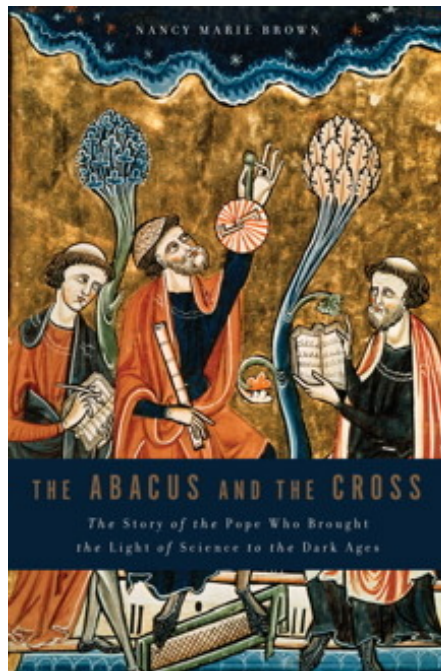




The Abacus and the Cross: The Story of the Pope Who Brought the Light of Science to the Dark Ages

Nancy Marie Brown

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The medieval Catholic Church, widely considered a source of intolerance and inquisitorial fervor, was not anti-science during the Dark Ages—in fact, the pope in the year 1000 was the leading mathematician and astronomer of his day. Called “The Scientist Pope,” Gerbert of Aurillac rose from peasant beginnings to lead the church. By turns a teacher, traitor, kingmaker, and visionary, Gerbert is the first Christian known to teach math using the nine Arabic numerals and zero. In *The Abacus and the Cross*, Nancy Marie Brown skillfully explores the new learning Gerbert brought to Europe. A fascinating narrative of one remarkable math teacher, *The Abacus and the Cross* will captivate readers of history, science, and religion alike.

The Abacus and the Cross: The Story of the Pope Who Brought the Light of Science to the Dark Ages Details

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From Reader Review The Abacus and the Cross: The Story of the Pope Who Brought the Light of Science to the Dark Ages for online ebook

Tinika says

The Abacus and the Cross did not work for me. The premise of the book, The Story of the Pope (Gerbert of Aurillac/Sylvester II) Who Brought the Light of Science to the Dark Ages, was intriguing but I don't feel Nancy Marie Brown delivered. The first section of the book was very speculative, full of "we can imagine ...", "It's possible that...", "they could have...". She develops her ideas in the second section by looking at the state of science at the turn of the first millennium. While interesting, I found Gerbert peripheral to a lot of it and don't think Ms. Brown made the case that he was a master of the astrolabe at all, though an entire chapter was devoted to this. The third section concerns the last twenty-something years in the life of Gerbert/Pope Sylvester II. He was a political animal. The supposition of a missed Utopia that Ms. Brown starts the last chapter with is too optimistic. Even if both men, Otto III and Sylvester, had lived longer, when would they have given up war and politics? Otto spent most of his life at war, subduing one group only to have them rebel when his armies retreated. The Romans hated the Pope he thrust upon them. Sylvester retained his interest in mathematics but he was still a man of his times. The latter part of his life was concerned with such things as who should receive tithes or hold archbishoprics. He also dabbled in king-making while Councils of Bishops ignored him. After Sylvester dies, Sergius IV wrote that "the world was darkened and peace destroyed" (p 236 and 240) but the rest of this section shows that there was little peace while he was still alive. Yes, the book successfully dispels the myth that Sylvester was "the Magician Pope" but does not convince that a longer pontificate would have brought science to the fore.

M Christopher says

An interesting story not very well told. The story of Gerbert of Aurillac, later known as Pope Sylvester II, should have been absorbing. The first French pope, an uncommon scholar who was the tutor and confidant of kings and emperors, and perhaps the man most responsible for bringing "Indian numbers" and the Arabic sciences of mathematics and astronomy to Europe, this little-known cleric was truly a pivotal figure in history. For centuries, his story has been obscured by the scurrilous rumors begun by his enemies that he was a practitioner of Black Magic. Brown's book could have been the key to unlocking this fascinating man's historical gaol but, alas, it's simply not very well written. Long discourses on the scientific instrumentation which Gerbert helped to introduce to the West are far more confusing than helpful. Brown fails to introduce many of Gerbert's contemporaries in a way that helps the reader understand their motivations or place in history and so they remain a confusingly amorphous group.

