CITY WALLS
The Urban Enceinte in Global Perspective

The essays presented in this volume describe a phenomenon so widespread in human time and space that its importance is easily overlooked. City walls shaped the history of warfare; the mobilization of manpower and resources needed to build them favored some kinds of polities over others; and their massive strength, appropriately ornamented, created a visual language of authority. Previous collective volumes on the subject have dealt mainly with Europe, but the historians and art historians who collaborate here follow a comparative agenda. The millennial practice of wall building that branched out from the ancient Near East into India, Europe, and North Africa shows continuities and points of contact of which the makers of urban fortifications were scarcely aware; separate traditions in China, sub-Saharan Africa, and North America illustrate universal themes of defensive strategy and the symbolism of power, each time embedded in a distinctive local context.

James D. Tracy is Professor of History at the University of Minnesota. He is author of Erasmus: The Growth of a Mind, Politics of Erasmus, A Financial Revolution in the Habsburg Netherlands, Holland under Habsburg Rule, Erasmus of the Low Countries, and Europe's Reformations. He is also editor of several volumes and author of numerous academic papers, articles, and book reviews.
Previously published in series:

CITY WALLS
THE URBAN ENCEINTE IN GLOBAL PERSPECTIVE

Edited by
JAMES D. TRACY
University of Minnesota
Contents

List of Figures                                      page xi
Contributors                                        xvii
Acknowledgments                                     xix

Introduction                                        1
  James D. Tracy

PART I  TO WALL OR NOT TO WALL

1  Contained communities in tropical Africa          19
   Graham Connah

2  Palisaded settlements in prehistoric eastern North
   America                                           46
   George R. Milner

3  To wall or not to wall: Evidence from medieval
   Germany                                            71
   James D. Tracy

4  Medieval walled space: Urban development vs. defense 88
   Kathryn L. Reyerson

5  A world without walls: City and town in colonial
   Spanish America                                    117
   Richard L. Kagan

PART II  WALLS OF WAR

6  The fortifications of Epaminondas and the rise of the
   monumental Greek city                              155
   Frederick A. Cooper

vii
Contents

7 Imperial walled cities in the West: An examination of their early medieval Nachleben
   Bernard S. Bachrach 192

8 Walled cities in Islamic North Africa and Egypt with particular reference to the Fatamids (909–1171)
   Jonathan M. Bloom 219

9 Delhi walled: Changing boundaries
   Catherine B. Asher 247

10 Ottoman military architecture in the early gunpowder era: A reassessment
   Simon Pepper 282

11 Walled towns during the French wars of religion (1560–1630)
   Michael Wolfe 317

12 Portuguese urban fortifications in Morocco: Borrowing, adaptation, and innovation along a military frontier
   Martin M. Elbl 349

13 The artillery fortress as an engine of European overseas expansion, 1480–1750
   Geoffrey Parker 386

PART III SIGNIFYING WALLS

14 Representations of Chinese walled cities in the pictorial and graphic arts
   Nancy Shatzman Steinhardt 419

15 The hierarchy of Ming city walls
   Edward L. Farmer 461

16 Decoration of city walls in the medieval Islamic world: The epigraphic message
   Sheila S. Blair 488

17 Medieval French representations of city and other walls
   Wolfgang G. van Emden 530

18 Siege law, siege ritual, and the symbolism of city walls in Renaissance Europe
   Simon Pepper 573
Contents

ix

19  Representations of the city in siege views of the seventeenth century: The war of military images and their production  605
    Martha Pollak

Annotated bibliography of selected secondary works  647
Index  663
Figures

1.1 Distribution of enclosed settlements in the text.  
1.2 Type N settlement unit at Ntsuanatsatsi, South Africa.  
1.3 Enclosures at Bago, Uganda.  
1.4 Barth’s 1851 plan of the walled city of Kano, Nigeria.  
1.5 French military plan of the fortified settlement of Mourgoula, Mali, in 1881.  
1.6 The city walls of Ife, Nigeria.  
1.7 Earthwork enclosures in the Benin City area, Nigeria.  
1.8 Site of the Swahili walled city of Gedi, Kenya.  
1.9 The fortified town of Kalenga, Tanzania, in 1894.  
2.1 Palisade segments.  
2.2 Palisade postmold diameters (cm) for Mississippian and northern sites.  
2.3 The distribution over time of Mississippian and northern walled settlements.  
4.1 Medieval Montpellier.  
4.2 Suburban Montpellier.  
4.3 Monspessulanus, Montpellier.  
5.1 Map of Spanish America.  
5.2 Juan de Solórzano Pereira, “Concordia Quos Unit Munit.”  
5.3 Juan de Solórzano Pereira, “Legum Munia Urbium Mænia.”  
5.4 Map of Texúpa (Oaxaca).  
5.5 Juan de Matienzo, Plan of a Reducción, 1567.  
5.6 Map of Heuxutla (México). 1580.  
5.7 Anonymous. Our Lady of Cocharcas.  
6.1 Messene, plan of site and walls.  
6.2 Messene, view of Arkadian Gate and Tower L.
List of figures

