

Alexandria Antiqua

A Topographical Catalogue and Reconstruction

Amr Abdo



ARCHAEOPRESS PUBLISHING LTD

Summertown Pavilion

18-24 Middle Way

Summertown

Oxford OX2 7LG

www.archaeopress.com

ISBN 978-1-78969-943-2

ISBN 978-1-78969-944-9 (e-Pdf)

© Archaeopress and Amr Abdo 2022

Cover:

Front cover illustration

Background: Alexandria in a 5th-century AD mosaic from Σέπφορις (Sepphoris, Galilee)

Insets: AutoCAD extracts

Strabo (1st century BC)

Gratien Le Père (1769-1826)

Mahmoud el-Falaki (1815-85)

All rights reserved. No part of this book may be reproduced, or transmitted, in any form or by any means, electronic, mechanical, photocopying or otherwise, without the prior written permission of the copyright owners. This book is available direct from Archaeopress or from our website www.archaeopress.com

He (Ptolemy Lagides) made his residence, 'the Fortress of the King of Upper and Lower Egypt, [Meri-Amun, Setep-en-Re]: Beloved of the Ka-Spirit of Amun, Chosen of Re, Son of Re, Alexandros' - a priestly epithet for the city of Alexandria - on the shore of the great green sea of the Hau-Nebu (the Mediterranean); (it was) formerly called Râ-Kedet (Rhakotis).

Excerpt from the Satrap Stela (311 BC)

Table of Contents

List of Figures	ii
List of AutoCAD Maps (digital format)	ix
Preface	x
Introduction	1
Chapter 1: Context of Foundation	7
Chapter 2: Urban Layout	10
Chapter 3: Cityscape.....	52
Conclusion	171
Epilogue: A Holistic Approach to Topographic Reconstruction.....	181
Bibliography	182
Index.....	198
Figures.....	205

List of Figures

Figure 1. Hugues Commineau de Mézières aka Ugo Comminelli de Maceriis. ‘Veduta d’Alessandria’ of Codice Vaticano Urbinate (277) – 1472.....	205
Figure 2. Álvaro de Bazán, Marqués de Santa Cruz. Archivo General de Simancas (Valladolid, Spain): Mapas, Planos y Dibujos, XLIX-43. Manuscripts ‘E1 102-36’ and ‘E1 103-34’ – map drafted before 1605	206
Figure 3. Hartmann Schedel. ‘Alexandria’ – 1493.....	206
Figure 4. Ahmet Muhittin Piri aka Piri Reis. Portolan chart of Alexandria – drafted 1521; published 1525	207
Figure 5. Ahmet Muhittin Piri aka Piri Reis. Figure (4) reproduced	207
Figure 6. Pierre Belon du Mans. ‘Vray Portrait de la Ville d’Alexandrie en Egypte’ – drafted 1548; published 1553	208
Figure 7. Georg Braun and Frans Hogenberg. ‘Alexandria, etc.’ – 1575.....	208
Figure 8. Johann Helffrich. ‘Abris der Stadt Alexandria’ – drafted c. 1565-66; published 1582	209
Figure 9. Olfert Dapper. ‘De Stadt Alexandria Of Scanderik’ – 1668.....	209
Figure 10. Abraham Ortelius. ‘Aegyptus Antiqua’ – drafted 1570; published 1587	210
Figure 11. Étienne Gravier, Marquis d’Ortières. ‘Plan de la Ville d’Alexandrie Avec Ses Forteresses et Ses Ports’ – 1685-87	210
Figure 12. Joseph Razaud, Ingénieur du Roy. ‘Plan Particulier de la Ville et Ports d’Alexandrie’ – 1687.....	211
Figure 13. Christian Melchien, Pilote Entretenu de Sa Majesté à Toulon. ‘Plan du Port d’Allexandrie, etc.’ – 1699	211
Figure 14. Antoine Massy, Pilote des Galères de Sa Majesté. ‘Plan des Ports d’Allexandrie, etc.’ – 1699.....	212
Figure 15. Marquese de la Garde. ‘Plan et Élévation de la Rade d’Alexandrie en Égypte’ – 1713	212
Figure 16. Pierre-Nicolas Bonamy. ‘Alexandria Antiqua’ – drafted 1731; published 1736	213
Figure 17. Frederick Ludwig Norden. ‘Carte Particulière de la Vieille et de la Nouvelle Alexandrie, et des Ports’ – drafted 1737; published 1795.....	213
Figure 18. Frederick Ludwig Norden. ‘Carte et Plan du Port Neuf d’Alexandrie’ – drafted 1737; published 1795	214
Figure 19. Richard Pococke. ‘A Plan of Alexandria’ – drafted 1737; published 1743.....	214
Figure 20. Jacques-Nicolas Bellin. ‘Costes d’Egypte Depuis Alexandria Jusqu’à Rosette’ – 1764.....	215
Figure 21. Jacques-Nicolas Bellin. ‘Plan des Ports et Ville d’Alexandrie’ – 1764.....	215
Figure 22. Joseph Roux, Hydrographe du Roy à Marseille. ‘Alexandrie Barbarie’ – first edition (121 plans), 1764; extended edition (163 plans), 1804.....	216
Figure 23. Jean-Baptiste Bourguignon d’Anville. ‘Plan d’Alexandrie’ – 1766	216
Figure 24. Louis-François Cassas. ‘Alexandrie, Nommée par les Arabes, Eskandériéh. Plan Général de la Ville’ – drafted 1785; published 1799.....	217
Figure 25. Les Ingénieurs de l’Armée d’Orient. ‘Alexandrie’ – drafted 1798-99; published 1818.....	217
Figure 26. Les Ingénieurs de l’Armée d’Orient. ‘Carte Générale des Côte, Rades, Ports, Ville et Environs d’Alexandrie’ – drafted 1798-99; published 1822	218
Figure 27. Les Ingénieurs de l’Armée d’Orient. ‘Plan Général des Deux Ports, de la Ville Moderne, et de la Ville des Arabes’ – drafted 1798-99; published 1817	218
Figure 28. Pierre-Jean-Baptiste aka Publicola Chaussard. ‘Plan Comparative d’Alexandrie Ancienne, Moderne, et du Temps des Arabes’ – 1802.....	219
Figure 29. Thomas Walsh. ‘Plan of the Operations of the British and French Armies Before Alexandria, etc.’ – drafted 1801; published 1803.....	219
Figure 30. Henri Salt. ‘A Geometrical Survey of the City of Alexandria’ – drafted 1806; published 1809.....	220
Figure 31. William Henry Smyth, R.N. (the Hydrographical Office of the Admiralty). ‘Alexandria. Plan of the City, Harbours, and Environs’ – 1825, 1833	220
Figure 32. William Henry Smyth, R.N. ‘Plan of Alexandria, etc.’ – 1843.....	221
Figure 33. Le Saulnier de Vauhello. ‘Plan des Ports et Mouillages d’Alexandrie’ – 1834	221
Figure 34. E. Napier, R.N. ‘Plan of Alexandria and Its Neighbourhood’ – 1841.....	222
Figure 35. Barthélémy Gallice. ‘Plan de la Place d’Alexandrie (Égypte) et de Ses Environs’ – 1845	222
Figure 36. Charles Müller. ‘Plan d’Alexandrie Comprenant Toutes Ses Fortifications, Rues, et Édifices Principaux’ – 1855	223
Figure 37. Mahmoud-Bey (el-Falaki). ‘Carte de l’Antique Alexandria et des Ses Faubourgs’ – 1866.....	223
Figure 38. Mahmoud-Bey (el-Falaki). ‘Carte d’Alexandrie en 1865’ – 1871.....	224
Figure 39. Mahmoud-Bey (el-Falaki). ‘Carte des Environs d’Alexandrie’ – 1866.....	224
Figure 40. Heinrich Kiepert. ‘Plan der Alten Stadt Alexandria’ – 1872.....	225
Figure 41. J. Millie. ‘Alexandrie d’Égypte et le Caire, Avec le Plan de Ces Deux Villes’ – 1867-68.....	225
Figure 42. A.L. Mansell, R.N. ‘Port d’Alexandrie, etc.’ – drafted 1869; published 1872-73	226
Figure 43. <i>Revue D’Artillerie Française</i> (Tome XX). ‘Le Bombardement d’Alexandrie par la Flotte Anglaise (11 Juillet 1882)’ – 1882	226
Figure 44. John Frederick Maurice. ‘Sketch of Country Between Alexandria and Kafr Ed-Dauar, etc.’ – 1887	227
Figure 45. <i>Atlas des Ports Étrangers</i> (Troisième Livraison). ‘Alexandrie (1882)’ – drafted 1882; published 1887	227
Figure 46. Henry de Vaujany. ‘Plan Comparatif d’Alexandrie Ancienne et Moderne’ – 1885	228
Figure 47. Direction Générale du Tanzim, Inspection de l’Ouest. ‘Plan de la Ville d’Alexandrie’ – 1887.....	228
Figure 48. Henry de Vaujany. ‘Plan Comparatif du Port Oriental d’Alexandrie’ – 1888.....	229
Figure 49. Tassos Demetrios Neroutsos. ‘Alexandrie Ancienne’ – 1888.....	229