Gerbert's story is an important one. Perhaps someday another scholar will write a better book. Until then, I reluctantly recommend this volume as an introduction to the Scientist Pope.

Walter says

The book uses the life of Gerbert of Aurillac, a monk who became the bishop of Bobbio and later Ravenna, and ultimately was elevated to pope (and is known as Sylvester II). Pope Sylvester II headed the church in the year 1000. Nancy Marie Brown does a fine job disproving the myth that the Church and the West

believed the year 1000 heralded the end of the world. The book shows Gerbert in his official capacity was more concerned with the management of the Church's holdings than with supposed impending apocalypse. And his private correspondence from the time portrays the man as being interested in calculating the area of triangles and other geometric shapes than with the second coming.

In this, book does a good job demolishing the persistent myths about the Church being anti-science. The Church in the year 1000 was the primary educational authority of Europe. And as a bishop, Gerbert taught generations of monks and the scions of ruling families. He introduced Arabic numerals to Europe, created a European Abacus. The Europe of Gerbert's day was more cosmopolitan than we have been taught. The three Western Religions co-existed.

The book also does a good job of showing the politics of the time. The Pope of Gerbert's time wasn't the authoritative leader of the Roman Catholic Church, but the Bishop of Rome and more of a "First Among Equals". A third of the books details Gerbert's involvement in the politics of the day, including his role as advisor to Emperor Otto III, ruler of the Holy Roman Empire. Had Otto lived longer, he would have married the daughter of the Byzantine Empire, thus rejoining the two parts of the Roman Empire.

Why Gerbert is not well known to modern audiences is a result of his sometimes choosing the wrong side in political squabbles. After his death, his opponents portrayed him as dark sorcerer and one who communed with devils. This view of Gerbert is widely held, even among men of science, who should know better.

Where the book falters is in trying to connect Gerbert to all scientific enquiries and advancements of the time. The Abacus and the Cross is subtitled : "The Story of The Pope Who Brought The Light of Science to The Dark Ages". While the title is catchy, it is not quite an accurate description of the book. Gerbert was Pope for only a few years and most of the time was spent on more mundane, bureaucratic matters. Most of Gerbert's scientific achievements occurred earlier in his life. Ms. Brown seems to try too hard to show Gerbert as the leading scientific light of his day. His were great accomplishments, but they should be allowed to speak for themselves.

The book does bog down at times, going off on tangents that have little to do with Gerbert. But, in general, the book does a good job of peeling away the myths. The Dark Ages weren't that dark. The Church was well aware the Earth was round, scientific learning was the norm, not the exception. And it makes clear: science and religion are not natural enemies.

C Romano says

This is an engrossing non fiction work that Investigates the mystery surrounding the Scientific Pope of 1000 AD. The Abacus and the Cross spans hundreds of years with scores of fascinating characters. Brown debunks the myth that the church in the year 1000 AD, and in the centuries proceeding 1000 AD, feared science and mathematics. She utilizes a recently discovered abacus that was hidden in a bible, parchment letters of that time and the astrolabe to thoroughly substantiate how mathematics and music were considered to reveal the mind of God. She shows, too, how the earth was know to be round at that time. We were all taught that the church thought the earth was flat, and that Columbus proved the earth was round. That is only a myth created by Washington Irving. These are the kinds of fascinating facts, contained within, that any scientist or history buff should enjoy. Had this Scientist Pope and his friend Otto III lived longer, science might have evolved at a good clip. Unfortunately, as this book details, that did not come to pass, and the tolerance and open minded era drew to a close only a few decades after 1000 AD. Once you've read this book, you can proudly debunk the myths exposed yourself. It's a good read for believers and non-believers alike. Enjoy!