6.3 Gyptokastro, Portal B. 159
6.4 Gyptokastro, view of N wall from N. 160
6.5 Aigosthena, E wall from SE. 160
6.6 Boudoron, walls. 161
6.7 Sounion, masonry styles. 168
6.8 Sounion, earlier rubble wall encased in later isodomic construction. 168
6.9 Rhamnous, masonry styles. 170
6.10 Siphai, view of tower. 182
6.11 Siphai, view of consoles at portal. 183
6.12 Kreusis, view of tower. 184
6.13 Mantinea, plan. 187
6.14 Mantinea, detail of portals and walls. 188
6.15 Attica and Boiotia, plan of sites. 190
8.1 Map of the Mediterranean region. 220
8.2 Plan of Mahdia in the early tenth century. 221
8.3 Schematic plan of Cairo and the surrounding districts. 237
9.1 Map of Delhi’s “Eight Cities.” 248
9.2 Alai Darwaza, Jami (Quwwat al-Islam) Mosque Complex. 260
9.3 Map of Qila Rai Pithora, Siri, Tughluqabad, and Jahanpanah. 261
9.4 Sketch plan of Tughluqabad. 262
10.1a Ottoman fortifications at Constantinople. 290
10.1b Ottoman fortifications at Constantinople. 291
10.2a Fortification plans. 291
10.2b Fortification plans. 299
10.3a Ottoman fortifications at the Dardanelles. 302
10.3b Ottoman fortifications at the Dardanelles and Thessaloniki. 303
10.4 Castle of the Morea, straits of Patras, 1499–1500. 310
11.1 Map of fortified towns. 319
11.2 Montauban’s fortifications in 1621. 330
11.3 Montauban 1585–6. Bastion construction at Portes de Campagne and de Moustier. 334
11.4 Montauban 1585–6. Bastion construction at the Portes de Campagne and de Moustier. 334
11.5 Siege of Amiens. 3 April 1597. 342
11.6 Arc de triomphe sur la magnificence du Roy. 343
11.7 La justice et la clemence sont agenouillées. 344
12.1 Morocco in the early sixteenth century. 351
List of figures

12.2 Perspective model of Muslim and Portuguese Ceuta, fifteenth-sixteenth centuries. 359
12.3 Perspective model of the fortifications of Tangier, fifteenth–early sixteenth centuries. 362
12.4 Perspective model of the fortifications of Alcácer Ceguer, fifteenth-sixteenth centuries. 363
12.5 The Manueline torrião of the Kechla, in the qasba of Safi. 371
12.6 The Manueline torrião at Azemmur (ca. 1515). 375
12.7 The Muralla Real and the Foso de San Felipe, Ceuta, with orillioned bastion. 383
13.1 The development of modern fortifications in Europe. 390
13.2 The Renaissance-style fortifications around Makassar. 413
14.1 Remains of wall of Liao Shangjing, Balinzuoiqi, Inner Mongolia. 420
14.2 City in North China. 422
14.3 Zhaoyu tu. Tomb of King Cuo, Zhongshan kingdom, Pingshan, Hebei. 423
14.4 Redrawing of “Walled Enclosure.” Mawangdui tomb no. 3, Hunan. 425
14.5 “Lishicheng” detail. Tomb at Helinge’er, Inner Mongolia. 427
14.6 “Fanyangcheng” detail. Tomb at Helinge’er, Inner Mongolia. 428
14.7 “Wangcheng” (ruler’s city). 433
14.8 Idealized plan of Northern Song capital, Bianliang. Shilin guangji. 433
14.9 Painting showing “fortification.” Detail of north wall, Dingjiaza tomb no. 5, Jiuquan, Gansu. 434
14.10 “Shooting Birds.” Brick from tomb in Jiayuguan, Gansu province. 435
14.12 “City Scene,” Relief sculpture from tomb in Chengdu, Sichuan province Eastern Han dynasty (a.d. 23–220). 437
14.13 Line drawing of city wall. Mogao cave 249, Gansu, Northern Dynasties. 438
14.14 Architecture and walls in panorama. South side of ceiling, Mogao cave 420, Gansu province. 440
14.15 Line drawing of walled city. Mogao cave 85, Gansu, Tang period. 441
xiv

