

The ARCHITECTURE of ROMAN TEMPLES

The Republic to the Middle Empire

This book examines the development of Roman temple architecture from its earliest history in the sixth century B.C. to the reigns of Hadrian and the Antonines in the second century A.D. Although archaeologists, architects, and historians have studied these temples since the Renaissance, this book is unique for its specific analysis of Roman temples as a building type. John Stamper analyzes their formal qualities, the public spaces in which they were located, and, most importantly, the authority of precedent in their designs. The basis of that authority was the Temple of Jupiter Capitolinus, the city's first and most important temple. Stamper challenges the accepted reconstruction of this temple, proposing a new reconstruction and an assessment of its role in the transformation of Rome. He also traces Rome's temple architecture as it evolved over time and how it accommodated changing political and religious contexts, as well as the effects of new stylistic influences.

John Stamper is Associate Professor and Associate Dean in the School of Architecture at the University of Notre Dame. Both an architect and architectural historian, he is the author of *Chicago's North Michigan Avenue: Planning and Development, 1900–1930.*



The ARCHITECTURE of ROMAN TEMPLES

The Republic to the Middle Empire

JOHN W. STAMPER

University of Notre Dame





PUBLISHED BY THE PRESS SYNDICATE OF THE UNIVERSITY OF CAMBRIDGE The Pitt Building, Trumpington Street, Cambridge, United Kingdom

CAMBRIDGE UNIVERSITY PRESS

The Edinburgh Building, Cambridge CB2 2RU, UK
40 West 20th Street, New York, NY 10011-4211, USA
477 Williamstown Road, Port Melbourne, VIC 3207, Australia
Ruiz de Alarcón 13, 28014 Madrid, Spain
Dock House, The Waterfront, Cape Town 8001, South Africa

http://www.cambridge.org

© John W. Stamper 2005

This book is in copyright. Subject to statutory exception and to the provisions of relevant collective licensing agreements, no reproduction of any part may take place without the written permission of Cambridge University Press.

First published 2005

Printed in the United Kingdom at the University Press, Cambridge

Typefaces Bembo 11/14 pt., Weiss, Trajan, and Janson System LTEX 2E [TB]

A catalog record for this book is available from the British Library.

Library of Congress Cataloging in Publication Data

Stamper, John W.

The architecture of Roman temples : the republic to the middle empire $\/$ John W. Stamper.

p. cm.

Includes bibliographical references and index.

ISBN 0-521-81068-X

Temples, Roman – Italy – Rome.
 Temple of Jupiter Capitolinus (Rome, Italy)
 Architecture, Roman – Italy – Rome – Influence.
 Rome (Italy) – Buildings, structures, etc.
 Title.

NA323.873 2004 726′.1207′09376 – dc22 2004045666

ISBN 0 521 81068 x hardback

© Cambridge University Press



CONTENTS

	List of Illustrations Preface	page vii xiii
	Introduction: The Authority of Precedent	I
1	Building the Temple of Jupiter Capitolinus	6
2	A New Reconstruction of the Temple	19
3	Etrusco-Roman Temples of the Early Republic	34
4	Assimilation of Hellenistic Architecture after the Punic Wars	49
5	The Corinthian Order in the First Century B.C.	68
6	Architecture and Ceremony in the Time of Pompey and Julius Caesar	84
7	Rebuilding Rome in the Time of Augustus	105
8	Augustus and the Temple of Mars Ultor	130
9	Temples and Fora of the Flavian Emperors	151
0	The Forum Traiani	173
1	Hadrian's Pantheon	184
2	Hadrian and the Antonines	206
	Epilogue	219
	Notes	222
	List of Abbreviations	223 261
	Works Cited and Consulted	265
	Index	281

