PRAISE FOR

WHEN WAS JESUS REALLY BORN?

Weaving scientific and historical scholarship with theological and pastoral concern, Dr. Ware’s book provides a fresh, rigorous, and engaging new approach to an old issue. Although we must remain uncertain about the answer to the question the book’s title asks, When Was Jesus Really Born? offers new clarity about how Christians have seen time and history as revealing God’s presence and activity. This book deserves to be widely read by students and scholars, and by pastors and others exploring their faith.

—Rev. Professor Andrew McGowan
Warden, Trinity College, The University of Melbourne
Joan Munro Professor of Historical Theology, Trinity College Theological School

History really matters for Christians. Our faith is founded upon events from the past that really happened. The dates of these historical events have been so disputed that they have created many contradictory calendars, including the Western Gregorian calendar we use today.

Steven Ware focuses upon the dates of key events of the life of Jesus. The birth of Jesus of Nazareth—unlike the legendary births of many rulers of the ancient world—is essential to date, as an affirmation of the full reality of Jesus as a historical, rather than a merely mythological or spiritual, character. If Jesus was a real human being, then he must have been born on a specific date.

Upon what historical evidence does this claim of the true humanity of the person Jesus of Nazareth rely? This is the place where Ware’s painstaking labors come to our aid. When Was Jesus Really Born? offers a truly comprehensive reading of all of the calendars, timelines, church chronologies, and other materials that provide the evidence for dating the birth of our Lord. Ware shows how the calendar dates of Jesus’ conception, birth, death, and resurrection are inextricably connected with each other. With special emphasis upon the history of Christianity, Ware also creatively
portrays the history of timekeeping from ancient history to the present. This is a daunting and remarkable task.

Would you like to know what the biblical, historical, astronomical, and calendrical evidence shows about the dating of the life of Jesus of Nazareth? Then Ware’s book is essential to answer your questions. So, if you really want to know why December 25, 3 BCE may likely be the most viable date for the birth of Jesus, according to Ware and the Western calendar, read this book.

—Charles J. Scalise
Professor of Church History
Fuller Theological Seminary

“The most important event in human history,” is what Steven Ware the Christian called the birth of Jesus Christ. With his particular thoroughness and diligence, Steven Ware the scientist considered the question of when it all took place. Broad in scope, he pursues the topic purposefully.

For me, the name and personality of an author are synonyms of profound education, scientific thoroughness, and Christian conviction. Dr. Ware brings together his knowledge of the Bible, history, astronomy, the calendar, and chronometry to show us when Jesus was really born. The comprehensive, informative appendix should not go unmentioned.

I hope that this book will attract the deserved attention.

—Prof. Dr. Manfred Schukowski
Rostock, Germany
Retired Professor of History of Science
Author of Wunderuhren: Astronomische Uhren in Kirchen der Hansezeit (Schwerin: Thomas Helms, 2006), Sonne, Mond, und zwölf Apostel: Die Astronomische Uhr in der Marienkirche zu Rostock (Schwerin: Thomas Helms, 2012)

Debates on the precise dates of Jesus’ birth, his Passion, and Resurrection have been taking place since the early days of Christianity. Though we may not realize it, the Christian calendar affects the schedules and daily lives of most people throughout the world. The puzzles involved in synchronizing cosmic events within a rational calendar have stimulated the development of historical chronology in many ways. Steven Ware’s very readable book
explains the often complex issues and sets them in a wide historical horizon. His arguments for the dates in question—brought forward by a dedicated Christian—are persuasive, though they will certainly not bring the debates to an end.

—Prof. Dr. Gerhard Dohrn-van Rossum
Professor of Medieval History
Technical University of Chemnitz, Germany
Author of History of the Hour: Clocks and Modern Temporal Orders
(Chicago: University of Chicago Press, 1998)
WHEN WAS JESUS REALLY BORN?

EARLY CHRISTIANITY, THE CALENDAR, AND THE LIFE OF JESUS

STEVEN L. WARE

CONCORDIA PUBLISHING HOUSE • SAINT LOUIS
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“All true research and writing is autobiography,” my dissertation mentor once told me. The further my dissertation progressed, the more I discovered the truth of his statement. And although the present topic is far afield from that of my dissertation of years ago, my old friend might be pleased to know that his statement is now even more true than it was previously.

An item of my personal history which my parents shared with me at an early age was the fact that I had been born early on Easter Sunday morning. With a birthday in early April, I therefore assumed that it would coincide with Easter Sunday quite regularly. When I later discovered the error in my assumption and queried my parents about it, they simply answered that Easter had a habit of hopping all around the calendars of March and April. Then one Sunday morning in the 1960s when my restless adolescent mind was having perhaps as much success in listening to the sermon as Mister Bean in his later comedy sketch, I happened to be paging through our worship book, *The Lutheran Hymnal*, when I made the unexpected discovery which began my long journey toward the current project.