Figure 50. Carlo Marchettini. 'Plan de la Ville d'Alexandrie et du Marché de Minet-el-Bassal' – 1890.....	230
Figure 51. David George Hogarth and Edward Frederic Benson. 'Alexandria' – 1894-95.....	230
Figure 52. Georges Marichal. 'Plan du Quartier "Rhacotis" dans l'Alexandrie Romaine' – 1897.....	231
Figure 53. Giuseppe Botti. 'Carte de l'Antique Alexandria' – 1898.....	231
Figure 54. Ferdinand Noack. 'Ausgrabungen in Alexandrien; Übersichtsplan' – 1900.....	232
Figure 55. Expedition Ernst Sieglin (1898-1902). 'Plan von Alexandrien und Umgebung' – 1908.....	232
Figure 56. Wilhelm Sieglin. 'Alexandria 100 BC – AD 100' – 1897.....	233
Figure 57. Wilhelm Sieglin. 'Alexandria 3rd – 5th Century AD' – 1897.....	233
Figure 58. Les Services Techniques de la Municipalité. 'Plan de la Ville d'Alexandrie' – 1902.....	234
Figure 59. Richard Massie Blomfield. 'Alexandria (Ancient and Modern)' – 1905.....	234
Figure 60. Mariano Bartocci. 'Alexandrie. Plan de la Ville Ancienne et Moderne' – 1914.....	235
Figure 61. Gaston Jondet. 'Carte de la Rade d'Alexandrie' – 1916.....	235
Figure 62. Le Survey Department. 'Plan d'Alexandrie' – 1917.....	235
Figure 63. Edward Morgan Forster. 'Alexandria: Historical Map' – 1922.....	236
Figure 64. Achille Adriani. 'Saggio di una Pianta Archeologica di Alessandria' – 1934.....	236
Figure 65. Achille Adriani. 'Pianta Schematica di Alessandria Antica a Cura di Mahmûd Bey el-Falaki (Con Varianti e Aggiunte di A. Adriani)' – 1966.....	237
Figure 66. Achille Adriani. 'Pianta Comparativa di Alessandria Antica e Moderna' – 1966.....	237
Figure 67. Peter Marshall Fraser. 'Outline Map of Alexandria' – 1972.....	238
Figure 68. Barbara Tkaczow. 'Ptolemaic and Early Roman Period: 3rd – 1st Century BC' – 1993.....	238
Figure 69. Barbara Tkaczow. 'Late Roman and Early Byzantine Period: 4th – 7th Century AD' – 1993.....	239
Figure 70. Barbara Tkaczow. 'Collective: 3rd Century BC – 7th Century AD' – 1993.....	239
Figure 71. Wolfram Hoepfner and Ernst-Ludwig Schwandner. 'Alexandria' – 1994.....	240
Figure 72. Wolfram Hoepfner and Ernst-Ludwig Schwandner. 'Alexandria' – 1994.....	240
Figure 73. Wolfram Hoepfner and Ernst-Ludwig Schwandner. 'Alexandria' – 1994.....	241
Figure 74. Judith McKenzie. 'Alexandria: Plan of Ptolemaic Cemeteries and City Walls' – 2007.....	241
Figure 75. Judith McKenzie. 'Alexandria: Plan of Roman Cemeteries' – 2007.....	242
Figure 76. Institut Européen d'Archéologie Sous-Marine (IEASM). 'Great Harbour of Ancient Alexandria' – 2011.....	242
Figure 77. AutoCAD Map (V1). 'Alexandria: 4th – 2nd Century BC (Ptolemaic)' – 2019.....	243
Figure 78. AutoCAD Map (V2). 'Alexandria: 1st Century BC – 3rd Century AD (Late Ptolemaic-Roman)' – 2019.....	244
Figure 79. AutoCAD Map (V3). 'Alexandria: 4th – 7th Century AD (Late Antique)' – 2019.....	245
Figure 80. AutoCAD Map (V4). 'Alexandria: 4th Century BC – 7th Century AD (Collective)' – 2019.....	246
Figure 81. AutoCAD Map (V5). 'Alexandria: Eastern Suburbs' – 2019.....	247
Figure 82. Alexandria and its environs in antiquity. Aquatint by Jean-Claude Golvin.....	248
Figure 83. Satrap Stela; recorded decree issued in autumn 311 BC.....	248
Figure 84. Fortification-point (α). Localisation.....	249
Figure 85. Fortification-point (α). Plan.....	249
Figure 86. Fortification-point (α). View of the outer façade of nummulithic limestone.....	250
Figure 87. Fortification-point (α). A slight deviation of the Tulunid circuit to the east of transversal street R1.....	250
Figure 88. Fortification-point (ε). Localisation.....	250
Figure 89. Fortification-point (ε). View of submerged remnants to the east of el-Silsileh.....	251
Figure 90. Site 3. Localisation.....	251
Figure 91. Fortification-point (γ). Relative location to el-Falaki's fortification-point (P).....	251
Figure 92. Fortification-point (γ). Plan and sectional view.....	252
Figure 93. Fortification-point (γ). View of excavated remnants.....	252
Figure 94. Bab el-Bahr, the northern entrance to the Arab town. Localisation.....	253
Figure 95. Bab el-Bahr, the northern entrance to the Arab town, c. 1798-99.....	253
Figure 96. Fortification-point (β). Localisation.....	253
Figure 97. Fortification-point (β): the so-called 'Tower of the Romans' next to the Heliopolis obelisks aka Cleopatra's Needles, c. 1798-99.....	254
Figure 98. Fortification-point (β): the so-called 'Tower of the Romans' and the standing Heliopolis obelisk (transported shortly after to New York) on the 19th-century shoreline – October 1879.....	254
Figure 99. The so-called 'Palais ruiné'. Localisation.....	255
Figure 100. Relative location of 'Palais ruiné' (a: site of Tabiat el-Mencherieh) to the "Tower of the Romans" (b: Fortification-point β) and the standing Heliopolis obelisk (c). View of the eastern harbour's 19th-century shoreline.....	255
Figure 101. Noack's trenches (K3), (K4), and (L). Localisation.....	256
Figure 102. The so-called 'Mole ruiné'. Localisation.....	256
Figure 103. The Pharillon site. Localisation.....	257
Figure 104. Traces of street R1. Plan and sectional view. Noack's trench (N5); approximately, the present-day site of the Faculty of Commerce, el-Mazarita.....	257
Figure 105. Breccia's 'Route-Mosaïque': traces of street R1 or L4? and a fragment of a mosaic; approximately, the present-day site of the Faculty of Commerce, el-Mazarita.....	258
Figure 106. Chantier Djanikian, el-Mazarita. Plan of constructions (A) and (B).....	258
Figure 107. Chantier Djanikian, el-Mazarita. Sectional view of constructions (A) and (B).....	259
Figure 108. Noack's trenches (B1) and (B2), el-Mazarita. Plan of remnants pertaining to four phases of construction (a; b; c; d).....	259
Figure 109. Noack's trenches (B1) and (B2), el-Mazarita. Sectional view of remnants pertaining to four phases of construction (a; b; c; d).....	260

Figure 110. Cinema Amir, Kom el-Dikka. Excavation plan.....	260
Figure 111. Kom el-Dikka archaeological park. Satellite image: localisation of sites.....	261
Figure 112. Kom el-Dikka archaeological park. Localisation of sites	261
Figure 113. Excavations at Sidi el-Bardissi and Sidi Abd el-Razzak el-Wafai, off el-Nebi Daniel, Kom el-Dikka. Breccia's trenches (D; E; F)	262
Figure 114. Excavations at Sidi el-Bardissi, off el-Nebi Daniel, Kom el-Dikka. Breccia's trench (D). Plan of excavated remnants	262
Figure 115. Excavations at Sidi el-Bardissi, off el-Nebi Daniel, Kom el-Dikka. Breccia's trench (D). Sectional view of excavated remnants.....	262
Figure 116. Columns opposite el-Attarine Mosque, c. 1798-99.....	263
Figure 117. Columns opposite el-Attarine Mosque.....	263
Figure 118. Noack's trench (J), east of el-Khartoum (Said Pasha) Square, el-Mazarita. Plan of remnants pertaining to four phases of construction (a; b; c; d).....	264
Figure 119. Noack's trench (J), east of el-Khartoum (Said Pasha) Square, el-Mazarita. Sectional view of remnants pertaining to four phases of construction (a; b; c; d).....	264
Figure 120. Ptolemaic foundations, and traces of Roman street L _a ; approximately, the present-day site of the faculties of commerce and law, el-Mazarita	265
Figure 121. Excavations at el-Amir Abd el-Moneim (Ismail Mahanna) Street, Kom el-Dikka. Plan	265
Figure 122. Excavations at el-Amir Abd el-Moneim (Ismail Mahanna) Street, Kom el-Dikka. Sectional view	266
Figure 123. Street R8 as a δρόμος to the Sarapeion, extending between two intermediate thoroughfares.....	266
Figure 124. Waterfront of ancient Alexandria (black line) relative to the 1798-99 post-mediaeval setting (base map) and modern setting (yellow line)	266
Figure 125. Construction of the Corniche, c. 1906	267
Figure 126. The standing Heliopolis obelisk on the 19th-century seashore, c. 1860s.....	267
Figure 127. Relative location of dockyards and detected harbour amenities to the Heptastadion.....	268
Figure 128. Great Harbour of ancient Alexandria	268
Figure 129. Submerged harbour infrastructure north and northwest of Pharos	268
Figure 130. Submerged harbour infrastructure northwest of Pharos; detailed view	269
Figure 131. Line of shoals extending E-W, from el-Silsileh to el-Agamy, c. 1798-99.....	269
Figure 132. Remnants of Mareotic lake-ports detected within the main basin, c. 1798-99	270
Figure 133. Remnants of a Mareotic lake-port south of Alexandria, c. 1798-99.....	270
Figure 134. Remnants of a Mareotic lake-port south of el-Max, c. 1798-99.....	271
Figure 135. Dyke separating the Maryut Depression from Abu Qir aka el-Maadiya Lagoon, c. 1801	271
Figure 136. Prolongation of the canal towards the westernmost sector of the Arab town, whence a subterranean aqueduct extends to the amenities of the Ottoman-controlled western port (<i>kadirġa/ġlam limāni</i>), c. the 16th-17th century	272
Figure 137. Course of el-Mahmoudiya Canal at Minet el-Bassal, Alexandria. Satellite image.....	272
Figure 138. Possible location of the Kibotos basin of ancient Alexandria	273
Figure 139. Depression at the proposed location of the Kibotos basin	273
Figure 140. Canal divergence from (c. 16th-17th century) and readjustment to (early 19th century) its possible course in antiquity	274
Figure 141. Segmenting the cityscape into predetermined urban and suburban sectors	274
Figure 142. Pharos Lighthouse of Alexandria; reconstruction by Hermann and August Thiersch	275
Figure 143. Fort Qaitbay. View from the Ottoman village (el-Anfushy), c. 1798-99	275
Figure 144. Map showing Abul-Saadat's encounters in the eastern harbour during the early 1960s.....	276
Figure 145. Marked zone with submerged fragmentary architecture and statuary off Fort Qaitbay (K3)	276
Figure 146. el-Anfushy necropolis. Hypogea (I-V). Plan	277
Figure 147. el-Anfushy necropolis. Hypogea (VI). Plan.....	277
Figure 148. el-Anfushy necropolis. Hypogea (I). Plan	278
Figure 149. el-Anfushy necropolis. Hypogea (II). Plan	278
Figure 150. el-Anfushy necropolis. Hypogea (III). Plan.....	279
Figure 151. el-Anfushy necropolis. Hypogea (IV). Plan.....	279
Figure 152. el-Anfushy necropolis. Hypogea (V). Plan	280
Figure 153. Ras el-Tin necropolis. Hypogea (I-III). Plan.....	280
Figure 154. Ras el-Tin necropolis. Hypogea (IV-VI). Plan.....	281
Figure 155. Ras el-Tin necropolis. Hypogea (VII). Plan	281
Figure 156. Ras el-Tin necropolis. Hypogea (VIII). Plan.....	282
Figure 157. Ras el-Tin necropolis. Hypogea (IX). Plan and sectional view	282
Figure 158. Ras el-Tin necropolis. Hypogea (X). Plan and sectional view	283
Figure 159. Ras el-Tin necropolis. Hypogea (XI). Plan and sectional view	283
Figure 160. Minet el-Bassal necropolis. Sezione (A). Hypogea (I-III). Plan	284
Figure 161. Minet el-Bassal necropolis. Sezione (B). Extant section of a hypogea. Plan	284
Figure 162. Minet el-Bassal necropolis. Sezione (C). Extant section of a hypogea. Plan	285
Figure 163. Gabbari necropolis. Southern Gabbari (Gebel el-Zeitoun). Agnew hypogea. Approximate location.....	285
Figure 164. Gabbari necropolis. Southern Gabbari (Gebel el-Zeitoun). Agnew hypogea. Plan.....	286
Figure 165. Gabbari necropolis. Zwei gräber (I-II); Hermann Thiersch. Hypogea (I). Plan	286
Figure 166. Gabbari necropolis. Zwei gräber (I-II); Hermann Thiersch. Hypogea (II). Plan	287
Figure 167. Gabbari necropolis. Two hypogea (A-B); Banoub Habachi. Plan.....	287