V

1

1

1



ILLUSTRATIONS

1 Perspective view of west end of Forum Romanum as it appeared in

	ca. A.D. 300	page xv
2	Rome, Model of Temple of Jupiter Capitolinus, ca. 580-509 B.C.	7
3	Rome, Capitoline Hill in ca. 509 B.C.	9
4	Capitoline Triad, Archaeological Museum, Palestrina	13
5	Relief depicting sacrifice in front of the Temple of Jupiter Capitolinu	s
	in Rome	15
6	Plan of Capitoline Hill according to Luigi Canina, 1854	16
7	Plan of the Capitoline Hill with foundations of Capitoline Temple as	
	discovered by Lanciani in the late 1890s	17
8	Etruscan Temple according to Vitruvius	20
9	View of Capitoline Temple foundation wall located inside the	
	Capitoline Museum	21
Ю	Plan of the Temple of Jupiter Capitolinus by Canina	22
ΙI	Temple of Jupiter Capitolinus, plan of archaeological remains	
	discovered as of 1921	23
12	Temple of Jupiter Capitolinus according to Gjerstad	24
I 3	Temple of Jupiter Capitolinus, elevation according to Gjerstad	25
14	Temple of Jupiter Capitolinus compared with the Parthenon, Athens	26
15	Temple of Jupiter Capitolinus, plan of archaeological remains	
	discovered as of 2000	27
16	Proposed new plan of the Temple of Jupiter Capitolinus	28
17	Temple of Jupiter Capitolinus, elevation of proposed reconstruction	28
18	Temple of Jupiter Capitolinus, axonometric view of proposed	
	reconstruction	29
19	Orvieto, Belvedere Temple, 400s B.C., plan	30
20	Satricum, Temple of Mater Matuta I, ca. 550 B.C., plan	30
	Figural frieze with processional scene	3 I
22	Figural frieze with racing chariots as on the raking cornices of the	
	Temple of Jupiter Capitolinus, sixth century B.C.	32
	Temple of Jupiter Capitolinus, partial reconstruction of elevation	33
	Rome, Curia Hostilia and Comitium, ca. 600 B.C., site plan	36
	Rome, Temple of Saturn, 498 B.C., plan	36
	Rome, Temple of Castor and Pollux, 484 B.C., plan	37
27	Rome, Forum Boarium, ca. 350 B.C., plan	40

vii

viii ILLUSTRATIONS

28	Rome, Temples of Mater Matuta (top) and Fortuna (bottom),	
	ca. 396 B.C., elevation and plan	41
29	Veii, Portonaccio Temple, 400s B.C., elevation and plan	42
30	Rome, Largo Argentina, in the third century B.C., site plan with	
	Temples A and C	44
3 I	Largo Argentina, Temple C, view of podium	45
32	Paestum, Temple of Peace, 273 B.C., rebuilt ca. 80 B.C., plan	47
33	Cosa, Temple of Jupiter Capitolinus, 150 B.C., plan and elevation	48
	Athens, Erechtheum, 421–405 B.C., Ionic capital from north portico	51
35	Teos, Temple of Dionysius (top), Hermogenes, ca. 220–205 B.C.;	
	Magnesia, Temple of Artemis Leukophryene (bottom), Hermogenes,	
	ca. 205–190 B.C.	53
	Porticus of Metellus (Octaviae), 143–131 B.C.	55
37	Rome, Temple of Castor and Pollux, plan at time of rebuilding	
	in 117 B.C.	57
	Rome, Forum Romanum, plan, ca. 200 B.C.	58
	Rome, Forum Holitorium, third to first centuries B.C., elevation	59
	Forum Holitorium, plan of temples	60
	Forum Holitorium, columns remaining from the Temple of Spes	61
	Rome, Forum Boarium, plan	63
	Rome, Temple of Portunus, ca. 120 B.C.	64
	Temple of Portunus, plan	64
	Tivoli, Temple of Sybil, ca. 150–125 B.C., plan	65
	Cori, Temple of Hercules, first century B.C.	65
	Temple of Portunus, elevation and details	67
	Rome, Round Temple by the Tiber, ca. 100–90 B.C.	69
	Round Temple by the Tiber, plan	71
	Round Temple by the Tiber, elevation	71
	Round Temple by the Tiber, detail of the original column capital	72
52	Round Temple by the Tiber, detail of a replacement capital from	
	the first century A.D.	72
	Round Temple by the Tiber, detail of column	73
	Tivoli, Temple of Vesta, first century B.C.	74
	Tivoli, Temple of Vesta, plan Tivoli, Temple of Vesta, datail of column conital and antablature	75
	Tivoli, Temple of Vesta, detail of column, capital, and entablature	76
	Rome, Temple B, Largo Argentina, ca. 90–80 B.C.	77
	Rome, Temple B, detail of capital Rome, Temple B, plan	78 78
	Rome, Temple of Vesta, Forum Romanum, as built by Septimius	78
00	Severus and Julia Domna in ca. A.D. 200	70
6т	Temple of Vesta, Forum Romanum, plan	79 80
		81
	Rome, Largo Argentina, Temples A, B, C, and D, first century B.C. Rome, Plan of the Capitoline Hill and Forum Romanum at	01
υz	the time of Sulla	83
64	Sculpture portrait of Pompey the Great, Museo Archaologica, Venice	85
	Rome, Porticus Pompeiana with Theater, Temple of Venus Victrix,	رن
ر	Porticus, and temples of Largo Argentina, 62–55 B.C., site plan	86
		0.0