Near the end of all the liturgical details at the beginning of the text (only 170 pages) and just before the hymns, under the heading “Miscellaneous,” my eyes found delight and my mind began to find intellectual sustenance in lists and charts which were anything but miscellaneous matters to me. The first was the “Table of the Days on which Easter will Fall from 1941–2000,” followed by “A Table of the Movable Feasts and Festivals” and “A Table of Lessons for the Sundays, Feasts, and Chief Festivals of the Church Year.”¹ With no formal knowledge of Latin at the time, I was intrigued by the many

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¹ *The Lutheran Hymnal* (St. Louis: Concordia, 1941), 158ff.
Latin titles for Sundays in the church year, perhaps most notably by “Sexagesima Sunday.”

Aside from an introduction to the details of the ecclesiastical calendar, however, other bits of more personally relevant information became immediately apparent from even a cursory glance at the first two “tables.” The first was that Easter had occurred on my birth date eleven years before my birth—a pattern likewise followed with some other dates in late March and April. The second and less encouraging observation was that Easter would not again fall on the calendar date of my birth until sometime after the beginning of the twenty-first century. In addition, I learned from the second table concerning “the several days that Easter can possibly fall upon” that “several” had been stretched well beyond its usual limits to encompass the thirty-five possible dates for (western) Easter between 22 March and 25 April.

This book is about much more than the proper date(s) of Easter, of course. As the title suggests, it begins with an exploration of the date of Jesus’ birth. But the reader will soon become aware that the calendrical dates of Jesus’ birth, death, and resurrection are inextricably linked, and form one of the fascinating stories of early Christianity. As subsequent pages will show, I am far from the first to investigate the question of the dates of Jesus’ birth, death, and resurrection. In fact, this question and the related matters of time measurement have consumed some of the greatest minds of human history, and it is therefore with a palpable sense of humility that I have dared to enter this discussion.

In addition, I must gladly concede that I have not engaged in this investigation alone, but that my queries have been refined and augmented along the way by numerous other individuals who deserve recognition for their contributions. First of all, heartfelt thanks are due to the President and administration of Nyack College and Alliance Theological Seminary, whose generous support of this project in the form of both a sabbatical and a summer writing grant were essential

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2 Sexagesima Sunday is the second to last Sunday in the ecclesiastical calendar before Ash Wednesday. “Sexagesima” means “sixtieth,” referring to the approximately sixty days between this Sunday and Easter Sunday (actually 57). Quinquagesima (“fiftieth”), the last Sunday before Ash Wednesday (also known as the Feast of the Transfiguration), is mathematically correct as standing fifty days from Easter. See http://www.newadvent.org/cathen/13747a.htm.
to my ability to travel on multiple occasions to multiple countries and continents, and consequently to complete the necessary research. Secondly, I should recognize and thank the many students who have attended my courses at both campuses of Nyack College in New York City and Nyack, NY, for their patience in observing my progressive development of the material of this book over the past several years, and for their many questions and comments which pushed me to improve and clarify its message. Along with them, I must thank several of my colleagues among the Nyack faculty who have questioned and debated pieces of this material with me. Foremost among them is David A. Weir, Ph.D., Professor of History, whose interest in my topic, suggestions of additional resources, and relentless critique of numerous fine points in the manuscript added incalculable value to its final form.

Thanks are likewise due to the interlibrary loan staff at the Bailey and Wilson libraries of Nyack College for their patient efforts to locate numerous obscure and hard-to-find texts and journal articles from centuries past. Thanks are equally due to J. James Mancuso, Librarian at Northeastern Baptist College, for his many suggestions of additional materials and research assistance in finding them. Jim’s enthusiasm for this topic was rather naturally spurred by the fact that he also has a birthday within the range of possible dates for Easter, and furthermore because Easter occurs on the calendrical date of his birth more often than any other.

Thanks are due to individuals at a variety of churches, museums, and state and national parks—in several countries and across several continents—for their assistance in transportation, their enthusiastic sharing of information, and their permission to view and photograph precious artifacts and monuments. In particular, thanks are due to the special events officers at the Vatican Museum for granting special permission and a personal escort into the closed Pio Christian gallery for the purpose of viewing and photographing the sarcophagus of Hippolytus, without which my research would have been sadly incomplete. Thanks are also due to Uta Jahnke and Dr. Manfred Schukowski for their very thorough explanation of the operations of the astronomical clock at Marienkirche (Saint Mary’s Church) in Rostock, Germany. Their explanations not only confirmed some of the conclusions made in this text about the historical evolution of the
Easter (Paschal) cycle, but opened doors for further research and future academic collaboration.