Figure 168. Gabbari necropolis. Gabbari Zone (B): Centre d'Études Alexandrines. Relative location to Zone (A) of the Deutsche Archäologische Institut (site 47i) and Zone (C) of the Centre d'Études Alexandrines (site 47k)	288
Figure 169. Gabbari necropolis. Gabbari Zone (B): Centre d'Études Alexandrines. Excavation zone (I). Sector (I). Hypogea (B1-B8). Plan	288
Figure 170. Gabbari necropolis. Gabbari Zone (B): Centre d'Études Alexandrines. Excavation zone (I). Sectors (I-II). Plan	289
Figure 171. Gabbari necropolis. Gabbari Zone (B): Centre d'Études Alexandrines. Excavation zone (II). Sectors (III-VI). Plan	289
Figure 172. Gabbari necropolis. Gabbari Zone (C): Centre d'Études Alexandrines. Central sector. Hypogea (C3-C14). Plan	290
Figure 173. Gabbari necropolis. Gabbari Zone (C): Centre d'Études Alexandrines. Central sector. Hypogea (C3). Plan	290
Figure 174. el-Mafrouza necropolis. Suq el-Wardian hypogea. Sectional view	291
Figure 175. el-Mafrouza necropolis. A complex of hypogea, including the <i>saqiya</i> . Hypogea (I). Plan	291
Figure 176. el-Mafrouza necropolis. A complex of hypogea, including the <i>saqiya</i> . Hypogea (II). Plan	292
Figure 177. el-Mafrouza necropolis. A complex of hypogea, including the <i>saqiya</i> . Hypogea (III). Plan	292
Figure 178. el-Mafrouza necropolis. A complex of hypogea, including the <i>saqiya</i> . Hypogea (III-IV). Plan	293
Figure 179. el-Mafrouza necropolis. Stagni complex of hypogea. Hypogea (I-III). Plan	293
Figure 180. el-Wardian necropolis. Grand catacomb. Location in Norden's 1755 map (Norden's visit to Alexandria: June 1737)	294
Figure 181. el-Wardian necropolis. Grand catacomb (site 49a-c) and the so-called 'Baths of Cleopatra' (site 49d). Location c. 1798-99	294
Figure 182. el-Wardian necropolis. Grand Catacomb. Satellite image: localisation	295
Figure 183. el-Wardian necropolis. Grand Catacomb. Plan (a)	295
Figure 184. el-Wardian necropolis. Grand Catacomb. Plan (b)	296
Figure 185. el-Wardian necropolis. Grand Catacomb. Plan (c)	296
Figure 186. el-Wardian necropolis. Grand Catacomb. Plan (d)	297
Figure 187. el-Wardian necropolis. Grand Catacomb. Surface constructions. Plan	297
Figure 188. el-Wardian necropolis. Bartocci hypogea. Plan	298
Figure 189. el-Wardian necropolis. Two adjacent hypogea: junction of streets number 2171 and 2150 (Korret el-Ein). Plan	298
Figure 190. el-Wardian necropolis. Youssef Mahmoud hypogea. Plan	299
Figure 191. el-Wardian necropolis. Ezbet el-Yousra hypogea. Plan	299
Figure 192. <i>Hippodromos-circus</i> dug into the northern sector of Kom el-Shuqafa	300
Figure 193. Remnants of a <i>Hippodromos-circus</i> , c. 1798-99	300
Figure 194. Remains of the <i>spina</i> of a <i>Hippodromos-circus</i> , c. 1798-99	300
Figure 195. Remains <i>in situ</i> of the seats (marked k) of a <i>Hippodromos-circus</i> , c. 1798-99	301
Figure 196. Sarapeion. Diocletian's Column aka Pompei's Pillar, c. 1798-99	301
Figure 197. Sarapeion. General plan of site	302
Figure 198. Sarapeion. Northern sector. Excavated off-grid vestiges of construction phase (I)	302
Figure 199. Sarapeion. Northeastern sector. Excavated off-grid vestiges of construction phase (I) on either side of the Euergetean temple of construction phase (IIb)	303
Figure 200. Sarapeion. Northeastern sector. Excavated vestiges of the Euergetean temple and <i>oikos</i> building of construction phase (IIb) relative to the off-grid constructions of phase (I)	303
Figure 201. Sarapeion. Northeastern sector. Excavated off-grid vestiges of construction phase (I) to the east of the Euergetean temple of construction phase (IIb). The earlier remnants are overbuilt with successive constructions of phase (II)	304
Figure 202. Sarapeion. Axonometric reconstruction of the Euergetean sanctuary c. the second half of the 3rd century BC	304
Figure 203. Sarapeion. Axonometric reconstruction of the Roman-renovated sanctuary c. the 3rd century AD	305
Figure 204. Kom el-Shuqafa necropolis. Relative location of the funerary structures recorded by G. Botti, Expedition Ernst Sieglin, and H. Riad (site 53b-h) to the nearby bath complexes (site 55b), <i>Hippodromos-circus</i> (site 51), Sarapeion (site 52), and Agnew hypogea (site 47a)	305
Figure 205. Kom el-Shuqafa necropolis. Funerary structures recorded by G. Botti (1892-93, 1897, 1900-01) and Expedition Ernst Sieglin (1900-02), and revisited by A. Rowe (1941-42). General plan	306
Figure 206. Kom el-Shuqafa necropolis. Wescher hypogea. Plan	306
Figure 207. Kom el-Shuqafa necropolis. Pugioli hypogea: Schreiber's Typus (ε). Plan	307
Figure 208. Kom el-Shuqafa necropolis. Sectional view of Botti's Scavi (A) and (B), with conjectural surface constructions and the <i>Hippodromos-circus</i> (site 51)	307
Figure 209. Kom el-Shuqafa necropolis. Botti's Scavo (A). Plan	307
Figure 210. Kom el-Shuqafa necropolis. Botti's Scavo (B). Plan	308
Figure 211. Kom el-Shuqafa necropolis. Botti's Scavo (C). Plan	308
Figure 212. Kom el-Shuqafa necropolis. Botti's Scavo (D). Plan	309
Figure 213. Kom el-Shuqafa necropolis. Hauptgrab: construction phase (I). Plan	309
Figure 214. Kom el-Shuqafa necropolis. Hauptgrab and Nebengrab: subsequent phases of construction: subterranean level (I). Plan	310
Figure 215. Kom el-Shuqafa necropolis. Hauptgrab: subsequent phases of construction: subterranean level (II). Plan	310
Figure 216. Kom el-Shuqafa necropolis. Sectional view of the Hauptgrab, with conjectural surface constructions	311
Figure 217. Kom el-Shuqafa necropolis. Nebengrab: construction phase (I). Plan	311
Figure 218. Kom el-Shuqafa necropolis. Nebengrab: subsequent phases of construction. Plan	311
Figure 219. Kom el-Shuqafa bath complexes. Bath complex (A). Plan and sectional view	312
Figure 220. Kom el-Shuqafa bath complexes. Bath complex (B). Plan and sectional view	312
Figure 221. el-Attarine and Kom el-Dikka bath complexes: <i>insulae</i> L1-L'2-R4-R6. Relative location of the recorded bath complex in el-Attarine to that excavated at the nearby Polish concession in Kom el-Dikka (site 20)	313
Figure 222. el-Nabi Daniel Mosque. Breccia's 1929 trenches (A), (B), and (C)	313

