World History
A Concise Thematic Analysis
SECOND EDITION

II

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Volume II

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Introduction

TEACHING WORLD HISTORY at the college level presents an instructor with an especially difficult challenge. Unlike most historians who conduct courses in the study of a particular culture, nation, or region, those who teach World History ostensibly must have familiarity with the history of all the earth's peoples. As daunting as such a proposition is, the matter is far more complicated. Because imparting the history of humanity within the confines of a college-level course is, of course, impossible, world historians must convey to their students an appreciation of the short- and long-term effects of human practices on local and regional environments, the interdependencies of humans, animals, plants, and pathogens, and the diffusion of ideas, technologies, and disease through trade, migration, war, empire building, and human resistance—phenomena that create cross-cultural, transnational, and transregional patterns over time.

To make things even more difficult, much of the historical literature on World History emphasizes the differences between regional cultures and local histories, leaving the instructor scrambling to find the similarities that might produce a lucid global narrative. In particular, the current generation of World History textbooks fails to succeed in conveying a unified, coherent account. Indeed, linear surveys lack a central storyline, with any potential core narrative submerged under a sea of details that simply overwhelms the student reader.

What probably explains this bleak state of affairs is the fact that as a distinct discipline, World History is only about six decades old. Begun in the 1960s as part of a slow shift from Western Civilization, World History gradually became a subdiscipline as increasing numbers of historians recognized the usefulness of a global perspective to understand humanity's past. Developing steadily despite the vast amount of material that had to be digested and the necessary development of new mental habits of synthesis, World History finally achieved recognition as a discipline in 1982 with the establishment of the World History Association. Since then, the WHA has grown to 1,500 members, World History has become a standard general education requirement at the college level, and several major universities now offer advanced degrees in the field.

With decades of combined experience teaching World History—in community colleges and four-year institutions—we have witnessed firsthand the frustration instructors and students of world history experience with current survey textbooks. Deeming a new approach necessary, even overdue, in 2007 we brought out the first edition of *World History: A Concise Thematic Analysis*, the first truly concise, accessible, and affordable World History survey. Now, in response to feedback from student readers and instructors alike, we present the revised and improved second edition

In this new, second, edition we have refined the themes used to synthesize the narrative as presented in the first edition. In addition, we have made corrections to the overall presentation based on new research developed in climate history and studies recently done on farm technology. The overall effect of these changes has added a far greater depth to the entire project, producing a better integration of the material and a more thorough analysis of regional developments. Finally, in this second edition we responded carefully to feedback and specific criticisms leveled against the first edition by filling in key gaps in the original narrative and more thoroughly tying the storyline to a comprehensive vision of the world.

It will be immediately apparent to anyone familiar with the full-length or even so-called concise world history surveys currently on the market that this book stands alone: its interesting and recurrent themes—conceptual bridges that span the many centuries—give it a unique voice. Its format helps the reader see the larger picture, to conceptualize patterns over time by importing concepts from one unit to another. And while this book might not offer flashy four-color maps

and illustrations, its length and price speak for themselves. Too often students are required to pay a great deal of money for a book they have no hope of finishing, let alone comprehending or remembering long much longer than in the final exam.

To achieve the brief but coherent account of global events, the revised second edition of *World History: A Concise Thematic Analysis* comprises four complete units: the first is long, to lay a more thorough foundation for the entire narrative (eleven chapters); the second, short and concise (six chapters); the third is of medium length, with greater attention paid to consolidating and integrating the account of modernization (eight chapters); and the fourth and final unit is the same length as the third one (eight chapters), with new material to take the narrative of the contemporary world to the present.

Unit 1 employs three scientific themes to help explain the history of the ancient world. The first theme is a biological one used to explain the symbiosis of agriculture and the parasitism of disease. Coupled with this biological theme, a second one applies several geographic concepts to facilitate an understanding of the movement of plants, animals, tools, ideas, and germs from one major cultural hearth to another. Equally important is the condition of geographic isolation, which denied such movement. A new addition to the second edition is a third theme, climate history, which reveals clearly the impact of sharp changes in global weather conditions that dramatically altered the course of human events. Finally, Unit 1 introduces the concept of culture, explaining how human creativity responded to the scientific themes mentioned above as people everywhere adjusted to the changing circumstances of life in the ancient world.

Unit 2, the middle years of world history, develops further the concept of culture, elevating it to the central theme that governs the six chapters that consider the years 500 to 1500 CE. This section also responds to a constructive criticism of the first edition concerning the location of Persian history in the global narrative. The Parthian Empire has been moved to Unit 1 and linked through a more thorough analysis of the Hellenistic experience to the role that culture played in the middle years of world history. In Unit 2, culture serves to explain how the dominant human communities of the globe expanded to their limits, while only one of them developed the potential to change world events. Hence, a broad analysis of each major civilization reveals why most of them preferred stability to change, even as one of them broke the mold of tradition to set

in motion a whirlwind of change that laid the foundation for globalism and the modern era.

Unit 3 addresses the modern era, 1492 to 1914. Its major themes are modernization, the differential of power, and globalization. Focusing on European culture as the one that proactively transformed the world, this analysis of modernization considers the key institutional changes that created the nation-state in the West. In this second edition we have reduced the total number of chapters dealing with modernization by consolidating the narrative, adding a more thorough study of the differential of power, and illustrating more explicitly the link between the themes and the historical narrative. Using a comparative cultural analysis of political, economic, and military institutions to demonstrate the growing material might of Europe in contrast with the waning power of non-European societies, Unit 3 outlines the material advantages that Western peoples and cultures enjoyed as they expanded outward— and were themselves transformed by the peoples, ideas, and resources they encountered in the Western Hemisphere, Africa, and Asia. Next, the theme of globalization helps explain how other cultures of the world imported many Western institutions, adapting them in an effort to survive, but ultimately sought to expel Europeans from their territories through the long and difficult process known as decolonization.

Unit 4 considers a new conceptualization of the postmodern world by revising its dates from 1914 to 2012. We chose 1914 rather than 1945 because 1914 marks the end of Europe's political and military advantages based on the theme, the differential of power. Most historians see World War II as the natural break in the modern narrative, but this text argues that the critical moment from a world history perspective is World War I. The Great War changed the balance of power in the world and started the era of decolonization that liberated what has since been called "the third world" nations from European colonial rule. While 1945 is appropriate for European history, the authors feel it is too Eurocentric for World History. This new set of dates, we contend, returns the narrative of history back to the world and diminishes the role played by Europe as a proactive culture. This also creates a more balanced storyline, and we have decided to preserve this approach.