My heartfelt thanks are equally due to the editors and production assistants at Concordia Publishing House, without whose partnership this project would not have come to its final form. Thanks are particularly due to the Reverend Edward A. Engelbrecht, (former) Senior Editor for Professional and Academic Books, whose initial interest in my manuscript launched its long journey through the publication process. Thanks are also due to Laura Lane, Associate Editor of Professional and Academic Books, who guided the proposal through the necessary approvals. And thanks are equally due to Sarah Steiner, Production Editor for Professional and Academic Books, whose insights and very patient answers to my many questions were always accurate, helpful, and knowledgeable. In addition, thanks are due to the Rev. Dr. Larry Myers who, along with the aforementioned Dr. David Weir, served as a peer reviewer of the manuscript and thereby added immeasurably to its value.

Finally, it must be admitted that mere words are woefully inadequate to express my deepest heartfelt thanks to my wife Rebecca, to whom this book is most deservingly dedicated. She has been an absolutely faithful companion in all of life’s endeavors for more than thirty years, and a wonderful mother to our three children. Consequently, she has struggled with me through the long evolution and maturation of the topics contained in this book. She has been a most enthusiastic travel and research partner to literally hundreds of locations in dozens of countries on five continents. (It was she who refused to let me give up when we discovered that the Pio Christian collection at the Vatican Museum was closed!) And she has never been afraid to bring my far-ranging ruminations back to earth with the simple question of their relevance. I can never thank her enough.

My debt to my wife is exceeded only by my debt to Almighty God, who loved me enough not only to pay the debt of my sin through the death and resurrection of His Son Jesus Christ, but also to choose me as one of His own, give me the strangest of all birthdays, and then challenge me to somehow figure it out.

New York City
11 January 2013
INTRODUCTION

A SEASON FOR REASON

WHY A BOOK ON EARLY CHRISTIANITY, THE CALENDAR, AND THE LIFE OF JESUS?

The modern dilemma concerning Jesus’ birth and celebrations thereof was illustrated sharply in the New York metropolitan area in November 2010. At the New Jersey entrance to the Holland Tunnel a billboard was leased by American Atheists with the message “You know it’s a myth. This season, celebrate reason.” The image behind the message was that of the wise men following the star and riding their camels toward Bethlehem. Spokespersons for American Atheists claimed that they were not making an anti-Christian or anti-Christmas statement, but that they merely wished to “celebrate reason,” as the sign stated. One might wonder, however, why they chose not to illustrate their billboard with a dreidel and menorah or other images of the Jewish feast of Chanukah being celebrated at the same season, or why they chose not to illustrate their sign with images of the Muslim feast of Ramadan, celebrated just weeks previously. Fortunately, the tension was somewhat defused when the Catholic League put up a billboard on the Manhattan side of the tunnel stating, “You know it’s real. This season, celebrate Jesus.”

Indeed, in our modern post-Christian society, matters concerning the birth of the historical person Jesus and Christian claims about the uniqueness of the circumstances of his birth are relegated to the realm of faith and myth—widely respected, yet also widely disrespected and ignored. Even though many churches typically see their largest crowds of worshipers on Christmas Eve (or on Easter Sunday), a
large percentage of their neighbors are just as happy if no religious meaning at all is attached to what is otherwise a holiday full of feasting and materialistic pleasures. In fact, many moderns would greatly prefer that Christians would keep their faith to themselves as a purely private matter and not engage in large and highly publicized worship events to mark the holiday, since talk of a Messiah sent to save humanity carries with it the uncomfortable moral message that humans are sinners who actually need a Messiah.

For the vast majority of Christians, however, who prefer not to relegate their faith to the realm of myth or confine their faith to a privatistic box to be opened only in the friendly confines of like-minded individuals, this is a matter to be treated with utmost seriousness and care. To a limited degree, the dismissive and impatient reactions are readily understandable, given the voluminous and sometimes divisive history of discussions regarding the birth of Jesus and the celebration thereof. Yet like all great issues of pivotal significance in human history, it is not possible or even advisable to close the discussion, especially when new and previously unattended information offers to shed new light on an old issue.

In this book the author seeks to engage a foundational question behind Christian faith and practice for most of the past 2,000 years—the date of the birth of the Messiah, the Lord and Savior Jesus Christ. As succeeding chapters will show, however, the equally engaging question for Christians is that of the likely dates of his death and resurrection, and how the celebration of Jesus’ resurrection developed into the Paschal, or Easter cycle we know today. In attempting to locate these dates, this author is dependent upon the historical clues given in the Bible, and likewise upon the chronological assertions of authors—especially Christian authors—during the first several centuries of the Christian era. Indeed, it is the assumption of this author that a most fruitful avenue of investigation for this issue is to consult those who were among the first to confront these matters.

