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The Scientific Revolution and the Origins of Modern Science **The Scientific Revolution: A Very Short Introduction Reappraisals of the Scientific Revolution** *Die wissenschaftliche Revolution* **Rethinking the Scientific Revolution** *The Scientific Revolution in National Context* The Scientific Revolution *The Scientific Revolution* **The Scientific Revolution, 1500-1800** *The Scientific Revolution* **The Scientific Revolution Discipline and Experience** Copernicus' Secret **The Scientific Revolution in Victorian Medicine** *History Makers of the Scientific Revolution* **Science in the Scientific Revolution The Scientific Revolution** The Jewel House **Eight Against The World** *Ingenious Pursuits Science and the State* Watchers of the Stars *Celestial Novelties on the Eve of the Scientific Revolution, 1540-1630* **Distilling Knowledge The Scientific Revolution and Medicine** *The Scientific Revolution* **The Scientific Revolution Revisited Copernicus and the Scientific Revolution The Scientific Revolution** The Genesis of Science *Ships and Science The Scientific Revolution and World Politics Homo Faber and Homo Economicus in the Scientific Revolution* **The Social and Economic Roots of the Scientific Revolution The Scientific Revolution Revisited Much Ado about Nothing** *Problems of Scientific Revolution* **Blood Work Western Civilization: From the scientific revolution to the present Die zweite Erschaffung der Welt**

The Scientific Revolution Jan 25 2022 This revised edition of The Scientific Revolution highlights the difficulty of engaging, discarding, or assimilating religious paradigms in the course of scientific development. Jacob's introduction outlines the trajectory of the Scientific Revolution and argues that the revival of ancient texts in the Renaissance and the upheaval of the Protestant Reformation paved the way for science. The collected documents include writings of well-known scientists and philosophers, such as Nicolaus Copernicus, Francis Bacon, Galileo Galilei, René Descartes, and Isaac Newton, as well as primary sources documenting discoveries in medicine, innovations in engineering, and advances in scientific investigation. New to this edition are the writings of John Toland and Gottfried Wilhelm Leibniz, who both attempt to redefine the role of God in an age of science, and an excerpt from Dialogue Concerning the Two Chief World Systems that provides context to the popular understanding of Galileo's conflict with the Catholic Church. Document headnotes, questions for consideration, a chronology, and a selected bibliography support students' study of the Scientific Revolution.

The Scientific Revolution Dec 24 2021 Describes scientific discoveries that took place between 1550 and 1900, examines the development of the scientific method, and discusses the impact of science on people's views of their world.

Blood Work Aug 27 2019 "Excellent…Tucker’s chronicle of the world of 17th-century science in London and Paris is fascinating." —The Economist In December 1667, maverick physician Jean Denis transfused calf’s blood into one of Paris’s most notorious madmen. Days later, the madman was dead and Denis was framed for murder. A riveting exposé of the fierce debates, deadly politics, and cutthroat rivalries behind the first transfusion experiments, Blood Work takes us from dissection rooms in palaces to the streets of Paris, providing an unforgettable portrait of an era that wrestled with the same questions about morality and experimentation that haunt medical science today.

The Scientific Revolution: A Very Short Introduction Oct 02 2022 Lawrence M. Principe takes a fresh approach to the story of the scientific revolution, emphasising the historical context of the society and its world view at the time. From astronomy to alchemy and medicine to geology, he tells this fascinating story from the perspective of the historical characters involved.

History Makers of the Scientific Revolution Aug 20 2021 Tells the stories of some notable scientists of the scientific revolution, from the sixteenth to eighteenth centuries, who made important contributions both to their own time and the way we live today. Includes such figures as Nicolaus Copernicus, Robert Boyle, Robert Hooke and Alessandro Volta. Suggested level: junior secondary.

