § 2.2. Ilaria Rossetti was a former collaborator, as Egyptologist, of the *PATHs* project. Her contribution to this article regards the excavation and interpretation of the two sacred areas of the village of Bakchias. She wrote § 1.2.

Acknowledgements. We are grateful to the European Research Council for funding the *PATHs* project (ERC Advanced Grant 2015, project n° 687567), to the MIUR for financially supporting the *Sacri Lapides Aegypti* project (Programma FARE Ricerca in Italia, prot. R16HYTAP55), and the MAE for its continuous support to the archaeological missions at Bakchias.

1. Excavating the “Hill of the tamerisks”: Ghenut/Bakchias/ Kom Umm al-Athl (Fayyūm)¹

1.1 Bakchias: its (long) history, its urban development, and its two crocodile patron gods

Bakchias, the modern Kom Umm el-Athl (the ‘hill of the tamerisks’), is a little village located in the north-eastern corner of the Fayyūm region, at c. 20 m above sea level. Traditionally classified as a Ptolemaic-Roman settlement, in fact it has a much longer history, as the excavations now carried out by a joint mission of Bologna University and Sapienza Università di Roma have demonstrated².

In the next paragraphs, we will try to summarize the results of the most recent investigations of the site and the re-elaboration of collected data concerning this long lasting settlement.

It could be argued that Bakchias returned to life and attracted the attention of the international scientific community following the explorations of Grenfell, Hunt and Hogarth and, above all, after publication in 1900, of their work, *Fayūm Towns and Their Papyri*, a work which is still fundamental today to studies of the Arsinoite *nomos*. In the brief report which they devoted to the excavations which they had carried out in the first weeks of 1896 for the *Egypt Exploration Fund* (now *Society*) in the Kom Umm el-Athl site, where the Greek papyri placed the Graeco-Roman period village of Bakchias, they were unable to hide a certain

1. The archaeological mission to Bakchias is directed by Enrico Giorgi (Bologna University) and Paola Buzi (Sapienza Università di Roma), the latter being also the director of the other projects described here.

2. Between 1993 and 2004 the archaeological expedition to Bakchias was a joint mission of the Universities of Bologna and Salento. From 2005 the University of Salento became the only responsible for the archaeological mission working at Soknopaiou Nesos, while Sapienza University joined that of Bologna at Bakchias. (Giorgi and Buzi 2014).

amount of disappointment, since the Greek papyri which they had brought to light were few in number and of little interest, apart from a few exceptions. Moreover, from an archaeological point of view, no stone monument of any architectural value had been discovered.

As a matter of fact the harsh judgment of Grenfell, Hunt and Hogarth has affected the interest for Bakchias, whose investigation was abandoned until 1993, when the Italian mission started its work.

If, according to the traditional chronology, it was believed that Bakchias must have been founded around 280 BCE, during the reign of Ptolemy II, while the second reclamation of the area was taking place or was about to take place (being the first reclamation that carried out by Amenemhat III, during the Middle Kingdom), we are now aware, thanks to our excavations, that things went differently and that Bakchias was an active centre at least from the 26th dynasty, and probably earlier. A new chronology has therefore been elaborated on a completely different basis compared to what we knew before (Pernigotti 2014a: 17-38).

It is clear now that the urban structure of the *kome*, its religious architecture – with six temples of different ages – and as a result the *pantheon* within them, changed over the centuries. It went from modest village made entirely from mud bricks to the large centre of the Arsinoite *nomos*. It was a great collector of enormous quantity of cereals, which were transferred, in large boats, along the canal it faced to the south, towards Bahr Youssef, as far as the Nile and from there to Alexandria, from where, at least in part, the road led to Rome (Fig. 8.1).

As for the toponymy, Bakchias is a name which appears strictly linked to the Ptolemaic dynasty and to its religious ideas focusing on the Dionysian cult, and it corresponds with other toponymies of the Fayyūm (Dionysias, Philadelphia, Theadelphia etc.). There was a coherent urban policy by the Ptolemaic sovereigns, which was also manifested in the choice of names given to old and new settlements.

The name of one of the two crocodile patron gods, Soknobkonneus – the other patron god being Soknobraisis – (Pernigotti 2014b), the probable significance of which is ‘Sobek-lord of *Ghenut*’, however, suggested a pre-Ptolemaic phase of the village, when its name was *Ghenut*. The coexistence of two place names (*Ghenut*/Bakchias) could only mean that one name followed the other – that is, that *Ghenut* was succeeded by a new name, Bakchias, when the village was revived and perhaps also repopulated during the second reclamation of Fayyūm carried out in the reign of Ptolemy II. The ‘Book of the Fayyūm’ – a religious text dating

from the Roman period, but probably based on earlier material – appears to associate also a second place name, *Kem-ur*, with Bakchias, although this is more debated.

Certain findings from the western sacred area³ and from the northern district of the village had already posed questions about the periods before the foundation of the Ptolemaic township.

With regard to the sacred area, these concern the remains of statues which must have been part of the sacred furnishings of Temple A: a fragment of the head of a stone statue, possibly dated to the New Kingdom of Egypt or to the Late Period (750-342 BCE); a headless statue of a kneeling male figure with the inscription erased which can be dated, at the latest, to the reign of Psamtik II (26th dynasty, 664-525 BCE); another headless statue with a hieroglyphic inscription of a figure called Padibastet, also dated to the reign of Psamtik II (Pernigotti 2008; Giorgi 2011: 184). Moreover, below the main temple of the site, Temple A, and under the enclosure of Temple B, a kiln and an amphora from Tyre, which can be dated to between the seventh and sixth centuries BCE (See Gasperini 2014 [no. 556] Rossetti 2014, with related bibliography), was found embedded in the ground.

Excavations in a house interpreted as the residence of an Isiac priestess, where a scarab from the *Menkhepera* series was found, dated to the eighth century BCE, had also already suggested a building phase before the Ptolemaic Period. Thanks to stratigraphic investigations carried out recently in an adjacent area, still within the northern district, we now know that the townships associated with the first Ptolemaic settlement was inhabited before this and – based on radiocarbon analysis of some remains of animal bones – we can trace it back to at least the middle of the sixth century BCE.

If we previously had to consider the hypothesis that some of these portable finds could have been transported to Bakchias even from neighbouring places, the remains uncovered in reliable archaeological contexts suggest to us a real occupation of the site in a pre-Ptolemaic Period. Unfortunately, it is not easy to pinpoint more accurately the chronology, even if we can observe considerable convergence of some dates during the period of Psamtik II (26th dynasty).

In fact, some geographical factors could already reveal the potential of this site from the time of the dynastic epoch. The township grew up above the slope which marks out the hollow of the Fayyūm to the north east, along what was the shore of the

3. For the two sacred areas of Bakchias see Rossetti *infra*.



Fig. 8.1 – The Fayyūm area (Elaboration by J. Bogdani).

lake in the dynastic epoch, at the intersection with the northern slope which linked the region with the Nile Valley and Memphis. The location must therefore have been extremely attractive to the ancient population when choosing a site. It is not surprising that other centres in the region located on this raised plateau, such as Shedet/Arsinoe (Madīnat al Fayyūm), or Gia/Narmouthis (Madīnat Mādī), and Tebtynis (Umm al-Burayġāt), preserve important remains from the dynastic epoch⁴.