Consequently, the conclusions regarding the chronological dates of Jesus’ life which are drawn by this investigation will be twofold: First of all, we will endeavor to establish the most likely calendar dates of Jesus’ life, based on biblical, historical, and calendrical evidence. Secondly, we will follow the development of early Christian calculations of the essential dates of Jesus’ life, especially with regard to their understanding of time, calendars, and the divine
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redemptive plan. Moreover, we shall see that although we cannot often claim scientific accuracy or historical certitude for early Christian calculations, we can nevertheless assert that they are genuinely “Christian” and ancient answers to the question. And by their status as certifiably ancient Christian answers, it is secondarily hoped that they offer viable insights on this matter of historic import.

The interested reader who takes the time to browse through the literature regarding the birth date of Jesus or executes an online search is immediately confronted with a plethora of general interest articles, as well as other articles representing a wide variety of perspectives and sub-categories of the larger issue. For to do this is to enter into an arena which has engaged many great minds of centuries past and present who have given it serious debate on biblical, historical, and astronomical grounds, and in whose presence this author enters with deep humility and reverence. In fact, when one considers not only the volume of the material, but especially the sources of information used by early Christians and the manner in which they constructed their understanding of the chronological details of the life of Jesus, it becomes apparent that it is Christians who have consistently employed reason in this matter while atheists have simply substituted “reason” for non-belief. Therefore, mindful of the greatness of his company compared with his own minute contribution, it is not the intention of this author to offer final answers to the many matters of debate, although a brief review of some of those matters is given in succeeding chapters. It is hoped, rather, that renewed attention to the questions surrounding the calendar dates of Jesus’ life may shed new light on the world of early Christianity.

A BRIEF OVERVIEW

This book is about the birth of Jesus. Yet it is also about his resurrection, early Christianity, and the historical evolution of our calendar. The first chapter provides a summary of the variety of issues and debates surrounding the birth date of the historical person of Jesus. What historical clues are given in the Bible and other sources concerning people, places, or situations at the time of Jesus’ birth? How do those clues fit into the calendars of the period?

A short description of this author’s thoughts concerning early Christian dating for the birth of Jesus is given, although additional reading in later chapters is necessary for a fuller understanding of the
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matter. In addition, the reader will be introduced to two matters of historical debate which have engaged both Christians and non-Christians: The first is Saturnalia, an ancient pagan celebration of the birthday of the sun occurring in late December, which some have claimed was simply co-opted by Christians and overlaid with the celebration of Jesus’ birth. The second is that of the World Week—a belief that the entirety of God’s redemptive plan for human history is to be accomplished within the span of six thousand years.

Chapter Two begins the exploration of the larger issues involved when asking the question of the birth date of Jesus—the matter of timekeeping. It starts with the experience of our early ancestors—the first farmers—whose existence was dominated first and foremost by the necessity of procuring or producing enough food for survival to the next day, the next season, and the next year. Why was time measurement such an important matter for those living such an apparently simple existence? How is it that ancient civilizations came up with numerous stunning advancements in time measurement? What were the first calendars like? And how was time measurement linked to religious observances?

Chapter Three will observe some of the basic facts of earth science and astronomy which were slowly grasped by our ancestors in learning to measure time. Why is it that the task of time measurement was so difficult for so long? What is meant by terms such as “ecliptic,” “Tropical Year,” or “Sidereal Year”? How are these related to the construction of calendars? And finally, are the multiple astronomical factors of imprecision in time measurement perhaps an indication of divine origin of the cosmos?

Chapter Four focuses on the rise of Christianity and its unmistakable impact on the measurement of time. While most moderns are aware of the fact that the western chronological system is based on the approximate date of the birth of Jesus—hence the title of this text—we will see that the more important matter for early Christians was determining the proper date for the celebration of Jesus’ death and resurrection from the dead. Furthermore, we will see how Christians disagreed among themselves over the proper date for celebrating Jesus’ resurrection. We will again confront the biblical input on the date of Jesus’ resurrection, and how the Jewish calendar impacted early Christian celebrations of the resurrection. Moreover, we will observe early Christian conceptions of world history and their
linkage to debates over the proper date for the celebration of Jesus’ resurrection.

Chapter Five focuses on the person at the center of most discussions of Christianity and chronology—the sixth-century monk Dionysius Exiguus. An often-ignored but truly influential scholar of the early medieval period, it was he who designed the western or Christian chronological system under which most of the world presently dates itself. Understandably, his work received increased attention in recent years with the approach of the twenty-first century and third Christian millennium. He has been critiqued rather heavily in recent years with regard to both his chronological calculations and his theological perspectives. This chapter will seek to answer such questions as exactly what he was attempting to accomplish and why. Was he aware of his apparent error in calculating the birth date of Jesus? Was he even aware of the latest advances in chronological calculation prior to his own work? What was the impact of Dionysius’ Paschal cycle and invention of the “Christian Era”? And finally—based on knowledge of the work of Dionysius and early Christian understandings of calendars—we will return to some of the matters of debate in chapter one concerning the essential dates of Jesus’ life.

