

# THE 100 MOST IMPORTANT PEOPLE OF THE SECOND MILLENNIUM

**1 THOMAS EDISON 1847-1931** Because of him, the millennium will end in a wash of brilliant light rather than in torchlit darkness as it began. In 1879, Thomas Edison gave humans the power to create light without fire, by inventing a long-lasting, affordable incandescent lamp. Among life's many conveniences we can take for granted, thanks in part to him: copiers, radio, movies, TV, phones (he improved Bell's). On the night after his funeral, Americans dimmed their lights for the man who lit up the world.

**2 CHRISTOPHER COLUMBUS 1451-1506** He failed four times to find a route westward from Europe to the Orient, but the Italian explorer stumbled upon two giant continents rich in raw materials and agricultural products that changed the economy of Europe. Christopher Columbus is often criticized--principally for cruelty toward and enslavement of Caribbean natives--but his delivery on a promise to "discover islands and mainland in the Ocean Sea," however inadvertent, has never been surpassed.

**3 MARTIN LUTHER 1483-1546** When Martin Luther nailed his 95 Theses to the door of a Wittenberg, Germany, church in 1517 "for the purpose of eliciting truth," he began the Reformation that transformed political and religious alliances for centuries. While some later writings were marked by anti-Semitism, his early works stressed salvation by God's grace and Christian spirituality. He argued against papal authority in affairs of state, and when he refused to recant was excommunicated by the Catholic Church in 1521--an act that gave rise to all Protestant churches.

**4 GALILEO GALILEI 1564-1642** By challenging views of the natural world that had prevailed for 1,500 years, Italian astronomer, physicist and mathematician Galileo Galilei changed the way we think. By inventing a mathematical approach to everyday experience, he discovered the laws of inertia, falling bodies and the pendulum. With a telescope he built, he also made astronomical discoveries that convinced him of the heliocentric view of

the universe, which Copernicus had formulated earlier but had been hesitant to publish. Galileo took the chance but was forced to recant his findings before a Catholic Church tribunal in 1633. Nonetheless, his beliefs and discoveries lived on, opening the door for modern physics and a new approach to scientific thought.

**5 LEONARDO DA VINCI 1452-1519** Renaissance man--one who knows much and can do more, whose interests are broad and deep, whose zest for inquiry is indefatigable--was born in Vinci, Italy, in 1452 and named Leonardo. As an apprentice he quickly showed painting and sculptural talents. Soon after came projects in engineering, anatomy, architecture, scientific illustration, mapmaking, mathematics, optics. While his finished works--notably Mona Lisa and The Last Supper--are few, his copious and disorderly notebooks continue to enthrall us. Regarded as the greatest of great amateurs, this enduring icon of the Renaissance set a mark unequaled by any who came after.

**6 ISAAC NEWTON 1642-1727** A passionately religious man in a time of great scientific discovery, Isaac Newton wanted to know how God's universe worked. His quest for answers gave us the law of universal gravitation, calculus, a new theory of color and light, and the three laws of motion that form the basis of modern mechanics. Brilliant and creative, the English physicist and mathematician synthesized the discoveries of Galileo, Kepler and others, formalizing and transforming physical science. Yet, looking back, Newton said, "I seem to have been only like a boy, playing on the seashore, and diverting myself, in now and then finding a smoother pebble or prettier shell than ordinary, whilst the great ocean of truth lay all undiscovered before me."

**7 FERDINAND MAGELLAN c.1480-1521** When Ferdinand Magellan headed west across the Atlantic in 1519, people already understood the world to be round. But this expedition, under his brave command, provided proof. The Portuguese captain, sailing for Spain, found the strait off South America's tip to be treacherous in the extreme, but he made it through. Having survived mutiny, desertion and shipwreck, Magellan

and his crew faced starvation as they headed into the Pacific. Magellan died in the Philippines, but a small band of his men eventually reached home, having sailed around the world.

**8 LOUIS PASTEUR 1822-1895** Eulogized as "the most perfect man who has ever entered the kingdom of Science," Louis Pasteur was both practical problem-solver and theoretical genius. The French chemist discovered that heat would kill the unwanted microorganisms that turned wine bitter. Soon, the process of "pasteurization" was applied to many foods and beverages. Finding and eliminating a microbe that was attacking silkworm eggs, Pasteur is credited with saving the French silk industry. Realizing that most diseases are caused by microorganisms, he helped establish the germ theory. And using weakened microbes in vaccines to develop immunities to anthrax and other diseases, Pasteur saved countless lives and advanced the science of immunology.