Distilling Knowledge Nov 10 2020 Alchemy can't be science--common sense tells us as much. But perhaps common sense is not the best measure of what science is, or was. In this book, Bruce Moran looks past contemporary assumptions and prejudices to determine what alchemists were actually doing in the context of early modern science. Examining the ways alchemy and chemistry were studied and practiced between 1400 and 1700, he shows how these approaches influenced their respective practitioners' ideas about nature and shaped their inquiries

into the workings of the natural world. His work sets up a dialogue between what historians have usually presented as separate spheres; here we see how alchemists and early chemists exchanged ideas and methods and in fact shared a territory between their two disciplines. Distilling Knowledge suggests that scientific revolution may wear a different appearance in different cultural contexts. The metaphor of the Scientific Revolution, Moran argues, can be expanded to make sense of alchemy and other so-called pseudo-sciences--by including a new framework in which "process can count as an object, in which making leads to learning, and in which the messiness of conflict leads to discernment." Seen on its own terms, alchemy can stand within the bounds of demonstrative science.

Rethinking the Scientific Revolution Jun 29 2022 This book challenges the traditional historiography of the Scientific Revolution, probably the single most important unifying concept in the history of science. Usually referring to the period from Copernicus to Newton (roughly 1500 to 1700), the Scientific Revolution is considered to be the central episode in the history of science, the historical moment at which that unique way of looking at the world that we call 'modern science' and its attendant institutions emerged. It has been taken as the terminus a quo of all that followed. Starting with a dialogue between Betty Jo Teeter Dobbs and Richard S. Westfall, whose understanding of the Scientific Revolution differed in important ways, the papers in this volume reconsider canonical figures, their areas of study, and the formation of disciplinary boundaries during this seminal period of European intellectual history.

Die zweite Erschaffung der Welt Jun 25 2019 Schon Aristoteles und Ptolemaios, aber auch arabische Gelehrte des Mittelalters wussten erstaunlich viel über die Zusammenhänge in der Natur, über Mathematik, Astronomie und Physik. Doch erst Descartes und Tycho Brahe, Kepler, Galilei und Newton gelang es, durch eine wissenschaftliche Revolution die Welt neu zu erschaffen. Spannend und für jeden verständlich erzählt Floris Cohen die Geschichte von der Entstehung der modernen Naturwissenschaft. Im Vergleich mit den antiken und mittelalterlichen Vorläufern erklärt er, was die Gelehrten des 17. Jahrhunderts anders machten: Sie entwickelten nicht nur Theorien, sie probierten diese auch aus, stützten ihre Beobachtungen durch Experimente und nutzten die Mathematik bei der Formulierung von Gesetzen. So schildert Cohen jene Entwicklungen, welche die industrielle Revolution in Europa erst ermöglichten. Ein Buch für alle, die neugierig sind auf eine ferne, fremde Welt, in der die Grundlagen für unser heutiges Leben geschaffen wurden.

The Scientific Revolution Revisited Nov 30 2019 The Scientific Revolution Revisited brings Mikula Teich back to the great movement of thought and action that transformed European science and society in the seventeenth century. Drawing on a lifetime of scholarly experience in six penetrating chapters, Teich examines the ways of investigating and understanding nature that matured during the late Middle Ages and the Renaissance, charting their progress towards science as we now know it and insisting on the essential interpenetration of such inquiry with its changing social environment. The Scientific Revolution was marked by the global expansion of trade by European powers and by interstate rivalries for a stake in the developing world market, in which advanced medieval China, remarkably, did not participate. It is in the wake of these happenings, in Teich's original retelling, that the Thirty Years War and the Scientific Revolution emerge as products of and factors in an uneven transition in European and world history: from natural philosophy to modern science, feudalism to capitalism, the late medieval to the early modern period. With a narrative that moves from pre-classical thought to the European institutionalisation of science - and a scope that embraces figures both lionised and neglected, such as Nicole Oresme, Francis Bacon, Thomas Hobbes, Isaac Newton, Rene Descartes, Thaddeus Hagecius, Johann Joachim Becher - The Scientific Revolution Revisited illuminates the social and intellectual sea changes that shaped the modern world."