Chapter Six tells the story of the Christian role in more recent advances in timekeeping. Beginning with the often-misinterpreted trial of Galileo Galilei by Roman Catholic authorities in 1633, it investigates the role of Christians, and especially of the Roman Catholic Church, in scientific advances in timekeeping both before and after that tragic event. We will look backward at the calendar revision of 1582 initiated by Pope Gregory XIII and its gradual adoption by nations both Catholic and Protestant. Why was this revision necessary, and what was its connection to the celebration of Jesus’ resurrection? We will also look forward past the trial of Galileo to the Church’s further patronage of the science of time measurement in the construction of meridiane—simple lines for marking the solar position—which were placed in several cathedrals. Why this further patronage, even after the calendrical revision? And what does this say about the popular perception of the relationship between Christianity and scientific endeavors?

The Epilogue considers one of the odd consequences of the Gregorian calendrical revision—the development of All Fools’, or April Fools’ Day. It also takes us to the future, if only momentarily,
to consider lingering questions with regard to Jesus’ birth and chronology, with a few brief thoughts on the ongoing popularity of eschatology among Christians: Does the beginning of the current millennium have anything to do with the date of Jesus’ return? If not, are there perhaps other dates of Christological significance coming soon which should be celebrated? More importantly, how should Christians view themselves in relation to time?

As the reader can see by this point, this book is not intended as a Bible commentary or devotional guide to the birth narratives of Jesus in the gospels of Matthew and Luke. Nor is it an attempt at a general history of time measurement. That task has been accomplished rather adequately already by several earlier authors. Nor is this book about time as it regards debates about the absolute age of our earth or the universe, although at least a few such calculations will quite naturally be noted as we deal with the issues connected to an investigation of Christmas, Easter, and ancient calendars. Nor is this primarily a text of astronomy and earth science, although one chapter is devoted to a few of the basic facts of that discipline which form one of the foundations of this study.

Nor does this book attempt to delve into scientific questions regarding the nature of time beyond our immediate experience of it on planet Earth—the realm of Newton’s mechanics, Einstein’s special and general theories of relativity, or quantum mechanics. Nor is this a study of the evolution of time-keeping instruments, although some

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2 A worthwhile text for Christians in this regard is *Three Views on Creation and Evolution* (J. P. Moreland and John Mark Reynolds, eds. Grand Rapids: Zondervan, 1999). As the title indicates, it compares and contrasts the variety of views Christians have taken on this matter.

of the individuals and groups mentioned herein were centrally involved in their creation. Nor will this text dedicate large amounts of space to the wide variety of non-Christian calendars in the ancient world or at the present, although occasional mention of their contributions to the progress of accurate time measurement, and especially their contributions to the Christian story, is quite naturally included. As the reader will undoubtedly realize before turning very many pages, to a small extent it could be said that this book is about a particular understanding of human history—the Christian understanding of history—although in the end it is really more about Christians and their attempts to understand time itself.

Numerous times this author has told himself that he should have written this book twenty years ago. At that time, as humanity was approaching the end of the twentieth century and of the second Christian millennium, the attention of many people—although for most only momentarily—was naturally focused on the historical question of the precise end of that century and millennium and the beginning of the next. At the end of the twentieth century some were also asking the religious question of whether there was any cosmic significance to the big change in numbers—whether the new millennium was a harbinger of the imminent return of Jesus (or of some other Messiah), of earth-shaking cataclysms, or of a new world political order. Perhaps my publisher would have appreciated the boost in sales engendered by such fortuitous timing. Aside from the answers for the long delay which are matters of personal and professional history, however, it is hoped that a long engagement with this topic will yield fruitful results which would not have been part of the discussion in the late twentieth century, at least not by this author.


Furthermore, it is hoped that the value of this topic, especially for Christians, will be seen to extend far beyond immediate chronological and eschatological questions.

A glance at the bibliography at the conclusion of this text will reveal that this is far from the first attempt to investigate the essential dates of the birth of Jesus, or the conjunction of chronology and Christianity, despite the apparently arcane nature of the subject. The advent of the internet has given a whole new venue for discussion of these matters, as it has for everything else as well. The brilliance of numerous earlier authors in matters of chronology, astronomy, mathematics, liturgical observance, and political and theological history provide benchmarks to which the present writer can only aspire. Many of them are referenced in the following chapters where they provided invaluable assistance. Yet what seems to have been muted or even discounted in some recent discussions of chronology, or even of Christian celebrations such as Christmas and Easter, is the profoundly Christian story of true believers—even covered as they were with the warts of human self-interest and limitations—who were recipients and vessels of divine grace making an impact on their world. It is that story of faith, alongside the matters of academic investigation, to which the reader is invited herein.

