

Cambridge University Press

978-1-107-03023-7 - Time in Early Modern Islam: Calendar, Ceremony, and Chronology in the Safavid, Mughal, and Ottoman Empires

Stephen P. Blake

Frontmatter

[More information](#)

Time in Early Modern Islam

The prophet Muhammad and the early Islamic community radically redefined the concept of time that they had inherited from earlier religions' beliefs and practices. This new temporal system, based on a lunar calendar and era, was complex and required sophistication and accuracy. From the ninth to the sixteenth centuries, it was the Muslim astronomers of the Ottoman, Safavid, and Mughal empires, and not those of Europe, who were responsible for the major advances in mathematics, astronomy, and astrology. Stephen P. Blake's fascinating study compares the Islamic concept of time, and its historical and cultural significance, across these three great empires. Each empire, while mindful of earlier models, created a new temporal system, fashioning a new solar calendar and era and a new round of rituals and ceremonies from the cultural resources at hand. The hysteria that accompanied the end of the first Islamic millennium in 1591 also created a unique collection of apocalyptic prophets and movements in each empire. This book contributes not only to our understanding of the Muslim temporal system, but also to our appreciation of the influence of Islamic science on the Western world.

Dr. Stephen P. Blake is Professor Emeritus at St. Olaf College, Northfield, Minnesota, and Senior Research Fellow, Center for Early Modern History, University of Minnesota. His books include *Shahjahanabad: The Sovereign City in Mughal India, 1639–1739* (Cambridge University Press 2002), and *Half the World: The Social Architecture of Safavid Isfahan, 1590–1722* (1999).

Cambridge University Press

978-1-107-03023-7 - Time in Early Modern Islam: Calendar, Ceremony, and Chronology in the
Safavid, Mughal, and Ottoman Empires

Stephen P. Blake

Frontmatter

[More information](#)

To Meg, with love as always

To my children – Andrew, Edward, John, Paul, and Rachel

Cambridge University Press

978-1-107-03023-7 - Time in Early Modern Islam: Calendar, Ceremony, and Chronology in the Safavid, Mughal, and Ottoman Empires

Stephen P. Blake

Frontmatter

[More information](#)

Time in Early Modern Islam

*Calendar, Ceremony, and Chronology in the
Safavid, Mughal, and Ottoman Empires*

STEPHEN P. BLAKE

Center for Early Modern History, University of Minnesota



CAMBRIDGE
UNIVERSITY PRESS

Cambridge University Press

978-1-107-03023-7 - Time in Early Modern Islam: Calendar, Ceremony, and Chronology in the Safavid, Mughal, and Ottoman Empires

Stephen P. Blake

Frontmatter

[More information](#)

CAMBRIDGE UNIVERSITY PRESS

Cambridge, New York, Melbourne, Madrid, Cape Town,
Singapore, São Paulo, Delhi, Mexico City

Cambridge University Press

32 Avenue of the Americas, New York, NY 10013-2473, USA

www.cambridge.org

Information on this title: www.cambridge.org/9781107030237

© Stephen P. Blake 2013

This publication 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 2013

Printed in the United States of America

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

Library of Congress Cataloging in Publication Data

Blake, Stephen P.

Time in early modern Islam : calendar, ceremony, and chronology in the Safavid, Mughal, and Ottoman empires / by Stephen P. Blake.

p. cm.

Includes bibliographical references and index.

ISBN 978-1-107-03023-7 (hardback)

1. Islamic calendar. 2. Astronomy – Religious aspects – Islam. 3. Time – Religious aspects – Islam. 4. Islam and science – History. 5. Iran – History – Safavid dynasty, 1501–1736. 6. Mogul Empire. 7. Turkey – History – Ottoman Empire,

1288–1918. I. Title.

CE59.B63 2013

529'.327-dc23 2012023174

ISBN 978-1-107-03023-7 Hardback

Cambridge University Press has no responsibility for the persistence or accuracy of URLs for external or third-party Internet Web sites referred to in this publication and does not guarantee that any content on such Web sites is, or will remain, accurate or appropriate.