The Scientific Revolution Jun 05 2020 In this first book-length historiographical study of the Scientific Revolution, H. Floris Cohen examines the body of work on the intellectual, social, and cultural origins of early modern science. Cohen critically surveys a wide range of scholarship since the nineteenth century, offering new perspectives on how the Scientific Revolution changed forever the way we understand the natural world and our place in it. Cohen's discussions range from scholarly interpretations of Galileo, Kepler, and Newton, to the question of why the Scientific Revolution took place in seventeenth-century Western Europe, rather than in ancient Greece, China, or the Islamic world. Cohen contends that the emergence of early modern science was essential to the rise of the modern world, in the way it fostered advances in technology. A valuable entrée to the literature on the Scientific Revolution, this book assesses both a controversial body of scholarship, and contributes to understanding how modern science came into the world.

Copernicus and the Scientific Revolution Jul 07 2020 The wisest philosophers and the ablest astronomers agreed with the age-old belief of the common people that the earth is motionless. But the competing astronomical systems based on a stationary earth had to resort to unnecessary complications. The desire to get rid of a basic complication impelled Copernicus to proclaim the earth's true cosmic status as a natural satellite of the sun. This innovation of Copernicus started the scientific revolution, which has continued from his time to ours and is still going on. The authors's investigations are freshly presented here in a concise and fascinating form.

The Scientific Revolution Jun 17 2021

The Scientific Revolution in National Context May 29 2022 The 'scientific revolution' of the sixteenth and seventeenth century continues to command attention in historical debate. Controversy still rages about the extent to which it was essentially a 'revolution of the mind', or how far it must also be explained by wider considerations. In this volume, leading scholars of early modern science argue the importance of specifically national contexts for understanding the transformation in natural philosophy between Copernicus and Newton. Distinct political, religious, cultural and linguistic formations shaped scientific interests and concerns differently in each European state and explain different levels of scientific intensity. Questions of institutional development and of the transmission of scientific ideas are also addressed. The emphasis upon national determinants makes this volume an interesting contribution to the study of the Scientific Revolution.

The Scientific Revolution in Victorian Medicine Sep 20 2021

The Scientific Revolution Apr 27 2022 This book introduces students to the best recent writings on the Scientific Revolution of the sixteenth and seventeenth centuries. Introduces students to the best recent writings on the Scientific Revolution of the sixteenth and seventeenth centuries. Covers a wide range of topics including astronomy, science and religion, natural philosophy, technology, medicine and alchemy. Represents a broad range of approaches from the seminal to the innovative. Presents work by scholars who have been at the forefront of reinterpreting the Scientific Revolution.

The Social and Economic Roots of the Scientific Revolution Jan 01 2020 The texts of Boris Hessen and Henryk Grossmann assembled in this volume are important contributions to the historiography of the Scienti?c Revolution and to the methodology of the historiography of science. They are of course also historical documents, not only testifying to Marxist discourse of the time but also illustrating typical European fates in the ?rst half of the twentieth century. Hessen was born a Jewish subject of the Russian Czar in the Ukraine, participated in the October Revolution and was executed in the Soviet Union at the beginning of the purges. Grossmann was born a Jewish subject of the Austro-Hungarian Kaiser in Poland and served as an Austrian of?cer in the First World War; afterwards he was forced to return to Poland and then because of his revolutionary political activities to emigrate to Germany; with the rise to power of the Nazis he had to ?ee to France and then Americawhilehisfamily,whichremainedinEurope,perishedinNaziconcentration camps. Our own acquaintance with the work of these two authors is also indebted to historical context (under incomparably more fortunate circumstances): the revival of Marxist scholarship in Europe in the wake of the student movement and the p- fessionalization of history of science on the Continent. We hope that under the again very different conditions of the early twenty-?rst century these texts will contribute to the further development of a philosophically informed socio-historical approach to the study of science.