Franz says

This is a fascinating and entertaining book about a man who was the leading scholar/scientist in Western Christendom about a thousand years ago. Gerbert of Aurillac (c. 950-1003) was not only the leading mathematician and astronomer of his day, during the last few years of his life he served as Pope Sylvester II. Though this is billed as a biography of Gerbert, original sources are scarce, consisting largely of the relatively few surviving letters that Gerbert wrote and received. His enemies smear his reputation after he died, and it was the picture his enemies drew of him as a sorcerer, necromancer, and worse that survived. Brown's book is a welcome correction for the most brilliant mind in the Europe of his day. Brown frequently digresses, and rather than being distractions the digressions help illuminate both Gerbert and his medieval world. She discusses in detail how the abaci of the day worked (not with beads), the history of astrolabes, the political cauldron of conniving abbots, scheming bishops, betrayed confidences, and undermined loyalties. She tells her story with great energy and style.

Gerbert lived in a time before Muslims and Christians were at each other's throats and when relations were still quite cordial between them and with the Jews. Contrary to the common misperception, almost everyone knew that the earth was round, and Gerbert was aware that at least Mercury and Venus revolved around the sun. Science and faith were not in conflict; in fact, studying mathematics was thought to be one of the highest forms of worshipping God. During his lifetime the science and mathematics books in the Arab's library at Cordoba in Spain, many of them translations from Greek, Persian, and Hindu, were translated from Arabic into Latin. As a young monk he studied Arabic science and mathematics in Spain, and was the first Christian European to teach math using the nine Indo-Arabic numbers we use today, as well as zero, a number that ancient mathematicians outside of India did not know. His abacus, which counted on a board instead of using beads as with the Chinese abacus, is regarded as the first counting device for adding, subtracting, multiplying, and dividing that mimics modern day computers. As any scientist, he questioned authority and conducted original experiments. He achieved fame as a teacher, and taught future kings, abbots, popes, bishops, and emperors. Some of his students helped him spread the science of the Arabs throughout Europe, eventually sowing the seeds that gave birth to the Renaissance and paved the way for the development of modern science. To remember favorite sayings he constructed a memory palace in his mind as taught by the ancients, each room specific for storing a particular memory. Because of his studies in Christian Catalonia in the shadow of Muslim and Jewish scholars, Gerbert became the only Western Christian of his day to master the seven liberal arts: grammar, rhetoric, dialectic (these three were known as the trivium; most monks never advanced beyond grammar), arithmetic, geometry, astronomy, and music (known collectively as the quadrivium and which was not taught in Gerbert's France). He also mastered the use of the astrolabe, a complicated astronomical instrument for mapping the heavens and said to have over a thousand uses; the Arabs had used it to determine the circumference of the earth and to track the distance of the sun from the earth.

Later in life political circumstances conspired to take Gerbert away from his beloved teaching, research, and academic studies. One of his students became Emperor Otto III at a very young age, and Gerbert became one of the young emperor's primary counselors. Prior to playing this role, Gerbert became involved in political intrigue and spying, and was even excommunicated for political reasons. Otto III was able to install Gerbert as Pope Sylvester II on April 9, 999 (this was long before popes were elected by cardinals). Their dual ambition was to unite Byzantine East and Roman West under a new Roman Empire headed by Otto III who claimed legitimacy for this role as his father was the German emperor and mother was a Byzantine princess. After making much progress by neutralizing the aggressive Vikings and Magyars by converting them, establishing a Polish Catholic church, sending missionaries to the Prussians, Swedes, and other pagan tribes, and making overtures to both Spain and Constantinople, Otto III died at the age of 22 in 1002. Gerbert joined

him in death a year later, some say due to grief.

Brown speculates that had their partnership survived, with Otto taking care of the legal and political administration of the new empire while Sylvester watched over its ecclesiastical health, the Great Schism of 1054 between the Roman and Orthodox churches would have been avoided and the First Crusade of 1096 would never have taken place, the event that permanently altered the relationship between Christians and Arab Muslims to the mutually deadly antagonism that persists to this day. At the time of their deaths, society had not yet been divided up into the three groups of feudalism: churchmen, nobles, and serfs. Peasants were still largely free and probably would have remained so in the empire. Otto and Sylvester's hope was to create a Christian empire based on peace, tolerance, and laws. Science and learning decayed after their death, so that what Gerbert had learned and then taught to others became largely lost for several hundred years. Their deaths appear to be one of those turning points in history that changed almost everything, and in this case changed them for the worse.