ILLUSTRATIONS ix

66	Rome, Temple of Venus Victrix, 62-55 B.C., plan at top of cavea of	
	the Theater of Pompey	87
67	Palestrina, Sanctuary of Fortuna Primigenia, first half of first century	
	B.C., perspective view of model	89
68	Portrait bust of Julius Caesar, Museo Torlonia, Rome	91
69	Rome, Curia Julia, 44–29 B.C., site plan	93
70	Rome, Forum Julium with Temple of Venus Genetrix, 54–29 B.C.,	
	rebuilt A.D. 98–106 by Trajan	94
71	Temple of Venus Genetrix, plan	9:
72	Temple of Venus Genetrix, partial elevation	90
73	Temple of Venus Genetrix, reconstruction of three of the temple's	
	columns and entablature from the rebuilding by Trajan	97
74	Forum Julium, plan of forum	98
	Paestum, Roman Forum, ca. 273–50 B.C.	99
	Pompeii, Roman Forum, ca. 80 B.CA.D. 79	101
77	Statue of Augustus from Prima Porta, Vatican Museums,	
	Braccio Nuovo	107
	Rome, Forum Romanum, plan as existed by the middle Empire	108
	Temple of Divus Julius, 42–29 B.C., elevation	100
	Rome, Temple of Divus Julius, plan	110
	Temple of Divus Julius, Corinthian capital	III
	Temple of Divus Julius, cornice details	II2
	Temple of Divus Julius, cornice details	II2
	Rome, Temple of Saturn, Forum Romanum, rebuilt 42–30 B.C.	113
	Temple of Saturn, elevation	ΙΙΔ
	Temple of Saturn, plan	115
	Temple of Saturn, detail of entablature and cornice	110
	Rome, Temple of Apollo Palatinus, 36–28 B.C.	II7
	Temple of Apollo Sosianus, 34–20 B.C., plan	120
	Temple of Apollo Sosianus, elevation	121
	Temple of Apollo Sosianus, detail of columns and entablature	122
	Rome, plan of area around Circus Flaminius	123
93	Rome, Porticus Octaviae (Metelli) showing addition of entrance	
0.4	pavilion and <i>scola</i> or Curia Octaviae, 33–23 B.C.	124
94	Porticus Octaviae (Metelli), entrance pavilion at the time of	12
0.5	Augustus, 33–23 B.C. Comparison of temple plans built in Rome between 42	125
93	and 34 B.C., all plans at the same scale	125
06	Forum Augustum, Temple of Mars Ultor, 37–2 B.C., elevation	127 131
	Temple of Mars Ultor, plan	133
	Temple of Mars Ultor, view of columns	132
	Temple of Mars Ultor, detail of column capital and entablature	132
	Forum Augustum, Temple of Mars Ultor, site plan	137
	Forum Augustum, caryatid order of the flanking colonnades	138
	Statue of Mars Ultor, Museo Capitolino	139
	Rome, Temple of Concordia, rebuilt 7 B.C.–A.D. 10, elevation	142
	Temple of Concordia, plan	142
- 1	· · · · · · · · · · · · · · · · · · ·	1