Figure 223. Kom el-Dikka archaeological park. Localisation of sectors (U) and (US). Plan.....	314
Figure 224. Kom el-Dikka archaeological park. Cardinaly-oriented (N-S) off-grid vestiges excavated at sectors (U) and (US), against the secondary intercardinal orientation (NNW-SSE) of later constructions (<i>odeum's portico and auditoria</i>) on site. Plan.....	314
Figure 225. Kom el-Dikka. SE. corner of the Fouad-Safia Zaghoul junction. Stylobate of a Doric colonnade (stoa?). Plan and sectional view.	315
Figure 226. el-Attarine. Southern side of Fouad Street, at the junction with Morsi Badr and Sherif Pasha: the present-day site of Markaz el-Horreya lel-Ibda bel-Askandarreiya. Localisation of a temple to Sarapis and Isis, Θεοὶ Σωτῆρες, and Ptolemy IV Philopator and Arsinoe III, Θεοὶ Φιλοπάτορες.....	315
Figure 227. el-Attarine. NE. sector of <i>insula</i> L1-L'2-R5-R6. Localisation of a temple to Sarapis and Isis, Θεοὶ Σωτῆρες, and Ptolemy IV Philopator and Arsinoe III, Θεοὶ Φιλοπάτορες.....	316
Figure 228. Kom el-Dikka. SE. of the archaeological park. Localisation of a temple to Bastet (Boubasteion)	316
Figure 229. Kom el-Dikka. <i>Insula</i> L'2-L'3-R3-R4. Localisation of a temple to Bastet (Boubasteion)	316
Figure 230. Kom el-Dikka. Temple to Bastet (Boubasteion). Localisation of deposits on the SCA excavation plan.....	317
Figure 231. el-Ramleh. Bronze crabs of the standing (New York) obelisk, bilingually inscribed in Greek and Latin.....	317
Figure 232. el-Ramleh. Façade of the Caesareum; reconstruction.....	318
Figure 233. el-Ramleh. The present-day site of Le Hotel Métropole. Turning the standing (New York) obelisk. December 6th, 1879.....	318
Figure 234. el-Ramleh. <i>Insula</i> L2-L3-R4-R5, encompassing the site of the historical Caesareum.....	319
Figure 235. el-Ramleh. Scottish (el-Manar) School. Subterranean complex. Plan.....	319
Figure 236. el-Ramleh. Scottish (el-Manar) School. Left: plan of surface constructions (A) and (B). Right: sectional view of subterranean round chamber (V).....	320
Figure 237. el-Ramleh. Pelizäus Heim (Safia Zaghoul School). Daszewski's localisation of two cisterns on Adriani's 1934 <i>pianta</i>	320
Figure 238. el-Ramleh. Pelizäus Heim (Safia Zaghoul School). Plan and sectional view of a cistern.....	321
Figure 239. el-Ramleh. Chantier Moustaki. Excavation plan.....	321
Figure 240. el-Ramleh. Chantier Politi (Cinema Radio). Excavation plan.....	322
Figure 241. el-Ramleh. Chantier Heikal. Excavation plan.....	322
Figure 242. el-Ramleh. Chantier Finney. Excavation plan.....	323
Figure 243. el-Mazarita. Localisation of key sites at the premises of the former British Consulate (site 121) and the former Cricket Playground (site 122a-c).	323
Figure 244. el-Mazarita. The former Cricket Playground. Shenouda's 1970-71 excavation plan.....	324
Figure 245. el-Mazarita. The former Cricket Playground. Plan of the Daszewski-Barański 1980 recordings.....	324
Figure 246. el-Mazarita. Tulunid circuit deviation near the junction of el-Sultan Hussein with el-Mathaf.....	325
Figure 247. el-Mazarita. Localisation of the Arab bastions Tabiat el-Yahoudieh (1) and Tabiat el-Mencherieh (2) on Adriani's 1934 <i>pianta</i>	325
Figure 248. el-Mazarita. Extent of mediaeval and post-mediaeval Jewish interment down the Government Hospital Hill.....	326
Figure 249. el-Mazarita. Localisation of the Daszewski-Kamiński 1976 trenches (1) and (2a-c).....	326
Figure 250. el-Mazarita. Major conduit following the cardinal directions. Trench (2b). Plan and sectional view.....	326
Figure 251. el-Mazarita. Localisation of foundations and fragmentary architecture recorded by G. Botti on the slopes of the Government Hospital Hill (site 133a), and by L. Borchardt opposite the GRM <i>chantiers</i> at el-Ramleh (site 133b). Plan.....	327
Figure 252. el-Mazarita. Present-day site of el-Khaledin Park. Enclosure wall and thoroughfare following the cardinal directions: fortification-point (δ). Localisation.....	327
Figure 253. el-Mazarita. Present-day site of el-Khaledin Park. Enclosure wall and thoroughfare following the cardinal directions: fortification-point (δ). Plan.....	328
Figure 254. el-Mazarita. Present-day site of el-Khaledin Park. Enclosure wall and thoroughfare following the cardinal directions: fortification-point (δ). Sectional view.....	328
Figure 255. NW. sector of el-Shallalat Park. HRIAC excavations. Satellite image: localisation of site.....	329
Figure 256. NW. sector of el-Shallalat Park. HRIAC excavations. Localisation of site.....	329
Figure 257. el-Chatby. Chantier Bibliotheca Alexandrina. Excavation plan.....	330
Figure 258. el-Mazarita; el-Chatby; Kom el-Dikka. Excavated remnants aligned in the cardinal directions, in the Ptolemaic βασιλεία and the central district.	330
Figure 259. el-Chatby. Chantier el-Silsileh. Excavation plan.....	331
Figure 260. HIAMAS concession east of el-Silsileh. Satellite image: localisation of sites.....	331
Figure 261. HIAMAS concession east of el-Silsileh. Recorded finds (A-E) on el-Chatby 1.....	332
Figure 262. el-Chatby necropolis. Satellite image: localisation of Breccia's GRM excavations (1904-10).....	332
Figure 263. el-Chatby necropolis. Localisation of Breccia's GRM excavations (1904-10).....	333
Figure 264. el-Chatby necropolis. Excavation plan (1904-10).....	333
Figure 265. el-Chatby necropolis. Hypogea (A) and (B) and a shaft-and-chamber tomb of type (IN.5) as excavated in the early 20th century within the southern sector of the site (partially preserved to date). Plan.....	334
Figure 266. el-Chatby necropolis. Hypogeum (A). Plan.....	334
Figure 267. el-Chatby necropolis. Hypogeum (B). Plan.....	334
Figure 268. el-Hadra necropolis. Benson funerary structure. Plan.....	335
Figure 269. el-Hadra necropolis. Plan of Schreiber's Typus (π).....	335
Figure 270. el-Hadra necropolis. Satellite image: localisation of excavated sectors (1-9).....	336
Figure 271. el-Hadra necropolis. Localisation of excavated sectors (1-9).....	336
Figure 272. el-Hadra necropolis. Plan of excavated sectors (1-7).....	337