List of figures

14.16 Line drawing of Buddhist paradise, Magao cave 217, Tang dynasty. 443
14.17 “Jetavana Monastery.” Daoxuan, Zhong Tianzhu Sheweiguo Zhihua shi tuojing. 445
14.18 Line drawing of Houtu huangdi qinmiao ziangtu (Earthgod temple) stele. 446
14.20 Illustration of city wall with towers and of mamian, ca. 1040. 448
14.21 Wall of Xi’an, Shaanxi province, Ming period. 449
14.22 Line drawing of Pingjiang tu. 450
14.23 Zhang Zeduan, Qingming shanghe tu, detail. 453
14.24 Anonymous, Zhao Yu’s Pacification of the Barbarians South of Lu, detail. 455
14.26 Shen Zhou, Tiger-Flight Spring at the Back Gate, Chinese, Ming dynasty. 459
15.1 Guanghua xian (Huguang). 469
15.2 Xuzhou (Henan). 471
15.3 Daming fu (Beizhili). 473
15.4 Kaifeng (Henan). 474
15.5 Zhangyuan xian (Beizhili). 475
15.6 Nanjing, the southern capital. 476
15.7 The Capital, Ming Beijing. 477
15.8 Zhenyi bao (Liaodong). 481
15.9 Ningxia (Shaanxi). 482
15.10 Zhucheng xian (Shandong). 483
15.11 Haizhou (Nanzhili). 484
15.12 Yunyan xian (Sichuan). 485
16.1 Map of the Jazira showing the location of Amid/ Diyarbekir. 491
16.2 Plan of the walls of Diyarbekir. 492
16.3 Diyarbekir, view of the Kharpot Gate. 493
16.4 Diyarbekir, detail of tower LVI. 498
16.5 Diyarbekir, detail of tower XXX. 504
16.6 Cairo, Bab al-Nasr. 508
16.7 Diyarbekir, tower XXXIX known as the Yedi Kardaş. 513
17.1 Town wall at Autun. 531
17.2 Semur-en-Auxois. 535
17.3 Château Gaillard. 538
17.4 Carcassone (citadel). 541
## List of figures

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>17.5</td>
<td>Fougères.</td>
</tr>
<tr>
<td>17.6</td>
<td>Trévoux.</td>
</tr>
<tr>
<td>19.1</td>
<td>Siege of Vienna, 1529.</td>
</tr>
<tr>
<td>19.2</td>
<td>Siege of Vienna, 1683.</td>
</tr>
<tr>
<td>19.3</td>
<td>Battle of Pavia, 1525, woodcut.</td>
</tr>
<tr>
<td>19.4</td>
<td>Battle of Pavia, 1525, tapestry.</td>
</tr>
<tr>
<td>19.5</td>
<td>Conquest of Tunis by Emperor Charles V, 1535.</td>
</tr>
<tr>
<td>19.6</td>
<td>The Imperial camp outside Wittenberg, 1547, woodcut.</td>
</tr>
<tr>
<td>19.7</td>
<td>Siege of St. Quentin, 1557, woodcut.</td>
</tr>
<tr>
<td>19.8</td>
<td>Siege of Hohenaspern, 1519.</td>
</tr>
<tr>
<td>19.9</td>
<td>Siege of Amiens, 1597.</td>
</tr>
<tr>
<td>19.10</td>
<td>The conquest of Montmellian, 1691.</td>
</tr>
<tr>
<td>19.12</td>
<td>Siege of Groll, 1597.</td>
</tr>
<tr>
<td>19.13</td>
<td>Siege of Groll, 1627.</td>
</tr>
<tr>
<td>19.14</td>
<td>Siege of Breda, 1625.</td>
</tr>
<tr>
<td>19.15</td>
<td>Siege of La Rochelle, 1627.</td>
</tr>
<tr>
<td>19.16</td>
<td>Siege of St. Omer, 1638.</td>
</tr>
<tr>
<td>19.17</td>
<td>Siege of Casale Monferrato, 1630.</td>
</tr>
<tr>
<td>19.18</td>
<td>The entry of the King of Sweden into Frankfurt, 1631.</td>
</tr>
<tr>
<td>19.19</td>
<td>Victories of Marchese Spinola in Germany, 1620–1.</td>
</tr>
<tr>
<td>19.20</td>
<td>Siege of Corbie, 1636.</td>
</tr>
<tr>
<td>19.21</td>
<td>Siege of Turin, 1640.</td>
</tr>
<tr>
<td>19.22</td>
<td>Siege of Turin, 1640.</td>
</tr>
<tr>
<td>19.23</td>
<td>Siege of Copenhagen, 1658.</td>
</tr>
<tr>
<td>19.24</td>
<td>Assault of Fredrichsodde, 1657.</td>
</tr>
<tr>
<td>19.25</td>
<td>Siege of Lille, 1708.</td>
</tr>
<tr>
<td>19.26</td>
<td>Siege of Luxembourg, 1684.</td>
</tr>
<tr>
<td>19.27</td>
<td>Portrait of Louis XIV, 1684.</td>
</tr>
<tr>
<td>19.28</td>
<td>Siege of Mons, 1691.</td>
</tr>
</tbody>
</table>
Contributors