X ILLUSTRATIONS

105	Temple of Concordia, detail of cornice (Museo Capitolino)	143
106	Rome, Temple of Castor and Pollux, rebuilt 7 B.CA.D. 6, analytique	
	showing temple in its different phases	144
107	Temple of Castor and Pollux, plan at the time of Augustus	145
108	Rome, Temple of Castor and Pollux, view of columns	146
109	Temple of Castor and Pollux, detail of columns and entablature	147
110	Temple of Castor and Pollux, detail of columns and entablature	148
III	Rome, Forum Romanum at the time of Augustus, ca. A.D. 10	149
112	Portrait bust of Vespasian, Uffizi, Florence	152
113	View of Temple of Jupiter Capitolinus with Corinthian columns as	
	rebuilt by Vespasian, A.D. 70-79	153
114	Coin with image of Temple of Jupiter Capitolinus from Flavian	
	period	154
115	Athens, Corinthian columns of the Temple of Olympian Zeus	155
116	Temple of Jupiter Capitolinus after reconstruction by Vespasian	155
117	Temple of Jupiter Capitolinus, elevation compared with the Temple	
	of Mars Ultor	156
118	Rome, Templum Pacis, A.D. 71–75, plan	157
119	Portrait bust of Titus, Museo Nazionale, Naples	158
120	Portrait bust of Domitian, Vatican Museum	159
12 I	Rome, Temple of Vespasian, A.D. 79-87, elevation	160
122	Temple of Vespasian, plan	161
123	Temple of Vespasian, view of columns with Temple of Saturn	
	in the background	162
124	Temple of Vespasian, entablature and cornice	163
125	Rome, Forum Transitorium, A.D. 85/86–98, site plan	164
126	Forum Transitorium, Temple of Minerva, analytique	165
127	Forum Transitorium, detail of columns along sidewall of forum	166
128	Arch of Titus, A.D. 70–81 or 82–90, view through the arch toward	
	Capitoline Hill	167
129	Arch of Titus, detail of attic inscription	169
130	Arch of Titus, plan of Forum Romanum	171
13 I	Portrait bust of Trajan, Villa Albani, Rome	174
132	Rome, aerial view of imperial fora with Forum Traiani in the	
	foreground, A.D. 106/107-128	175
133	Forum Traiani, proposed plan with Temple of Divus Traianus at	
	southeast end of the forum	177
134	Forum Traiani, proposed plan with Temple of Divus Traianus at	
	northwest end of complex	178
	Rome, Forum Traiani, archaeological remains of Basilica Ulpia	179
	Portrait bust of Hadrian, Uffizi, Florence	185
	Rome, Pantheon, A.D. 118–128	187
	Pantheon, site plan with forum	188
	Aerial view of Campus Martius with Pantheon	189
	Pantheon, plan	190
141	Pantheon, right side of pronaos showing column base and portion	
	of corner pilaster	191



ILLUSTRATIONS xi

Pantheon, right side of pronaos showing detail of entablature	192
Pantheon, details of pronaos column and entablature	193
Pantheon, elevation as built (top); hypothetical elevation with	
taller columns (bottom)	194
Pantheon, hypothetical reconstruction of pediment with eagle in a	
laurel wreath	195
Pantheon, interior view	196
Pantheon, longitudinal section	197
Pantheon, interior view showing reconstruction of original attic zone	199
Pantheon, interior view showing dome	201
Plan of the northern Campus Martius	203
Comparison of (A) Temple of Jupiter Capitolinus, (B) Temple of	
Mars Ultor, and (C) Pantheon	204
Rome, Temple of Venus and Rome, A.D. 125/126-140/145,	
aerial view	207
Athens, Temple of Olympian Zeus	208
Rome, Temple of Venus and Rome, elevation with the statue	
of the sun god, Sol Invictus	209
Temple of Venus and Rome, site plan	210
Temple of Venus and Rome, elevation and section	211
Rome, Temple of Divus Hadrianus, A.D. 139–145, section	
and elevation	213
Temple of Divus Hadrianus, plan	214
Temple of Divus Hadrianus, entablature and cornice detail	215
Rome, Temple of Antoninus and Faustina, A.D. 141–161	216
Temple of Antoninus and Faustina, plan	217
Temple of Antoninus and Faustina, detail of entablature	217
	Pantheon, details of pronaos column and entablature Pantheon, elevation as built (top); hypothetical elevation with taller columns (bottom) Pantheon, hypothetical reconstruction of pediment with eagle in a laurel wreath Pantheon, interior view Pantheon, longitudinal section Pantheon, interior view showing reconstruction of original attic zone Pantheon, interior view showing dome Plan of the northern Campus Martius Comparison of (A) Temple of Jupiter Capitolinus, (B) Temple of Mars Ultor, and (C) Pantheon Rome, Temple of Venus and Rome, A.D. 125/126–140/145, aerial view Athens, Temple of Olympian Zeus Rome, Temple of Venus and Rome, elevation with the statue of the sun god, Sol Invictus Temple of Venus and Rome, site plan Temple of Venus and Rome, elevation and section Rome, Temple of Divus Hadrianus, A.D. 139–145, section and elevation Temple of Divus Hadrianus, entablature and cornice detail Rome, Temple of Antoninus and Faustina, A.D. 141–161 Temple of Antoninus and Faustina, plan