4. For a general classification of the sites in question see Davoli 1998. For Tebtynis and Narmouthis in particular, see Gallazzi 2001: 174, 179, 183; Bresciani and Giammarusti 2012: 23-25. At Soknopaiou Nesos, during the reconnaissance of surfaces conducted in the surroundings of the city, pottery remains attributed to the New Kingdom of Egypt were found (Capasso and Davoli 2012). In the case of Soknopaiou Nesos, it has been speculated that a dynastic sanctuary existed on an island in the lake, in a different po-

The results of the last missions

As for the topography of Bakchias (Fig. 8.2), the northern part was the first to be studied by Italian researchers. The Memphis route entered the city on this side, and entrance was regulated by the northern city gate and a custom house, of which we were already aware thanks to descriptions found in Roman-era papyri (Ippolito 1999)⁵. To the east and west of the gate, a residential district stretched out, whose layers generally match those that cover the entire existence of the city.

sition from that of the Ptolemaic township, to where the cult would have later moved. See Davoli 2015: 120.

5. These documents actually describe the customs duties that were demanded of those who crossed the city. There is only direct reference to this particular city gate in the case of commerce involving the northern route.

On the other hand, the most recent excavation campaigns conducted in the southern part of the old city unearthed a number of buildings that are of seminal importance for understanding urban living standards in the past. These buildings particularly include the baths, the kiln for making ceramics and the granary. Once more, we were already aware of the existence of these buildings thanks to the information that could be deduced from written records. However, it was only thanks to archaeological surveys that we were able to identify them beyond all reasonable doubt and have a clearer idea of the way they developed over time. Apart from the granary, which was built towards the end of the Ptolemaic era, the other two buildings date from Roman times. They all share, however, their geographical location along the large southern canal, which can easily be explained, if we take into account the need to supply water to the baths and kiln and the benefits to be gained from placing the granary near a waterway⁶.

Despite the fact that baths in Bakchias are already mentioned in a papyrus that can be dated to the third year of the Emperor Nero's reign (57 CE), it was only thanks to the surveys work, followed by the excavations, that we were finally able to identify them⁷. Indeed, we now know for a fact that they were composed of a building mainly made of brick with a number of floors that are still well preserved⁸. The presence of more valuable construction materials, such as fired brick and stone slabs, soon turned the building into a quarry, when it no longer performed its function. It is for this reason that the baths of Bakchias are an anomaly from a conservational point of view as well, because many floors are still clearly visible, such as the cobbled floors in the crawl space that clearly could not be reused, while almost all the brick walls have disappeared, unlike the many houses in mud-brick that generally still have visible masonry. Despite the incomplete state of the ruins, we were able to clarify a number of aspects⁹. From a chronological point of view, the baths were built during the early Roman Empire and were in use, with a number of renovation phases, up until the dawn of Late Antiquity. Some diagnostic ar-

tefacts that we were fortunate enough to find, particularly coins, unearthed in reliable stratigraphic locations, allow us to date the building to the Augustan age, whilst a thorough redevelopment of the site took place during Hadrian's reign¹⁰. This second construction phase led to changes in how rooms were used to varying degrees and changed the route through the baths. A further renovation may have taken place in the late era (fourth century CE), before the site was definitively abandoned, which we surmise from the many remnants of *noria* or *saqyia* buckets (dateable to the fourth-fifth centuries CE). These were containers for drawing water that, in this phase, clearly took place using wooden water wheels to which these containers were tied to collect and transport water (Giorgi 2012: 130-136). Some artefacts dating from the early Middle Ages, such as late amphorae and Islamic glazed ceramics, lead us to believe that the area was continuously inhabited even in such a late period in the history of the northern city. Nevertheless, we do not know if it was used in a less organized way or whether the building had fully or partly maintained its use as a bath house in these final phases.

Just south of the baths, a craftsmen's district dating from Roman times was found during the 2010 excavation campaign, where surveys are still ongoing (Rossetti 2011). It is a very complex building (BSE 352), mainly consisting of brick structures, even though there are sections in unfired clay masonry. There are the remains of a kiln and two tanks or cisterns for collecting water or perhaps clay, as well as a third, smaller tank that could have been used to draw on such reserves. Although the poor state of conservation does not allow us to interpret the building with any certainty, we cannot rule out that these three reserves were connected and could have been used as filtering tanks for clay that ended with the smallest tank where the purest clay would have settled. Waste liquid may have run into a channel that flowed into the nearby canal.

From a chronological point of view, the layout seems to be dateable to the Augustan era (late first century BCE).

Bakchias' public granary (*thesauros*), which was also already known to us thanks to two papyrus documents dating from the second century CE and an *ostrakon* from the third century CE (Nachtergaele 2007), was investigated in detail, a fact that allowed

6. For a detailed description, see Tassinari 2009; Giorgi 2012; Giorgi 2014: 53-67.

7. This document (BGU I 181) mentions an episode that probably involved an attack and subsequent theft that took place in Bakchias' baths on 15th June 57 CE. The dating of the building and the absence of other contemporary buildings led us to identify this complex as the one mentioned in the papyrus (Nachtergaele 2007: 15-19; Giorgi 2012: 36-37).

8. For a more exhaustive description of this building complex, see Giorgi 2012.

9. The most relevant comparisons in the Fayyūm region are those with Karanis and the Roman phase of the baths of Tebtynis. Hellenistic baths renovated in Roman times are also known to us in Arsinoe and Dionysias, while we only know of a Hellenistic phase in Arsinoe, Euhemeria and Theadelphia (Giorgi 2012: 19-28).

10. Among the other findings there are an Augustan coin (that can be dated to the period after 19 BCE) found at the bottom of a cistern; two coins from Hadrian's reign (dateable to 128-129 CE), one of which was unearthed whilst attached to the floor in room A; a coin from Trajan's reign and one from Hadrian's reign; and a stash of 45 mid-Empire coins (c. mid second-early third centuries CE) which was found in the drains (Giorgi 2012: 44-45).

us to detect a late-Ptolemaic layout with an important phase of use at the height of the Roman Empire (second century CE). Despite the fact that only part of it has survived and only in the lower section of the bottom of the storerooms, we can see that it was a large mud-brick building, so large that, to date, it can be considered the biggest building known to us in the Fayyūm region¹¹. The north-western part, which must have been where the offices were located, has unfortunately disappeared because it was destroyed by a large looting tunnel. The central part of the building, which is over 25×20 m wide, is edged by thick perimeter walls with a large central spine wall that divided two strips with three rows of 13 quadrangular cells on each side. The southernmost row was edged by another large wall that divided it from a final series of 13 storerooms that were slightly larger¹². Given the geometric structure of the building, we can imagine another row of 13 similar storerooms against the northern perimeter as well. All of these compartmentalized structures, which we have dubbed storerooms and cells, must have been inside a large courtyard. From a functional point of view, the thicker walls were probably also used as walkways to reach the storerooms below. However, given that this would have been more difficult in the rows of three cells, it is possible that inspections may have been carried out by walking over the removable covers that must have existed in any case¹³. As far as capacity is concerned, it has been estimated that the 78 smaller cells could store approximately 85 *artabae* of wheat each and that the granary must have been able to store at least 6,400 *artabae* of wheat in total, while the remaining 26 storerooms may have held around 2,600 *artabae* of barley¹⁴. This is the equivalent of 2,000 *modii*, i.e. a tenth of the entire annual grain tribute paid by Egypt to Rome during the Augustan era¹⁵. With the end of Antiquity, the granary must have lost its purpose and was used in different ways, even as housing, as shown by the discovery of artefacts that can be traced back to Coptic culture and the construction of a brick silo (Buzi 2009; Tassinari 2009: 51).

11. In addition to the many public and private granaries in Karanis, similar buildings are known to us in Bubastis, Dionysias, Euhemeria, Nilopolis, Sinnuris, Tebtynis and Theadelphia (Tassinari 2009: 29-40).

12. The perimeter walls are 135 cm thick, while the interior spine walls are slightly thinner. The smaller storerooms are 160×120 cm, while the larger ones are 153×256 cm.