Figure 273. el-Hadra necropolis. Sectors (1-2): Abu Qir Road and Kotsika (Gamal Abdel-Nasser) Hospital. Plan and sectional view of a developed form of the shaft-and-chamber tomb with a vestibule, surmounted by a funerary monument	337
Figure 274. el-Hadra necropolis. Sectors (4-6): Ezbet el-Makhlouf. Funerary structure with a circular plan.	338
Figure 275. el-Hadra necropolis. Sectors (4-6): Ezbet el-Makhlouf. Funerary structure with a circular plan.	338
Figure 276. el-Hadra necropolis. Sector (7): el-Manara Cemetery. Plan of Section (A).....	339
Figure 277. el-Hadra necropolis. Sector (7): el-Manara Cemetery. Plan of Section (B).....	339
Figure 278. el-Hadra necropolis. Sector (7): el-Manara Cemetery. Plan of Section (C).....	340
Figure 279. el-Hadra necropolis. Sector (7): el-Manara Cemetery. Plan of Section (D).....	340
Figure 280. el-Hadra necropolis. Sector (8): courtyard of the Diaconesses (el-Hadra University) Hospital. Plan of a hypogeum	341
Figure 281. el-Hadra necropolis. Sector (9): Faculty of Engineering. Plan of an extant section of a hypogeum.....	341
Figure 282. el-Chatby. Latin Cemetery (Terra Santa). Plan of Adriani's 1936 excavations near the Alabaster tomb.....	341
Figure 283. el-Chatby. Latin Cemetery (Terra Santa). Localisation of the Alabaster tomb within the proposed enclosure (C1-C2-C3) of the Ptolemaic Royal Quarter	342
Figure 284. el-Chatby. Latin Cemetery (Terra Santa). Satellite image: relative location of the Alabaster tomb to fortification-point (α) (site 1) and the HRIAC excavations (site 137a) at el-Shallalat Park.....	342
Figure 285. Eastern Suburbs. Localisation of recorded sites (150-161).....	342
Figure 286. Cleopatra. Tigrane Pasha (Port-Saïd) Street. Plan of a hypogeum	343
Figure 287. Cleopatra. Plan and sectional view of a hypogeum	343
Figure 288. Cleopatra. Funerary complex. Plan of hypogea (I-II).....	344
Figure 289. Cleopatra. Funerary complex. Plan of Hypogeum (III).....	344
Figure 290. Sidi Gaber. Plan of a hypogeum.....	345
Figure 291. Sidi Gaber. Funerary complex. Hypogeum (II). Plan of a <i>triclinium</i> -like chamberette comprising three alcoves	345
Figure 292. Mustapha Pasha. Satellite image: relative location of the funerary complex on el-Moaskar el-Romani Street (site 160) to analogous funerary structure at Stanley Bay (site 161).....	346
Figure 293. Mustapha Pasha. Satellite image: localisation of the funerary complex on el-Moaskar el-Romani Street.....	346
Figure 294. Mustapha Pasha. Zones (north: 1-7; south: 8-17) excavated by the GRM in 1933-35 on the western side of el-Moaskar el-Romani Street.....	347
Figure 295. Mustapha Pasha. Excavation plan of the funerary complex on el-Moaskar el-Romani Street.....	347
Figure 296. Mustapha Pasha. el-Moaskar el-Romani funerary complex. Hypogeum (I). Plan.....	348
Figure 297. Mustapha Pasha. el-Moaskar el-Romani funerary complex. Hypogeum (II). Plan	348
Figure 298. Mustapha Pasha. el-Moaskar el-Romani funerary complex. Hypogeum (III). Plan.....	349
Figure 299. Mustapha Pasha. el-Moaskar el-Romani funerary complex. Hypogeum (IV). Plan.....	349
Figure 300. Stanley Bay. Plan of a funerary structure	350
Figure 301. Smouha. Antoniadis Park. Plan of a hypogeum.....	350
Figure 302. Sidi Bishr. HIAMAS excavations. Relative location of Bir Masoud (1) to Alexandria (2), Canopus (3), and Abu Qir aka el-Maadiya Lagoon (4), c. 1798-99. <i>Description de l'Égypte</i> . Imperial Edition 1809-22.....	351
Figure 303. Sidi Bishr. HIAMAS excavations. Satellite image: localisation of the promontory of Bir Masoud (1) and the islets of el-Dahab (2) and Gabr el-Khur aka Miami (3).....	351
Figure 304. Sidi Bishr. HIAMAS excavations. Satellite image: relative location of Bir Masoud (1) to Gabr el-Khur aka Miami (3)	352
Figure 305. Sidi Bishr. HIAMAS excavations. Satellite image: islet of Gabr el-Khur aka Miami	352
Figure 306. Sidi Bishr. HIAMAS excavations. Islet of Gabr el-Khur aka Miami. General plan of recorded vestiges	353
Figure 307. Sidi Bishr. HIAMAS excavations. Islet of Gabr el-Khur aka Miami. Plan of a hypogeum	353
Figure 308. el-Montazah. Relative location of Taposiris Parva (1) to Alexandria (2), Canopus (3), and Abu Qir aka el-Maadiya Lagoon (4), c. 1798-99.....	354
Figure 309. el-Montazah. Satellite image: relative location of Taposiris Parva (1) to Canopus (3) and the desiccated Abu Qir aka el-Maadiya Lagoon (4) (presently, agricultural land)	354
Figure 310. el-Montazah. Hypogeum (I). Plan	355
Figure 311. el-Montazah. Hypogeum (II). Plan.....	355
Figure 312. Mustapha Pasha. Enclosure of a Roman <i>castrum</i>	356
Figure 313. Smouha. Localisation of the Eleusinian temple on G. Le Père's 1822 <i>carte</i> (drafted c. 1798-99; Figure 26), relative to the Antoniadis hypogeum (site 162).....	356
Figure 314. Smouha. Localisation of the Eleusinian temple on el-Falaki's 1871 <i>carte</i> of the 19th-century contemporary town (Figure 38)	357
Figure 315. Smouha. Localisation of the Eleusinian temple on el-Falaki's 1866 <i>carte</i> of the ancient city (Figure 37)	357
Figure 316. Smouha. Satellite image: localisation of the Eleusinian temple within the modern district of Smouha, between the streets of Tut-Ankh-Amun and Fawzi Moaz	358
Figure 317. Smouha. Location of two Eleusinian temples on Neroutsos' 1888 map (Figure 49)	358
Figure 318. Smouha. Satellite image: localisation of the plots (1-6) surveyed in 2008-12 by the Musée Royal de Mariemont and the Centre d'Études Alexandrines in the modern district of Smouha, between the streets of Tut-Ankh-Amun and Fawzi Moaz.....	359
Figure 319. Sidi Bishr Qibly. Relative location of Ras el-Soda (1) to Alexandria (2), Canopus (3), and Abu Qir aka el-Maadiya Lagoon (4).....	359
Figure 320. Sidi Bishr Qibly. Satellite image: relative location of Ras el-Soda (1) to the promontory of Bir Masoud (2), el-Montazah Bay (3), and the desiccated Abu Qir aka el-Maadiya Lagoon (4) (presently, agricultural land)	360
Figure 321. Sidi Bishr Qibly. Plan and sectional view of Ras el-Soda sanctuary.....	360
Figure 322. Relocating the Ras el-Soda tetrastyle temple from Sidi Bishr Qibly (1) to el-Chatby's Latin Cemetery (2).....	361

Figure 323. Circuit walls. The eastern peripheries. Eastern <i>necropoleis</i> of Ptolemaic Alexandria – c. late 4th to 2nd century BC	361
Figure 324. Circuit walls. The eastern peripheries. Proposed enclosure (C1-C2-C3) of the Ptolemaic Royal Quarter – c. late 4th to 2nd century BC	362
Figure 325. Circuit walls. Proposed eastern periphery (C3) of the Ptolemaic city: southern segment – c. late 4th to 2nd century BC	362
Figure 326. Buto (Tell el-Farraïn, Kafr el-Sheikh, the Nile Delta). A priestly adaptation of the Greek toponym 'Αλεξάνδρεια', and a record of 'Râ-Kedet' on the Satrap Stela of autumn 311 BC (Figure 83).....	362
Figure 327. Circuit Walls. Proposed eastern periphery (C4) of the Roman city: northern segment – c. 1st to 3rd century AD.....	363
Figure 328. Circuit walls. Proposed eastern periphery (C4) of the Roman city: southern segment – c. 1st to 3rd century AD.....	363
Figure 329. Circuit walls. The eastern peripheries. Expansion of the Roman city – c. 1st to 3rd century AD	364
Figure 330. Circuit walls. The eastern peripheries. Late antique readjustment to the Ptolemaic frontiers, following an abandonment of the greater part of the Broucheion (including the annexed Royal Quarter) – c. 4th-5th century AD. Reutilization of the eastern mounds to receive interments	364
Figure 331. Circuit walls. Proposed southern periphery of the ancient city.....	365
Figure 332. Circuit walls. G. Le Père's hypothetical southern periphery of the ancient city	365
Figure 333. Circuit walls. el-Falaki's hypothetical southern periphery of the ancient city	366
Figure 334. Circuit walls. Proposed western periphery of the ancient city.....	366
Figure 335. Circuit walls. Proposed western periphery of the ancient city: southern segment	367
Figure 336. Circuit walls. Proposed western periphery of the ancient city: northern segment	367
Figure 337. Circuit walls. Proposed northern periphery of the ancient city.....	368
Figure 338. Circuit walls. Proposed northern periphery of the ancient city: western segment	368
Figure 339. Circuit walls. Proposed northern periphery of the ancient city: eastern segment	369
Figure 340. Grid plan. Ptolemaic period. πλατείες relative to off-grid constructions	369
Figure 341. Grid plan. Roman period. πλατείες relative to off-grid constructions	370
Figure 342. Grid plan. Late antique period. πλατείες relative to off-grid constructions.....	370
Figure 343. Waterways and harbour infrastructure. Proposed courses of the four segments forming the Canopic-supplied freshwater canal (Κανωβικῆς διώρυγος) and its Mareotis-Eunostos navigable counterpart in the west	371
Figure 344. Waterways and harbour infrastructure. Dual-harbour complex of ancient Alexandria	371
Figure 345. Cityscape. βασιλεια <i>ad Alexandrēam</i> : a Royal Quarter northeast of the city proper. Localisation of off-grid constructions	372
Figure 346. Cityscape. βασιλεια <i>ad Alexandrēam</i> : a Royal Quarter northeast of the city proper – c. late 4th to 2nd century BC	372

List of AutoCAD Maps
<https://doi.org/10.32028/9781789699432-online>



V1. Alexandria – Ptolemaic: 4th to 2nd century BC
V2. Alexandria – Late Ptolemaic-Roman: 1st century BC to 3rd century AD
V3. Alexandria – Late Antique: 4th to 7th century AD.....
V4. Alexandria – Collective: 4th century BC to 7th century AD
V5. Alexandria – Eastern Suburbs

Preface

Amr Abdo, the author of this book, represents a new generation of Egyptian scholars blooming in the context of the revived interest in Alexandria's ancient heritage. The period between 1990 and 2010 witnessed impressive archaeological discoveries, both terrestrial and underwater, contemporary with the re-establishment of the Library of Alexandria in its home city. Stimulated by such an enthusiastic atmosphere, Abdo would find his way to Alexandria upon the completion of his undergraduate 'journey' in the Mediterranean. Hence, in 2013, he attended the postgraduate programme in the Alexandria Centre for Hellenistic Studies, an academic research unit of the revived Bibliotheca Alexandrina. Since then, the topography of ancient Alexandria has been the course of study that apparently stroke the attention of Abdo, who, as many before him, found inspiration in the cultural eclecticism intrinsic to the Alexandrian cosmopolis in antiquity, where the millenary urban fabric bears traces of coexistence and interplay between various traditions and their demographic representatives, mainly Greeks and Egyptians. He would be further intrigued by the fact that this Graeco-Egyptian model of cultural symbiosis expands beyond antiquity. Indeed, in the first half of the 19th century, Mohamed Ali Pasha, the Ottoman *wāli* of Egypt, would create the right conditions for the Greeks to return by thousands to the city founded by their ancestors and to subsequently contribute to the transfiguration of Alexandria into a modern metropolis.

The revival of Alexandria, however, would ironically signify the gradual burial of her ancient remnants under the concrete foundations of the modern city. Archaeological investigation and documentation in the past couple of centuries had thus taken place under the most adverse conditions with the continuous growth of an ever-developing town. In a context as such, a topographic reconstruction of the ancient city has become a foremost challenge confronting those studying Alexandrian urbanism in antiquity. As a matter of fact, it could have been a nearly lost case by the time the local archaeological institutions were established, in the 1890s, had it not been for the critical works of

two forerunners of Alexandrian studies, namely the Egyptian civil engineer Mahmoud el-Falaki (1815-85) and the Greek physician and epigraphist Tassos Demetrios Neroutsos (1826-92). Mahmoud el-Falaki provided the first reliable reconstruction of the grid plan of ancient Alexandria. Whereas Tassos Neroutsos, the father of modern Alexandrian scholarship, led the systematic documentation and publication of antiquities that were still visible in his time, providing a critical supplement to el-Falaki's cartographic repertoire. The significance of their contribution to the field of Alexandrian studies is emphasized by the fact that almost all subsequent research were to be based on the work of these two pioneering figures.

