

Cambridge University Press

978-0-521-66102-7 - Origins of the European Economy: Communications and Commerce, A.D. 300-900

Michael McCormick

Frontmatter

[More information](#)

## ORIGINS OF THE EUROPEAN ECONOMY

For fifty years debate has raged about early European commerce during the period between antiquity and the Middle Ages. Was there trade? Or no trade? If trade, in what – and with whom? New evidence and new ways of looking at old evidence are now breaking the stalemate. Analysis of communications – the movements of people, ideas, and things – is transforming our vision of Europe and the Mediterranean in the age of Charlemagne and Harun al Rashid.

The prevailing view of Europe's stone-age isolation yields to one of openness and dynamic change, even as new archaeological findings on the economic collapse of the Roman empire throw that change into clear relief. Discovering the travellers themselves, and the things they carried, leads to ships, sailing rhythms, the reopening of overland routes, and the rise of Venice. The travellers' stories show how the first truly European economy exported European slaves in exchange for African and Asian coins, silks, and drugs. The patterns laid down by 800 would shape trade and shipping into the next millennium.

This is the first comprehensive analysis of the economic transition from antiquity to the Middle Ages in over sixty years. Using new materials and new methodology, it will attract all social and economic historians of antiquity and the Middle Ages, and anyone concerned with the origins of Europe, the history of the slave trade, medicine and disease, cross-cultural contacts, and the Muslim and Byzantine worlds.

MICHAEL MCCORMICK is Professor of History, Harvard University. His many publications include *Eternal Victory: Triumphal Rulership in Late Antiquity, Byzantium, and the Early Medieval West* (1986) and contributions to *The Cambridge Ancient History*, *The New Cambridge Medieval History*, and *The Oxford Dictionary of Byzantium*.

Cambridge University Press

978-0-521-66102-7 - Origins of the European Economy: Communications and Commerce, A.D. 300-900

Michael McCormick

Frontmatter

[More information](#)

# ORIGINS OF THE EUROPEAN ECONOMY

*Communications and Commerce,*  
A.D. 300–900

Michael McCormick  
*Harvard University*



CAMBRIDGE  
UNIVERSITY PRESS

Cambridge University Press  
978-0-521-66102-7 - Origins of the European Economy: Communications and Commerce, A.D. 300-900  
Michael McCormick  
Frontmatter  
[More information](#)

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>

© Michael McCormick 2001

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 2001  
Reprinted 2002, 2003

Printed in the United Kingdom at the University Press, Cambridge

Typeface Quadraat 10.5/13pt System QuarkXPress™ [SE]

A catalogue record for this book is available from the British Library

Library of Congress Cataloguing in Publication data  
McCormick, Michael, 1951-

Origins of the European economy: communications and commerce  
A.D. 300-900/Michael McCormick  
p. cm.

Includes bibliographical references.

ISBN 0 521 66102 1 (hardback)

1. Europe - Commerce - History. 2. Europe - Economic conditions - To 1492. I. Title  
HF3495.M333 2001  
380 .094 - dc21 00-064142

ISBN 0 521 66102 1 hardback

Cambridge University Press

978-0-521-66102-7 - Origins of the European Economy: Communications and Commerce, A.D. 300-900

Michael McCormick

Frontmatter

[More information](#)

---

*In memory of  
Léopold Genicot and Alexander Kazhdan  
friends and teachers*

CONTENTS

List of maps .....	xiv
List of figures .....	xvi
List of tables .....	xviii
List of charts .....	xxii
Preface .....	xxiii
List of abbreviations .....	xxvi
 <b>Commerce, communications, and the origins of the European economy .....</b>	
<b>1</b>	<b>1</b>
From the end of Rome to the origins of the European economy .....	2
The changing context of Carolingian commerce .....	6
Early medieval writers' attitudes toward merchants .....	12
Early medieval communications .....	15
The road ahead .....	19
 <b>PART I THE END OF THE WORLD .....</b>	
<b>1</b>	<b>27</b>
<b>1. The end of the ancient world .....</b>	<b>27</b>
1. Long-term trends in the late Roman economy .....	28
2. People and food .....	30
3. Population health .....	38
<b>2</b>	<b>42</b>
<b>2. Late Roman industry: case studies in decline .....</b>	<b>42</b>
1. Metal extraction and production .....	42
2. The ceramic industry .....	53
<b>3</b>	<b>64</b>
<b>3. Land and river communications in late antiquity .....</b>	<b>64</b>
1. Routes, ships, and men .....	64