One lesson learned quickly by most of us who have engaged in the world of academic research and writing is that there is rarely a final word on anything. Regardless of how exhaustive and comprehensive our research, and in spite of the apparent persuasiveness of our arguments and conclusions, it is inevitable that some among the readership will feel that the evidence is one-sided or incorrectly analyzed, or that some small bit of information has been omitted which may lead to an entirely different conclusion of the matter. This is no less the case in the matter at hand, which is perhaps a way of recognizing that it is not so simple a matter as it may initially appear. As the following pages will show, determination of the essential dates of Jesus’ life is anything but a simple matter. In addition, the accurate measurement of time has been in fact a rather difficult matter for most of human history, and has therefore attracted the attention of some of the best minds in human history. So my apologies are hereby expressed to any readers who feel that their viewpoint has been slighted, undocumented, or misrepresented in this text. At the same time, however, the primary purpose of this text is to
present the story of Christian efforts to understand and measure time, and especially to worship the God who created time. While this study is not intended to be exhaustive, it is the intention of this author to give consideration of the variety of attempts to date the life of Jesus, and furthermore to understand and measure time—a variety which is in fact a central part of this very human story.
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One of the first lessons of United States history which has been learned in multiple generations by millions of school children across the wide expanse of the country is that the first American president, George Washington, was born on 22 February 1732. That date is now somewhat easier to remember since the creation of Presidents’ Day as a national holiday. Since both Washington and that other most famous of American presidents—Abraham Lincoln—had February birthdays, the US Congress deemed it appropriate to set aside a day to honor the chief executives of our government on the third Monday of the shortest month of the year. Similarly, millions of students in the United Kingdom have been taught to remember the birth date of their dearest queen—Elizabeth I—on 7 September 1533, and her date of death on 24 March 1603.

But are these dates indeed accurate? Astute observers of dates will note that careful biographical essays stipulate that both England and her colonies were using the “Old Style” calendar during the lifetimes of both of these crucially influential individuals. As noted later in chapter six, a reform of the calendar had been proclaimed by Pope Gregory XIII in 1582, but many Protestant nations such as England were slow to adopt it because it was viewed as one more papal attempt to regain control in lands that had rejected papal authority. The Pope’s new calendar—surely an improvement on the old Julian calendar from the first century BC—had eliminated ten days from October 1582 in order to bring the calendar into conformity with planet Earth’s astronomical relationship with the sun. Furthermore, the Pope’s decree had adopted 1 January as the official beginning of the civil year, replacing the former orientation around 25
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March. Consequently, a birth certificate for the date of Washington’s birth would have stated 22 February 1731, since at that time the English understanding of the year still began with 25 March. Likewise, it is quite accurate to say that Queen Elizabeth I actually died on the last day of 1602.

What do the birth and death dates of an American president and a British queen have to do with a discussion of the birth date of Jesus, let alone the dates of his death and resurrection? As these simple examples show, it was only a few centuries ago that our ancestors lived by a calendar which most of us would find rather strange and somewhat difficult to use today. More importantly, it brings us face-to-face with the small but unavoidable inaccuracies which have plagued most calendars through most of human history.

“What would you say is the calendar date of Jesus’ birth?” This question has been posed by this author to groups of listeners in both churches and the academic classroom. Typical answers include 25 December in the year 1 BC, AD 1, or 0 BC/AD. On the other hand, numerous people have heard critiques of the 25 December date, and so instead assert that he was more likely born in January, in the spring, or in early autumn. Some have claimed that the 25 December date was a Catholic invention intended as an overlay for the pagan Roman festival of Saturnalia, and was used by the church to make money from believers who would travel to a holy site for the occasion. Others have flatly stated that the calendar date of Jesus’ birth makes absolutely no difference to them, and that it probably had little significance for early generations of Christians.

Given the lack of calendrical specifics in the Biblical narratives of Jesus’ birth, it is tempting to go along with at least the last of those statements and simply celebrate the spiritual meaning of Jesus’ birth—the fact that God loved sinful humans enough to become one of us in the person of his Son Jesus, and further, to die a sacrificial death for our sins and to rise from the dead in victory over sin and death. Yet that very statement includes recognition of something more than just a spiritual event. “But after all,” someone will say, “the death and especially the resurrection of Jesus are ultimately more important than his birth, are they not?” While the apparent answer is “Yes,” we are nevertheless in danger of missing the deeper significance of the matter if we view it as merely a spiritual matter
and forget the fact that there was a specific moment in human history when God the Son became incarnate in human form.