Bob Mustin says

Nonfiction is still very much in vogue, and this book proves there's no end in sight to the wealth of research to be done, stories to be told of historical characters. This book's subtitle, "The Story of the Pope Who Brought the Light of Science to the Dark Ages," virtually tells the tale here, but stories are all the better wrapped in a human personality.

The personality here is a French peasant-monk, who had the good fortune to go to Spain in the mid-900s, where over some 3-4 years he immersed himself in the learning of Arabic Spain. The monk, Gerbert, would eventually become Pope Sylvester II, one half of a spiritual-political duo, along with Otto III, the last of Germany's Ottonian dynasty. But that high-altitude relationship was almost a postscript to Gerbert's life.

Following his return to France, Gerbert established a school in Reims, where he taught the long-lost trivium and quadrivium of the Roman Empire to most of the soon-to-be influential young minds of Europe. This was his legacy to both the church and to Europe in general, but his forays into the politics of the time were almost his undoing. But I'll leave it there – no need for a spoiler alert.

Brown tells us first of Gerbert's mathematics, his astronomy, his approach to learning that even included music and the creation of some of Europe's earliest pipe organs. Then her attention in this deeply researched book tells in details I've seen nowhere else of his political career. She writes with great emotion in places, sardonically and cynically in others, but there's no escaping the story she has at her fingertips. For anyone who thinks the "Dark Ages" were really dark – read Brown's book.

Ess Kay says

I really loved this book. Brown has a lively, humorous style and she tackles Gerbert in a very personable way. Her inclusion of manuscript preparation methods and overview of the importance of the House of Wisdom, and Islam in general, to the education of the European West was wonderful. I'm also a sucker for the astrolabe - it is a fascinating bit of technology whose journey around time, Europe, Asia and the Middle East serves as a beacon for the intellectual exchanges across cultures.

Brown was adept at setting the political stage as well as breathing life into the grudges and snubs that built it. The breadth of exploration that went into reconstructing the personality and mathematically complex humor of a man who lived ahead of his time made for a great read. If you enjoy Frankish, Holy Roman Empire or Church histories, you will enjoy this book.

My only complaint would be one of layout - I freakin' hate end notes and truly wish publishers would stop thinking that the minute non-academic audience that most histories have will walk away and cause the demise of publishing if there are footnotes. Footnotes are awesome and I miss the discourse that they allow the writer.

Bring back the footnote! End notes are for wusses!

Margaret D'Anieri says

While the information was fascinating and completely new to me (I along with many drank the koolaid about Columbus discovering that the earth was round, when in fact that was known in the 10th century) - the writing was tedious. Lots of names, lots of who was on whose side at any particular moment, lots of parenthetical references. I'm glad I read it, but it could have been so much better, starting with some simple charts of who was who as a reference.

Abbe says

From

The pontiff in question is Sylvester II, pope from 999 to 1003. From the fragmentary evidence about Gerbert of Aurillac, Sylvester's name before his elevation, Brown resourcefully recounts his remarkable career and boldly asserts that the history of mathematics must be revised in light of Gerbert's life. Born to a humble station around 950, Gerbert's precocity impressed bishops and counts, and his friendship-forming personality, visible in surviving letters, showed up in places from Barcelona to Reims to Rome. Brown speculates that he also may have studied in Cordoba, then a center of Islamic erudition, where he may have learned about Arabic numerals, the abacus, and the astrolabe. In any event, she recounts that Gerbert served as a conduit of Arab science into Christian Europe as schoolmaster at Reims. His medieval scholarly renown subsequently attracted the attention of emperors of the Holy Roman Empire. As readably knowledgeable about Gerbert's political fortunes as about his intellectual influence, Brown is a lively narrator and interesting interpreter of Gerbert's life and world. This portrait gives both the science and the history audiences something to talk about. --Gilbert Taylor

Review

"Overflowing with illuminating material, *The Abacus and the Cross* is the biography of a vital moment we know precious little about." --Maria Rosa Menocal, author of *The Ornament of the World*

Keith Devlin, Stanford University professor and author of *Fibonacci's Bridge of Numbers: the Medieval Visionary and the Book that Launched the Modern World*

_"Nancy Marie Brown's book provides a fascinating, well researched, in depth study of the life and times of one of the key figures who brought modern arithmetic into Western Europe."