Cambridge University Press

978-1-107-03023-7 - Time in Early Modern Islam: Calendar, Ceremony, and Chronology in the Safavid, Mughal, and Ottoman Empires

Stephen P. Blake

Frontmatter

[More information](#)

Contents

<i>Preface</i>	<i>page</i> vii
<i>Acknowledgments</i>	xi
<i>Note on Transliteration</i>	xiii
Introduction	I
1 Safavid, Mughal, and Ottoman Empires	21
2 Calendar	48
3 Ceremony	76
4 Chronology: Era	107
5 Chronology: Millenarian	141
6 Conclusion	174
<i>Select Bibliography</i>	187
<i>Index</i>	193

Cambridge University Press

978-1-107-03023-7 - Time in Early Modern Islam: Calendar, Ceremony, and Chronology in the
Safavid, Mughal, and Ottoman Empires

Stephen P. Blake

Frontmatter

[More information](#)

Cambridge University Press

978-1-107-03023-7 - Time in Early Modern Islam: Calendar, Ceremony, and Chronology in the Safavid, Mughal, and Ottoman Empires

Stephen P. Blake

Frontmatter

[More information](#)

Preface

As the last of the great world religions, Islam entered a crowded spiritual arena. Although Mecca, the home of the prophet Muhammad, contained the central shrine of the pagan Bedouins, it also housed sizable Jewish and Christian communities. As a result, an early aim of the new community was to distinguish itself from the beliefs and practices of its neighbors. And one of its most radical departures was a thoroughgoing redefinition of the concept of time. In the Quran Allah had ordained a new calendar. The year was to be strictly lunar, 354 days, divided into twelve months of twenty-nine and a half days each. Although many early states had adopted lunar calendars (the Babylonians, Egyptians, Jews, and Greeks, for example), their eras were lunisolar. That is, in order to keep the calendar (and its ceremonies and rituals) in rough synchronization with the seasons, these states added an extra month every three years or so. However, because Allah had expressly prohibited a thirteenth month, the strictly lunar era of the Muslims contained no lengthened years. Rather, the 354-day year of the lunar era regressed against the 365-day year of the solar era at the rate of 11 days per cycle. In thus cutting the calendar loose from the seasons, the new religion gave birth to an intense preoccupation with time – defining it, measuring it, celebrating its peak moments. In the years after Muhammad's death the introduction of new rituals accelerated the process of redefinition. A month of fasting and a pilgrimage month required a precise determination of the phases of the moon, and the five daily prayers demanded an accurate timetable of the sun's movement across the daytime sky.

Because in the premodern world time was measured by the movements of the heavenly bodies (the earth, sun, moon, the five visible planets, and the

Cambridge University Press

978-1-107-03023-7 - Time in Early Modern Islam: Calendar, Ceremony, and Chronology in the Safavid, Mughal, and Ottoman Empires

Stephen P. Blake

Frontmatter

[More information](#)

visible stars) and not by mechanical devices (clocks or watches), the new temporal system created a new dedication to astronomy. In premodern Eurasia, astronomy was the queen of the sciences, reaching (according to a modern historian) “a much higher level of accuracy and sophistication than any other science.”¹ And from the middle of the ninth century until the middle of the sixteenth it was the Islamic astronomers in the observatories of Isfahan, Maragha, and Samarqand, not those in Paris, London, or Rome, who achieved the major advances in the science. Not until Tycho Brahe in the late sixteenth century did the Europeans match the equipment, precision, and mathematical sophistication of the Islamic astronomers.

In the premodern Islamic world, the astronomer/astrologer (Persian, *munajjim*; Turkish, *munecim*) was the time expert. Not only was he responsible for establishing the observational and mathematical parameters of the new temporal system, but he was also given the task of working out its astrological components. Although astrology also defined a temporal order dependent on the heavenly bodies, it was a completely unscientific construct. The time of the astrologer was symbolic, eschatological, and millennial. Having constructed a horoscope or chart of the heavens, the astrologer foretold the future for individuals, communities, and nations. He determined the appropriate time for undertaking or avoiding activities. He revealed the hidden patterns of the cosmos – the eclipses and conjunctions, the comets and shooting stars – that predicted the triumphs and disasters of the terrestrial world.