13. As has been noted with valid arguments, these storerooms could not have been open to the elements, at the very least so as to protect the grain inside from parasites or from becoming a food source for birds of all kinds (Tassinari 2009: 25).

14. Barley was the second most abundant crop after wheat, while that of emmer wheat seems negligible (Tassinari 2009: 28).

15. Ancient tradition (*Epit. De Caes.* 1, 6) states that the total tribute paid by Egypt was 20,000 *modii* (Tassinari 2009: 28).

It is also worth mentioning the surveys and excavations conducted on the other side of the canal, in what is known as the South Kom.

The decline of the township to the north of the canal did not mean that the site was definitively abandoned but rather that the urban centre of gravity shifted to the southern bank of the watercourse, as a result of a retreat towards the south of the cultivated area and a general contraction of the region. According to the scattered remains on the surface, to the uniformity of the techniques and to consistency in the orientation of the buildings, the South Kom was subject to a rationally conceived settlement at the end of the Roman Age (Giorgi 2007: 82-91). It seems that the area occupied by the Ptolemaic and Roman township was abandoned during the course of the fourth century CE. The big temple areas, which had by now lost their function as cultural and economic centres, fell into disuse and were among the first to be destroyed to recoup the precious building material.

In the course of the fourth-sixth centuries CE, many dwellings which were by now disused were covered in sand and several tombs appeared in parts of the township. Later, on top of these little dunes, which now covered the buildings of the ancient city, sheep pens or byres were built as shelter for the flocks or herds¹⁶. The only exception in this general panorama may be represented by the baths, where there are later findings, some of which can be attributed to Islamic culture. It also seems that a new water supply system came into operation using *saqiya* vessels attached to water wheels (fourth-seventh century CE).

Slightly later, between the fifth and sixth centuries CE, there must have been a further evolution of the South Kom site, as the late Roman structures disappeared and a Coptic monastery (?) was built with two churches architecturally connected to one another.

During this period, the temple areas were transformed into real borrow pits, as is shown by the presence of blocks from Temple C which were reused to construct a Coptic church in the South Kom. The abandonment of the ancient urban area did not mean that the site was now completely abandoned. The plundering of buildings which were no longer in use by citizens is valuable evidence of renewed building activity more focused on the needs of daily life at that time. The two Coptic ecclesiastic complexes were, in turn, supplanted by a township of Islamic culture.

16. This is the trend which in other geographical areas of the Mediterranean was described as ruralization of the urban area but in this specific case was really desertification. In the shallower layers in the area in front of Temples A and C, several remains of sheep-goat dung have been found as well as the remains of an animal.

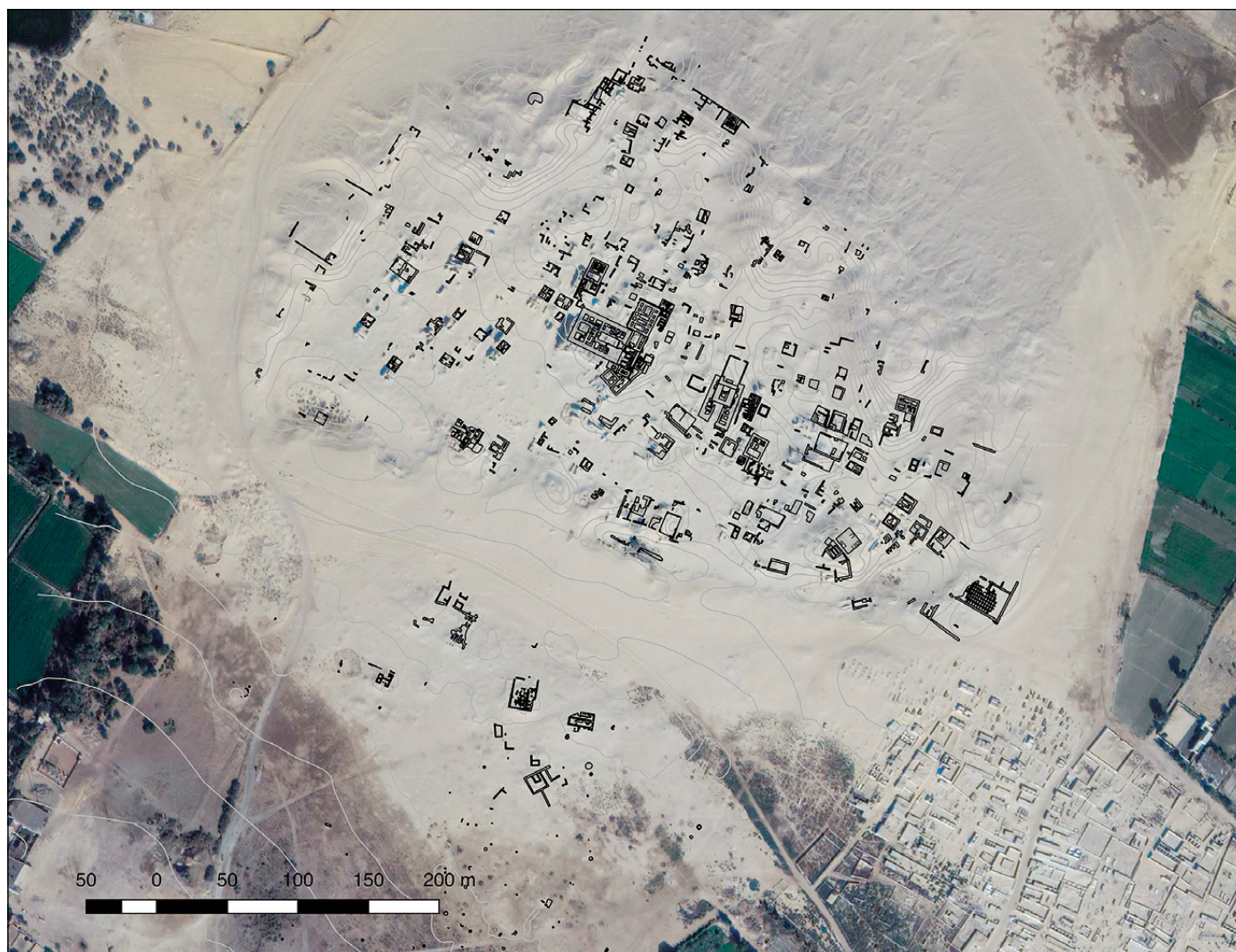


Fig. 8.2 – General plan of Bakchias (© Joint Archaeological Mission of Bologna University and Sapienza University of Rome at Bakchias).

This last medieval Bakchias appears to have featured buildings which were connected with productive activity with evidence of remains of numerous millstones and presses. The churches were redesigned and transformed into functional buildings, with presses, tubs and *silos* (Buzi 2014).

1.2 The temples and the sacred areas of Bakchias in their diachronic evolution

The North Kom of the village has proved to be of particular importance for the understanding and the reconstruction of the religious life of the ancient village, since six temples have been

unearthed there. These temples, that are not contemporary with each, were organized in two different sacred areas (Rossetti 2014) (Fig. 8.3).

Within a multidisciplinary research framework, the temples and their annexes were examined by integrating the archaeological data with the information obtained from spatial analysis, papyrological and epigraphic sources (see Rossetti 2017a, with bibliography). The interpretation of this complicated stratigraphic situation, which is largely due to ancient and modern spoliations, has allowed us to study the sequence and the development of the various temples.

The early Ptolemaic period (late fourth century BCE-mid-third century BCE)

As we have seen, the 'new' Ptolemaic hamlet of Bakchias was founded at the very beginning of the land reclamation project and was organized according to a quite regular grid focused around the most ancient temple discovered, named Temple B (BNO 109).