Marilyn Yalom, author of *_Birth of the Chess Queen*

—“This book will change how you think about the so-called Dark Ages. Well-researched, well-written, and vividly illuminating.”

Pat Shipman, Professor of Anthropology at the Pennsylvania State University and author of *Femme Fatale: Love, Lies, and the Unknown Life of Mata Hari*

“Nancy Marie Brown again uses her extraordinary ability to bring medieval time to life in *_The Abacus and the Cross_*, in the person of the ‘Scientist Pope’ Gerbert of Aurillac (later Pope Sylvester II). Working from sparse records, Brown manages to tell us of the remarkable scholar, brilliant mathematician, and inveterate punster who loved both his holy orders and luxurious living. She shows us a time in which the route to God lay through the study of science and math and when intellectual developments flowed across the boundaries of religion and empire in Eurasia. This is a remarkable book that reflects on our modern times on every page.”

Jeff Sypeck, author of *Becoming Charlemagne*

“A pleasure to read, *The Abacus and the Cross* draws readers into a world of intrigue, superstition, and scholarship. Nancy Marie Brown writes lucidly about math and science, finding important stories in the lives of medieval people who deserve to be widely remembered.”

_Kirkus

—“A thoroughly engrossing account of the Dark Ages and one of its Popes, both far less dark than popular histories teach. . . . The years around 1000 CE seem to be every medieval historian’s favorite era, but Brown’s welcome addition to the genre provides a lively, eye-opening portrait of a sophisticated Europe whose intellectual leaders showed genuine interest in learning.”

Science Writers Magazine

—“As she reconstructs the strangely illuminated Europe of the Dark Ages, Brown reminds readers that the major conflicts in our world today—between Christianity and Islam, between religion and science—are products of our own age, not historical inevitabilities.”

Booklist

“As readably knowledgeable about Gerbert’s political fortunes as about his intellectual influence, Brown is a lively narrator and interesting interpreter of Gerbert’s life and world. This portrait gives both the science and the history audiences something to talk about.”

Library Journal

“A rags-to-riches saga... captures how the direction of history can be influenced by one person. . . . Had Gerbert lived longer and been more politically savvy, Brown’s portrait makes one believe his ability to teach might have jump-started science before the Dark Ages enveloped Europe. VERDICT: Enjoyable to read, informative, and highly recommended for all history and history of science buffs.”

Maria Rosa Menocal, author of *_The Ornament of the World_* and co-author of *_The Arts of Intimacy_*

“Overflowing with illuminating material, *The Abacus and the Cross* is the biography of a vital moment we know precious little about: the second half of the tenth century, when Gerbert of Aurillac, the man who would be pope at the much-anticipated millennium, came of age. Among Brown’s many virtues is her ability to weave the intellectual and the material into a seamless narrative, so that when her readers learn about what

books the monks of a monastery might be copying—and how those volumes connect to the intellectual past and future—they are also going to learn the mechanics of the copying itself, beginning with the cultivation of the animals whose skins will become parchment. She has the scientist's eye for detail and the historian's gift of storytelling and she has not one but dozens of great stories to tell about this transformative moment in Latin Christendom, as it began to embrace the foundations of modern science and technology."

Richard Rubenstein, author of *Aristotle's Children: How Christians, Muslims, and Jews Rediscovered Ancient Wisdom and Illuminated the Middle Ages*

"*The Abacus and the Cross* tells the fascinating, little known story of the 'Scientist-Pope' Sylvester II (Gerbert of Aurillac), whom older writers long considered a practitioner of the Black Arts. In this vividly presented, scrupulously researched biography, Nancy Marie Brown shows how a few open-minded intellectuals illuminated the Dark Ages by importing scientific knowledge and methods into Christian Europe from Muslim Spain. Brown's descriptions of Gerbert's 'magical' instruments, the abacus, celestial spheres, and astrolabe, as well as of his worship of a mathematically-inspired Creator, make important contributions to the history of medieval science."