CONTENTS

2. Land communications and the closing of the overland corridors .....	67
3. River communications and the case of the Rhône route .....	77
<b>4 Sea change in late antiquity .....</b>	<b>83</b>
1. Transport and commerce .....	83
2. Public money and private ships .....	87
3. Ports, ships, and cargoes .....	92
4. Secular change 1: the flow of goods .....	98
5. Secular change 2: the transformation of late Roman shipping .....	103
<b>The end of the ancient economy: a provisional balance sheet .....</b>	<b>115</b>
 <b>PART II PEOPLE ON THE MOVE .....</b>	 <b>123</b>
<b>5 A few western faces .....</b>	<b>129</b>
1. Jerusalem pilgrims .....	129
2. Ambassadors to Constantinople .....	138
3. Comparisons .....	147
<b>6 Two hundred more western envoys and pilgrims: group portrait .....</b>	<b>151</b>
1. Basic facts .....	151
2. Geographic characteristics .....	153
3. Social profile .....	158
4. Under way .....	168
<b>7 Byzantine faces .....</b>	<b>174</b>
1. The ambassador .....	175
2. The missionaries .....	181
3. The pilgrims .....	197
<b>8 Easterners heading west: group portrait .....</b>	<b>211</b>
1. Basic facts .....	212
2. Geographic characteristics .....	213
3. Social profile .....	224
4. Under way .....	227

CONTENTS

<b>9</b>	<b>Traders, slaves, and exiles .....</b>	<b>237</b>
1.	Traders, slaves, and politicos .....	237
	Traders .....	237
	Slaves .....	244
	Politicos: exiles, refugees, and hostages .....	254
2.	Invisible travelers: immigrants, seamen, fishermen, and wanderers .....	261
3.	Fictional travelers .....	267
	<b>People on the move .....</b>	<b>270</b>
<b>PART III</b>	<b>THINGS THAT TRAVELED .....</b>	<b>281</b>
<b>10</b>	<b>Hagiographical horizons: collecting exotic relics in early medieval France .....</b>	<b>283</b>
1.	The problem of early medieval relics .....	283
2.	Collecting relics at Sens .....	290
	Changing geographic patterns .....	292
3.	Collecting relics at Chelles .....	308
	Early efforts .....	310
	The age of Charlemagne .....	312
<b>11</b>	<b>“Virtual” coins and communications .....</b>	<b>319</b>
1.	On the tracks of the mancosus .....	323
	Farfa .....	326
	Dinars on the Adriatic rim .....	330
	Dinars elsewhere in Italy .....	335
2.	Silver mancosi .....	337
<b>12</b>	<b>Real money: Arab and Byzantine coins around Carolingian Europe .....</b>	<b>343</b>
1.	Arab coins .....	344
2.	The Spanish and Viking groups .....	345
3.	Byzantine coins in and around Carolingian Europe ....	351
4.	Sardinia .....	354
5.	The Rhône and Rhine corridors .....	357
6.	The Adriatic rim .....	361
7.	The Amber Trail .....	369
	<b>Things that traveled .....</b>	<b>385</b>

CONTENTS

PART IV THE PATTERNS OF CHANGE ..... 39I

13 The experience of travel ..... 393

1. Land ..... 394

2. The sea ..... 402

    Terror of storms: environment and technology ..... 403

    Ships and their equipment ..... 404

    Convoys and fleets ..... 4I1

    How big were the ships? ..... 4I5

3. Operational issues ..... 4I8

    Landings ..... 4I8

    Styles of navigation ..... 422

    In port ..... 425

    Aboard ship ..... 426

    Danger ..... 428

14 Secular rhythms: communications over time ..... 43I

1. New data, new questions ..... 432

2. The ebb and flow of Mediterranean movement ..... 433

15 Seasonal rhythms ..... 444

1. Seasonality of land travel ..... 445

2. The seasons of the sea ..... 450

    The monthly patterns of movements ..... 452

    Two marginal months: April and October ..... 454

    Winter ..... 458

    Winter sailing close up ..... 462

    Another factor ..... 464

16 Time under way ..... 469

1. Duration of embassies and speed of travel ..... 470

2. Speed of land travel ..... 474

3. Traveling to Italy ..... 476

4. Speed of sea travel ..... 48I

5. Reconstructing some early medieval voyages ..... 483

    The transport of Pope Martin I to Constantinople, A.D. 653 ... 483

    Some other early medieval voyages ..... 488

6. A ninth-century shift? ..... 49I



CONTENTS

17	<b>“Spaces of sea”: Europe’s western Mediterranean communications</b>	501
1.	The ancient trunk route from Italy to the Aegean	502
2.	Southern rim: communications between the Maghreb and the Muslim center	508
3.	Southern links: from Africa to the southern Tyrrhenian Sea	511
4.	Northern links: Tuscany, the northern Tyrrhenian Sea, and Liguria	515
18	<b>Venetian breakthrough: European communications in the central Mediterranean</b>	523
1.	Venetian breakthrough	523
2.	The reopening of the Gulf of Corinth	531
3.	Home ports and the regional structure of shipping routes	537
19	<b>New overland routes</b>	548
1.	The revival of the Balkan and Danube routes	549
	<i>The Danubian corridor</i>	553
	<i>The Balkan corridor</i>	557
2.	The northern arc	562
	<b>The patterns of change</b>	565
PART V	<b>COMMERCE</b>	571
20	<b>Early medieval trading worlds</b>	573
1.	Imagining trading worlds	573
2.	Trading worlds beyond the Carolingian empire	580
	<i>The south: Mediterranean trading worlds</i>	582
	<i>West and east: new trading worlds</i>	604
	<i>The northern arc</i>	606
21	<b>Where are the Merchants? Italy</b>	614
1.	The problem of Carolingian merchants	614
2.	Merchants and markets in southern Italy	618
3.	Merchants in northern Italy	630