The sacred edifice was built of mud-brick, except for the entrance doors, which were made of limestone. The temple measured 13x16 m and was oriented southwards, probably towards the main canal. The elongated shape of the *naos* together with the discovery of scattered crocodiles' bones, pitched scales and a little statue of the reptile, suggest that one of the Sobek's manifestations was venerated inside the edifice. In front of it, several structures of worship service have been found, including what appears to be the base of a basin.

This oldest sacred area, and consequently the village, was established in a place formerly occupied by other edifices: these structures show a completely different orientation from the others. It is possible that these structures were part of a single complex, perhaps already having a religious character, which belonged to an earlier village dating at least to the Late Period.

The mid-Ptolemaic Period (mid-third century BCE-mid-second century BCE)

During the second half of the third century BCE, when the land reclamation project was almost completed, the settlement was re-organized according to the new temple-*dromos* system, located at a very central position, nearby Temple B. The erection of a new important temple (Temple A) and a rapid expansion of the entire urban planning was probably related with the enlargement of the agricultural area and the increase in the economy and finances of Bakchias.

This sacred building (Temple A, BSO 375), likely a *proton hieron* (a first-class temple) for the Ptolemaic administration, was oriented orthogonally to Temple B and was dedicated to the crocodile god Soknobia (Rossetti 2014: 118-130)¹⁷. The first mention of this crocodile deity appears in a Greek papyrus dating back to 218 BCE (Enteux 54 – TM 3329) according to one of the most corroborated interpretations, the god's name is the Greek transcription of *Sbk-nb-Genwt*, 'Sobek lord of Ghenut', the dynastic name of the site (Pernigotti 2014a, 2014b).

The sacred building is visible today in its impressive structure of mud-brick (26.3x39.5 m) and it is preserved to a height of about 10 metres (corresponding partly to the elevation and partly to the foundation). The temple consists of 25 rooms in total and it is the result of several building-phases, the last of which led to the raising of the levels of the internal floors and to the creation of an entrance system made of sandstone blocks¹⁸.

The temple and its badly-preserved annexes were surrounded by a mud-brick *temenos*, from which the long *dromos* branched off. The sacred processional way became the most important axis of the settlement, sloping eastwards and running parallel to the main local canal. This new orientation of the system temple-*dromos* and thus of the main axis of the settlement is probably due to the expansion of the village, whose development focus on the main axis parallel to the canal. It cannot be excluded that the *dromos* also pointed to one of the channels that irrigated the field around Bakchias.

The late Ptolemaic Period (mid-second century BCE-late first century BCE)

This new face of the village was not destined to last long. A revolution in the urban planning can be traced back to the end of the second century BCE: the first sacred area was completely rearranged, a second important *temenos* was added and the road system hierarchy was transformed once again.

First of all, in front of the most important structure of the village, the Temple A¹⁹, a new sacred building (Temple C, BSE 384) was erected, completely made of sandstone and limestone blocks (Rossetti 2014: 131-139). The edifice was oriented southwards, towards the main canal, and very likely it inherited both the worship of the local main god, Soknobia, and the administrative status of *proton hieron*. The temple measures 22x17 m and, since Late Antiquity, the structure has been badly affected by the spoliation of the stone material, although the ground plan may be reconstructed on the basis of the foundation rooms. In total, 16 rooms have been identified, with the plan of the inner chambers following the classical Egyptian style, similarly to the sacred edifices of Soknopiai Nesos and Dionysias) in the Fayyūm (Davoli 2015: 122-123; Rossetti 2015: 314-318). An entrance *pronaos* was erected on the façade, probably decorated with columns, which were later reused in the construction of the churches.

18. This raising of the temple's level (more or less 3 metres) entailed the obliteration of the earlier buildings, comprising the little Temple B.

19. The Temple A was dismissed as a sacred building, but it was used as a warehouse.

17. For the temple classification during the Ptolemaic period see Rossetti 2015, 2017a.

In the direction of the old main axis (the *dromos* of Temple A) a second mud-brick temple, named as Temple E (BSE 408), was built. Although poorly preserved, the internal organization of the structure (34×22.5 m) was very similar to that of Temple A, and showed a south orientation parallel to Temple C. This sacred area, placed inside its own enclosure, was dedicated to the crocodile god Soknobraisis, *Sbk-nb-ršy* literally ‘Sobek lord of joy’, who was probably introduced later in the village *pantheon* and is attested for the first time in a still unpublished Demotic papyrus dating not long after 192 BCE²⁰.

Both these sacred buildings altered the ancient processional way, the site’s main axis, as well as the structures connected to it. In its place, however, two thoroughfares were realized, the *dromoi* of the two temples, both reaching the canal, which was about 90 metres away.

A second temple (Temple D, BSE 6) was built near the new sacred enclosure similar in size (12.50×17 m) and in architectural features to the ancient Temple B. The temple could be probably classified as a second-class temple (*deuteron hieron*) according to the Ptolemaic administration (Rossetti 2015, 2017b). It was placed inside its own *temenos*, where a priest house and a series of annexes have been found. The deity that was worshipped in it is still unknown, but it is probable that the sacred edifice housed the cult of the god Amon or the syncretistic goddess Isis-Hathor-Aphrodite, for which later papyri attest a probable independent temple in the village²¹.

The Roman Period

The long development of the village was completed in Roman times, when the two sacred areas were significantly monumentalized. The two impressive *temene* characterized the scenery of the town and produced an important architectural impact on the village landscape. Their importance is also demonstrated by the papyrus BGU XIII 2215 (TM 8745), which records the existence at Bakchias of two *logima* temples, epithet that classified the most important temple during the Roman era (Rossetti 2015, 2017b).

The temple of Soknobkonneus (Temple C) was decorated on the front with a new courtyard and a majestic entrance stone pylon gateway, the only one known in the whole Fayyūm. Its twin temple (Temple E) was rebuilt in stone and enlarged in its rear part.

Despite the precarious state of conservation, the new temple of Soknobraisis (BNE 14, 21.3×13 m) was probably realized in Egyptian style, similarly to the other one, and adorned with an access *pronaos*. A very important archive probably originated from this second enclosure, and has yielded 34 papyri, ranging in date from 116 to 216 CE, which provide some information about the administrative life of one or, in some cases, both of the temples (TM ArchID 235; Gilliam 1947).

The urban organization of Bakchias seems to have remained unaltered throughout the Roman period until the abandonment of the northern area, which probably occurred during the late third and early fourth century CE, when the gravity centre had moved further south and the ancient remains entered a state of partial abandonment.

2. Tracking Papyrus and Parchment Paths: an Archaeological Atlas of Coptic Literature. Coptic Texts in their Geographical Context. Production, Copying, Usage, Dissemination, Storage. Intellectual production and archaeological context compared: The ‘PATHs’ project

2.1 Methodological introduction

‘PATHs’ is the short form of “Tracking Papyrus and Parchment Paths: An Archaeological Atlas of Coptic Literature. Literary Texts in their Geographical Context. Production, Copying, Usage, Dissemination and Storage”, a European Research Council founded project aimed to create an online atlas able to comprehensively and clearly represent the long-lasting and complex phenomenon of the Coptic literature production in its actual and concrete archaeological context (paths.uniroma1.it; <https://atlas.paths-erc.eu/>).

The most peculiar trait of ‘PATHs’ is its ambition to be a multi-disciplinary project: the application of information technology to humanities studies is by no means an innovative approach, but the combination of literary, textual, religious and historical studies with archaeological research, using information technology as a common sharing and working platform, certainly is.