The New York Journal of Books

"Ms. Brown's easily readable history draws the reader into a world of political intrigue, the excitement of introducing the abacus and astrolabe to Europe, and the shaky ground that surrounding the broader culture of Europe around 1000. Her book is a useful reminder that clear and well-reasoned history is by no means simplistic. The story of d'Aurillac's life and papacy shows a medieval milieu more complex than oft portrayed."

Jennifer says

An eye opening book.

This history of the scientific activity of the pope and others around the year 1000 addresses the myth that science died during the middle ages - that nothing happened between the ancient Greeks and the Renaissance. I've read other books that present the same concept, but this book was the first I've read that suggests that the politics of the Renaissance era directly led to the myth. The author writes that Petrarch, historian writing in the 1400s, apparently coined the term "Dark Ages" and introduced the idea that the Renaissance generation was the first enlightened generation in over 1000 years. This idea supported the struggle of the merchant and intellectual class against the "old" powers of the church and the feudal economy.

I enjoyed the book -- the science and math more than the politics -- and I am inspired to read more about this time period.

Marlene Smith says

The story of the scholar who became Pope Sylvester II in 999, the first half of the book outlines the young monk Gerbert's education, his teaching and his contributions to the seven liberal arts. The author included the history of the various fields both before and after Gerbert but could have done it in a much more concise and organized fashion. The book's second half concerns Gerbert's later years, when he was mostly embroiled in

the murky politics of the day. Nancy Marie Brown succeeds in shedding some light on the Dark Ages. An interesting tidbit: Gerbert's protector, Otto III, who became King of Germany at age 3, came of age at 14 and ruled as emperor without a regent. He led an army against Rome at age 15. Quite a difference from present-day adolescents.

Atoorva says

A fascinating biography of a man I knew nothing about and what a wonderful read it turned out to be ! Much before the Great Schism of 1054 and the first crusade of 1096, there lived a Pope who was a mathematician, astronomer and scientist. Gerbert of Aurillac , Pope Sylvester II, was perhaps first Christian known to teach maths using arab numerals and zero , who got the science books translated from arabic to Latin , invented a kind of abacus , a computus and even built a primitive planetarium . And then in just about a 100 years of his death, he was branded a sorcerer , devil worshipper for teaching science and maths coming through Islamic Spain(an image that continues even today - even on his Wikipeddia page) . Instead of loving, copying and collecting the works of scientific wisdom as Pope sylvester II did , the monks of Chistiandom were suddenly burning the books and ...even the scientists and the mathematicians . What a contrasting tale history tells. As another mathematician Hraban Maur wrote - Time is the motion of the restless world and the passage of decaying things .

Gail says

Math nerds, history nerds, and students of church history will love this book! I am so happy to have found it, and I'm horrible at math. I tend to be very cynical regarding Church history and refer to myself as one of those "recovering Catholics." How refreshing to learn that once, in a time incorrectly referred to as the "dark" ages, the Church produced and educated brilliant men interested in science, who were enthusiastically sharing knowledge with Muslim and Jewish scholars and intellectuals in a time of peace between the great religions.

This story of Gerbert of Aurillac and the present Pope Francis restore my faith in a church that devolved into Crusade, relic worship, Inquisition, misogyny and witch burning, and pedophilia. Sadly, the superstitious idiots of the Middle Ages, who corrupted the memory of Gerbert's accomplishments and accused him of devil worship, and burned his students at the stake for heresy, are the same breed of idiots calling today's scientists liars and Lib-tards. People fear what they don't understand. How long until Pope Francis and our climatologists are burned at the stake? History repeats itself over and over and over and over.