The Post 1914 era begins by showing how global warfare, a harvest of violence set in motion by the empire building of Unit 3, destroyed Europe's hold over its colonies, protectorates, and spheres of influence and shifted dramatically the global differential of power. At the same time, we approached Unit 4 in a unique way. Given that 1914 to 2012 constitutes slightly less

than one hundred years of world history, we strived to maintain an appropriate balance between its content and the remainder of the text. In other words, the last 99 years establishes the contemporary world but deserves no more space than does any other period of global history. Therefore, we kept the content of Unit 4 as concise as possible, even as we show that the tumultuous events leading all the way up to the state of the world today are the products of, and the conclusions to, the preceding three units.

The advantage of this long-, short-, medium-, medium-unit presentation is that it allows for a logical division of the text for use in either the semester or the quarter system. For those on the semester system, the completion of Units 1 and 2 bring the reader to the dawn of the modern age (1500 CE), the classic stopping point for the first half of world history. Units 3 and 4 complete the story in the second semester. For those on the quarter system, Unit 1 covers the ancient world, the standard stopping point in a ten-week class. Unit 2 and the first half of Unit 3 link the middle years to the early modern era (1000–1750 CE) and bring the narrative up to the formation of nation-states, the standard stopping point for the second ten-week period of study. Finally, the second half of Unit 3 and all of Unit 4 cover modernization and the postmodern age.

As mentioned, each unit features a dominant set of themes. Not only do these themes constitute the thesis for the unit under consideration, but they reappear throughout the text, providing cohesiveness and unity where none otherwise exists and making World History accessible and meaningful to student readers. On the other side of the desk, both experienced and inexperienced instructors, eager to find footholds as an otherwise unwieldy narrative unfolds, will find the use of overriding themes helpful. In short, the introduction of themes in a World History text eliminates the problem of presenting an isolated and seemingly endless list of facts, figures, and dates: the "one darn thing after another" phenomenon that gives World History a bad name.

Themes also help the reader build a comparative analysis of regional histories. Such comparisons help students grasp how human creativity produces a unique stamp on the development of distinct cultures, even as people everywhere struggle with a common set of problems. Finally, themes highlight contrasts between cultures, making the text relevant to an increasingly diverse student population, as well as useful in the new comparative World History courses.

Whether you are new to the field of World History or have taught the subject for years, it is our hope that, having tried our approach, you will agree that a concise thematic analysis goes a long way toward making a complicated compendium of human numbers, economies, and cultures meaningful to student readers.

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THEMES FOR UNIT THREE
The Modern World

🏹 **Modernization**

🏹 **Globalization**

🏹 **The differential of power**

The printing press enabled the large-scale transmission of ideas that, in turn, contributed to the development of the concept of "culture" in European thinking.

Tʜᴇ ᴄʀᴇᴀᴛɪᴠᴇ ᴇɴᴇʀɢʏ ᴏꜰ ᴄᴜʟᴛᴜʀᴇ, the central theme of Unit 2, and the biological and geographical concepts of Unit 1 underlie the themes of Unit 3. Added to these three themes from Volume One are **modernization**, **globalization**, and **the differential of power**. The creative energy of culture from Unit 2 helps explain the spontaneous process of change that transformed traditional European societies into new and powerful ones capable of imposing their will on the world. The concept of "culture" itself emerged from the intellectual changes occurring in Europe in Unit 3 that spawned a new way of seeing the world. And once this concept of culture became entrenched, Europeans came to believe that theirs was "superior" to the "backward" cultures of Asia, Africa, and the Americas. This kind of thinking convinced Europeans that they not only could but *should* change the world.

The biological and geographical concepts of Unit 1 mesh with the themes of Unit 3 by returning to the consequences of the material advantages enjoyed by some cultures, especially in Europe, as compared to those of the rest of the world. Europe was the primary beneficiary of the vast biological resources of the Ancient Near East: the numerous domesticated plants and animals, and the development of the agricultural tools associated with beasts of burden, plus a long disease history that bestowed upon Europeans substantial resistance to the infections of the wider world before they began to explore it in the fifteenth century. Furthermore, those less fortunate peoples living in places like the Americas and Africa, which had long histories of geographic isolation, never developed military institutions to match those found in Eurasian societies. Africa did enjoy a disease barrier that excluded foreign entry into its interior until the nineteenth century, but Africans did not have a plow or wheel to help generate the food surpluses needed to feed a growing population. In addition, African states had already become dependent on foreign trade to build their political institutions; this made sub-Saharan cultures vulnerable to foreign influences. The Americas suffered a geographic quarantine that excluded its peoples from the wealth of ideas, goods, and tools that had developed in Europe, Asia, and Africa and also made Native Americans vulnerable to a biological disaster once Christopher Columbus breached their isolation in 1492.

In this unit we will see how the new themes of **modernization**, **globalization**, and **the differential of power** fit within the existing cultural, biological, and geographical context. **Modernization** refers to that extraordinary series of events that pulled Europe out of

the bounds of tradition and pushed it onto a new cultural level where change was not only tolerated but encouraged. What is so amazing about this process is that Europeans were unaware of what was happening to them even as the momentum of change was transforming their cultural landscape.

In contrast to **modernization**, tradition generates a set of complementary practices that require people to repeat their behavior without question; they believe that their way of life is sacred and therefore holds intrinsic value that should not be changed. Despite the power of tradition, a process of change began in Europe that undermined the commitment to repeated behavior and inspired an opposing set of values that encouraged change by labeling it as *progress*. These changes took place simultaneously in Europe's intellectual, economic, social, and political institutions: the Renaissance (1300–1600); the Commercial Revolution (1492–1763); the Rise of Territorial States (1494–1648); the Reformation (1517–1648), and the Scientific Revolution (1543–1687). Each of these overlapping upheavals occurred in the entrenched institutions of European culture. Once the first cycle of modernization was complete, Europe had become aware of the changes taking place, so that Europeans now sought to accelerate the process. They did so through the Enlightenment (1690–1789), the French Revolution (1789–1815), and the Industrial Revolution (1750–1850). This second cycle of parallel events created both the nation-state and a new awareness of the concept of culture itself.

Given the complexity of the European story, and its spontaneous break with tradition, a significant amount of space in this text is dedicated to the explanation of this process of change. Once one understands how this process unfolded in Europe, one can easily see how **modernization** was exported to the rest of the world, thereby spawning **globalization**. **Globalization** involves the use of Europeans' growing hostility to tradition as their self-awareness of modernization took root. And if Europeans came to condemn their own traditional patterns of life, then they came to have even less patience with foreign beliefs and practices. Hence, as the people of Europe set up outposts in alien cultures, Europeans justified the imposition of their institutions on the "backward, pagan, or savage" communities of foreign lands that still suffered the "superstitions" that had plagued their traditional societies.

To accomplish the process of globalization, Europeans first had to capture **the differential of power**. This theme contrasts the military and political potential of European culture with that of the rest the world. Military power determined which culture had the means to attack and defeat a foreign foe. Political power defined the resources needed by the victorious society to consolidate its hold on captured lands. Together, military and political power delineated the tools needed to invade, occupy, and change foreign cultures.