The historical background of this common research is the Late Antique and Medieval Egypt: the third and the eleventh centuries CE are, in fact, the time-frame of the birth, diffusion and sunset of Coptic language, a somehow artificial construction yet representing the very last stage of the millenary history of the Egyptian language (Buzi *et al.* 2017: 2-3). Coptic language was used at

20. P.Stan.Green.dem 23(1)-24(1), preliminary discussed by Arlt and Monson 2010: 114.

21. Respectively, they are the papyri P.Lund IV 9 (TM 11881) and P.Bacch. 7 (TM 15184), both dating back to the second century CE.

an initial moment to translate Biblical works from Greek, and was soon employed to compose original literary works, mainly of religious content. The main aspiration of 'PATHs' is to try to capture, sketch and actually represent the diachronic geography of this literary production by extensively combining philological studies, archaeology and digital humanities, and to explore the process of production, copying, dissemination, usage, transmission and preservation of Coptic texts in a very close relationship with the tangible geographical contexts of their provenance (Bogdani 2017). Besides the philological, papyrological, codicological and literary studies conducted on manuscripts, a careful attention must be paid on the archaeological and topographical aspects of the Egyptian landscape, which certainly are not unknown to the academic community, but have not been yet considered in their entirety and with a particular focus on the later (and less monumental) phases of the Egyptian history, and rarely in connection to text production and dissemination.

This is the main reason why *Places* becomes to us a pivotal resource from which research can be fruitfully conducted (Berno *et al.* 2018). Places are, in our view, first of all archaeological sites, tangible locations that bear archaeological interest, where excavations have been, are being or can be conducted. This is the first and fundamental distinction aspect between 'PATHs' archive and previous publications (Amélineau 1893; Timm 1984) or other richer and most famous online database, such as Trismegistos Places (Verreth 2013; Depauw and Gheldof 2014) or the Pleiades gazetteer (Simon *et al.* 2016); these are resources that have profoundly influenced our work and that have offered a fundamental contribute to our first dataset. Whilst at a first glance the 'PATHs' Places and Trismegistos Places (or Pleiades gazetteer) may seem very similar – and indeed they are, since 'PATHs' owes its first nucleus to Trismegistos (Berno *et al.* 2018) – the basic concepts on which these resources are built on is quite different. Trismegistos records place names (i.e. *toponyms*) found in written sources (texts and documents compiled in any writing support) and provides them with a location – geographical coordinates – and information on dating, when known. 'PATHs', on the other hand, aims at obtaining a complete and up-to-date catalogue of *sites* known to have been active in the referenced period, i.e. third to eleventh centuries CE beyond the attestation or not of the toponym in literary or documentary texts. Each site is thoroughly described, providing a very detailed bibliographic report on previous research and studies, with full description of its urbanistic and monumental shape in Late antiquity, but also an exhaustive overview of the previous (and sometimes later) phases. It is our strong belief that

the study of a well-defined chronological phase of a landscape (or even of a very small archaeological site) cannot be fully completed and understood if the wider chronological context is neglected: it is not possible to study Late Antique Egypt without taking into account the Pharaonic, Hellenistic and Roman phases that have radically marked and changed the landscape.

A particular attention is paid to places that are known to have provided manuscripts (or manuscript fragments) or that are somehow related to the manuscript creation, storage, or circulation. These places, even if (or because of being) scarcely documented by archaeological sources need a more attentive analysis, in order to better understand the book creation and conservation process. We should also keep in mind that Coptic literature is made up exclusively of works of religious content, and therefore the religious geography must receive a particular focus in our reconstruction. Consequently, bishoprics, pilgrimage centers and important monastic clusters mark at our eyes inevitable prominent places in the Egyptian Late Antique geography.

These few points briefly clarify our concept of place and the type of archaeological landscape that we are trying to represent. On the other hand, looking inwards, these places must be located in a very detailed network of connections with the other entities analyzed and registered in the 'PATHs' database in order to provide a solid foundation of the atlas. Some few examples may be enlightening beyond any theoretical speculation. Manuscripts are by far one of the most important material evidences we deal with and a pioneering work has been coordinated in the past decades by Tito Orlandi who has implemented a formidable online database (Orlandi, n.d.) aiming at patiently and rigorously reconstructing and returning to the academic community the *codicological units* (Orlandi 2008: 7-11), i.e. the original manuscripts with literary content (Orlandi 2003). We have had great benefit from this important work and are further developing this model by adding, for each manuscript, a very detailed description of its physical aspect in the attempt to provide a useful comparative tool and to obtain a new set of information on the fabrication techniques, the history of the book and the reconstruction of the activities of the ancient *scriptoria*. These are aspects that texts by themselves cannot provide and only an accurate analysis of the fragments can enlighten. Moreover, manuscripts are being related to places, i.e. archaeological sites by several means; in the most fortunate cases each manuscript can be linked to many places. These are qualified links, marked by a limited set of labels, in order to provide significant cluster capabilities without losing precious information. A manuscript can be thus referred to



Fig. 8.3 – The two sacred areas and the temples of Bakchias (© Joint Archaeological Mission of Bologna University and Sapienza University of Rome at Bakchias).

a *production* place; this information can be obtained on the basis of palaeographic analysis, codicological examination or even textual evidence²². Books are a precious (and rather expensive) good and, as such, displacements and safekeeping locations are sometimes worth registering in paratexts (mainly colophons). These *storage* places too are being carefully filed, in the attempt to retrace on the geographical map the circulation of these very

special archaeological finds. As far as the archaeological context is involved, we must not forget the extraordinary climatic context of Egypt, that allows sometimes the conservation of entire volumes (Górecki 2007; Antoniak 2008). *Discovery* places are thus recovered not only from antiquarian notices, but sometimes from first hand archaeological documentation.

The archaeological (re)contextualization of manuscripts is not a plain task, as some over-simplifications introduced in the previous paragraphs may suggest. A very meticulous, attentive and patient work on all the scattered pieces of this disassembled mosaic must be completed before the overall picture is completed.

22. Paratexts, such as colophons, do often provide reliable information on the production process of the book. For a more detailed and documented discussion of this topic see Soldati 2018.

Yet the methodology is set and is being tested and important achievements are being earned.

The archaeological survey of the Late Antique Egypt and the archaeological atlas, besides providing the fundamental base for the overall analysis, do represent, we believe, an important contribution on its own. If it is not considered as a static and immutable contribution but as an open and collaborative platform, it can become foundation of other parallel studies focused on this time-frame, not necessarily related to manuscripts, literature, history of religion, etc., but to any cultural aspect of this most particular region.

2.2 The Places-Database and the case of western thebes: the contribution of archaeology to the study and representation of landscape in Late Antique Egypt

The Archaeological Atlas of Coptic Literature represents the final goal and the main product of the project 'PATHs', meaning that archaeology and geography are crucial issues for the research. The value of such combination in Coptic studies appears even more relevant if one considers – with Ewa Wipszycka (2013: 109) – that “*geography and monks are rarely associated with one another*”; while 'PATHs' aims at addressing such a problem from an archaeological perspective, places are an important domain and a core part of the database system informing and underpinning the structure of the work (Bogdani 2017; Buzi *et al.* 2017: 8-9). Accordingly, their spatial, physical, stratified dimension – i.e. the possibility to link them to a tangible area, with a (more or less) precise location, and a distinctive configuration of material correlates represent a central focus and distinctive mark of the project (*supra*). As for the structure and formalization of the record within the *Places* category of the 'PATHs' database, each entry has been assigned a permanent identifying number and contains a set of information about the ancient site, as detailed as possible, which defines and articulate its historical identity in terms of designation(s), temporal and spatial attributes, while also linking it to already existing dataset in order to compare data and integrate results²³ (Fig. 8.4). Accordingly, the main established fields concern (1) the different toponym(s) (both ancient and modern) by which the place is known depending on the linguistic and cultural context of reference (in our case: Coptic, Greek, modern Arabic and ancient Egyptian); (2) the link to similar projects as well as the cross references to scholarly *repertoria* providing com-

parative material and information (Trismegistos GeolD; Pleiades id; Timm 1984-1992); (3) the ancient administrative affiliation (*nomos* and province, according to the division of the country by Diocletian) and possible religious position (episcopal see); (4) the type of occupation that took place at the site together with its spatial and/or historical relationships with other places; (5) the dating of the Coptic settlement within the chronological range of reference and the criteria upon which the attribution relies; (6) a brief description of the site summing up its main topographical and historical features as documented in the extant archaeological record; (7) the link to other related entities of the database, especially manuscripts, which, as stated above, may have an articulated relationship with one or more places; (8) the spatial localization of the site, as identified by its geographical coordinates and illustrated by plans and maps; (9) an essential and updated bibliography; (10) the information about the preceding and possibly subsequent phases to the Coptic occupation.