CONTENTS

<b>22</b>	<b>Merchants and markets of Frankland .....</b>	<b>639</b>
	1. Royal toll stations .....	640
	2. Merchants, tolls, and rivers .....	644
	3. Expanding horizons: the Seine basin and the fair of St. Denis .....	647
	4. Ships and traders on the Rhine .....	653
	<i>The economic lessons of Rhenish pottery</i> .....	656
	<i>A movable market?</i> .....	663
<b>23</b>	<b>Connections .....</b>	<b>670</b>
	1. Northern and eastern European connections .....	670
	2. Southern European connections .....	674
	Spain .....	674
	<i>Trade across the Alps</i> .....	678
	<i>Money movements across the Alps</i> .....	681
	3. The view from Iraq .....	688
<b>24</b>	<b>Where are the wares? Eastern imports to Europe .....</b>	<b>696</b>
	1. Bulk wares inside Carolingian Europe .....	698
	2. The problem of papyrus and the Alps .....	704
	3. Drugs: the spice of life .....	708
	4. A liturgical imperative .....	716
	5. Silk .....	719
<b>25</b>	<b>European exports to Africa and Asia .....</b>	<b>729</b>
	1. Lumber, fur, and arms .....	729
	2. Europeans .....	733
	<i>The language of slavery</i> .....	734
	<i>Two changes</i> .....	738
	<i>Getting slaves</i> .....	741
	<i>The economics of slave trading</i> .....	752
	3. Geography of the European slave trade .....	759
	<b>At the origins of the European economy .....</b>	<b>778</b>
	<b>Appendices</b>	
	1 Checklist of Mediterranean travelers, 700–900 .....	799
	2 Mentions of mancosi to 850 .....	811
	3 Catalogue of Arab and Byzantine coins in the west .....	815

CONTENTS

4 A register of Mediterranean communications,  
700–900 ..... 852

**Bibliography** ..... 973

Primary sources ..... 973

Secondary sources ..... 991

**Index** ..... 1048

MAPS

I have designed all of the maps in this book myself, using ArcView GIS 3.0a; David Cobb and the staff of the Map Collection of Widener Library provided valuable support in this regard. Along with the reader, I owe a particular debt to my student, Gregory A. Smith, for his patient and elegant work in polishing the maps for final publication.

When elevations are shown, the first level of shading designates heights of 1,000–3,000 feet (305–915 m), the second level, 3,000–7,000 feet (915–2,134 m), the third, 7,000–11,000 feet (2,134–4,622 m), and the darkest shading indicates elevations over 11,000 feet (4,622 m).

2.1	The end of Roman metal production.....	page 44
2.2	Late Roman ceramics: fourth-century expansion and contraction .....	56
2.3	Late Roman ceramics: sixth-century expansion and contraction .....	57
3.1	Late Roman land and river communications .....	70
4.1	Late Roman sea communications.....	94
5.1	Pilgrimage 721–4: Willibald’s outbound voyage.....	130
5.2	Pilgrimage 867: Bernard’s outbound voyage .....	135
5.3	Changing routes of embassies: Amalarius (813) and Marinus (866–9) .....	140
6.1	Pilgrims and emporia.....	159
7.1	Byzantine envoys and pilgrims.....	176
7.2	The travels of Cyril and Methodius .....	185
7.3	The greater Constantinopolitan region .....	200
8.1	Eastern travelers: geographic background .....	216
10.1	Foreign relics at Sens and Chelles: 7th–9th centuries.....	298

LIST OF MAPS

11.1	Virtual Arab coins: earliest mentions of mancusi in northern Italy.....	325
12.1	Carolingian Europe: Arab and Byzantine coins. General overview of find sites.....	348
12.2	Arab and Byzantine coin finds on Sardinia.....	355
12.3	Rhône valley: Byzantine and early Arab finds.....	358
12.4	Rhine route: Arab and Byzantine coins.....	362
12.5	Adriatic rim: Arab and Byzantine coins.....	365
12.6	The Amber Trail and Carolingian frontier stations: Arab and Byzantine coins.....	371
12.7	The Amber Trail: from the Adriatic to Central Europe.....	374
13.1	The Alps.....	396
15.1	The Carolingian heartland.....	446
16.1	Southern Italy, Africa, Greece.....	487
17.1	The northwestern Mediterranean.....	517
18.1	Upper Adriatic.....	525
18.2	Greece and the Balkans.....	532
19.1	The Adriatic façade of the Balkans.....	558
19.2	The growth of new routes, 700–900.....	567
20.1	The Islamic world.....	583
20.2	Shipping routes: simplified segments.....	593
20.3	Early medieval shipwrecks.....	597
20.4	The northern arc, from space.....	608
21.1	Merchants in Italy, 700–900.....	619
22.1	Frankish toll stations, merchants and fairs.....	643
23.1	Merchant communications, 700–900.....	676
23.2	Transalpine coin movements.....	687
24.1	Distribution of papyrus, c. 500–900.....	705
25.1	Main European slave exports, 700–900.....	762

FIGURES

In addition to the institutions and individuals who kindly granted permission to reproduce and often supplied the images that illustrate this book, I am particularly indebted to the following individuals whose advice guided me and whose intervention was often decisive in helping identify, track down or obtain the illustrations: Dimiter Angelov, Hartmut Atsma, Alan Cooper, Ute Drews, Joachim Henning, Werner Janssens, Haris A. Kalligas, Blanka Kavánová, Walter E. Keller, Angeliki E. Laiou, Jodi Magness, Robert G. Ousterhout, Ilya Prokopov, James Russell, Lawrence E. Stager, Thomas Szabó, Ann Terry, Natalia Teteriatnikov, Paolo Tomea, and Vladimir Vavřínek.