Europe captured the differential of power in the modern era, and modernization bestowed on Europe a newly integrated political entity called the "nation-state." Building on the wealth generated by the Age of Discovery and the Commercial Revolution, Europe enjoyed the financial resources needed to fuel changes at home through empires built abroad. Using this newly won wealth to sustain the rise of the Royal Army (1494–1648), as kings fought the religious wars (1556–1648) of the Reformation (1517–1648), Territorial States (1648–1789) emerged with either a monarch or a parliament functioning as sovereign. Then, once the Scientific Revolution (1543–1687) questioned a religious explanation of the universe, and reinforced these inquiries with questions raised by the Enlightenment (1690–1789), public opinion emerged in the eighteenth century as a new force in politics.

Combining public opinion with a growing hostility toward tradition within Europe, the French Revolution (1789–1815) and the British Industrial Revolution (1750–1850) reintegrated the geographic unity of the state to create the nation. The French Revolution created the national army, a professional bureaucracy, a national tax system, and a positive political consensus, as well as the concept of citizenship. The British industrial revolution caused a demographic shift in which people moved from the countryside to the city, producing an *urban hierarchy* (a realignment of a nation's cities through a national market system) and causing these migrants to learn *urban skills* (literacy, calculation, and critical thinking). The combination of both the French and industrial revolutions integrated the political, economic, and social space in Britain and France with public opinion to create a new *internal coherence* (a modern geographer's term for the national unity of people capable of mobilizing their entire strength). This new internal coherence became the nation-state and gave Europeans an extraordinary concentration of power: they now had the ability to muster the people and resources of an entire nation, mass-produce weapons, and combine military might with a national will to take new territories

and create new markets, regionally and around the globe.

Just as the nation-state grew strong in Europe, most of the other major Eurasian and African civilizations reached the nadir of their existence. While the Americas and sub-Saharan Africa had fallen under European influence during the Commercial Revolution, the Dynastic Cycle robbed China of its strength. Japan's self-imposed isolation denied the Japanese access to military and political changes occurring in Europe, despite Japan's own version of modernization. The Mogul Empire experienced internal decay as the Muslim rulers in India commanded some of the poorest military units in world history. The Middle East produced several powerful gunpowder empires, but once they reached the limits of their expansion under Jihad, the age-old problem of stagnation and religious rivalry between Sunni and Shiites began sapping the Islamic states of their military might. Finally, the disease barrier that had long protected sub-Saharan Africa from foreign intrusion collapsed thanks to the development of germ theory and modern medicine, which opened the entire continent to potential European exploration.

Naturally, **the differential of power** accelerated the process of globalization, which increased Europe's capacity to capture foreign lands and transform the world. As a result, modern imperialism, fueled by the illusions of progress, linked Europe's capacity for mass transportation to a global economic system of change. Old empires, like those established by Western Europe during the Commercial Revolution, expanded to embrace all corners of the world. Central European nations, such as Germany and Italy, tried to imitate their neighbors to the west, yearning to compensate for years without access to the new trade routes developed after 1492. These Central European states planned to build empires in all the places of the world that Western Europeans had not ventured. In addition, new non-European nations like the United States and Japan, after a quick development of power, considered the consequences of not joining in this scramble for global markets and set aside their scruples to build comparable empires.

Meanwhile, non-European cultures around the world had to re-evaluate the effectiveness of their ancient ways as they failed to help people resist the modern onslaught. These traditional, non-European cultures had to consider whether they should join the United States and Japan in forming nations of their own in order to preserve what was left of their social, ethnic, and political integrity. The result was the **globalization** of the modernization process. Modern changes occurred under Europe's initiative, or because of lessons learned from contact with Europeans, or as a result of a combination of both. The traditional, non-European peoples began to contemplate how quickly and how completely they should take on a modern face.

The modern (imperial) age ended with the onset of World War I (1914–18). Not only did the Great War dramatically change **the differential of power** globally, it also drew into question things Europeans had been taking for granted since 1492: that they were "superior" in might, intellect, and energy as compared to the rest of the peoples of the world. For more than four hundred years, Europeans had used this sense of superiority to justify taking action against tradition everywhere in an effort to reshape the world. Once Europeans transmitted the same notions of progress to several non-European nations such as the United States and Japan, they joined in, also attempting to "civilize" the rest of the world by modernizing "backward" peoples for the benefit of all involved.

Meanwhile, the rest of the world had learned enough from Europe during the modern age to begin to employ the means to resist during the post-modern era (1914–91). Hence, by 1914, the forces analyzed in this unit had thoroughly changed the face of the world because of the reintegration of European institutions through **modernization**, the role of **the differential of power**, and the impact of **globalization**. All three themes laid the foundation for the twentieth century and the postmodern world, covered in Unit 4. ⬎

PACIFIC OCEAN

PACIFIC OCEAN

ARCTIC OCEAN

ATLANTIC OCEAN

ATLANTIC OCEAN

INDIAN OCEAN

Food Imported To Europe:
Corn
Potatoes
Tomatoes
Cod Fish
Squash
Beans
Cassava
Quinoa

Food Imported To Africa:
Corn
Potatoes
Tomatoes
Cod Fish

Food from the Americas caused a population explosion in Europe where human numbers increased by an estimated 50 percent.

Food from the Western Hemisphere sustained population growth in Africa despite the huge number of people forcefully exported.

The Slave Trade *(from 1460 to 1900)*
Occidental Slave Trade: 11,340,000
Oriental Slave Trade: 5,000,000
Internal Slave Trade: 15,000,000

The Columbian Exchange: 1492 to 1618

Epidemics from Europe created a demographic crisis in the Western Hemisphere with a mortality that varied from 80% to 95%:

1493–1498:   Influenza
1496:   Jaundice
1514–1517:   Influenza
1518–1528:   Smallpox (pandemic)
1519–1521:   Measles (pandemic)
1545–1546:   Typhus and Pulmonary Fever (pandemic)
1550:   Mumps (Mesoamerica)
1559–1563:   Measles, Influenza, Mumps, Diphtheria (pandemic)
1576–1580:   Typhus, Smallpox, Measles, Diphtheria
1595:   Measles

SLAVES
SLAVES
SLAVES
SLAVES
SLAVES
SLAVES
FOOD
FOOD
FOOD
EPIDEMICS
EPIDEMICS
EPIDEMICS
EPIDEMICS

Food
Disease
Slaves

0   1,000   2,000 Mi
0   1,200   2,400 Km

THE COLUMBIAN EXCHANGE AND THE SLAVE TRADE

Spontaneous European Modernization: Phase One
The Process of Change Begins

Modernization challenges tradition and sets in motion patterns of cultural change that require the complete reintegration of a society's fundamental institutions. Tradition itself is a complex set of practices handed down from generation to generation that become unquestioned behaviors because traditional people believe them to be sacred. The cultural changes set in motion by modernization challenged these traditional behaviors and eroded their sacred underpinning through doubt. Once doubt took hold, modernization raised the questions that led a society to seek innovative and transformative solutions.