Debra says

I'm very interested in the (relatively) new literature retrieving the "Dark Ages" from the dustbin of history. While academicians have long asserted that there was little about the early middle ages that was really "dark" popular culture and writings generally have ignored that. What a wicked good job the writers of the Renaissance did in labelling the somewhat recent past (ok, in the big picture it was recent!) as dismal, unlearned, and dark.

The convergence of science and religion, so absent in much of the modern world, was key to scholarly work in the early medieval period. The monasteries were the seats of learning and members of religious orders led the way in scientific study. This book helps us to remember the role of religious figures in building scientific

knowledge. Not too heavy for the general reader, Brown's book shines a bright light on the otherwise misnamed "Dark Ages".

Good read!

David says

I have long been fascinated by Gerbert of Aurillac, who as Pope Sylvester II indeed represented the light of science in an otherwise rather dark period of history. Popes for at least 150 years before Gerbert and for at least 100 years after Gerbert were almost exclusively preoccupied with wars among rival Italian states and rival factions among the Cardinals. The papacy was bought and sold like a commodity in the local market. And many of these popes failed to set an example of holiness, to say the least. A sample of this sordid history was given by historians Will and Ariel Durant in their *Story of Civilization* (vol 4, pg. 538):

In 897 Pope Stephen VI had the corpse of Pope Formosus (891-896) exhumed, dressed it in purple robes, and tried before an ecclesiastic council on the charge of violating certain Church laws; the corpse was condemned, stripped, mutilated, and plunged into the Tiber [River]. In the same year a political revolution in Rome overthrew Stephen, who was strangled in jail. For several years thereafter the papal chair was filled by bribery, murder, or the favor of women of high rank and low morality. For half a century the family of Theophylact, a chief official of the papal palace, made and unmade popes at will. His daughter Marozia secured the election of her lover as Pope Sergius III (904-911); his wife Theodora procured the election of Pope John X (914-928). ...

Even more important than the wars and sins of these popes was the fact that for several hundred years they were indifferent, at best, to scientific or cultural advancement.

Into this foray came Gerbert, who ascended to the papacy by the good graces of German emperor Otto II. Gerbert was unique in having brought what he had learned about science and mathematics from Islamic scholars in Spain. Sadly, he reigned less than two years (999-1002). As Brown accurately observed, history may have been far different if had held the office longer. Within a few years after his death (which Brown says was due to depression upon the death of Otto II but other historians have ascribed to poisoning), the papacy redescended into squalor and warfare, and Gerbert's interest in Islamic science and mathematics was cited only as proof of his sorcery. These claims reached an incredible climax in the 1648, when Gerbert's tomb was opened to investigate whether his corpse showed evidence of mutilation for his sorcery.

One disappointment for me is that Brown did not devote sufficient space to what, in my view, was Gerbert's most significant (attempted) contribution, namely to introduce Indo-Arabic decimal arithmetic into Europe. For one thing, Brown almost completely ignored research that recently has pinned the origin of the Indo-Arabic system to roughly 500 AD in India. In general, like many other historians, she does not appear to appreciate the enormous impact that this discovery has had through the ages. Just the fact that school children today are able to master the techniques for performing addition, subtraction, multiplication and division is an enormous advance over the hugely complicated schemes that once were required for reckoning with Roman numerals.

In general, though, this is an interesting book, particularly if you are interested in the history of mathematics and science (or the papacy).

Kelly Sedinger says

This is a terrific book that I selected randomly while perusing the science section at the library. It relates the life and times of a monk named Gerbert of Aurillac, who lived from 946 to 1003. During the last four years of his life he went by a different name: Pope Sylvester II. Gerbert was a brilliant scholar who was keenly interested in mathematics, astronomy, and logic. He was instrumental in introducing Arabic numerals to Europe, and he was one of the most literate men of his day.

During the Dark Ages in Europe, such learning was not often respected, and it fell to various church leaders throughout those centuries to keep science and the old learning alive. Pope Sylvester II was one such church leader, and even though his papacy was quite short, he played a strong role in preserving science in the face of the self-imposed ignorance that dominated Europe in his day.