PREFACE

he temple architecture of ancient Rome has served A as a model for architectural design for more than two millennia. Beginning with the Temple of Jupiter Optimus Maximus on the Capitoline Hill and proceeding through the buildings of the Republic and the Empire, generations of architects have copied Roman architecture directly or have been influenced by its principles and building vocabulary. Even the most abstract modern buildings often have links to ancient Rome. It has been the standard against which all other architecture and urban design is measured, and even today, nearly two thousand years after the construction of Rome's major buildings and urban spaces, hundreds, if not thousands, of architects and city planners across the United States and Europe use Rome's architecture as a vital design source.

The inventive transformations of architects such as Charles Moore, Michael Graves, and Robert Venturi or the literal interpretations of Leon Krier, Robert Adam, and Thomas Gordon Smith reveal the profound and persistent influence of Roman temple design. Even those who rail against its influence, who point out its representation of political oppression or of pagan sacrifice, or who dislike the orders in general, still marvel at the beauty of its proportions and the technical expertise of its buildings. Whatever our bias may be – traditional, modern, or something in between – the buildings of Rome provide a rich manifestation of precedent-based architectural design. Representing the power of ancient Roman culture, they commemorate its largely anonymous designers and builders.

Beyond their meaning for today's architects, the temples of ancient Rome tell us much about the city's political, social, and religious history. They played an important role in mediating between the efforts of the ruling class to legitimize its power and the needs and desires of the general populace to have a safe and secure existence. An analysis of the temples reveals much about the relationship between politics and religion on one hand and the signs, symbols, and rituals embedded in architecture and ceremony on the other. The image Roman citizens had of the temples resulted from the interplay between physical appearance and mental construct. Like all cities, ancient Rome was a composite of the manifest and the imagined, and any reading of its buildings and urban spaces must see them both as physical forms and as ancient political and religious symbols.

The purpose of this study is thus to describe the architecture and the political and religious context of the most significant sacred shrines in ancient Rome, from the Temple of Jupiter Capitolinus at the beginning of the Republic to Hadrian's Pantheon and Temple of Venus and Rome in the middle of the second century A.D. It does so in terms of both the archaeological and the literary evidence that allows reconstruction of their forms and architectural details. It describes aspects of their structural and spatial types, formal vocabulary, topographical and urban orientation, ceremonial function, and symbolic meaning. In terms of their social context, it analyzes their symbolic role as places for public ceremony and the display of political and religious authority.

This book is not intended to be an all-encompassing guide to Roman architecture. Building types other than temples – basilicas, curias, theaters, and housing, for instance – are not part of this study. Only those temples that are fairly well documented are included, and only those found in central Rome. Some examples from the Roman provinces are included, but

xiii

xiv PREFACE

only for reasons of comparison. This is not an archaeological study, although it obviously draws on the work of archaeologists both past and present. Nor is it a treatise on ancient Roman religions and their mythological figures. Rather, it is a study in architectural history that focuses on the forms of the Roman temples, their urban settings, and their cultural and political contexts. It places more emphasis on reconstructions and architectural character than on the physical remains of foundations and fragments of building materials. It analyzes changes to the buildings over time and relates those changes to broader political and religious events. Finally, it considers the temples in a comparative way, not as isolated examples on a tourist's itinerary, but in relation to other temples of their time and to the urban context in which they were built.

The thousands of visitors who go to Rome each year, especially to its ancient sites and monuments – the Forum Romanum, Forum Boarium, the imperial fora, and the Campus Martius – are invariably impressed by the grandeur and dignity of what they see. They cannot, however, easily visualize the original appearance of the temples, the technical methods used in their construction, nor their role in the ancient city's social, political, and religious life. The fragments of the buildings that remain only suggest their original character; it is the task of archaeologists and architectural historians to make those images more vivid and tangible in both form and meaning (Fig. 1).