Ingenious Pursuits Mar 15 2021 In this fascinating look at the European scientific advances of the seventeenth and early eighteenth centuries, historian Lisa Jardine demonstrates that the pursuit of knowledge occurs not in isolation, but rather in the lively interplay and frequently cutthroat competition between creative minds. The great thinkers of that extraordinary age, including Isaac Newton, Johannes Kepler, and Christopher Wren, are shown in the context in which they lived and worked. We learn of the correspondences they kept with their equally passionate colleagues and come to understand the unique collaborative climate that fostered virtuoso discoveries in the areas of medicine, astronomy, mathematics, biology, chemistry, botany, geography, and engineering. Ingenious Pursuits brilliantly chronicles the true intellectual revolution that continues to shape our very understanding of ourselves, and of the world around us.

Celestial Novelties on the Eve of the Scientific Revolution, 1540-1630 Dec 12 2020

The Scientific Revolution and the Origins of Modern Science Nov 03 2022 This is a concise but wide-ranging account of all aspects of the Scientific Revolution from astronomy to zoology. The third edition has been thoroughly updated, and some sections revised and extended, to take into account the latest scholarship and research and new developments in historiography.

Die wissenschaftliche Revolution Jul 31 2022 "Wissenschaftliche Revolution", das meint die Durchsetzung neuer Formen von Erkenntnisansprüchen, Theorien und experimentellen Praktiken an der Schwelle zur Neuzeit: nicht nur die Herausbildung einer mathematisierten Physik, die lange Zeit als das Paradigma der neuzeitlichen Wissenschaft galt, sondern auch das Aufkommen neuartiger Wissenschaftsprogramme, Techniken der Beobachtung und der kontrollierbaren Herstellung von Phänomenen auf den verschiedensten Wissensgebieten. Steven Shapins Buch ist eine materialreiche, überaus prägnante Darstellung dieses keineswegs plötzlichen, revolutionären Umbruchs, die insbesondere die gesellschaftlichen Kontexte der "neuen Wissenschaft" beleuchtet und eine ausgezeichnete Einführung in dieses facettenreiche Thema bietet. Sie liefert einen hervorragenden Überblick, der durch einen ausführlichen "bibliographischen Essay" – ein Leitfaden durch die Literatur – noch an Wert gewinnt.(Dieser Text bezieht sich auf eine frühere Ausgabe.)

Homo Faber and Homo Economicus in the Scientific Revolution Jan 31 2020 "Why did the scientific revolution take place in the West and not in China or the Islamic world? How did humanity's progress in science and technology,

which had been moving along at a relatively steady pace for tens of thousands of years, end up taking such an unprecedented leap? Subjecting the history of thought and technology to a novel interpretation based on the relationship between theory and practice, Ahmet Selami ðCal ?ðskan argues that the industrial revolution and modern science-and the scientific revolution that preceded both-did not alone suffice to sort out the philosophical problems of their day or to produce the institutions of the modern age. Both required a new sort of human: Homo economicus faber. Tracing the historical emergence of this figure and its persistence in our own age, this book offers an innovative and holistic assessment of the economic, cultural, and political effects of centuries of interaction between East and West and their repercussions in our world today"--

Copernicus' Secret Oct 22 2021 Nicolaus Copernicus gave the world perhaps the most important scientific insight of the modern age, the theory that the earth and the other planets revolve around the sun. He was also the first to proclaim that the earth rotates on its axis once every twenty-four hours. His theory was truly radical: during his lifetime nearly everyone believed that a perfectly still earth rested in the middle of the cosmos, where all the heavenly bodies revolved around it. One of the transcendent geniuses of the early Renaissance, Copernicus was also a flawed and conflicted person. A cleric who lived during the tumultuous years of the early Reformation, he may have been sympathetic to the teachings of the Lutherans. Although he had taken a vow of celibacy, he kept at least one mistress. Supremely confident intellectually, he hesitated to disseminate his work among other scholars. It fact, he kept his astronomical work a secret, revealing it to only a few intimates, and the manuscript containing his revolutionary theory, which he refined for at least twenty years, remained "hidden among my things." It is unlikely that Copernicus' masterwork would ever have been published if not for a young mathematics professor named Georg Joachim Rheticus. He had heard of Copernicus' ideas, and with his imagination on fire he journeyed hundreds of miles to a land where, as a Lutheran, he was forbidden to travel. Rheticus' meeting with Copernicus in a small cathedral town in northern Poland proved to be one of the most important encounters in history. Copernicus' Secret recreates the life and world of the scientific genius whose work revolutionized astronomy and altered our understanding of our place in the world. It tells the surprising, little-known story behind the dawn of the scientific age.