Catherine B. Asher  
Department of Art History, University of Minnesota

Bernard S. Bachrach  
Department of History, University of Minnesota

Sheila S. Blair  
Art Historian, Richmond, New Hampshire

Jonathan M. Bloom  
Art Historian, Richmond, New Hampshire

Graham Connah  
Humanities Research Centre, Australian National University

Frederick A. Cooper  
Department of Classical and Near Eastern Studies, University of Minnesota

Martin M. Elbl  
Department of History, Trent University

Edward L. Farmer  
Department of History, University of Minnesota

Richard L. Kagan  
Department of History, The Johns Hopkins University

George R. Milner  
Department of Anthropology, Pennsylvania State University

Geoffrey Parker  
Department of History, Ohio State University
Contributors

Simon Pepper
School of Architecture & Building Engineering, University of Liverpool

Martha Pollak
Department of Art History, University of Illinois–Chicago

Kathryn L. Reyerson
Department of History, University of Minnesota

Nancy Shatzman Steinhardt
Department of Asian and Middle Eastern Studies, University of Pennsylvania

James D. Tracy
Department of History, University of Minnesota

Wolfgang G. van Emden
Department of French Studies, University of Reading

Michael Wolfe
Department of History, Pennsylvania State University–Altoona
Acknowledgments

This volume is based on a Center for Early Modern History conference (October 1995), made possible by a grant from the University of Minnesota’s McKnight Special Events Fund. Lucy Simler, assistant director of the Center from 1985 to 1996, gracefully managed the business end of the conference, aided by Kelli Ringhofer. History graduate students who provided reasoned summaries of conference discussions for the use of authors in revising their papers included Mary Beth Ailes, Glen Bowman, Gordon Bynum, Jodi Campbell, Doug Catterall, Dan Doyle, Anna Dronzek, Don Harrel, Lindy Lundgren, Craig Neumeier, and Markus Vink. The authors themselves made an editor’s job easy, especially by picking up questions from work by colleagues interested in other parts of the globe, which was part of our purpose. I wish to thank particularly those whose advice and suggestions helped shape the project at various stages: Sheila Blair, Jonathan Bloom, Simon Pepper, Martha Pollak, Paul Solon of Macalester College, Nancy Shatzman Steinhardt, and among my Minnesota colleagues, John Archer, Catherine Asher, Bernard Bachrach, Frederick Cooper, Sheila McNally, Kathryn Reyerson, and Leon Satkowski. Finally, Peter Burkholder compiled the annotated bibliography, and Marguerite Ragnow’s finely honed copyediting skills have spared us the embarrassment of errors at many levels. Few projects live up to all of their initial expectations, and we have not in the end been able to include all of the topics we once envisioned. But I believe we have carried out our plan of providing a comparative framework for our topic, which is the walls that men have built around their cities. I hope this juxtaposition of geographically diverse essays on similar issues conveys to readers something of the excitement we have all felt in trying to climb over the walls of the mind that scholars build around their separate regions of the globe.

James D. Tracy,
Director, Center for Early Modern History

xix