1.1	Gaza amphora. Type A “Gazition,” Ascalon .....	page 37
4.1	Late Roman beachside market, mosaic, Musée du Bardo, Tunis.....	85
5.1	Monemvasia, from the southeast sea approach.....	132
7.1	The Apostle of the Slavs, St. Methodius and his disciples, in the Reichenau Liber memorialis, Zurich, Zentralbibliothek, Ms. Rh. hist. 27 .....	194
8.1	Lead seal of Theodosius 3 Baboutzikos, Patrician, Imperial Protospatharios and Chartoularios of the Vestiarion, discovered at Haithabu in 1966, Archäologisches Landesmuseum der Christian-Albrechts-Universität.....	227
9.1	Grado, Santa Maria delle Grazie, which Fortunatus covered with a new lead roof .....	257
10.1	Chelles, eighth-century authentic of a relic of the beard of St. Boniface of Fulda .....	289
10.2	Sens, eighth-century relic tag reflecting a pilgrimage to the Holy Land .....	305

LIST OF FIGURES

11.1	Arab and Carolingian coins from the marketplace at Torcello (Venice). Museo archeologico nazionale, Venice .....	320
13.1	“Fossa Carolina”: map of Charlemagne’s canal intended to link the Danube and the Rhine river systems .....	400
13.2	Fossa Carolina, today, looking toward the Danube end.....	401
20.1	Haithabu, aerial view from the south .....	581
22.1	Carolingian pottery produced in kilns such as that illustrated in Figure 22.2.....	658
22.2	Carolingian kiln at Brühl-Eckdorf.....	663
25.1	Witness to slavery? Neck-piece or collar of a late ninth- or early tenth-century shackle, from the ring fort “Staré Zámky.” Archeologický ústav Brno.....	742
25.2	Complete neck shackle, tenth century, from Krivina. Museum Ruse, Bulgaria .....	743

TABLES

2.1	Metal cargoes of late Roman wrecks, 300–700 .....	page 51
6.1	Comparison of named and anonymous western ambassadors and pilgrims.....	152
6.2	Known geographic origins of envoys and pilgrims to the east.....	153
6.3	Geographic origins within Italy of envoys and pilgrims .....	154
6.4	Changing percentages of travelers: four regions of Italy, eighth to ninth centuries.....	155
6.5	Correlations of pilgrims’ homes and emporia, in chronological order .....	158
6.6	Status of ecclesiastical envoys and pilgrims at the time of their travel .....	163
6.7	Minimum ages of papal envoys, if the canonical ages were observed .....	167
6.8	Minimum ages of other western travelers, if the canonical ages were observed.....	168
8.1	Types of eastern travelers: overview .....	212
8.2	Comparison of named and anonymous eastern envoys and pilgrims.....	213
8.3	Byzantine travelers: known birthplaces compared with residences .....	215
8.4	Travelers’ points of departure in the Arab world .....	218
8.5	Religious travelers to Rome arriving from the Byzantine empire: known residences and/or birthplaces .....	222
8.6	Travelers arriving at Rome from the Caliphate .....	223
8.7	Age at which easterners undertook travels .....	230
8.8	Ages of travelers broken down by life decade.....	231



LIST OF TABLES

8.9	Eastern travelers making multiple journeys .....	231
8.10	Eastern travelers: main destinations.....	233
9.1	Merchants attested as traveling in the early medieval Mediterranean.....	243
9.2	Individual slaves exported to the Arab world in the eighth and ninth centuries .....	249
9.3	Individual slaves exported to the north, eighth and ninth centuries.....	250
9.4	Age at time of enslavement: qualitative evidence .....	251
9.5	Destinations of European slaves within the Islamic world.....	252
9.6	Ethnic origin of individual slaves .....	253
9.7	Geography of enslavement: place of capture.....	254
9.8	Exiles and refugees: age at time of travel.....	260
9.9	Types of travelers.....	271
9.10	Languages of sources documenting travelers .....	276
10.1	Sens: date of scripts of authentics .....	293
10.2	Sens: regions represented by relics in the early Middle Ages.....	294
10.3	Sens: regions of cults, Merovingian group .....	296
10.4	Sens: Mediterranean cults, Merovingian group .....	296
10.5	Sens: geography of eastern relics, Merovingian group.....	299
10.6	Sens: regions associated with relics tagged in the eighth century .....	301
10.7	Sens: comparison of geographic associations, Merovingian group and eighth-century collecting .....	301
10.8	Sens: eighth-century foreign relics and cult centers .....	303
10.9	Sens: regions associated with relics tagged c. 790–c. 900 .....	306
10.10	Chelles: chronological breakdown of authentics, seventh–ninth centuries .....	308
10.11	Chelles: chronological attribution of eighth- and ninth-century tags.....	309
10.12	Chelles: regional associations of tags assigned to 700–99 or 750–800, in all scripts .....	311
10.13	Chelles: foreign relics, eighth century .....	311
10.14	Chelles: foreign relics, c. 775–900 .....	313
10.15	Chelles: comparison of regional component in three phases of relic collecting .....	314
11.1	Precious metals mentioned in the will of Fortunatus of Grado, c. 824–5.....	333