The Scientific Revolution and Medicine Oct 10 2020 The Middle Ages marked a time when religion and superstition dominated all thinking and stalled the pursuit of new ideas. This book examines the scientific revolution and how it has affected future developments in medicine. It is suitable for readers in need of additional information on specific terms, topics, and developments in medical science.

The Jewel House May 17 2021 The #1 New York Times–bestselling author of A Discovery of Witchesexamines the real-life history of the scientific community of Elizabethan London. Travel to the streets, shops, back alleys, and gardens of Elizabethan London, where a boisterous and diverse group of men and women shared a keen interest in the study of nature. These assorted merchants, gardeners, barber-surgeons, midwives, instrument makers, mathematics teachers, engineers, alchemists, and other experimenters formed a patchwork scientific community whose practices set the stage for the Scientific Revolution. While Francis Bacon has been widely regarded as the father of modern science, scores of his London contemporaries also deserve a share in this distinction. It was their collaborative, yet often contentious, ethos that helped to develop the ideals of modern scientific research. The book examines six particularly fascinating episodes of scientific inquiry and dispute in sixteenth-century London, bringing to life the individuals involved and the challenges they faced. These men and women experimented and invented, argued and competed, waged wars in the press, and struggled to understand the complexities of the natural world. Together their stories illuminate the blind alleys and surprising twists and turns taken as medieval philosophy gave way to the empirical, experimental culture that became a hallmark of the Scientific Revolution. “Elegant and erudite.” —Anthony Grafton, American Scientist “A truly wonderful book, deeply researched, full of original material, and exhilarating to read.” —John Carey, Sunday Times “Widely accessible.” —Ian Archer, Oxford University “Vivid, compelling, and panoramic, this revelatory work will force us to revise everything we thought we knew about Renaissance science.” —Adrian Johns, author of The Nature Book

The Scientific Revolution Mar 27 2022 The Scientific Revolution is known as the time period when modern science was born. Without the people who made discoveries, theories, and inventions during this time, the world as we know it today would not exist. Readers are introduced to the figures, discoveries, and events that defined the Scientific Revolution through annotated quotes from historians and historical documents, primary sources, fact-filled sidebars, and a detailed timeline. As readers explore this essential social studies topic, they also learn the important connections that can be made between history and STEM, broadening their view of each topic.

Ships and Science Apr 03 2020 The first book to portray the birth of naval architecture as an integral part of theScientific Revolution, examining its development and application across the major shipbuildingnations of Europe.

Science in the Scientific Revolution Jul 19 2021

Eight Against The World Apr 15 2021 The Four Aces of Hearts In 1860, Ellen has to give her 4 son's away after

her husband was murdered and a mysterious bill of sale showed up, she and her son's were evicted. On a cold rain filled day laying in the muddy street, Short, fat bald headed Charlie finds Ellen praying for God to take her life. They become partners in the Bull saloon. Ellen knew who killed her husband for the gold that was discovered near their ranch. It was Fulton. After sixteen years, Fulton wants to transfer the gold he has taken out of Ellen's ranch. He has desires of building his own town. Ellen decides to find her four son's and bring them back to Hardin, Montana to steal that gold. She decides to run a poker tournament to find four men to go after her son's. Charlie has kept track of there where abouts. She finds two fast guns, a dynamite expert and a horse man stage driver. She gives each one A PIECE OF PAPER WITH A HEART DRAWN ON IT AND two bags of gold containing $100.00. One for the boy's and one for them, with the promise of a lot more. If the boy's want to know what the heart drawing is all about they will have to come with you to see me.