As a classical archaeologist, Amr Abdo may well have drawn inspiration from earlier scholars such as el-Falaki and Neroutsos, following their paradigm in the course of his doctoral research at the Universitat Autònoma de Barcelona (Catalonia). This monograph comprises the outstanding outcome of a backbreaking scholarly inquiry into the topography of ancient Alexandria, aiming at tackling the ever-growing need for an exhaustive, up-to-date catalogue of the city's archaeological heritage, complemented with a reconstruction of its topographical constituents through a millenary range of occupation. Not many would have had the courage, the persistence, and the knowledge, after all, to materialize such a demanding project, tracing evidence spanning over 220 years of continuous archaeological discoveries. Amr Abdo approached this multifaceted task through a thorough investigation not only of what is still visible but also of what is not discernible anymore and survives merely in archaeological reports, publications, and other references scattered in the 'ocean' of Alexandrian bibliography.

There is no doubt to my mind that the new topographical catalogue and reconstruction of ancient Alexandria, presented here by Amr Abdo, will accompany all current and future readers of Alexandrian archaeology – including his once tutor – providing a comprehensive, accurate, and most reliable resource.

Kyriakos Savvopoulos
Research fellow and tutor at the Faculty of Classics,
University of Oxford (UK)
March 2021

Introduction

I. Theoretical Framework

The Hellenistic period is marked by a shift in urban culture away from the Classical ideals of the Greek city-states (πόλεις). Certain uniform institutions and infrastructural norms are attested throughout the annexed lands of the Hellenised East. Concurrent changes in the urban landscape seem to have been fostered by the socio-political developments occurring in the course of the second half of the 4th century BC (Owens 1992: 74). At the time, scores of new cities were founded or remodelled on the orthogonal pattern in consequence of a rapid expansion of Macedonian colonialism eastwards, from Asia Minor to the trans-Tigris regions of Media and Bactria, through the Levantine coast, Egypt, and Mesopotamia (Chamoux 2002: 12-30). Besides their principal role as focal points for international trade and metropolitan disseminators of the Hellenic culture, the founded cosmopoleis served as administrative centres in securing the political unity of the newly established kingdoms of the Διáδοχοι, i.e. the rival successors of Alexander the Great (Wycheley 1951: 178). The physical and cultural sophistication of urban development within the Hellenistic inhabited world (οικουμένη) thus hints at far more intricate intercity-mercantile relations between increasingly globalized societies. A cosmopolitan commercialism as such is well manifested in the eventual dominance of a Hellenistic common dialect (κοινή) over local (Ionic, Aeolic, Doric, etc.) dialect forms of the 5th-century BC Classical πόλεις (Billows 2005: 196). In this context, the capital of Graeco-Roman Egypt, Alexandria, exemplifies one such prototype of a series of Hellenised urban hubs established across the Macedonian-controlled Afro-Asiatic East.

American geographer Carl Ortwin Sauer (1889-1975) maintains: ‘the works of man express themselves in the cultural landscape. There may be a succession of these landscapes with a succession of cultures. They are derived in each case from the natural landscape, man expressing his place in nature as a distinct agent of modification. Of especial significance is that climax of culture which we call civilization’ (Sauer 1925: 307). Accordingly, cultural landscapes are subject to change either by the development of a culture or by a replacement of cultures. In studying such interrelationship between natural landscapes and cultural groups, the grandiose cosmopolis of Graeco-Roman Egypt offers a case in point of the ways in

which the topographical components of alien (foreign or colonial) civic life, religious practices, and funerary rites are on display in concurrence with the indigenous tradition, hence the attempt to piece together the fragmentary material evidence towards a clearer view of the city in antiquity.

II. History of Research

a) Earlier Maps of the Renaissance

One of the Renaissance earlier surviving scenes of Alexandria is the 15th-century ‘Veduta d’Alessandria’ by French copyist Hugues Commineau de Mézières aka Ugo Comminelli de Maceris (Figure 1) (Bibliotheca Apostolica Vaticana, Codice Urbinata Latino 277: ‘Cosmografia di Claudio Tolomeo’ – date of issue: January 5th, 1472). A c. 16th-century derivative of Commineau’s ‘Veduta d’Alessandria’, drafted before 1605 by Álvaro de Bazán, Marqués de Santa Cruz, is deposited today at the Archivo General de Simancas in Valladolid, Spain (Figure 2) (Machinek 2018: 9, Footnote 80; Tzalas 2000: 27-28, Figure 5; 2018: 27, Figure 22). Back in 1493, a picturesque view of the late mediaeval town appeared in *Liber Chronicarum*, a book edited by German physician and historian Hartmann Schedel (Figure 3) (Schedel 1493: LXXVIII). In 1521, following the Ottoman conquest of Egypt (1516-17), the cartographic catalogue of the geographer and navigator Ahmet Muhittin Piri aka Piri Reis, *Kitāb-ı Bahriye*, featured a portolan chart showing the Mediterranean port of the recently annexed *eyālet*: Egypt as an Ottoman governorate (Figures 4-5) (Bacqué-Grammont and Tuchscherer 2013: 45, Figure 1; Piri 1525: 295). During his voyages to the Orient (1546-49), in 1548, French traveller and naturalist Pierre Belon du Mans produced a ‘Vray Portraict de la Ville d’Alexandrie en Egypte’, which was published in *Les Observations de Plusieurs Singularitez et Choses Mémorables Trouvées en Grèce, Asie, Judée, Égypte, Arabie et Autres Pays Estranges* (Figure 6) (Belon 1553: 206). At least three derivatives of Belon’s *carte* were released subsequently: (i) *Civitates Orbis Terrarum*, an illustrative volume edited by Georg Braun and lavishly engraved by Frans Hogenberg (Figure 7) (Braun and Hogenberg 1575: 56); (ii) Johann Helffrich’s travelogue *Kurtzer & Warhafftiger Bericht von der Reis Aus Venedig Nach Hierusalem, von Dannen in Aegypten, Auff den Berg Sinai, und Folgends Widerumb Gen Venedig* (Figure 8) (visit to Alexandria: c. 1565-66; Helffrich 1582); (iii) *Naukeurige Beschrijvinge der Afrikaensche*

Gewesten, an ethnographic survey of Africa compiled by Dutch physician and historian Olfert Dapper (Figure 9) (Dapper 1668: 74-75). Preceding the Belon derivatives, in 1570, Flemish geographer and cartographer Abraham Ortelius included 'Aegyptus Antiqua', with an inset map of Alexandria, in *Theatrum Orbis Terrarum* (Figure 10) (Ortelius 1587: 107). Later, towards the end of the 17th century, four *cartes* were made for King Louis XIV: first by Étienne Gravier (Marquis d'Ortières; Gravier 1685-87) and Joseph Razaud (Ingénieur du Roy - 1687; Jondet 1921: Planche VIII), then by Christian Melchien (Pilotte Entretenu de Sa Majesté à Toulon - 1699; Jondet 1921: Planche IX) and Antoine Massy (Pilotte des Galères de Sa Majesté - 1699; Jondet 1921: Planche X) (Figures 11-14).

b) The Eighteenth Century

Early in the 18th century, another French *carte* was issued by Marquese de la Garde in 1713 (Figure 15) (Jondet 1921: Planche XI). An earlier attempt to illustrate the ancient city was made by Pierre-Nicolas Bonamy, the prominent French historian (1694-1770), as part of his 'Description de la Ville d'Alexandrie, Telle Qu'elle Etoit du Temps de Strabon': an article written around 1731 and published later in Tome IX of *Histoire de l'Academie des Inscriptions et Belles-Lettres* (Figure 16) (Bonamy 1736: 416-431). In 1755, the Royal Danish Academy of Sciences and Letters, by order of King Frederick V of Denmark, released a first edition of Frederick Ludwig Norden's *Voyage d'Égypte et de Nubie*, with two maps of the city in attachment. Both maps were republished in Tome Première of the Nouvelle Édition of 1795 (Figures 17-18) (visit to Alexandria: June 1737; Norden 1795: Planches I-II). The latter is preceded by Richard Pococke's anthropological account *A Description of the East, and Some Other Countries* of which volume I (Observations on Egypt) features a plan of the city (Figure 19) (visit to Alexandria: September-October 1737; Pocock 1743: Plate II). A derivative of the Gravier-Razaud maps along with another showing Alexandria's environs (the coastline, lakes Edku, el-Maadiya, and Mareotis, Abu Qir Bay, and the Rosetta Nilotic outlet) complement Jacques-Nicolas Bellin's Tome III of *Le Petit Atlas Maritime: Recueil de Cartes et Plans des Quatre Parties du Monde* (Figures 20-21) (Bellin 1764: Planches 85-86). In the same year, 1764, Joseph Roux (Hidrographe du Roy à Marseille) released the so-called 'Alexandrie Barbarie' together with an atlas of 121 harbour plans published under the title *Recueil des Principaux Plans des Ports et Rades de la Mer Mediterrane* (Figure 22) (an extended edition with 163 harbour plans dates to 1804; Roux 1804: Planche 65). Another French cartographer, Jean-Baptiste Bourguignon d'Anville, was, in turn, influenced by the Gravier-Razaud maps, as evident in his version of Alexandria in *Mémoires Sur l'Égypte Ancienne et Moderne* (Figure 23) (Bourguignon d'Anville 1766: 53). In 1785, the landscape-painter Louis-François

Cassas created a view of the city during his visit to Egypt. It was published later in volume III of *Voyage Pittoresque de la Syrie, de la Phénicie, de la Palestine, et de la Basse Égypte* (Figure 24) (Cassas 1799: Planche 47).