This last point should be particularly emphasized as it allows us not just to outline continuities and ruptures in the (modes of) appropriation of a certain space, area or environment between the Coptic communities and their pharaonic forerunners but also, and more significantly, to properly contextualize such strategies into a broader perspective of dynamic engagement with a highly diversified and historically stratified surrounding landscape (Hahn *et al.* 2008; Brooks Hedstrom 2017).

Unfortunately, archaeology of Late Antique Egypt is unevenly represented²⁴: areas like the Theban necropolis, densely inhabited by a very diverse typology of settlements – from the isolated occupations of Middle and New Kingdom tombs to the well-connected and organized monastic communities – provide unique contexts with a great informative potential (Wilfong 1989; Wipszycka 2009: 171-197; Pimpaud and Lecuyot 2013; Choat and Cromwell 2016). This is the reason why this area was the first to be fully investigated.

A tremendously rich archive and bibliographical documentation was reviewed and became the rationale for a specifically designed survey on the field, aimed at verifying the current conditions of the sites, at obtaining a more precise positioning of their remains and, finally, at collecting a very rich and up-to-date pho-

23. The protocol for the site-description has been developed by Julian Bogdani, Angelo Colonna and Ilaria Rossetti.

24. This situation is mainly the result of the imperialist, colonialist and orientalist values driving the research agendas of the first archaeologists exploring Egypt in the late 19th-early 20th century; within such politico-ideological context of thought and action, pharaonic monuments were accorded a largely uneven preference over the Coptic remains, despite the latter being still an extensive and well visible presence in the contemporary Egyptian landscape. Detailed discussion in Brooks Hedstrom 2017: 7-39, 40-75; Horbury 2003.

tographic documentation²⁵. The campaign produced a new set of first-hand data on many major sites as well as precious information on other poorly documented or lesser-known contexts. Each acquired place was georeferenced and fully recorded; the gathered data need obviously to be processed, refined and fully analyzed, but they already fit into a complex occupational pattern, characterized by (1) an extensive distribution of sites dotting the Late Antique Theban landscape; (2) a certain degree of hierarchization and spatial organization connecting them; (3) a systematic strategy of reuse, transformation and adaptation of earlier pharaonic spaces (temples, tombs) to the needs of the new community (Fig. 8.5).

These points have important consequences on our perception and interpretation of the urban and monastic landscape in the Theban region, which can be only briefly addressed here (cf. Brooks-Hedstrom 2017): firstly, the archaeologically documented diversification of the modes of occupation reflects a wide range of possibilities and arrangements, from massive, walled cities like those implanted at Medinet Habu (ancient Djeme: Hölscher 1934; 1954) and possibly within the temple of Seti I at Gurnah, to differently scaled and structured monastic communities like those of Epiphanius (Winlock 1915; Winlock and Crum 1926), Phoibammon (Godlewski 1986), Cyriacus (Bács 2000), to smaller units and more distant installations not necessarily having a religious character (temporary recoveries, stages of a pilgrimage routes, isolated cells for ascetic practices), located further away in the remote wadis south-west of the Theban mountain (Delattre and Lecuyot 2016). In this perspective, anchoritic and cenobitic monasticism represent two opposite options, with more nuanced transition between them.

This relates, secondly, with the delicate question about the definition of both the social identity of these spaces, their inhabitants, and the context for their mutual connections; this implies that even forms of seclusionism and asceticism might be better understood when re-contextualized as distinctive social practices within a dynamic and stratified framework of interactions, rather than as idiosyncratic religious choices. Finally, the integration of archaeological, documentary and literary information allows investigating how the new-colonized space was understood and narrated by its Christian inhabitants; how spatial relationships with the natural landscape and its monumental 'pagan' past were (re-)constructed (re-)conceptualized, and transposed

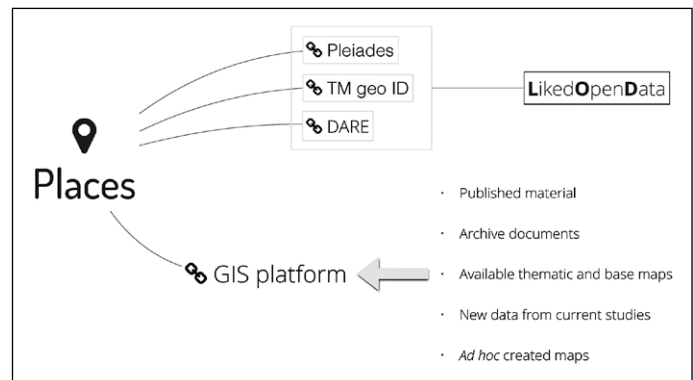


Fig. 8.4 – The mutual exchange of data in the 'Places' section of the 'PATHs' database (© PATHs).

into culturally evocative and influent models disseminated in literary and textual sources; how, eventually, "*the desert was made a city by monks*" (*Life of Anthony*, 14.7) and earlier "*tombs filled with dead [bodies]*" (*Life of Pachomius*, G'7, 12) became the appropriate setting for ascetic conducts and practices.

What is therefore relevant, in this perspective, is that once formalized and visualized on a map, the pattern sketched above not only shows a strong continuity between the pharaonic and the Byzantine facies of the Theban region but also illustrates a distinct process of landscape reconfiguration, which set the geographical background and the cultural scenario for a much more complex network of relations between people, places, products than it has been acknowledged so far. This quick overview, finally, exposes the limits of a traditional literary-informed perspective by emphasizing on the one hand the conscious organization and integration of Christian spaces and settlement practices into the local environment and, on the other, the aspect of movement and circulation; as Ewa Wipszycka (2015: 24) aptly remarks: "*I monaci infatti si muovevano spesso. L'immagine del monaco chiuso nella sua cella e che soltanto malvolentieri entra in contatto col prossimo è un topos letterario che ha poco a che fare con la realtà*".

In the light of these considerations, a reassessment of the situation appears a task as appealing as desirable, with scholarship becoming more and more engaged with theoretical models and comparative approaches in the strategic fields of Coptic archaeology and religious studies (Brooks Hedstrom 2012, 2017; Frankfurter 2012; O'Connell 2014). The work of classification and analytical description conducted at Thebes clearly fits with this growing change of paradigm, demonstrating once more the strong contribution of an archaeologically-based perspective in

25. The campaign took place from 8th to 21st January 2018; the team, directed by Paola Buzi, included Julian Bogdani, Angelo Colonna and Ilaria Rossetti.

raising new questions, stimulating discussion and refining tools for the study of both Christianity (in general) and monasticism (in particular) as active forces shaping the cultural landscape of Byzantine Egypt.

3. *Sacri lapides Aegypti*. From the scribes of temples to the copyists of scriptoria. The transformation of spaces of cult, identity and memory from pharaonic and Graeco-Roman Egypt to Christian Egypt

3.1 A project on the metamorphosis of the Egyptian religious landscape

‘Sacri lapides’ is a new project that is now moving its first steps. It aims to analyze and provide documentary evidence concerning the transformation processes of the sacred spaces assigned to cult, identity and memory from Pharaonic and Ptolemaic-Roman Egypt to Christian Egypt. Such a task will be accomplished through both the topographical-functional analysis and the creation of an exhaustive digital catalogue of the temples and heathen shrines converted into places of Christian worship (basilicas, churches, monasteries, hermitages) designated to book production and preservation (libraries and *scriptoria*), besides, obviously, the cultural function.