These transformative solutions then caused a reintegration of a modernizing society's basic institutions that reflected the realities of culture itself. Culture is a functional integration of those basic practices that make up a society's economy, status system, political design, and religious and intellectual beliefs. In the case of Europe, modernization began when tradition collapsed in the face of a series of simultaneous institutional changes. These changes included a reconfiguration of European society as a result of the new Atlantic trade routes opened by Christopher Columbus and Vasco da Gama, which fuelled economic growth that financed the contemporaneous changes caused by the Reformation, which then inspired religious and dynastic disputes

that in turn opened space for the redefinition of European political society. Finally, the combination of all these massive intersecting changes accelerated existing doubts that then raised questions that European tradition could not answer.

Europe's simultaneous institutional changes comprised an economic revolution that launched a global realignment of trade (1492–1763), while a military revolution (1495–1648) bestowed upon European monarchs a monopoly on coercion that ultimately granted them sovereignty. Meanwhile, the Reformation (1517–1648) released intense religious passions that culminated in the collapse of Catholic orthodoxy, which, in turn, fuelled religious warfare that reinforced changes already underway in the military and in politics. Also, with the breakdown of this religious orthodoxy, a new intellectual space opened for science, permitting sufficient freedom of inquiry to inspire a complete redefinition of Europeans' understanding of the universe (1543–1687). This radical redefinition of the universe launched by science, in turn, generated an intellectual response called the Enlightenment (1690–1789) that created yet another intellectual weapon called public opinion that accelerated political change. Each of these changes complemented the others and heightened their combined effect, allowing Europe to embark upon a process of spontane-

ous modernization that few understood at the time it occurred. Ultimately the significance of these combined changes became clear to later generations.

Simultaneous Revolutions: Phase I, New Trade Routes

The old trade routes prior to 1492 relied on a complex system of exchanges that integrated ancient and medieval markets in Eurasia and Africa, which required trekking through numerous cultural zones, crossing an equally complex pattern of political borders, and using different vehicles to accommodate travel over land, on rivers, and across oceans and seas. During the Late Middle Ages (1300–1450), goods made their way from Europe to Yuan and Ming China (1260–1368 and 1368–1644, respectively) or to the Delhi Sultanate of India (1206–1526) and the subcontinent's fragmented set of subordinate Muslim states. Goods thus crossed countless frontiers and passed through numerous exchanges. Few products made it all the way from one end of this commercial system to the other, while each exchange along the way added the expense of an intermediate profit to the final price when the last sale was made.

Merchants in London or Novgorod, for example, might begin the commercial process by loading their cargoes aboard ships, sail the North or Baltic seas respectively, and make their way to Flanders or the northern German coast. There the cargo would be unloaded and sold to merchants in Bruges, Flanders, or Bremen in the Holy Roman Empire. Using the Bruges route as the first illustration of an old trade pattern, the English or Russian cargo might be sold in Flanders, and new merchandise purchased and sent on to Paris and then Chalons as it crossed France. From Chalons, after more intermediate sales, the merchandise would then cross the Alps into Milan and journey on to Genoa. Once in Genoa, the cargo would leave for Alexandria and the Red Sea. Since Alexandria was a Muslim city, new, Muslim merchants would handle the sale and transport the goods on oceangoing vessels as they set off for Calicut, India, while local political rulers along the route would impose heavy taxes. Arriving in India, the sales there would enable the sellers to purchase the spices for which India was famous, and a return trip would be charted.

If merchants chose the Bremen route, the cargo, or merchandise purchased, would then make its way to Augsburg as these goods crossed the Holy Roman Empire. From Augsburg, the cargo would travel to Venice, where Italian merchants would load it onto ships and sail for Constantinople. In this city, the capital of the Byzantine Empire, the Eastern Roman Emperor would impose his share of taxes and then send the cargo on its way. From Constantinople, the merchandise would next sail for Tara on the Crimean coast and move up the Volga River to Sarai, the capital of the Golden Horde, a Mongol tribe. The Golden Horde had conquered Russia between 1237 and 1240 and imposed taxes on all the cargoes that crossed their domain. Once in Golden Horde territory, the cargo would then move on to Urgeni, Bukhara, and Samarkand. From Samarkand, the goods would cross into Yuan China, another Mongol realm. Once inside China, the goods would travel to Armand and on to Dadu, the Mongol name for Beijing. Later, after the fall of the Yuan in 1368, the cargo would move on to Nanjing, the capital of the Ming Dynasty (1368–1644).

Yet another route would have been to land the cargo from London or Novgorod in Flanders. Then merchants would send it to Cologne, where it would make its way to Milan and Genoa and then on to Alexandria. Once in Alexandria, the goods would be shipped to Tyre on the Syrian coast, transported to Damascus, and then moved up to Aleppo, Turkey. From Aleppo, the merchandise would cross Turkey to Baghdad, journey to Meshed in Afghanistan and go onto Bukhara. From Bukhara, the goods would follow the route through Mongol territory into China described in the preceding paragraph.

Each trip along these complex routes incurred numerous expenses: first, the cost of labor involved in loading and unloading at each port or market; second, the necessity of transferring the cargo to vehicles that could cross land, travel on rivers, and sail across seas; and third, paying the various taxes imposed on the merchants as they cross different political borders. Added to the overall cost of trade was the final price of the items sold at the end of their trip; this price included all the additional profits derived from all the intermediate sales of the goods that started in London

or Novgorod and made their way through so many markets on their way to China or India.

Beyond these costs, the necessity of shifting from overland travel to river and oceangoing vessels caused friction that reduced the total volume of goods moving through these different commercial mediums. Because each route required land travel and land travel imposed the highest degree of friction, it set an absolute limit on the total amount of cargo merchants could carry. Furthermore, moving from Catholic Europe into Muslim Turkey, Egypt, India, Persia, and Afghanistan, and on to Mongol Central Asia and China or to Ming China (restored to Chinese control) required numerous diplomatic gifts and bribes. Crossing so many religious and cultural frontiers required merchants to negotiate the underlying hostilities between these cultural zones and increased the expenses requisite to travel. Therefore, taken all together, the old trade routes made goods transported throughout Eurasia extremely expensive and confined this trade to luxury items only. These were items that only the rich could afford.

In contrast, the new trade routes opened by Christopher Columbus and Vasco da Gama reversed these expenses, simplified the transport of goods, eliminated the need to cross foreign borders, and completely redefined global exchanges. From Europe's perspective, the route discovered by Christopher Columbus opened two new continents and made available, through conquest, a vast new abundance of resources and precious metals that revolutionized European commerce. Meanwhile, Vasco da Gama's route around Africa eliminated the need to cross the European continent, the Mediterranean Sea, the Middle East, and Central Asia in order to reach India or China. Furthermore, the da Gama route also eliminated the need to travel across land, reduced friction, and increased the volume of trade. Finally, since both new trade routes utilized only oceangoing vessels, both eliminated political barriers to travel. Only foreign resistance in a port of call remained to restrict contact between cultures.