c) Bonaparte and Mohamed Ali

As the case with the Italian Renaissance in Europe, the landing of the French expeditionary forces in Egypt on July 1st, 1798, marks another turning point in mapping the city of Alexandria. Three *cartes* were produced by the engineers accompanying Bonaparte's Armée d'Orient: (a) 'Alexandrie', a regional view of the city and its environs (Figure 25) (*Description de l'Égypte*. Imperial Edition 1809-22. Carte Topographique de l'Égypt, 1818: Flle 37), (b) 'Carte Générale des Côte, Rades, Ports, Ville et Environs d'Alexandrie' (Figure 26) (*Description de l'Égypte*. Imperial Edition 1809-22. Antiquities V, Planches, 1822: Planche 31), and (c) 'Plan Général des Deux Ports, de la Ville Moderne, et de la Ville des Arabes' (Figure 27) (*Description de l'Égypte*. Imperial Edition 1809-22. Etat Moderne II, Planches, 1817: Planche 84). The three maps are published in the 19th-century enterprise entitled *Description de l'Égypte* (Imperial Edition: 1809-22; Panckoucke Edition: 1821-29), where they are listed as 'Flle 37' (Carte Topographique de l'Égypt, 1818), 'Planche 31' (Antiquities V, Planches, 1822), and 'Planche 84' (Etat Moderne II, Planches, 1817) respectively. At the time of the expedition, wide-scale scientific studies of the ancient and modern city were undertaken by Gratien Le Père (Ingénieur en Chef au Corps Royal des Ponts et Chaussées; 'Mémoire Sur la Ville d'Alexandrie', 1813, Etat Moderne II, Ite Partie) and Alexandre de Saint-Genis (Ingénieur en Chef des Ponts et Chaussées; 'Description des Antiquités d'Alexandrie et de Ses Environs', 1818, Antiquités II, Descriptions). Shortly after, in 1802, Pierre-Jean-Baptiste aka Publicola Chaussard's Tome Première of *Histoire des Expéditions d'Alexandre, par Flave Arrien de Nicomédie* featured a 'Plan Comparative d'Alexandrie Ancienne, Moderne et du Temps des Arabes' (Figure 28) (Chaussard 1802: Planche VI).

Following the British victory in the Battle of Alexandria (1801), a map was published with supplementary narratives by Captain Thomas Walsh in the *Journal of the Late Campaign in Egypt* (Figure 29) (Walsh 1803: Plate 24). Henry Salt, the British Consul General in Alexandria, then carried out a geometric survey of the city around 1806. The results were plotted and later released in volume III of George Viscount Valentia's *Voyages and Travels to India, Ceylon, the Red Sea, Abyssinia, and Egypt, in the Years 1802-1806* (Figure 30) (Valentia 1809: Plate III).

In consequence of a rapid urban and demographic growth towards the end of Mohamed Ali's lengthy rule as *wāli* (Ottoman governor: 1805-48), several contemporary maps began to display the expansion of

the Ottoman village, built earlier in the 16th century on a silted-up isthmus, back into the enclosure of the mediaeval town. The Arab walls were erected in the 9th century (267 Hijri, AD 881) by order of Ahmed ibn Tulun – restoration works: the Fatimid caliph el-Mustansir Billah (11th century); the Burji Mamluk el-Sultan el-Ashraf Qaitbay (15th century); Caffarelli du Falga, *L'Expédition Française d'Égypte* (1798-1801); Barthélémy Gallice (19th century) (De Vaujany 1888: 79-80). An urban expansion southwards is, therefore, seen in the charts of (1) Captain William Henry Smyth, R.N. (the Hydrographical Office of the Admiralty – 1825, 1833; Jondet 1921: Planche XXXI; Wilkinson 1843: 120), (2) Le Saulnier de Vauhello (1834; Jondet 1916: Planche I), (3) Lieutenant-Colonel E. Napier, R.N. (1841; Jondet 1921: Planche XXXIII), (4) Barthélémy Gallice (1845; Bibliothèque Nationale de France – Gallica), and (5) Charles Müller (1855 – issued under *Wāli Saïd Pasha*; Jondet 1921: Planche XXXV) (Figures 31-36).

d) *The Maps of el-Falaki*

Our knowledge of the topography of ancient Alexandria owes a great deal to the pioneer work of Mahmoud Pasha el-Falaki, whose recordings back in the 19th century had saved the last chance for attaining a rather coherent understanding of the city's ancient layout, which would have otherwise vanished in such oblivion of modern urbanization. His cartographic repertoire provides the basis upon which archaeological investigation strives today to piece together the fragmentary material evidence towards a relatively clear picture of Alexandria in antiquity. Perhaps Napoleon III (presidency: 1848-52, reign: 1852-70) should be as much credited (Kiepert 1872: 338-339). Indeed, el-Falaki's investigations were instigated by the literary ambitions of the French emperor in writing a biography of Julius Caesar: *Histoire de Jules César* (Tome Première: 1865, Tome Deuxième: 1866).

Hence, in need of a map displaying the urban layout of ancient Alexandria, Napoleon III turned to his friend Ismaïl Pasha, then Khedive (Ottoman viceroy) of Egypt (1863-79). In turn, the task was given to the khedivial court-astronomer Mahmoud Bey Hamdy, known by the title 'el-Falaki', which literary means 'the astronomer' in Arabic. Mahmoud Pasha el-Falaki (1815-85) was, in fact, a local engineer who held the traditional epithet for a scientist/technician operating in a 19th-century Ottoman court. The French-educated cartographer, an *alumnus* of Ecole des Artes et Metries in Paris, carried out a strenuous survey work around 1863-66. The outcome is a corpus of three maps published with supplementary text in *Mémoire Sur l'Antique Alexandria: Ses Faubourgs et Environs Découverts, par les Fouilles, Sondages, Nivellements et Autres Recherches* (Mahmoud-Bey 1872). In addition to his 'Carte de l'Antique Alexandria et des Ses Faubourgs' (1866) (Figure 37), there is one of the 19th-century

contemporary town, 'Carte d'Alexandrie en 1865' (1871) (Figure 38), and another of its environs, 'Carte des Environs d'Alexandrie' (1866) (Figure 39). Relevant to the current topographical study would be the first *carte*: a contour map showing the circuit walls and street grid of ancient Alexandria along with some of its principal edifices as known primarily from classical literary sources. In 1872, German cartographer Heinrich Kiepert reproduced el-Falaki's map of the ancient city, under the title 'Plan der Alten Stadt Alexandria', to be published in volume VII of *Zeitschrift der Gesellschaft für Erdkunde zu Berlin*, which includes a concise contribution by Kiepert entitled 'Zur Topographie des Alten Alexandria. Nach Mahmud Beg's Entdeckungen' (Figure 40) (Kiepert 1872: Tafel V).

e) *The Late Nineteenth Century*

Urban expansion towards the south is on display in the maps of J. Millie (1867-68) (Jondet 1921: Planche XXXIX) and Commander A.L. Mansell, R.N. (1869) (De Bellefonds 1872-73: Planche VIII^b), where modern constructions cover progressively the Tulunid enclosure of the mediaeval town (Figures 41-42). The British bombardment of the city on July 11th, 1882, is documented in Tome XX of *Revue d'Artillerie Française* (Figure 43) (Jondet 1921: Planche XLIV). In *Military History of the Campaign of 1882 in Egypt*, Major-General Sir John Frederick Maurice (British Royal Artillery) provides a state-of-the-art map showing the fortified position occupied by British troops on July 23rd, 1882, at el-Ramleh (Figure 44) (Maurice 1887: Map Number 3). Another panoramic view of Alexandria and its harbours dates to the 1880s. It was published in Paris as part of an *Atlas des Ports Étrangers* (Figure 45) (Direction des Cartes, Plans et Archives, et de la Statistique Graphique, Ministère des Travaux Publics: Planche XVII). A 'Plan Comparatif d'Alexandrie Ancienne et Moderne', with el-Falaki's orthogonal grid superimposed in red, is published in Henry de Vaujany's guidebook *Alexandrie et la Basse-Égypte* (Figure 46) (De Vaujany 1885: 27). In 1887, an official map of the city was issued by the 'Inspection de l'Ouest', which operated at the time under the 'Direction Générale du Tanzim' (Figure 47) (Jondet 1921: Planche XLVII). The influence of Strabo's descriptive narrative on ancient Alexandria (*Γεωγραφικά: Geōgraphiká*, c. the late 1st century BC) is evident in De Vaujany's plan of the Royal Quarter, supplementing his *Recherches Sur les Anciens Monuments Situe Sur le Grand-Port d'Alexandrie* (Figure 48) (De Vaujany 1888).

One major attempt to mapping the ancient city and its suburbs is that of Greek physician and epigraphist Tassos Demetrios Neroutsos. His map, based largely on Kiepert's 1872 reproduction of el-Falaki's *carte*, forms part of the monograph *L'Ancienne Alexandria: Étude Archéologique et Topographique* (Figure 49) (Neroutsos

1888). A 'Plan de la Ville d'Alexandrie et du Marché de Minet-el-Bassal' was then drafted by Carlo Marchettini in 1890 (Figure 50) (Bibliothèque Nationale de France – Gallica). In 1894-95, British archaeologist David George Hogarth, renowned for excavating at Naukratis (section 1.1), investigated the city with the prime aim of assessing its archaeological potential (Figure 51) (Hogarth and Benson 1894-95). While finding very little of what was recorded earlier by el-Falaki (1872), Tassos Neroutsos (1875; 1888), and Henry de Vaujany (1885; 1888), Hogarth questioned the relevance of a 'future British expedition' in his *Report on Prospects of Research in Alexandria*. He even undermined any potential for Kom el-Dikka after excavating a few trenches there, a judgment proven wrong with the successive discoveries made in the central district since the early 1960s by the Polish Centre of Mediterranean Archaeology (PCMA, University of Warsaw; *Alexandrie I-VIII*, 1976-2010).