Thus, ‘Sacri lapides’ could be seen as the theoretical precondition as well as the archaeological follow-up inspection of the ERC project ‘PATHs’. Like the project ‘PATHs’, ‘Sacri lapides’ has a twofold trait (archaeological and historic-philological), but, compared to that, it mainly focuses on the architectural and planimetric features, by tangibly defining how and where Late Antique Egypt was inserting its ‘knowledge places’.

‘Sacri lapides’ fills a gap, since a complete exploration and a methodical consideration of the processes of physical permutation of the sacred Egyptian space is totally lacking. In fact, the scholars who study the final period of Egyptian history until now have devoted themselves to the ideological-religious phenomena, overlooking (apart from some particular cases, which were in any case connected to regional ranges) an attentive analysis of the archaeological contexts and of the physical spaces.

By means of a team of Egyptologists and Classical archaeologists, whose skills complementarity is an essential requirement for the success of the project, the following goals will be achieved:

1) A complete catalogue of temples, but also of chapels and burials, dated to pharaonic and Ptolemaic-Roman ages, which have



Fig. 8.5 – Coptic graffito showing two crudely painted saints with upraised arms standing below the text of a prayer; north wall of the entrance corridor of KV 2 (Ramses IV), Valley of the Kings. The pharaonic tomb was reused as a chapel dedicated to Saint Ammônios and perhaps saint Abraham (© PATHs).

been re-used as churches, basilicas, monasteries, hermitages and in general as Christian places that are known for the finding of books or have been interpreted as libraries and *scriptoria*. The catalogue will include: a) an analysis of the planimetric relationship between Pharaonic and Christian sacred spaces, with a focus – in the case of temples that have been transformed into basilicas with their archives and libraries – on the disposition of new structures compared to the *naos* of the temple and on the changes of internal paths, also by means of claddings and the creation of new openings; b) an indication of possible continuities between temples’ archives and monastic archives; c) an attentive analysis of access roads, of road networks and of maritime and fluvial harbours; d) an accurate evaluation of the distances between the structures that are the object of the analysis, and the urban centres, in order to understand the relationships – cultural, devotional (such as pilgrimages) and commercial – which intertwine the civil

and religious worlds. 2) A catalogue of the items of the temple décor bearing traces of reuse in Christian period.

3) An annotated survey of the Late-Dynastic devotional inscriptions, exhibiting an overwritten Christian text.

4) A survey of the Greek and Coptic literary sources dovetailing with the archaeological evidence.