Thus, since these new trade routes made available to Europe every port in the world except those which were seasonally ice-bound, the only obstacle to trade lay in the reaction European sailors, soldiers, and merchants might receive when they arrived at their des-

tination. Also, such a sharp reduction in the foreign political obstacles to commerce, plus the equally sharp reduction in the expenses of transport, despite the loss of ships at sea, encouraged greater intercultural contact initiated by Europeans. Furthermore, the volume of goods carried by Europeans increased because of the reduced friction, giving them an

> From Europe's perspective, the route discovered by Christopher Columbus opened two new continents and made available, through conquest, a vast new abundance of resources and precious metals that revolutionized European commerce.

unequalled competitive edge in global trade. Finally, as one might expect, a slow but steady realignment of worldwide exchanges toward Europe began.

Simultaneous Revolutions, Phase II: Biology and Europe

While Europe's new trade routes provided an unobstructed pathway to the entire world, they also transferred pathogens and domesticated plants and animals to new geographic locations. The most dramatic of these transfers began when Columbus opened the route to the western hemisphere; this route breached the near absolute isolation of Native American cultures. Because of this breach, Native Americans suffered a demographic crisis because of the new diseases from Europe, which claimed the lives of an unprecedented number of human beings. In contrast, Europe received a new supply of plants and animals that supported a population explosion that, in turn, facilitated European migrations to the western hemisphere that launched imperial adventures.

Called the Columbian Exchange, this exchange of germs for food reshaped global population dynamics. The story of the diseases that devastated the western hemisphere, however, belongs in chapter 19 where the Europe-

an impact on the Americas is fully discussed. Here the issue is population dynamics in Europe. The reason why a discussion of European population dynamics is important in this location of the text is because growing human numbers in Europe supplied European kings with the surplus people needed to colonize the western hemisphere. At the same time, the increase in human numbers in Europe also created pressures at home that accelerated modernization.

Columbus' new trade routes provided new foods from the western hemisphere that caused a population explosion in Europe. These new foods included corn, potatoes, tomatoes, peppers, peanuts, papayas, guavas, avocados, cacao, cassava, squash, and beans, while cod caught off the Labrador Shelf supplemented the protein available to Europeans. It takes time for new foods to work their way onto the menu in places where a traditional diet has long been in place; this slowness results from the resistance to change that tradition itself imposes. Yet, population pressures combined with the rising cost of living in Europe drove the poor of Europe to experiment with tastes they normally would have avoided. The steady inflationary pressures that raised the cost of a living for more than a century after 1500—historians call this a "price revolution"—were caused by the sudden influx of gold and silver into Europe from the Americas and Africa.

Rising food prices stimulated the introduction of new plants from abroad that Europeans began to cultivate. Once grown, these plants then encouraged changes in traditional European eating habits. Such changes in part reflected the forces of population pressure and inflation in breaking down centuries-old dietary practices. Simultaneously, people who would have normally suffered starvation because of the rising cost of living now found new foods available to eat.

Although cod was not new to the European diet, the lavish new supplies brought from the Newfoundland breeding grounds had a profound effect on Europe's calorie intake. Exploited for centuries by Basque whalers, these massive fisheries off the coast of northeastern Canada became known to the rest of the world after Jacques Cartier's voyage of 1534, under the flag of Francis I of France. Cod are enormously prolific fish; in the sixteenth century, they spawned in the waters off Newfoundland, generating one hundred thousand eggs per female, and would have flooded the high seas with their offspring if this fish were not a major portion of the European diet. This fishery went a long way to easing the pressures of inflation, as dried and pickled cod made the voyage to Europe and became part of the expanding population's diet.

In the meantime, the poorest people in Europe found that they had to experiment with new foods to stave off starvation as the cost of living rose. The introduction of corn (i.e., maize), potatoes, and tomatoes to Europe illustrates this point. The calories available in these new food sources dramatically changed the population dynamics of Europe.

Corn arrived in Europe when Columbus returned from the Americas. As a food source, corn provided numerous benefits, two of which were its extremely high yield (about three times more than wheat), and its ability to reduce the number of fallow fields during a growing season because of its deep roots. These deep roots penetrated the soil more thoroughly than those of wheat and took fewer nutrients from the land, allowing corn to flourish where wheat did not.
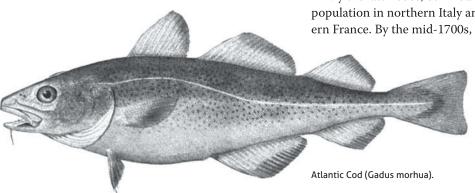
By the late 1600s, corn fed a growing population in northern Italy and southwestern France. By the mid-1700s, corn spread

Atlantic Cod (Gadus morhua).

throughout Spain and Portugal. And by 1800, corn fed all of Europe. But corn did not travel to the rest of Europe directly from Spain. Rather, it followed a circuitous route before it became part of the European diet.

Corn went from Spain to southwestern France and then on to northern Italy. From there, the grain made its way into the Middle East to take root in Syria, the Lebanese coast, and Egypt. From the Middle East, corn then re-entered Europe, spreading into the Balkans and then throughout Central Europe, where the serfs cultivated the plant to supplement their diet. Since corn was new to all these areas, the plant went untaxed until the eighteenth century. Accordingly, European peasants had access to a food that they could eat without having to pay the fees associated with traditional cereal grains.

Also important, the potato and tomato made a strong impression on Europe in general, but on the Irish and Italians in particular. The potato first entered Europe through Spain and Italy in 1565. It next traveled to the Low Countries (today's Netherlands, Belgium, and Luxembourg), where it arrived in 1587. One year later, the potato moved into the German territories. And by the end of the sixteenth century, it entered England and France.

The potato, however, took a long time to come into common use in Europe because it initially scared potential consumers. The potato belongs to the botanical family called Solanaceae, which contains several poisonous members; this fact scared Europeans. Nonetheless, the potato overcame these fears and became one of the most popular foods eaten in Europe.

The potato served Europe well thanks to its ability to grow in gardens instead of requiring fields, which could therefore be dedicated to wheat. Also, the potato grew spontaneously without much care, matured quickly, and generated a spectacular yield. The potato produced a harvest 10.6 times greater than wheat and 9.6 times greater than rye. The potato also withstood fluctuations in weather far more heartily than any of the grain cereals and was a reliable source of famine relief when the climate suddenly turned cold. By 1664, some authors in Europe spoke of the potato as an insurance policy against starvation should the regular European harvest fail.