LIST OF TABLES

12.1	Arab coins: Spanish corridor, by phase and from south to north .....	347
12.2	Viking group: Arab dirhams, arranged by find types and date .....	350
12.3	Sardinia: Byzantine and Arab coin finds .....	354
12.4	Arab and Byzantine coins: coastal route toward Marseilles, and Rhône corridor .....	357
12.5	Rhine–Meuse corridor from the North Sea to the Alps: Arab and Byzantine coin finds .....	361
12.6	Adriatic rim 1, Italian segment: Arab and Byzantine coin finds .....	363
12.7	Adriatic rim 2, Venice: Arab and Byzantine coin finds .....	366
12.8	Adriatic rim 3, Balkan façade: Byzantine coin finds .....	367
12.9	The Amber Trail: Arab and Byzantine coins .....	372
12.10	Arab and Byzantine coins around Sirmium .....	377
12.11	Northeastern frontier of the Carolingian empire: Arab and Byzantine coins .....	379
13.1	Estimated sizes of early medieval ships .....	416
13.2	Numbers of persons attested aboard ninth-century ships .....	417
14.1	Types of movements in recorded travel .....	434
14.2	Distribution of core movements by half-century .....	435
14.3	Distribution of core movements by quarter-century .....	435
15.1	Monthly rhythms of Mediterranean communications, c. 650–970 .....	452
15.2	Sailing movements dated to April .....	456
15.3	Mediterranean movements occurring in October .....	457
15.4	Movements occurring in the period of the “closed sea” .....	460
15.5	Sailing movements dated to March .....	465
16.1	Duration of embassies between Constantinople and the west .....	472
16.2	Travel times of Carolingian groups and messages between Italy and Francia .....	480
16.3	Average rates of travel, for fifteen early medieval voyages .....	492
16.4	Rates of movement: voyages in the <i>Vita Gregorii Agrigenti</i> .....	496
16.5	Rates of movement: voyages in the southern Italian hagiographical novels .....	498

LIST OF TABLES

18.1	Corinth excavations: bronze coins per regnal year, 775–959 .....	536
20.1	Western Mediterranean: early medieval shipwrecks and cargoes along the main trunk route .....	594
20.2	Western Mediterranean: early medieval shipwrecks in the southern Italian zone.....	596
20.3	Western Mediterranean: early medieval shipwrecks on the Adriatic route.....	598
20.4	Western Mediterranean: early medieval shipwrecks on the Spain–Riviera route .....	599
20.5	Eastern Mediterranean: early medieval shipwrecks in the Aegean shipping zone .....	601
20.6	Eastern Mediterranean: early medieval shipwrecks in the Cyprus shipping zone.....	603
20.7	Eastern Mediterranean: various early medieval shipwrecks.....	604
24.1	Hadrian I’s distributions of textiles, Rome, February 772 to August 779 .....	721
25.1	The comparative cost of a human being: Carolingian Europe, Byzantium, and the Caliphate .....	756
25.2	Movements of large numbers of slaves, 700–900 .....	773

CHARTS

3.1	Changing seasonal patterns of communications: percentage of papal letters sent to northern Europe each month, 580–900 .....	page 80
6.1	Changing origins of travelers from Italy, eighth and ninth centuries .....	156
6.2	Religious status: western envoys and pilgrims .....	160
9.1	Languages attesting travelers .....	277
10.1	Sens and Chelles: comparative trends of the geography of relic supply .....	315
10.2	Sens and Chelles: relative percentage of foreign relics .....	317
12.1	Arab coins entering Europe: percentage of each zone .....	383
14.1	Ambassadorial and other core movements: comparison by quarter-century .....	436
14.2	Comparison of ambassadorial and western non- military movements with complementary Arab and Byzantine military and administrative movements .....	437
14.3	Comparison by quarter-century of core and complementary movements and Arab and Byzantine coin finds .....	440
15.1	Monthly rhythms of communications, late seventh– late tenth centuries .....	453
15.2	Comparison of military with non-military ship movements, October–April .....	466
18.1	Church foundations in Venice, 600–1200 .....	530
22.1	Rhenish Vorgebirge: periods of activity of pottery- making sites, 500–1050 .....	662
24.1	Surviving silks per quarter-century, 600–900 .....	722
25.1	The comparative price of a human being, Carolingian Europe, Byzantium, and the Caliphate .....	757

Cambridge University Press

978-0-521-66102-7 - Origins of the European Economy: Communications and Commerce, A.D. 300-900

Michael McCormick

Frontmatter

[More information](#)

## PREFACE

This book began in Baltimore. But it was fostered in the remarkable scholarly repair of Dumbarton Oaks, and grew to maturity in the bracing clime of Cambridge, Massachusetts. It sprang, utterly unintended, from another research project, on diplomacy between the Carolingian and Byzantine empires. My intent had been a respite from the “powerful and sinister drama” of late antiquity, the social transformations of political power and its rituals which had formed the subject of *Eternal Victory*.