References

- Amélineau E. (1893) *La géographie de l'Égypte à l'époque copte*, Paris, Imprimerie Nationale.
- Antoniak I. (2008) Recent Discoveries in the Hermitage of Sheikh Abd El-Gurna: Coptic Codices and Ostraca, in "Et maintenant ce ne son plus que des villages" Thèbes et sa région aux époques hellénistique, romaine et byzantine, Bruxelles: Papyrologica Bruxellensia.
- Arlt C. and Monson A. (2010) Rules of an Egyptian Religious Association from the Early Second Century BCE, in Knuf H., Leitz C. and von Recklinghausen D. (eds.) *Honi soit qui mal y pense. Studien zum pharaonischen, griechisch-römischen und spätantiken Ägypten zu Ehren von Heinz-Josef Thissen*, Leuven, Peeters: 113-122.
- Bács T.A. (2000) The so-called "Monastery of Cyriacus" at Thebes, *Egyptian Archaeology*, 17: 34-36.
- Berno F., Bogdani J. and Buzi P. (2018) The 'PAThs' Project: An Effort to Represent the Physical Dimension of Coptic Literary Production (Third-Eleventh Centuries), *COMSt Bulletin* 4: 47-66.
- Bogdani J. (2017) The archaeological atlas of Coptic literature. A question of method, *VO*, XXI: 59-69.
- Bresciani E. and Giammarusti A. (2012) *I templi di Medinet Madi nel Fayum*, Pisa, PLUS-Pisa University Press.
- Brooks Hedstrom D.L. (2012) Egyptian Monasticism: Sources and Epistemology Models of Seeing and Reading Monastic Archaeology, *Cistercian Studies Quarterly*, 48 (3): 299-315.
- Brooks Hedstrom D.L. (2017) *The Monastic Landscape of Late Antique Egypt*, Cambridge UK, Cambridge University Press.
- Buzi P. (2009) Un ostrakon copto proveniente dal granaio di Bakchias, in Tassinari C., *Il thesaurus di Bakchias. Rapporto definitivo*, Imola, La Mandragora: 157-160.
- Buzi P. (2014) Il settore cristiano, in Giorgi E., Buzi, P. *Bakchias. Dall'Archeologia alla Storia*, Bologna, Bononia University Press: 179-212.
- Buzi P., Bogdani J., Carlig N., Giorda M.C. and Soldati A. (2017) 'Tracking Papyrus and Parchment Paths: A New International Project on Coptic Literature, *Rivista del Museo Egizio*, 1: 1-11 [Online], DOI: 10.29353/rime.2017.656 (Accessed 19 June 2018).
- Capasso M. and Davoli P. (eds.) (2012), *Soknopaiou Nesos Project I (2003-2009)*, Roma, Serra.
- Choat M. and Cromwell J. (2016) Thebes in Late Antiquity, in *Coptic Society, Literature and Religion from Late Antique to Modern Times* (OLA 247), 2 vols., Leuven-Paris-Bristol, CT, Peeters: 695-698.
- Davoli P. (1998) *L'archeologia urbana nel Fayyum in età ellenistica e romana*, Napoli, Proccaccini.
- Davoli P. (2015) The Temple as a Spatial and Architectural Reality, in Capasso, M., Davoli P., eds. (2015), *Soknopaiou Nesos. The Temple and the Worship. Proceedings of the First Round Table of the Centro di Studi Papirologici di Università del Salento, Lecce October 9th 2013*, Lecce, Pensa Multimedia: 119-154.
- Delattre A. and Lecuyot G. (2016) À qui et à quoi servaient les «ermitages» des vallées sud-ouest de la montagne thébaine?, in *Coptic Society, Literature and Religion from Late Antique to Modern Times*, 2 vols., Leuven-Paris-Bristol, Peeters: 709-718.
- Depauw M. and Gheldof T. (2014) Trismegistos. An Interdisciplinary Platform for Ancient World Texts and Related Information, in *Theory and Practice of Digital Libraries*, Berlin: Springer: 40-52.
- Frankfurter D. (2012) Comparison and the Study of Religions in Late Antiquity, in *Comparer en histoire des religions antiques Controverses et propositions*, Liège, Presses Universitaires de Liège: 83-98.
- Gallazzi C. (2001) La ricerca archeologica a Umm el-Breigât (Tebytnis), in Casini M. (ed.), *Cento anni in Egitto. Percorsi dell'archeologia italiana*, Milano, Electa: 171-183.
- Gasperini V. (2014) I materiali ceramici e vetri di Bakchias, in Giorgi E. and Buzi P. (eds.) *Bakchias. Dall'Archeologia alla Storia*, Bologna, La Mandragora: 243-368.
- Gilliam E.H. (1947) The Archives of the Temple of Soknobraisais at Bacchias, *Yale Classical Studies*, 10: 181-281.
- Giorgi E. (2007) Bakchias XVI. La campagna di scavo 2007, *REAC*, 9: 47-92.
- Giorgi E. (2011) Riflessioni sull'urbanistica di Bakchias, in Buzi, P. Picchi D. and Zecchi M. (eds.), *Aegyptiaca et Orientalia. Studi in onore di Sergio Pernigotti*, Oxford, Arheopress: 183-194.
- Giorgi E. (2012) *I bagni romani di Bakchias. La storia dell'edificio e l'evoluzione dell'impianto urbano*, Imola, La Mandragora.
- Giorgi E. (2014) La genesi e lo sviluppo urbano di Bakchias, in Giorgi E., and Buzi P. (eds.) *Bakchias. Dall'Archeologia alla Storia*, Bologna, Bononia University Press: 53-67.
- Giorgi E. and Buzi P. (eds.) (2014) *Bakchias. Dall'Archeologia alla Storia*, Bologna, Bononia University Press.
- Godlewski W. (1986) *Le monastère de S[ain]t Phoibammon* (Deir el-Bahari V), Varsovie, PWN.
- Górecki T. (2007) Sheikh Abd El-Gurna (Hermitage in Tomb 1152). Preliminary Report, 2005, *PAM*, 263-274.
- Grenfell B.P., Hunt A.S., Hogarth D.G. (1900) *Fayûm Towns and Their Papyri*, London.
- Hahn J., Emmel S. and Gotter U. (2008) *From Temple to Church: Destruction and Renewal of Local Cultic Topography in Late Antiquity*, Leiden-Boston, Brill: 91-112.
- Hölscher U. (1934) *The Excavation of Medinet Habu, Volume 1: General Plans and Views* (OIP 21), Chicago, University of Chicago Press.
- Hölscher U. (1954) *The Excavation of Medinet Habu, Volume 5: Post Ramessid Remains* (OIP 66), Chicago, University of Chicago Press.
- Horbury M. (2003) *The British and the Copts, Perspectives on Ancient Egypt since Napoleon Bonaparte: Imperialism, Colonialism and Modern Appropriations*, London, UCL Press: 153-170.
- Ippolito F. (1999) L'economia di Bakchias II: l'attività doganale secondo la testimonianza dei papiri, *PapLup*, 8: 41-69.
- Nachtergaeel G. (2007). Le grenier public de Bacchias d'après la documentation papyrologique, *REAC*, 9: 15-19.
- O'Connell E. (2014) *Egypt in the First Millennium AD Perspectives from New Fieldwork*, Leuven, Peeters.
- Orlandi T. (2003) Modeling the Coptic Literature. The 'Corpus Dei Manoscritti Copti Letterari', in *I&E 2002: Proceedings of the XIV Table Ronde Informatique et Egyptologie*. Pisa [<http://www.cmcl.it/~orlandi/pubbli/pisa.doc>].
- Orlandi T. (2008) *Coptic Texts Relating to the Virgin Mary. An Overview*. Roma: CIM.
- Orlandi T. (n.d.) *CMCL – Corpus Dei Manoscritti Copti Letterari* [<http://www.cmcl.it/>].
- Pernigotti S. (2008) *Catalogo delle sculture a tutto tondo e su superficie piana da Bakchias (1996-2005)*, Imola: La Mandragora.
- Pernigotti (2014a) Per una storia di Bakchias, in Giorgi E. and Buzi, P. (eds.) *Bakchias. Dall'Archeologia alla Storia*, Bologna, Bononia University Press: 17-38.
- Pernigotti (2014b) Il mondo religioso di Bakchias, in Giorgi E. and Buzi P. (eds.) *Bakchias. Dall'Archeologia alla Storia*, Bologna, Bononia University Press: 39-52.
- Pimpaud A-B. and Lecuyot G. (2013) Cartes pour l'étude de la rive gauche de Thèbes aux époques romaines et byzantines, *Memnonia* XXIV: 147-154.
- Rossetti I. (2011) Lo scavo del settore E e del saggio F del complesso produttivo (BS 352), in Buzi P. and Giorgi E. (eds.), *Bakchias 2009-2010. Rapporto preliminare della XVIII e XIX Campagna di scavi*, Imola, La Mandragora: 239-262.
- Rossetti I. (2014) Le aree templari di Bakchias in Giorgi E. and Buzi P. (eds.) *Bakchias. Dall'Archeologia alla Storia*, Bologna, Bononia University Press: 109-153.
- Rossetti I. (2015) *I templi nel Fayyum di epoca tolemaico-romana tra fonti scritte e contesti archeologici*, unpublished Phd thesis, University of Siena.
- Rossetti I. (2017a) Reshaping the Urban Space: Bakchias in Ptolemaic and Roman Times, in Garagnani S. and Gaucci A. (eds.) *Knowledge, Analysis and Innovative Methods for the Study and the Dissemination of Ancient Urban Areas. Proceedings of the KAINUA 2017 International Conference in Honour of Professor Giuseppe Sassatelli's 70th Birthday*: 291-300.
- Rossetti I. (2017b) Temple ranks in the Fayyum during the Ptolemaic and Roman Periods: documentary sources and archaeological data, in Rosati G. and Guidotti M.C. (eds.), *Proceedings of the XI International Congress of Egyptologists. Florence Egyptian Museum. Florence, 23-30 August 2015*, Oxford, Archaeopress: 543-548.

- Simon R., Isaksen L., Barker E. and de Soto Cañamares P. (2016) The Pleiades Gazetteer and the Pelagios Project, in Lex Berman M., Mostern R. and Southall H. (eds.), *Placing Names: Enriching and Integrating Gazetteers*, Bloomington: Indiana University Press: 97-109.
- Soldati A. (2018) One of the oldest extant Coptic "colophons", *Adamantius*, 24 (forthcoming).
- Tassinari T. (2009) *Il thesaurus di Bakchias. Rapporto definitivo*, Imola: La Mandragora.
- Timm S. (1984-1992) *Das christlich-koptische Ägypten in arabischer Zeit. Eine Sammlung christlicher Stätten in Ägypten in arabischer Zeit, unter Ausschluss von Alexandria, Kairo, des Apa-Mena-Klosters (DêrAbü Mina), der Skêtis (Wâdi n-Natrûn) und der Sinai-Region* (TAVO 41), 6 vols., Wiesbaden, Verlag.
- Wilfong T.G. (1989) Western Thebes in the Seventh and Eighth Centuries: A Bibliographic Survey of Jême and Its Surroundings, *BASP*, 26/1-2: 89-145.
- Winlock H.E. (1915) The Egyptian Expedition: The Monastery of Epiphanius at Thebes, *The Metropolitan Museum of Art Bulletin*, 10 (7): 138-150.
- Winlock H.E., Crum W.E. (1926) *The Monastery of Epiphanius at Thebes*, 2 vols. New York, Metropolitan Museum of Arts.
- Wipszycka E. (2009) *Moines et communautés monastiques en Égypte (Ive-VIIIe siècles)* (Journal of Juristic Papyrology, Supplements 11), Varsovie: Warsaw University.
- Wipszycka E. (2013) A look at the Origins of the Monasticism in Egypt from a Geographic Point of View, *Przegląd Humanistyczny*, 57 (2): 109-126.
- Wipszycka E. (2015) Il monachesimo della Tebaide, in *Eremitismo e habitat rupestre. Atti del VI Convegno internazionale sulla civiltà rupestre in ricordo di Giuseppe Giacobozzo Savelletti di Fasano (BR), 13-15 novembre 2013*, Spoleto, Fondazione Centro di Studi sull'Alto Medioevo: 13-28.
- Verreth H. (2013) *A Survey of Toponyms in Egypt in the Graeco-Roman Period (Trismegistos Online Publications, 2)*. Köln, Leuven: Trismegistos Online Publications [<https://www.trismegistos.org/dl.php?id=15>].