The potato is most famously associated with the Irish; they began cultivating it as the principal staple of their diet long before the rest of Europe because they faced dire economic and political restrictions imposed on them by the English (see below). The rest of Europe gradually followed the Irish example as Europeans discovered the numerous advantages the potato offered. Keep in mind that Europe's inhabitants lived through a mini-ice age that lasted from 1300 to 1850. This cold snap devastated wheat and barley crops periodically after 1300 because a related shift in the Atlantic currents shortened the grow-

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ing season and caused summer storms. These storms hit just when the harvest was ripe for collecting and battered Europe cereal plants down in the fields, where they spoiled. Not only did these storms destroy a year's worth of labor, but they also eliminated nearly all the food for the next winter. The resulting hunger drove first the Irish and later the rest of Europe to ignore their fears about the potato and begin to cultivate it.

In contrast to the potato, the tomato entered Italy in the sixteenth century via Naples, where southern Italians began eating this American fruit. Southern Italians used the tomato because they could not afford the cream that wealthier northern Italians consumed in their sauces. Southern Italians substituted what they called "the golden apple" for cream, obtaining a key new ingredient in their cooking and substantially increasing their

caloric intake. Hence, tomatoes, like potatoes, sustained life in a specific location where starvation would have otherwise reduced human numbers. Once again the poor in one region developed a new diet before the rest of Europe caught on.

The combination of the rising cost of living plus the lower price of new crops from the Americas changed eating habits in Europe and sustained a growing population. From 1490 to 1590, Europeans began a recovery from the bubonic plague (1347–1352), which

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killed 40 percent of their population. In 1490, Europe was home to some 81 million people; this number grew to 100 million by 1590, a 23 percent increase. From 1600 to 1650, however, European numbers only rose to 109 million, a minor increase of 8.25 percent; this slowing of population growth resulted from another prolonged cold period, the destructive force of the Thirty Years War (1618–1648), and a major economic recession. Then from 1650 to 1700, these numbers rose slightly again, growing to 120 million, or a 9 percent increase, again constrained by the continued poor climate and a slow economy. Finally, from 1700 to 1800, Europeans numbers increased to 190 million as they fully accepted all the new foods from the Americas. This sudden new growth spurt represented an increase of 36 percent. Hence, while Native Americans died by the millions (see chapter 18), Europeans increased by the millions. For Europe, this situation made migration to the western hemisphere an outlet for the population pressures caused by the new trade routes.

Also, rapid periodic population growth in any traditional culture strains the inherited occupational structure of that society while causing the price of necessities to rise. Since tradition resists change and population pressure demands it, the increased human

numbers in Europe drove Europeans to seek alternatives to their inherited practices. Hence, these pressures fuelled the simultaneous revolutions that modernized the economic, social, political, religious, and intellectual landscape of Europe.

Simultaneous Revolutions: Phase III, Warfare, Politics, and Religion

While human numbers in Europe increased as Native American numbers fell, surplus Europeans who did not migrate to the western hemisphere to participate in the colonial side of the commercial revolution (1492–1763) witnessed the religious architecture of their continent buckle and collapse. As the Catholic Church splintered under reform pressures during the Reformation (1517–1648), religious disputes fuelled a series of wars from 1556 to 1684 that accelerated a political process already underway during the Late Middle Ages (1300–1450). This political process funneled military power into the hands of Europe's princes and kings by developing a link between chartered cities, commerce, taxation, knight-killing weapons, and mercenaries.

A chartered city was one that became a corporation within a king's domain and supplied him with taxes in compensation for his act of legal recognition. The king, in turn, used his new tax revenues to refine his military arsenal by purchasing knight-killing weapons such as the crossbow, which shot bolts that penetrated armor; the pike, which could be used to unhorse a knight and subject him to an infantry assault; and the longbow, whose arrows killed the knight's horse and exposed him to the pike. Coupled with these weapons were cannons and gunpowder, which could destroy a castle and expose a knight to the king's wrath.

Carried by mercenaries, or soldiers for hire, these weapons gave a king a monopoly on coercion within his realm so that he could tap into the resources of his domain to take on new political and commercial projects. Accordingly, the concentration of power in the hands of kings, plus the link between power and money, encouraged investments in overseas exploration, which led to the development of the new trade routes described above and fuelled the European conquests in the Americas, which in turn accelerated the commercial revolution. Finally, the intense religious warfare sparked by the Reformation pitted Catho-

lics against Protestants and not only helped to refine military practices and improve royal armies, but also undermined papal authority and removed the pope as a rival to the kings of European states.

The complex web of interwoven changes that linked the history of war to the rise of royal authority, which, in turn, supported the colonial efforts that spread European outposts all over the world, combined to create the concept of sovereignty. Sovereignty identified the king as the ultimate authority in the state and removed the pope from politics. Sovereignty also integrated the territory that lay under a king's domain, which became known as "the territorial state." The territorial state took its name from the incorporation of old feudal estates into a new, integrated political system that kings commanded—provided that they could find a way to finance their new governments.

Commerce, and the need to raise taxes to finance the state, required a king to intimidate, as well as cajole and recruit, the great men of his realm to support his efforts to unify his political and religious institutions. Meanwhile, the conflict over religion caused by the Reformation also provided kings with the opportunity to enlist the aid of their general populations in what often appeared to be a struggle of religious conscience. Such intense struggles gave kings the possibility of shaping their states to their liking, if they could maintain popular support for their religious enterprises and secure access to the financing needed to meet the rising cost of government. If successful, these kings indeed became the rulers of true territorial states.

The territorial state emerged after nearly a century of warfare between Catholics and Protestants (1556–1648) that helped European monarchs refine their royal armies as instruments of coercion. The coercive power of the army provided the monarch with an implicit threat of reprisal as he strove to justify his religious and political policies after the era of intense warfare ceased. Combined with the intellectual consequences of the scientific revolution (1543–1687) and the Enlightenment (1690–1789) (see chapter 19), the territorial state emerged after 1648 to offer Europeans a respite from the religious violence of the Reformation. It gave them a chance to catch their breath and prepare for the next great

stage in modernization (the French Revolution, 1789–1815, and British industrialization, 1750–1850; see chapter 20).

As an era of temporary calm before another great modernizing storm, the territorial state marked a brief period (1648–1789) when Europeans agreed to talk to one another to settle their differences, rather than use warfare. To achieve this level of calm, however,

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Europeans first had to experience the cauldron of religious conflict in order to remove the residue of a feudal system from the fabric of their society. The steps taken to achieve this transformation of the European political landscape included the concentration of military and financial power in the hands of kings and the integration of political authority in a realm under one set of governmental institutions. Fundamental to this process of political change were the integration of commercial capitalism and the political consequences of the Reformation.