When I had about concluded the research for the diplomacy book, I sat down to write a brief chapter describing how two early medieval courts communicated. Within a few weeks it became clear that my prosopographical study of diplomats had uncovered much new evidence. A few months more of research, and I was back at Dumbarton Oaks to present a first sketch of my findings in an informal talk. I no longer remember everyone in the small group who attended that talk, but I do recall that my friends Alexander Kazhdan and David Jacoby were present. Both levied vigorous criticism of the sort that we all most enjoyed, even as they lent me further important evidence for my findings. Alexander, in particular, objected to detecting broad shifts in the infrastructure of Mediterranean shipping and transport on the basis of “only sixty pieces of evidence,” sixty instances of long-distance communication. We all laughed when I retorted that complaining about “only” sixty witnesses was rather unbecoming to a Byzantinist. But I took his point, and have spent no small effort in deepening the research in order to expand the evidentiary base. Conversations with my friend John Baldwin urged me on in seeking independent series of data against which to test the patterns, and the intellectual stimulus of The Seminar of the Department of History of the Johns Hopkins University showed me some places to look for them, particularly when I listened to papers and comments by Philip Curtin and Richard Goldthwaite. The “pieces of evidence” are now some ten times what they were, and the patterns observed that distant day still hold. But others have emerged alongside them.

Cambridge University Press

978-0-521-66102-7 - Origins of the European Economy: Communications and Commerce, A.D. 300-900

Michael McCormick

Frontmatter

[More information](#)

## PREFACE

The move to Cambridge both slowed and deepened progress. No one who examines the footnotes of this book will fail to recognize that it was written in Widener Library. This book owes an incalculable debt to the men and women, librarians, scholars, and benefactors who have made that library great: without it, and them, it would never have been written in this way.

At Harvard University, I have been immensely stimulated by my colleagues and students, particularly in the Department of History. Thomas N. Bisson, in particular, has exemplified collegiality in every way, and so made this book possible also. I am grateful to the Department for its handsome support of this project, especially to my colleagues David Blackburn, Chair, Patrice Higonnet, Chair, Publications Committee, and Mark Kishlansky. To list the colleagues who have sparked my thinking in the last eight years would make this a very long preface indeed. But I cannot fail to mention the most stimulating interlocutors of all: the justly fabled students, graduate and undergraduate, whose probing, thoughtful questions push all of us ever forward in our understanding of our subjects.

Special thanks are due to a few colleagues who helped me in areas where I dared not help myself. Bernard Septimus and, while on a visit, Robert Brody made an invaluable contribution to this book by introducing me to important new Hebrew evidence. Roy Mottahedeh generously aided me by deciphering the inscriptions on some Kufic dinars. Michael L. Bates provided precious expertise on the Arab coins. Horace Lunt has helped me more than once with his piercing insight into the linguistic (and other) jungles of Old Church Slavonic. At Dumbarton Oaks, Irfan Shahîd kindly labored over an Arabic text on my behalf. There too, Philip Grierson has taught me much. It is due to long years there, across the hall from Philip, and his unfailingly kind and thoughtful answers to my questions that I dared to venture as far into numismatics as I have. The last part of this book was written up in the splendid circumstances afforded me by my friend and colleague, then Director, Angeliki Laiou, during a spring leave at Dumbarton Oaks. I am not about to forget the stimulus of my conversations there, especially during the questions that followed the public presentation of my findings in the very room where the first results had been discussed nine years earlier. Irene Vaslef and her assistant Mark Zapatka worked wonders in obtaining for me books and articles which wandered far beyond the ample confines of Byzantium. Thrice in recent months I had the privilege of discussing my findings in depth with Dietrich Claude, whose gift of his own book on the subject had sharpened my interest long ago. It was with great sadness that I learned of his death two weeks after our last meeting.

My weekly swims with Paul Meyvaert have exercised the mind no less than the body. Poor Paul has had many a theory tried on him in the slow lane of Blodgett Pool; rarely did he fail to suggest a further reference. Telephonic, electronic, and face-to-face conversations with Guy Philippart and his comments have been a

Cambridge University Press

978-0-521-66102-7 - Origins of the European Economy: Communications and Commerce, A.D. 300-900

Michael McCormick

Frontmatter

[More information](#)

#### PREFACE

continuing source of stimulus, especially on hagiography, but on much else as well. The John Simon Guggenheim Memorial Foundation made possible the research on diplomacy out of which this book was born. That it was born at all in the intended fashion reflects the support of my editor, Mr. William Davies; Ms. Philippa Youngman's meticulous copy-editing has made this a better book.