In 1897, the Italian founder and first director of the city's Graeco-Roman Museum, Giuseppe Botti (1892-1903; founded the museum on October 17th, 1892), published Georges Marichal's map of the Egyptian borough of ancient Alexandria, Rhakotis, in the Roman period: *Plan du Quartier 'Rhakotis' dans l'Alexandrie Romaine* (Figure 52) (Botti 1897c). In the following year, Botti attempted a reconstruction of the Ptolemaic city in *Plan de la Ville d'Alexandrie à l'Époque Ptolémaïque; etc.* (Figure 53) (Botti 1898c). The century ends with a five-month excavation campaign (October 1898 – March 1899) directed by German archaeologist Ferdinand Noack. Its results were published in 'Neue Untersuchungen in Alexandrien' (Figure 54) (Noack 1900: Tafel IX). On the centenary of the Napoleonic campaign, German industrialist Ernst von Sieglin financed an archaeological expedition to Alexandria (1898-1902). Its members include Theodor Schreiber, Friedrich W.F. von Bissing, Ferdinand Noack, Ernst R. Fiechter, Siegfried Loeschke, Rudolf Pagenstecher, Joseph Vogt, Carl Watzinger, Alfred Schiff, Victor E. Gardthausen, Jean-Paul Richter, August Thiersch, Hermann Thiersch, and Giuseppe Botti. The outcome was three volumes released under the title *Expedition Ernst Sieglin: Ausgrabungen in Alexandria – band I: Schreiber et al. 1908a-b, Die Nekropole von Kom-Esch-Schukafa; band II: miscellaneous 1913-27, Die Griechisch-Ägyptische Sammlung Ernst von Sieglin; band III: unpublished, Ausgrabungen im Königsviertel und im Sarapeion von Alexandria* (Figure 55) (Schreiber et al. 1908b: 1, Abbildung 1). Earlier, Ernst's brother, historian Wilhelm Sieglin, produced two maps of ancient Alexandria at different epochs in Karl Baedeker's *vierte auflage of Aegypten: Handbuch für Reisende* (Figures 56-57) (Baedeker 1897: Pläne IV-V).

f) The Twentieth Century and Recent Research

An ever-expanding metropolis is clearly depicted in the charts of the early 20th century. A case in point

would be the one issued by the technical services of the Municipality of Alexandria (1902) (Jondet 1921: Planche L), and that of Rear-Admiral Sir Richard Massie Blomfield (1905) (Breccia 1907b: 3) (Figures 58-59). The next cartographic attempt pertains to Mariano Bartocci, the draughtsman of the Graeco-Roman Museum. His map supplements *Alexandrea ad Aegyptum: Guide de la Ville Ancienne et Moderne et du Musée Gréco-Romain*, the guidebook written by the second, Italian director of the museum, Evaristo Breccia (1904-16, 1918-31; Swiss orientalist Étienne Combe replaced Breccia as director of the museum in 1916-18) (Figure 60) (Breccia 1914a). In 1912, Gaston Jondet, then Chief Engineer of the Department of Ports and Lighthouses of Egypt, published a 'Carte de la Rade d'Alexandrie' on the occasion of the harbour works carried out in Alexandria from 1911 to 1915 (Figure 61) (Jondet 1916: Planche III). Another map of the city and its harbour infrastructure was issued by the Survey Department in 1917 (Figure 62) (Jondet 1921: Planche LIII).

Two maps of the ancient and modern city are featured in Edward Morgan Forster's iconic guidebook *Alexandria: A History and a Guide* (Figure 63) (Forster 1922: 84-85). About a decade later, the first cataloguing attempt was made by the third, Italian director of the Graeco-Roman Museum, Achille Adriani (1932-40, 1949-52; British archaeologist Alan Rowe took over the directorship of the museum in 1940-49). Adriani produced a map of the ancient Royal Quarter, including the archaeological sites registered to date, in his 'Saggio di una Pianta Archeologica di Alessandria': an appendix to the 1934 *Annuario del Museo Greco-Romano (1932-33)* (Figure 64) (Adriani 1934). The latter formed the nucleus of an exhaustive topographical catalogue of ancient Alexandria published under the title *Repertorio d'Arte dell'Egitto Greco-Romano* (Figures 65-66) (Adriani 1966a: 269, Tavola di Aggettivo A; 1966b: Catalogue Number 1, Tavola 1, Figure 1). The reference work of Adriani is followed by another monumental *opus* in three volumes: Peter Marshall Fraser's *Ptolemaic Alexandria* of which Chapter 1 (Foundation and Topography) features an outline map of the city with an informative legend (Figure 67) (Fraser 1972).

In 1993, Polish archaeologist Barbara Tkaczow created a repertoire of four maps, three displaying the configuration at different epochs, along with a fourth, collective one, in *The Topography of Ancient Alexandria: An Archaeological Map* (Figures 68-70) (Tkaczow 1993: maps A-D). A year later, German scholars Wolfram Hoepfner and Ernst-Ludwig Schwandner published their version in the second edition of an extensive study of classical urbanism entitled *Haus und Stadt im Klassischen Griechenland* (Figures 71-73) (Hoepfner and Schwandner 1994). The political and social developments of late antique Alexandria were then discussed by Christopher Haas,

relative to contemporary urban milieus, in *Alexandria in Late Antiquity: Topography and Social Conflict* (Haas 1997). At the turn of the century, Marjorie Susan Venit adopted a chronological-thematic approach to cataloguing the funerary remnants of antiquity in her thorough inquiry into the *Monumental Tombs of Ancient Alexandria: The Theater of the Dead* (Venit 2002: appendix A, 191-200). In 2007, Judith McKenzie released various plans of the ancient city in a topographic prelude to *The Architecture of Alexandria and Egypt, 300 BC-AD 700* (Figures 74-75) (McKenzie 2007: 21, 26, 38, 175).

Topographical studies of ancient Alexandria took a great leap forward with the publication of results from (i) the geophysical (bathymetric and magnetic) surveys and underwater excavations of the Institut Européen d'Archéologie Sous-Marine (IEASM; section 2.3.3) (Figure 76), (ii) the salvage excavations (both underwater and terrestrial) of the Centre d'Études Alexandrines (CEAlex; sites 43, 47j-k, 52, 54c, 74b, 95, 99-100, 103, 114, 118, 121, 122c, 149c, 166), (iii) the resistivity geophysical surveys conducted by the Centre de Recherche Géophysiques (CRG, France), Universités Paris VI and VII, the Centre d'Études Alexandrines, and the National Research Institute of Astronomy and Geophysics (NRIAG, Egypt; section 2.3.2), and (iv) the underwater archaeological surveys carried out to the east of the Silsileh headland by the Hellenic Institute of Ancient and Mediaeval Alexandrian Studies (HIAMAS; sites 142, 151, 163). Archaeological investigation yet continues in the compact city of today, whether by the Egyptian Supreme Council of Antiquities (SCA, Ministry of Tourism and Antiquities), or by foreign research institutions working under license from the government.

III. Objectives and Structure

The current study takes the previous scholarship (Introduction II. History of Research) into account jointly with a corpus of relevant chronicles from classical and late antiquity and the Renaissance in order to produce a comprehensive, up-to-date topographical catalogue and reconstruction of Alexandria in antiquity, from the time of the city's foundation in the 4th century BC to the Arab conquest of Egypt in the 7th century AD: a millenary range of occupation. To this end, the main line of research shall encompass:

- (a) Setting the historical context of the Graeco-Macedonian foundation: geomorphology, location, orientation, and governance (Chapter 1).
- (b) Tracing the urban layout: circuit walls (lines of defence), grid plan, waterways, and harbour infrastructure (Chapter 2).
- (c) Contextualizing the principal civil, religious, and funerary edifices within predetermined urban and suburban sectors (Chapter 3).

Chapter 3 is subdivided into (i) physical remnants corresponding to known historical narratives, (ii) physical remnants without known historical reference, and (iii) literary accounts pending physical evidence.

- (d) Cataloguing the archaeological sites in Alexandria, from the recordings of the Napoleonic expedition at the end of the 18th century to the recent discoveries of the 21st century (chapters 2 and 3).
- (e₁) Inferring the urban plan of the Graeco-Macedonian founders and the successive adjustments made through the course of classical and late antiquity, from the historical foundation of the city (331 BC) to the Arab conquest of Egypt (AD 641-42) (Chapter 2: Conclusion I).
- (e₂) Identifying the distributional patterns of edifices across the Alexandrian metropolis to gain a deeper insight into the topographical configuration of the cityscape in the Hellenistic, Roman, and Byzantine periods (Chapter 3: Conclusion II).

Theoretical analysis of the topography of ancient Alexandria is constantly informed through a critical study of relevant literary sources from antiquity, where the historical record is calibrated to the results of archaeological investigation. This is approached by integrating the historical narratives with a full repertoire of material culture, including architecture, sculpture, mosaics, iconography, ceramics, inscriptions, and coinage. Text is supported with 346 illustrations. Whereas the featured maps (Figures 77-81) intend to serve as digital models of reconstruction and are drawn up using a conceptualization application software (AutoCAD) as a tool for visualizing topographic data. Five maps (V1-V5) are generated: four of the city, the adjacent Pharos Island, and the western suburbs (Ptolemaic: late 4th to 2nd century BC – Figure 77; late Ptolemaic-Roman: 1st century BC to 3rd century AD – Figure 78; late antique: 4th to 7th century AD – Figure 79; collective: late 4th century BC to 7th century AD – Figure 80) and one of the eastern suburbs (Figure 81). The study follows basically two interrelated approaches, descriptive and analytical, with the latter being dependent on the former. The descriptive discourse covers introductory sections on the historical foundation (Chapter 1), previous archaeological investigation (2.1.1, 2.1.2.1, 2.1.3.1, 2.1.4.1, 2.2.1, 2.3.3.1), and urban and suburban division (3.1.1-8). Analyses and proposals are either in separate sections (2.1.2.2, 2.1.3.2, 2.1.4.2, 2.2.3, 2.3.1-2), following prerequisite descriptive accounts, or together with the data in the same section (2.2.2, 2.3.3.2-6, 2.3.4-5) or site (3.2-9). All the hypotheses introduced here (urban layout: objectives b and e₁; cityscape: objectives c and e₂) are based on archaeological and/or historical evidence from the catalogue (objective d). The latter includes

168 archaeological sites structured in accordance with predetermined geographical and typological categories. Finally, the conclusion provides an integrated summary of all proposals, with the evidence shown between brackets as a reference number corresponding to

the relevant site(s) from the catalogue. The three constituents of this study (text: part 1; illustrations: part 2; AutoCAD maps in digital format: an annex hosted online) should be considered together, as one unit, in order to attain an understanding of the content.