To put it another way, even though it may be ultimately less important than the spiritual meaning of Jesus’ life, there is an unmistakable quality of historicity and chronology in the event of the life of Jesus and how the events of his life were celebrated by his followers—a quality that should not be missed by those who claim to be his followers 2,000 years later. This book is one attempt to understand more accurately one of those historical aspects—the essential chronological dates of his life.

This chapter begins the investigation of the essential dates of Jesus’ life by introducing first of all the several matters of debate based on biblical, historical, and astronomical evidence—and where those bits of evidence lead us in determining the most likely date of Jesus’ birth. A second section reviews early Christian calculations of the date of Jesus’ birth, along with the theological and calendrical understandings which informed their statements. It is hoped, of course, that the reader will not be satisfied with a discussion focused merely on the date of Jesus’ birth, and will continue reading later chapters in order to grasp the larger picture—including the date of Jesus’ resurrection from the dead and its importance in the historical and calendrical understanding of early Christians. A third section discusses briefly the critique of the 25 December birth date of Jesus and its alleged connection to the Roman festival of Saturnalia. A final section widens the scope by introducing two long-standing concepts of historical interpretation which have informed the understanding of millions of Christians—the integral age of the prophets and the World Week.

**Jesus’ Birth Date: A Review of Biblical, Historical, and Astronomical Debates**

From the standpoint of Roman history and biblical studies, there are several prime issues to be engaged when considering the likely birth date of Jesus. One of those prime issues is the ostensibly assumed date of Jesus’ birth as implied in the chronology of sixth-century monk Dionysius Exiguus. It was Dionysius who constructed the western (Christian) chronological system—the same dating system in use throughout most of the world today. Although nowhere in his writings does Dionysius forthrightly state his chosen date of Jesus’
WHEN WAS JESUS REALLY BORN?

birth, most scholars who have studied his writings agree that his use of numbers points to 25 December 1 BC—just seven days before the beginning of the year known as AD 1. Dionysius and his chronological work will be discussed in greater detail in chapters four and five. But what can be stated here briefly is that Dionysius’ chosen date for Jesus’ birth has been widely criticized as being at least a couple years off the mark.

Why? The birth narrative of Jesus in the Gospel of Matthew (2:1–10) describes unmistakably the paranoia of Herod the Great when he heard that Magi had arrived from the east and were inquiring in Jerusalem about a newborn Messiah. After ascertaining from Jewish religious authorities that the Messiah was to be born in Bethlehem in fulfillment of Micah 5:2, he consulted with the Magi and told them to inform him of the infant Messiah’s whereabouts after they had completed their mission in finding him. According to most scholars of recent generations who have researched the date of Herod’s death, however, all of this was impossible in December of 1 BC because Herod had already died. Flavius Josephus, a Romanized Jew living in the late first century AD, claimed that Herod’s death took place thirty-four years after the death of his predecessor Antigonus and thirty-seven years after his royal recognition by the Romans. By several accounts, this date corresponds to 4 BC1—thereby leaving Christians with the rather strange and uncomfortable likelihood that Jesus was born a few years before Christ.

It should be noted that recent scholarship has pointed rather in the direction of 1 BC as the correct year of Herod’s death. This is based on the assertion that Josephus was incorrect in his dating of two crucial events—the death of Herod and the census mentioned by Luke in relation to the governorship of Quirinius. Concerning the date of Herod’s death, Steinmann has contended that the lunar eclipse mentioned by Josephus as occurring just before his death—and therefore an ominous sign—is not the partial eclipse of March 4 BC, but rather the full eclipse of January 1 BC. This date actually fits

1 Josephus’ account is found in Ant. XVII, 8. This has been confirmed by several as corresponding to 4 BC, although recent scholarship has revived the debate and suggested 1 BC as the true date. See Emil Schürer, A History of the Jewish People in the Time of Jesus Christ (New York: Scribner, 1896); Timothy David Barnes, “The Date of Herod’s Death,” JTS 19 (1968): 204–219; P. M. Bernegger, “The Affirmation of Herod’s Death in 4 BC,” JTS 34 (1983): 526–531; Harold W. Hoehner, “The Date of the Death of Herod the Great,” CKC, 111.
better with Josephus’ claim that Herod was nearly 70 years old at the end of his life. Furthermore, an eclipse in January leaves sufficient space for the several events Josephus describes between the eclipse and Herod’s death shortly before Passover, whereas an eclipse in March makes for an extremely compressed set of events.² Even with an assumption of Herod’s death in March of 1 BC, however, Dionysius’ apparent assertion of Jesus’ birth in December of 1 BC is nonetheless an impossibility.