The Reformation:
A Conflict over Salvation

The Reformation pitted against each other two forms of Christianity that proposed opposite routes to salvation. Catholics relied on the sacraments, while Protestants chose faith. The sacraments involved the rituals of the Catholic Church and a reliance on the special competence of a priest to transform the faithful from sinners into righteous worshipers through the spiritual and physical consequences of religious ceremonies. In contrast, Protestants relied on the healing powers of Christ, which worked when the adherent surrendered his or her will completely to God as an expression of pure faith in His Son's infinite mercy. Such faith made each worshiper capable of

Martin Luther burning the papal bull of excommunication, with vignettes from Luther's life and portraits of Hus, Savonarola, Wycliffe, Cruciger, Melanchton, Bugenhagen, Gustav Adolf, & Bernhard, Duke of Saxe-Weimar.

achieving salvation without the intervention of a priest. Accordingly, Catholics relied on external ceremonies and the clergy, while Protestants relied on internal submission to God and the sincerity of their faith.

The sacraments had evolved over the long history of the Catholic Church and comprised a series of rituals focused on the passages of life that prepared worshipers for salvation: baptism occurred after birth and removed original sin; confirmation occurred at puberty and acknowledged entry into adulthood; marriage followed adulthood and sanctioned sexual passions; and extreme unction occurred prior to death to cleanse the soul as it exited this world. Two further sacraments repaired the soul on a daily basis, if needed: first, the Eucharist occurred during the mass, where the worshiper received the host in the form of bread dipped in wine; the miracle of transubstantiation changed this sacred food into the body and blood of Christ. Second, penance was the act of confession, in which worshipers voluntarily revealed their sins and sought absolution. If done out of love for God, or contrition, the ritual of confession and absolution freed the soul from sin; if done out fear of God, or attrition, then the soul retained a fraction of the sin, which meant that the worshiper

would have to suffer through a stay in purgatory after death. Finally, priests experienced the sacrament of holy orders, which elevated them out of the laity, distinguished them from all other Catholics, and bestowed upon them the spiritual capacity to perform the church's sacred rituals to save their flock.

The sacraments made attending church mandatory. Since only the priest could administer them and since such rituals alone could cleanse the soul of the stain of sin, worshipers had to participate in these rituals to attain salvation. Also, since the priest existed within an established Church hierarchy that took spiritual guidance from the pope, and since the pope was the vicar of Christ on Earth, then the pope's judgment was equated with God's majestic powers, giving the pope the aura of infallibility. Long established practice within the Church reinforced this aura of infallibility until it became Church doctrine; this aura made the pope the religious conscience of Europe during the Middle Ages.

In contrast, the Protestants initially followed the teachings of Martin Luther (1483–1546), who focused solely on faith. Luther's method of achieving salvation came from his study of the Bible; there he sought an answer to a personal question: how could he as a sinner earn salvation using the sacraments when

his soul was already deeply mired in spiritual corruption? From Luther's perspective, every act performed by a sinner was already thoroughly contaminated and generated stained results that could never achieve the purity God required in return for salvation. Therefore, sin had already condemned the sinner's efforts to failure before he participated in the sacraments.

In his review of Paul of Tarsus's message in the New Testament, Luther stumbled upon the passage called The True Gates of Paradise (Romans 1:17). This passage states, "Man is justified by faith alone." Trained as a lawyer prior to becoming a monk, Luther interpreted the verb *justified* to mean *judged*. He concluded that God judged humanity solely by the sinner's faith in Jesus. Hence, faith and faith alone saved the sinner; faith permitted the sinner to utterly surrender to Christ and receive His infinite mercy. This mercy cleansed the soul and granted the sinner grace.

While Martin Luther defined faith for the Protestants, John Calvin (1509–1564) refined Protestant practices and spread Luther's message beyond Germany, the realm of Lutheranism. Developing a vision of God as the absolute sovereign of the universe whose will was totally unknown, Calvin concluded that humanity was utterly helpless in its quest for salvation because of its contamination with original sin. As a result, people could only be saved by the grace of God through the redemption made possible by Jesus' sacrifice on the cross. Divine law had been given to humanity as a means to reveal the utter helplessness of each individual, and it thus served as a warning to all sinners that a life of absolute submission and complete obedience to God's will was the sole means of acquiring the grace needed for salvation. This grace, however, came as a gift from God and could not be earned, no matter how hard the sinner might try.

Faith in God's infinite mercy alone served as the signal that perhaps the supreme lord of the universe had selected an individual for salvation. Belief in the Holy Spirit as presented in scripture allowed a person to discover the *hope* that perhaps God might have selected him or her salvation. For Protestants, this hope, and not the sacraments, was the initial sign that God dwelled within a particular individual's heart. As this hope matured into faith, the possibility of grace occurred.

Calvin developed these beliefs as a young man but revised them over the course of his entire life. He completed his first explanation of his ideas, the book *The Institutes of the Christian Religion* in 1535, when he was only 26. However, the idea of the power of faith was not fully refined until 1559 when he published the final edition. In that year, Calvin presented the doctrine of predestination, which became the hallmark of his religious system. For him, predestination was the logical consequence of God's absolute authority over everyone and everything.

As the eternal lawgiver who judged every event in the universe, God had a majesty that towered over human sin. Since humanity was completely worthless when compared to

> Therefore, the *true* Christian could only be saved by the direct intervention of God as part of the divine plan. Such an intervention occurred only when faith awakened in worshipers the exquisite hope that God had embraced them and would permit them to lead a life worthy of Jesus' sacrifice.

the purity of God, no one had the capacity to sway the divine judgment, because God already knew each individual's destiny—in other words, it was predestined. Therefore, the *true* Christian could only be saved by the direct intervention of God as part of the divine plan. Such an intervention occurred only when faith awakened in worshipers the exquisite hope that God had embraced them and would permit them to lead a life worthy of Jesus' sacrifice. Yet faith did not offer certainty; it only offered hope, required a constant discipline, and demanded the diligent reading of scripture.

According to Calvin, scripture induced faith in the righteous when the Holy Spirit touched their souls. These elect few sensed the divine presence through the hope inspired by studying the Bible. This hope filled them with the sensation that God might have chosen

Title page of Niccolò
Machiavelli's "The Arte
of Warre" illustrated
with cavalries engaged
in battle.

them. This was the first sign of grace, which overwhelmed the worshipper with the utter awe of God's majesty. Realizing the depth of original sin, these special worshipers understood the necessity of repentance and looked to Christ for redemption. Then, on the basis of the promises made in the New Testament, such an individual began a life of complete obedience to God's will.

Faith met the needs of the Protestants who followed Luther and Calvin, and this emphasis on faith led them to condemn all Catholic practices as mere distractions from the one, true path to salvation. The sacraments enabled the Catholics to enter paradise, so

they responded by condemning the Protestants for denying the true path to heaven and spreading a false interpretation of God's word. Both sides denounced each other as heresies, which denied the possibility of resolving their differences peacefully. Accordingly, both felt compelled by their religious conscience to rid Europe of the other by any means possible, including warfare.

Religious Warfare and Its Political Consequences

Hence, Christendom split into hostile camps that proposed exactly opposite routes to salvation and heaven. These differences inspired the wars that swept through Europe for ninety-

two years, from 1556 to 1648. Yet, warfare itself changed more than simply the religious landscape; it also redefined politics. Hence, war released forces of change that only well-armed rulers had a chance to control.