Science and the State Feb 11 2021 The first historical overview of the partnership between science and the state from the Scientific Revolution to World War II.

The Scientific Revolution Sep 08 2020

The Scientific Revolution Revisited Aug 08 2020 The Scientific Revolution Revisited brings Mikulás Teich back to the great movement of thought and action that transformed European science and society in the seventeenth century. Drawing on a lifetime of scholarly experience in six penetrating chapters, Teich examines the ways of investigating and understanding nature that matured during the late Middle Ages and the Renaissance, charting their progress towards science as we now know it and insisting on the essential interpenetration of such inquiry with its changing social environment. The Scientific Revolution was marked by the global expansion of trade by European powers and by interstate rivalries for a stake in the developing world market, in which advanced medieval China, remarkably, did not participate. It is in the wake of these happenings, in Teich's original retelling, that the Thirty Years War and the Scientific Revolution emerge as products of and factors in an uneven transition in European and world history: from natural philosophy to modern science, feudalism to capitalism, the late medieval to the early modern period. With a narrative that moves from pre-classical thought to the European institutionalisation of science - and a scope that embraces figures both lionised and neglected, such as Nicole Oresme, Francis Bacon, Thomas Hobbes, Isaac Newton, René Descartes, Thaddeus Hagecius, Johann Joachim Becher - The Scientific Revolution Revisited illuminates the social and intellectual sea changes that shaped the modern world. This work was published by Saint Philip Street Press pursuant to a Creative Commons license permitting commercial use. All rights not granted by the work's license are retained by the author or authors.

The Scientific Revolution and World Politics Mar 03 2020

Reappraisals of the Scientific Revolution Sep 01 2022 A compendium offering broad reflections on the Scientific Revolution from a spectrum of scholars engaged in the study of 16th and 17th century science. Many accepted views and interpretations of the scientific revolution are challenged.

Watchers of the Stars Jan 13 2021

The Scientific Revolution, 1500-1800 Feb 23 2022

Problems of Scientific Revolution Sep 28 2019

Discipline and Experience Nov 22 2021 Although the Scientific Revolution has long been regarded as the beginning of modern science, there has been little consensus about its true character. While the application of mathematics to the study of the natural world has always been recognized as an important factor, the role of experiment has been less clearly understood. Peter Dear investigates the nature of the change that occurred during this period, focusing particular attention on evolving notions of experience and how these developed into the experimental work that is at the center of modern science. He examines seventeenth-century mathematical sciences—astronomy, optics, and mechanics—not as abstract ideas, but as vital enterprises that involved practices related to both experience and experiment. Dear illuminates how mathematicians and natural philosophers of the period—Mersenne, Descartes, Pascal, Barrow, Newton, Boyle, and the Jesuits—used experience in their argumentation, and how and why these approaches changed over the course of a century. Drawing on mathematical texts and works of natural philosophy from all over Europe, he describes a process of change that was gradual, halting, sometimes contradictory—far from the sharp break with intellectual tradition implied by the term "revolution."

Western Civilization: From the scientific revolution to the present Jul 27 2019 Offers chronologically arranged primary and secondary source readings, including background information and study questions.

Much Ado about Nothing Oct 29 2019 Provides a description of the major ideas about void space within and beyond the world that were formulated between the fourteenth and early eighteenth centuries.

The Genesis of Science May 05 2020 The Not-So-Dark Dark Ages What they forgot to teach you in school: People in the Middle Ages did not think the world was flat The Inquisition never executed anyone because of their scientific ideologies It was medieval scientific discoveries, including various methods, that made possible Western civilization’s “Scientific Revolution” As a physicist and historian of science James Hannam debunks myths of the

Middle Ages in his brilliant book The Genesis of Science: How the Christian Middle Ages Launched the Scientific Revolution. Without the medieval scholars, there would be no modern science. Discover the Dark Ages and their inventions, research methods, and what conclusions they actually made about the shape of the world.