By the early modern period, three great empires had come to rule the Islamic world – the Mughal (1526–1739) in India; the Safavid (1501–1722) in Iran; and the Ottoman (ca. 1289–1923) in Anatolia, the Balkans, Syria, Egypt, the Arabian Peninsula, and North Africa. Although all three had inherited the basic Islamic concept, their different cultural environments (Indic for the Mughals, Zoroastrian for the Safavids, and Christian for the Ottomans) meant that in each state different temporal systems emerged. These systems varied in three ways – calendrically, ceremonially, and chronologically. The calendrical difference revolved around the addition of one or more solar calendars to the liturgical lunar, the necessity in an agrarian state for a calendar that tracked the seasons. The ceremonial difference, by contrast, centered on the adoption of new public rituals, celebrations that reflected both the dynasty’s heritage and its need for legitimacy. Finally, the chronological issue was twofold: First, in an agrarian state with multiple

¹ Steven Weinberg, “The Missions of Astronomy,” *New York Review of Books* 56 (22 Oct. 2009): 19.

Cambridge University Press

978-1-107-03023-7 - Time in Early Modern Islam: Calendar, Ceremony, and Chronology in the Safavid, Mughal, and Ottoman Empires

Stephen P. Blake

Frontmatter

[More information](#)

Preface

ix

eras, how were the several dating systems managed? How many eras were employed and how were documents, orders, and histories dated? Second, how did the three empires handle the millenarian hysteria of the late sixteenth century? The Grand Conjunction of Jupiter and Saturn in 1583 and the end of the first Islamic millennium in 1591 caused a great deal of political, social, and economic disruption, throwing up an unstable collection of prophets and sects.

Cambridge University Press

978-1-107-03023-7 - Time in Early Modern Islam: Calendar, Ceremony, and Chronology in the
Safavid, Mughal, and Ottoman Empires

Stephen P. Blake

Frontmatter

[More information](#)

Cambridge University Press

978-1-107-03023-7 - Time in Early Modern Islam: Calendar, Ceremony, and Chronology in the Safavid, Mughal, and Ottoman Empires

Stephen P. Blake

Frontmatter

[More information](#)

Acknowledgments

I have long been interested in a comparative study of the three early modern Islamic empires. My introduction to the topic was in the early 1990s: two conferences at Harvard University on the political economies of the Mughal, Safavid, and Ottoman Empires. At that time I benefited from conversations with Bert Fragner, Metin Kunt, David Ludden, Burton Stein, and John Richards. My journey led me from Mughal India to Safavid Iran, and finally to the Ottoman empire. Along the way I received advice and encouragement from Stephen Dale, Andrew Newman, Charles Melville, Rudi Matthee, Muzaffar Alam, Chris Bayly, and Peter Bang. Two other early modern historians have been especially influential. Sanjay Subrahmanyam has written extensively and perceptively on a variety of topics in early modern Eurasian history, and Cornell Fleischer has been creative and especially insightful in his studies of millenarianism in the early modern Mediterranean world. Francis Robinson's article on shared knowledge was an early inspiration.

This book has been a long time coming, and I owe a great deal to the support of my family. I dedicate the final product to my children – Andrew, Edward, John, Paul, and Rachel – and to my wife, Meg. They provided entertainment and encouragement during the long months of composition.

Cambridge University Press

978-1-107-03023-7 - Time in Early Modern Islam: Calendar, Ceremony, and Chronology in the
Safavid, Mughal, and Ottoman Empires

Stephen P. Blake

Frontmatter

[More information](#)

Cambridge University Press

978-1-107-03023-7 - Time in Early Modern Islam: Calendar, Ceremony, and Chronology in the Safavid, Mughal, and Ottoman Empires

Stephen P. Blake

Frontmatter

[More information](#)

Note on Transliteration

I have adopted a simplified system of transliteration. Arabic and Persian words are rendered according to the system of the *International Journal of Middle East Studies* but without the diacriticals. Ottoman Turkish words are given in their modern Turkish form, and common words follow their spelling in the *IJMES* Word List. For most dates I employ the Common Era but, because of my topic, I also provide a good number of Hijra Era equivalents.

Cambridge University Press

978-1-107-03023-7 - Time in Early Modern Islam: Calendar, Ceremony, and Chronology in the
Safavid, Mughal, and Ottoman Empires

Stephen P. Blake

Frontmatter

[More information](#)