A second biblical/historical debate has centered on Luke’s assertion (2:2) that the census which brought Joseph and the pregnant Mary to Bethlehem just before the birth of Jesus was “the first registration when Quirinius was governor of Syria.” It is well-known from other sources that a census was ordered by Caesar Augustus in 8 BC, although its execution in outlying and rebellious provinces like Palestine was inevitably delayed by a few years. One problematic matter is the identification of Quirinius as governor of Syria. Although he was indeed governor of Syria by the time of the next census in AD 6, Quinctilius Varus was the governor in 6–4 BC and therefore possibly at the time of Jesus’ birth. Consequently, it comes as no surprise to many that Josephus associated the census rebellion led by Judas the Galilean with the census in AD 6.³

Several possible solutions to this difficulty have been offered. Authors such as Crossan and Watts who distance themselves from commitment to historical reliability, let alone inerrancy of the biblical text, have asserted that Luke was simply wrong in his mention of Quirinius, or that he confused Quirinius with Quinctilius Varus.⁴ Other solutions more palatable to Bible-believing Christians include the assertion by both Steinmann and Rhoads that it was Josephus rather than Luke who was inaccurate in his dating of the census, and

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³ Josephus’ three accounts of Judas the Galilean are found in 1) Ant. XVII.6.2–4, 2) Ant. XVII 10.4–8, and 3) Ant. XVIII.1.1 [also in J. W. II.8.1].

GLOSSARY OF TERMS

Ab Urbe Condita, or Anno Urbis Conditae (AUC). Latin for “from the founded city,” or years since the founding of Rome in 753 BC.

Anno Domini (AD). Latin for “in the year of the Lord.” Our current AD chronological understanding originated with the Paschal Cycle of Dionysius Exiguus, denoting the purported number of years since the birth of Jesus Christ.

Anno Hijrah (AH). The chronological count of the lunar-based Muslim calendar. Begun in AD 622 with the “hijrah,” or flight of Muhammad and his followers from Mecca to Medina.

Ante Christum (AC). Latin for “before Christ.” Usage of this designation began with the Venerable Bede in his Ecclesiastical History and De Temporum Ratione in about AD 725.

Before Common Era (BCE). Although BCE can also denote “Before the Christian Era,” it is a modern designation equivalent to “Before Christ,” or “BC” which is usually intended to avoid specific recognition of the life of Jesus Christ.

Book of Jubilees. A Jewish text of the intertestamental period (probably mid-second century BC), which is largely a reworking and interpretation of the material of Genesis. It was well known among ancient Jews and early Christians, but has never enjoyed wide recognition of canonical status.

Calends (Kalends). Latin term denoting the beginning or first day of a month; source of our term calendar.

Century. Any period of one hundred years in length. The usual calendrical designation of a century, according to our system derived from Dionysius Exiguus, is that it begins on 1 January in the year ending with “__01,” and ends on 31 December in the year ending with “__00.”
Common Era (CE). Although CE can also mean “Christian Era,” it is a modern designation equivalent to “Anno Domini,” or “AD”—usually intended to avoid specific recognition of the life of Jesus Christ.

Decade. Any period of ten years in length. The usual calendrical designation of a decade is that it begins on 1 January in a year ending with “1,” and ends on 31 December of a year ending in “0.”

Dionysian Era. Another term denoting the period known as “AD” or “CE”—the period designated by Dionysius Exiguus as beginning with the birth of Jesus Christ.

Easter Cycle (Paschal Cycle). Any of several cycles of varying lengths developed by Christians during the first several centuries of the Christian Era with the purpose of establishing the date of Easter decades into the future. Cycles of 112 or 84 years were developed by the early third century in Rome, and soon thereafter cycles of 95 years (five consecutive Metonic cycles) were developed in Alexandria.

Ecclesiastical Calendar. Ekklesia (εκκλησία) is Greek for “those called out,” and has been used historically to mean “church,” or the corporate assembly of Christians. The ecclesiastical calendar is the annual schedule of holidays and feasts when Christians celebrate events in the life of Jesus or the history of Christianity—for instance, Christmas and Easter.

Ecliptic. The Earth’s tilt or inclination on its axis at nearly 23.5°. It is sometimes described as the intersection of the Earth’s equatorial plane with its orbital plane. It is because of the ecliptic that our planet has noticeable seasons, especially in the temperate zones. The temperate zones are those regions of the planet which are “above” the Tropics in latitude (23.5° or more north or south of the Equator) and “below” the polar regions (66.5° north or south of the Equator).

Embolism. A calendrical device employed by many ancient civilizations for the purpose of synchronizing lunar and solar cycles. Since the lunar cycle of just over 29.5 days does not
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