This book's purpose is to provide visitors to Rome – architects, planners, historians, and students – with a more comprehensive description of its ancient temples than exists to date. It also proposes a new reconstruction of the Temple of Jupiter Capitolinus and emphasizes both the crucial role it played as a precedent for later temple design and the basis for its political and religious authority. It reviews the principal temple and forum complexes of the Etruscan and early Republican periods, then focuses on the projects of Rome's most famous consuls, dictators, and emperors from Pompey the Great and Julius Caesar to Augustus and Hadrian those who contributed most to the city's civic and religious architecture. It sheds new light on the form and chronological development of Roman architecture, and interprets the work of archaeologists through the eyes of an architectural historian. Discussing the authority of precedent as the basis for design and symbolic connotations, it proposes a new unity in the history of Roman temple architecture.

The illustrations include a large number of new drawings of the temples in plan and elevation that I or architecture students under my direction have produced. The classical focus of the School of Architecture at the University of Notre Dame provides these students with an excellent grounding in drawing the orders. They are highly proficient and accurate in drawing reconstructions of classical buildings. They have been further aided in this expertise by their experience of a junior year abroad at Notre Dame's Rome Studies Center, where I was director from 1990 to 1999. I have credited individual students in the illustration captions and have indicated the primary source or sources for each drawing. In most cases, several sources and data from firsthand site visits were used, including articles on recent archaeological findings from the 1990s.

I want to thank especially those students who participated in my classes in ancient and early Christian architecture from 1991 to 1995. Professionals who have been of great assistance in their recommendations and encouragement include James Packer, Tadeusz Mazurek, Margaret Miles, Mark Wilson Jones, Tom Butler, Celeste Guichard, Fikret Yegül, Thomas Noble Howe, Thomas Gordon Smith, Dennis Doordan, Michael Lykoudis, Carol Krinsky, Lynne Lancaster, Branko Mitrović, and Jeff Burden.

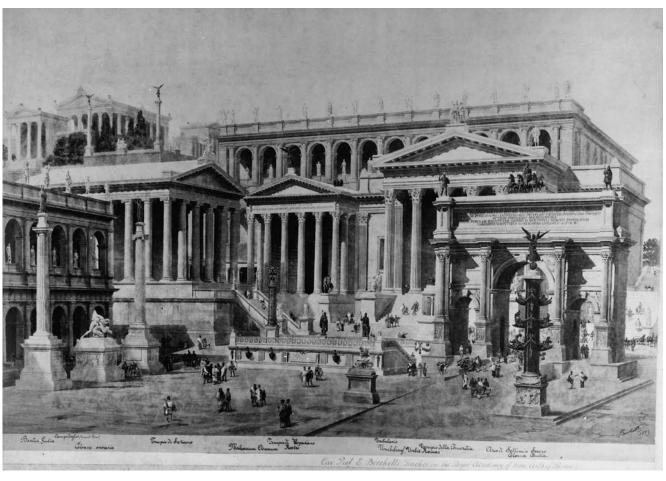
Financial assistance for travel and purchase of archival photographs has been made possible by Anthony K. Hyder and the Graduate School of the University of Notre Dame and by Carroll William Westfall of the Notre Dame School of Architecture.

I would like to thank the staff librarians and archivists of the Hertziana Library, the Library of the American Academy of Rome, the Deutsches Archäologisches Institut in Rome, the Istituto Centrale per il Catalogo e la Documentazione in Rome, the Regenstein Library of the University of Chicago, the Sawyer Library of Williams College, and the University of Notre Dame Libraries.

I also wish to thank those who have assisted with editing, typing, and other technical matters: Romana De Ferrari, Rogelio Carrasco. Elizabeth Norian, Gayle Rottinghaus, Molly Denver, Paula Garvey, John Mellor, Michael Shveima, Kevin Curran, Hoa Vu,



PREFACE XV



1. Perspective view of west end of Forum Romanum as it appeared in ca. A.D. 300. Drawing by E. Becchelli, 1983. Photo: Deutsches Archäologisches Institut, Rome, 74.2700.

Chad Carnahan, Marc Bailly, Amra Spahic, and Joann Sporleder. Special thanks go to Beatrice Rehl, Senior Editor, Arts and Classics, at Cambridge University Press, plus her staff members Sarah Wood and Alan Gold, and Eleanor Umali and the production staff of TechBooks.

Finally, I wish to thank my wife, Erika Pistorius Stamper, for her help with proofreading and for her patience during my many visits to Roman sites and libraries. Our daughter, Alessandra, has shown equal patience and tolerance with my travel and extensive work schedule. George and Marie Pistorius have graciously lent their expertise by helping with German translations, bibliographic questions, and proofreading. All photographs are by the author unless otherwise indicated.

© Cambridge University Press