Author Brown writes a compelling biography of Gerbert/Sylvester, capturing a sense of the man (brilliant scholar and, apparently, not quite so brilliant a politician) and the times in which he lived and worked (a passage on the making of books circa 1000 AD is almost worth reading all on its own). This would be a valuable book for anyone interested in the history of science, or medieval Europe, or of science IN medieval Europe.

Steve Horton says

A story starring a scientist pope must have grabbed the publisher by the lapels the same way "MTV cops" sold NBC on 1980's iconic television show Miami Vice. The book is well written, with a moat full of incredibly researched detail. I would propose this book is a monument to research. Want to know how to make parchment? Construct an astrolabe? How about an abacus? You could if you followed the descriptions that Nancy Marie Brown uses to bring the reader right into this non-fiction page turner. The millenia melt away under her descriptive powers.

A scientist pope...a nexus where science and religion do not compete, but compliment? It hardly sounds like Dark Ages.

SH

Andi says

I had such high hopes for this one, but was sorely disappointed. The topic was interesting. Pope Sylvester, the Roman Catholic Church in the 10th century, politics...all things I was excited to read about. Unfortunately, Ms. Brown's writing largely killed that excitement. I could not get into this book. It was a chore to read. I stuck with it because I truly did want to learn about Pope Sylvester and the Catholic Church during that time, but it was a struggle. The narrative was dull for 2/3 of the book, only picking up a bit when people started killing each other off. I may seek out more books about this period, but I will not be seeking out other books by this author. I just don't click with her writing style.

Jess says

Really outstanding book which does yeoman's work of trying to dispel the myth of the "Dark Ages." At points, I couldn't stop reading bits out loud to the DH, and finding the flimsiest excuses to bring it up with complete strangers (no, really, we're talking store clerks here). I'm not even particularly thrilled about mathematics, which is the strong suit of Gerbert of Aurillac--later to be Pope Sylvester II--the subject of the book; it was just so exciting to feel like I was discovering the connections along with the writer, which is the most compelling thing about the book.

The only reason I struck a star off an otherwise-perfect rating is the fact that the book is profoundly unbalanced. She's so intent on showing what an accomplished scholar Gerbert is that, if it doesn't bear directly on her thesis that he was a brilliant scientist working at a level completely unheard-of before the year 1500, she doesn't spend much time on it. There are only two chapters left in the book when he becomes pope, and granted, he's not pope for long, but instead of feeling like she's just wrapping up because the part of his life that she's interested in has passed, it feels like she abruptly got bored or ran out of source material. As a reader avidly enjoying the book, it felt like a rip-off; as a historian, it felt like a cheat. I'd be interested to know what a non-historian thinks of the pacing.

That being said, the information in the first 3/4 of the book is so worthwhile that I'd like to press this book into the hands of every person who has to sit through an Early Modern history class, in a desperate attempt to undo just a fraction of the damage that that era's perception of its recent past has done to medieval people, the medieval age, and the field of medieval history.

Joshua Buermann says

The first half of this biography of Gerbert of Aurillac covers a very brief period in the centuries-long transmission of Islamic science to the Latin west through al-Andalus. The narrow breadth allows the author to delve deeply into the details of a monastic scholar's daily labors, which can be quite fascinating. The wider history suffers somewhat: for instance Michael Scot -- who worked two centuries later at the Toledo School of Translators and helped bring the works of Avicenna and Averroes into Latin -- appears in these pages only to denounce Gerbert as a necromancer in league with the devil.

The second half of the book focuses on Gerbert's political career, wading adroitly through the interminable, Game-of-Thrones-like intrigues of the Holy Roman Empire during the Ottonian dynasty, his tenure as Sylvester II, and ending on the dark notes of Europe's religious unification and the start of the Crusades.

Brown argues that Gerbert's labors as an educator proved far more significant to the history of Europe than his ascendance to the Holy See. Even if her claims about his influence on Latin education are modestly exaggerated and his work converting the last corners of Europe somewhat slighted, it would be hard to disagree. Gerbet's story serves largely as a frame for medieval Europe's political institutions at the turn of the first millennium, and his rise through church and court adds a good deal of depth to the picture.