From beginning to end, this book has benefited from the serene and happy home that Magda has created for all of us. Thomas Kennedy and Elena Sylvie have borne patiently Daddy's isolation upstairs with his computer and books. My brother Tom, Cathleen McCormick, and my other cousins and aunts have listened tolerantly and sometimes even enthusiastically to descriptions of my work. Tonawanda has continued to provide a warm refuge from the rigors of academe, in the home of my mother, and amidst the watchful friendship of Mary Lou and Rose Marie Metzger.

Our home in Tonawanda holds fond memories of the two scholars to whom this book is dedicated. To have known and worked closely with one such scholar is privilege enough for a lifetime. Twenty-six years of knowing and learning from Léopold Genicot and nineteen with Alexander Kazhdan seem an unfair share for any one historian. Both followed the development of this study closely, and urged me onward. To their memory and example it is respectfully dedicated.

15 August 1999  
Tonawanda, New York

ABBREVIATIONS

AASS	<i>Acta sanctorum</i> , 3rd edn, Paris, Rome, Brussels, 1863–.	BMGS	<i>Byzantine and Modern Greek Studies</i> , Oxford, 1975–.
AAWG	Abhandlungen der Akademie der Wissenschaften in Göttingen, Philologisch-historische Klasse, 3rd series.	BS	<i>Byzantinoslavica</i> , Prague, 1929–.
AB	<i>Analecta bollandiana</i> , Brussels, 1882–.	BSFN	<i>Bulletin de la Société française de numismatique</i> , Paris, 1948–.
ACO	<i>Acta conciliorum oecumenicorum</i> , ed. E. Schwartz et al., Berlin 1914–.	BZiel	J. F. Böhmer and H. Zielinski, <i>Die Karolinger im Regnum Italiae</i> , <i>Regesta Imperii</i> 1, 3, 1; Cologne, 1991.
BAH	<i>Berichte über die Ausgrabungen in Haithabu</i> , Neumünster.	CBSDO	<i>Catalogue of Byzantine Seals at Dumbarton Oaks and in the Fogg Museum of Art</i> , ed. J. Nesbitt and N. Oikonomides, Washington, DC, 1991–.
BDHIR	Bibliothek des [Preussischen] Instituts in Rom, Tübingen.	CC Cont. Med.	<i>Corpus christianorum, Continuatio mediaevalis</i> , Turnhout, 1971–.
BHG	F. Halkin, <i>Bibliotheca hagiographica graeca</i> , 3rd edn, SH 8a; Brussels, 1957; <i>Auctarium</i> , SH 47; Brussels, 1969.	CCL	<i>Corpus christianorum, series latina</i> , Turnhout, 1953–.
BHL	<i>Bibliotheca hagiographica latina</i> , SH 6 and 12; Brussels, 1898–1901; H. Fros, <i>Novum supplementum</i> , SH 70; Brussels, 1986.	CDL	<i>Codice diplomatico longobardo</i> , ed. L. Schiaparelli et al., FSI 62–6 (1929–86).
BibS	<i>Bibliotheca sanctorum</i> , Rome, 1961–.	CFHB	<i>Corpus fontium historiae byzantinae</i> , Washington, Vienna, etc. 1967–.
BM	J. F. Böhmer, E. Mühlbacher, et al., <i>Die Regesten des Kaiserreichs unter den Karolingern</i> , <i>Regesta imperii</i> , 1; 3rd edn, Hildesheim, 1966.	ChLA	<i>Chartae latinae antiquiores</i> , ed. A. Bruckner et al., Olten etc., 1954–.
		CPG	M. Geerard, <i>Clavis patrum graecorum</i> , Turnhout, 1974–87.
		CSEL	<i>Corpus scriptorum ecclesiasticorum latinorum</i> , Vienna, 1866–.