The wars that determined a kingdom's faith allowed some local monarchs to take power into their own hands, while others failed. As these successful kings discovered the potential power available to them through religious warfare, those who abandoned issues of faith in favor of the amoral thinking of science proved far more likely to survive than rulers trapped by their religious passions. These successful kings constituted a new social character called the *politique* personality.

Technically, the term *politique* referred to a faction of French Catholics and Protestants who objected to the political and economic mismanagement of their country during the era of religious civil war from 1562 to 1598. This politique party placed the common good of France above their religious differences and attempted to create a rational, scientific solution to their country's problems by shifting back and forth between the Catholic and Protestant leaders. The leading politique thinker, Jean Bodin (1530–1596), established the modern concept of sovereignty by arguing that every society needed one ultimate authority capable of imposing law, preferably with the consent of the people but by force if necessary. The term *politique* defined the modern political thinking of this group, but the term is used in this chapter to depict the reasonable yet amoral practices of a far more important coterie of people: the successful leaders who profited politically from the Reformation.

Politique individuals used Machiavelli's principle that "the ends justify the means" to achieve their goals (see chapter 14, volume one). Similarly, politique monarchs followed Machiavelli's advice and wore morality as a mask to cover their actions. The combination of these two strategies allowed politique kings to appear to be moral and justified their conduct while they achieved their political goals by whatever means possible.

At the heart of politique behavior was the use of reason alone to decide political issues. Practitioners of this new political conduct applied themselves to the process of solving problems in a dispassionate manner calculated solely for the purpose of success. Such

individuals were the first to discover that religious warfare could not offer either side a decisive victory and that religious pluralism would become the new political reality of Europe. When surviving kings finally came to this realization, they discovered that a careful, rational application of their material resources to the problem of acquiring power served best to achieve their political ends.

Like many of the intellectuals who began to appear as a result of the scientific revolution (1543–1687; see chapter 19), these politique kings concluded that religion itself was suspect as a political instrument. It became clear to them that Europe was no longer going to be dominated by a single, universal faith. Thus, fighting wars to enforce conformity both was wasteful financially and entailed unnecessary cruelty and carnage. After 1648, these politique monarchs redefined political authority in their realms. Achieving this new kind of political reality, however, took time.

The events that drew Europe into religious warfare between 1556 and 1648 involved dynastic rivalries that actually preceded this century of combat. Beginning with Charles VIII of France's invasion of Italy (1494–1495) to take possession of the land he claimed, the nature of warfare caused matters of faith and royal ownership of European estates to overlap. For example, after Charles VIII marched into Italy to claim Naples and Sicily, the Valois rulers of France fought the Habsburgs of Spain, the Netherlands, and the Holy Roman Empire over who would rule this peninsula. Using their control of their vast estates, the Habsburgs proved to be more than a match for the Valois of France as both dynasties turned Italy into a battlefield. Their struggle spanned the years between 1494 and 1559, when the Valois finally admitted military failure and relinquished their claim to lands in both Italy and the Low Countries. Yet, by the year 1559 the first phases of religious combat had erupted as Catholics and Protestants across Europe squared off to determine what form of Christianity their countries would embrace.

Meanwhile, the Valois' hunger for Italy and the religious strife that followed on the heels of France's failure to realize its dreams of conquest combined to transform the role of warfare in European politics. Between 1556 and 1648 every war fought in Europe

allowed the combatants to test and refine their weapons while consolidating power in the hands of the monarchy. The French, English, Spanish, Portuguese, Italians, Germans, Poles, Czechs, Hungarians, Danes, Swedes, and Swiss all engaged in a pan-European struggle that destroyed obsolete feudal practices and advanced the modern forms of combat. Simultaneously, all types of regional weapons, tactics, and practices met one another on the battlefield when dynastic and religious rivalries burned their hottest. The intense military struggles of this era refined the means of violence, while kings and princes everywhere pressed their political claims. At the same time, continuous armed trials on the battlefield introduced new weapons like artillery and muskets that changed the nature of tactics and strategy. The result was the emergence of a new model of military might that defined the political landscape in the West between 1660 and 1789.

Only when the kings and princes of Europe had resolved their dynastic disputes did the pan-European era of violence officially subside. At that moment, the political developments that unfolded alongside Catholic and Protestant hostility could finally separate secular from religious issues. When this separation occurred, kings and princes everywhere agreed that political conduct could no longer be linked to establishing a universal church. In addition, each monarch had to be free to determine the religion of his own realm.

The various wars during the Reformation—the civil war in France, the Spanish invasion of the Netherlands, the Spanish Armada against England, and the Thirty Years War (1618–1648)—ultimately demonstrated that neither side could prevail. On the final battlefield, Germany, the Thirty Years War forced both sides to come to terms with the new religious reality of Europe: multiple churches and multiple sects. This new religious reality took shape in the Treaty of Westphalia of 1648.

The Treaty of Westphalia marked the end of Thirty Years War and the Reformation. Two articles from this treaty defined the political landscape of the territorial state after 1648. One stated that the pope would no longer participate in politics, and the other that the prince of each realm would determine the religion practiced there. The first article removed the pope as a political rival and left the king in charge of his state's church. The second reinforced the first by explicitly making the prince the sole authority capable of defining religion within his state. Accordingly, both articles made the king the sole ruler and true sovereign of his domain, provided he could find the means to pay for the cost of his new military institutions.

Simultaneous Revolutions: Phase IV, Commerce

While warfare, politics, and religion defined sovereignty in the territorial state, the economic examples of Spain and England illustrated the commercial conduct that determined financial success between the years 1492 and 1763. The central economic force that differentiated Spain's failure from England's success was inflation. Inflation created the specific set of circumstances that defined the state and private decisions that led to financial prosperity or culminated in pecuniary destitution during this era of commercial change.

Inflation occurs when demand exceeds supply. Between 1492 and 1648, demand exceeded supply in Europe because of a combination of economic forces: 1) the steady influx of gold and silver from the Americas from 1521 to 1619, which became the means to make purchases; 2) the steady growth in Europe's population from 1490 to 1590, which spurred the rising cost of necessities; and 3) the increased military expenses caused by religious warfare from 1556 to 1648. Each of these economic forces was a form of demand that caused the cost of luxuries and necessities in Europe to rise, increases that threatened the foundations of political power because of the growing cost of government.

Yet, inflation also created extraordinary business opportunities for those who responded to this steady rise in demand. Innovations in production that substantially increased supply in response to the growing demand would generate exceptional profits for those willing to risk investing in these changes. England's response to inflation involved taking these innovative risks, while Spain chose to maintain traditional practices; hence, England succeeded in commerce and Spain failed. Spain's failure was most obvious during the reign of Philip II (1556–1598).

During Philip II's reign, the Spanish consolidated their hold on Mexico and the