LIST OF ABBREVIATIONS

DACL	Dictionnaire d'archéologie chrétienne et de liturgie, ed. F. Cabrol and H. Leclercq, Paris, 1907–53.	DOP	Dumbarton Oaks Papers, Washington, DC, 1941–.
D Arnulf	Die Urkunden Arnolfs, ed. P. Kehr, MGH Die Urkunden der deutschen Karolinger 3 (1940).	EI	Encyclopaedia of Islam, 2nd edn, ed. H. A. R. Gibb et al., Leyden, 1955–.
D Ch III	Die Urkunden Karls III., ed. P. Kehr, MGH Die Urkunden der deutschen Karolinger 2 (1936–7).	FSI	Fonti per la storia d'Italia, Rome, 1887–.
D ChB	Recueil des actes de Charles II le Chauve, roi de France, ed. G. Tessier et al., Chartes et diplômes relatifs à l'histoire de France, 8; Paris, 1943–55.	FMRZD	Die Fundmünzen der Römischen Zeit in Deutschland, ed. M. R. Alföldi, Berlin, 1960–.
D L II	K. Wanner, ed., Die Urkunden Ludwigs II., MGH DDKar 4 (1994).	Grumel <sup>2</sup>	V. Grumel and J. Darrouzès, Regestes du patriarcat de Constantinople, Paris, 1972–.
D LG	Die Urkunden Ludwigs des Deutschen, Karlmanns und Ludwigs des Jüngeren, ed. P. Kehr, MGH Die Urkunden der deutschen Karolinger 1 (1934).	HBN	Hamburger Beiträge zur Numismatik, Hamburg, 1947–.
D Loth I	Die Urkunden Lothars I. und Lothars II., ed. T. Schieffer, MGH DDKar 3 (1966).	ILS	Inscriptiones latinae selectae, ed. H. Dessau, Berlin, 1892–1916.
DD Imp	Diplomata imperii, 1, ed. K. A. F. Pertz (1872).	JE	P. Jaffé, P. Ewald et al., Regesta pontificum Romanorum ab condita ecclesia ad annum post Christum natum MCXCVIII, Leipzig, 1885–8.
DDKar	Diplomata Karolinorum, ed. E. Mühlbacher et al. 1– (1906–).	JESHO	Journal of the Economic and Social History of the Orient, Leyden, 1957–.
Dekkers	E. Dekkers, Clavis patrum latinorum, 3rd edn, Steenbrugge, 1995.	JRA	Journal of Roman Archaeology, Ann Arbor, 1988–.
DHGE	Dictionnaire d'histoire et de géographie ecclésiastiques, ed. A. Baudrillart et al., Paris, 1912–.	JRS	Journal of Roman Studies, London, 1911–.
DOC	P. Grierson, Catalogue of the Byzantine Coins in the Dumbarton Oaks Collection and in the Whittemore Collection, 2–3, Washington, DC, 1968–73.	Laurent	V. Laurent, Le corpus des sceaux de l'empire byzantin, Paris, 1963–81.
Dölger	F. Dölger, Regesten der Kaiserurkunden des oströmischen Reiches, 1, Berlin, 1924.	Lavrov	P. A. Lavrov, Materialij po istorii vozniknovenija drevnejšej slavjanskoj pis'mennosti, Akademija Nauk SSSR, Trudij slavjanskoj komissii, 1; St. Petersburg, 1930.
		LMA	Lexikon des Mittelalters, ed. R. Auty et al., Munich, 1977–99.
		Mansi	J. D. Mansi, Sacrorum conciliorum nova et amplissima collectio, Florence, 1759–98.

LIST OF ABBREVIATIONS

MBAH	Münstersche Beiträge zur antiken Handelsgeschichte, Ostfildern, 1982-.	PLRE	A. H. M. Jones et al., <i>The Prosopography of the Later Roman Empire</i> , Cambridge, 1971-92.
MGH	Monumenta Germaniae historica, Hanover, Berlin, etc.	Pros.	M. McCormick, "Early Medieval Travelers. A Mediterranean Prosopography, A.D. 700-900," in preparation.
AA	Auctores antiquissimi, 1877-1919.	QFIAB	Quellen und Forschungen aus italienischen Archiven und Bibliotheken, Tübingen, 1898-.
Capit.	Capitularia regum Francorum, ed. A. Boretius and V. Krause, 1883-97.	R1, R2	Appendix 4, Register of etc. Mediterranean Communications, no. 1, 2, etc.
Capit. episc.	Capitula episcoporum, 1984-.	RBPH	Revue belge de philologie et d'histoire, Brussels, 1922-.
Conc.	Concilia, 1893-.	RE	Paulys Realencyclopädie der klassischen Altertumswissenschaft, ed. G. Wissowa, Stuttgart, 1893-.
Epist.	Epistolae, 1889-.	REB	Revue des études byzantines, Paris, 1946-.
Form.	Formulae, ed. K. Zeumer, 1886.	RGA	Reallexikon der germanischen Altertumskunde, ed. H. Jankuhn et al., 2nd edn, Berlin, 1968-.
Poet.	Poetae latini, 1881-.	RIN	Rivista italiana di numismatica, Milan, 1888-.
SRG	Scriptores rerum germanicarum in usum scholarum, 1839-.	RN	Revue numismatique, Paris, 1838-.
SRL	Scriptores rerum Langobardicarum, 1878.	SB	Sitzungsberichte
SRM	Scriptores rerum merovingicarum, 1884-1951.	SC	Sources chrétiennes, Paris, 1941-.
SS	Scriptores, 1826-.	Setti-	Settimane di studi del Centro
NC	Numismatic Chronicle, London, 1838-.	mane	italiano di studi sull'alto medioevo, Spoleto, 1953-.
ÖAWD	Österreichische Akademie der Wissenschaften, Philos.-hist. Klasse, Denkschriften, Vienna.	SH	Subsidia hagiographica, Brussels, 1886-.
ODB	The Oxford Dictionary of Byzantium, ed. A. P. Kazhdan and A. M. Talbot, Oxford, 1991.	Syn. CP.	Synaxarium ecclesiae Constantinopolitanae, AASS, Nov. Propylaeum.
PG	Patrologiae cursus completus . . . series graeca, ed. J. P. Migne, Paris, 1857-86.	TIB	Tabula imperii byzantini, 1-, ed. H. Hunger, ÖAWD, 125, etc. Vienna, 1976-.
PL	Patrologiae cursus completus . . . series . . . ecclesiae latinae, ed. J. P. Migne, Paris, 1844-64.	TM	Travaux et mémoires, Paris, 1965-.