**9 CHARLES DARWIN 1809-1882** A child of wealth and an undistinguished student, Charles Darwin leapt at the chance to serve as an unpaid naturalist on the H.M.S. Beagle. In the course of his five-year adventure, he realized his genius: Though he returned a semi-invalid, he proceeded to father 10 children--and to work out the implications of what he had seen in the Galapagos Islands and atolls of the Pacific. His theories of evolution and natural selection, published in 1859, still excite us today.

**10 THOMAS JEFFERSON 1743-1826** Were it not for his mind and his pen, the world might have witnessed one more bloody revolution signifying nothing. A lawyer by trade, a pioneer of American architecture, a president who spurred westward expansion, a slave owner who opposed slavery, Thomas Jefferson embodied many of the aspirations of a newborn nation. It was a self-evident truth, wrote the 33-year-old Virginian, "that all Men are created equal." Natural law, the right to "Life, Liberty, and the Pursuit of Happiness," became the New World blueprint. It remains an alluring goal for democracies around the world.

**11 WILLIAM SHAKESPEARE 1564-1616** William Shakespeare's masterful use of the English language has captivated audiences for 400 years.

He penned 38 plays and 154 sonnets that explored the complexities of the human soul with unprecedented emotional range. His subject matter, from romantic comedies to moving tragedies, was equally diverse. But what all his work demonstrates is a facility for wordplay unrivaled by any writer before or since. Shakespeare's ubiquity on world stages, on film, in textbooks and in our everyday vernacular is a testament to his achievement.

**12 NAPOLEON BONAPARTE 1769-1821** Already a war hero, he seized power in France in 1799 and quickly set out to conquer the world. He treated soldiers well and promoted for reasons of talent, not class. He said he hoped to build a federation of free governments throughout Europe. But to the enemy, Napoleon Bonaparte looked like a tyrant. He met his Waterloo at Waterloo, Belgium, in 1815, and spent his last six years in exile on the British isle of St. Helena.

**13 ADOLF HITLER 1889-1945** A failed artist who was gassed and wounded during World War I, Adolf Hitler embarked on a vicious campaign of global domination. He almost succeeded. Along with his mastery of propaganda, his ideology of racial purity and his ruthless political skills, Hitler possessed a diabolical personal magnetism. He secured the chancellorship of Germany in 1933, declared war on the world in 1939, and set about systematically exterminating Jews and other "undesirables." By the time Hitler was defeated in 1945, as many as 77 million had died, making him responsible for more human destruction than any other man in the history of the world. As the Allies were closing in on Berlin, Hitler committed suicide in his bunker.

**14 ZHENG HE 1371-c.1435** In the early decades of the 15th century, the seas off Asia were dominated by the huge Chinese treasure ships of Admiral Zheng He--each one of them five times as large as a typical European caravel. Zheng, a court eunuch turned diplomat, led seven naval expeditions for Ming emperor Yongle between 1405 and 1433. His assignment was to extend China's political sway overseas. His first entourage included 62 ships and 27,800 men; the others were of similar scale, making them the most fantastic naval ventures the world had yet seen. His journeys took him to the east coast of Africa, to Mecca and to India. Zheng always

brought back exotic souvenirs as proof of his exploits, including, once, an African giraffe.

**15 HENRY FORD 1863-1947** When Henry Ford set up shop in Detroit in 1903, all he wanted to do was make and sell cars. For 19 years he sold only one kind, the Model T, but he sold 15.5 million of them, half the auto output in the world. His revolutionary assembly line enabled him to sell his cars at a price the average American family could afford, and to double his workers' wages while cutting hours. What had been a toy of the rich fast became a necessity of life, spawning gas stations, superhighways and traffic jams around the world.

**16 SIGMUND FREUD 1856-1939** Hearing about a colleague's successful use of hypnosis to cure hysterics, Sigmund Freud developed free association, in which his patients simply said whatever came into their minds. He used this technique, along with dream analysis and other methods, to help patients express their hidden wishes and repressed experiences. Freud's emphasis on the power of the unconscious to influence behavior broadened our view of human nature and sexuality, and gave rise to the age of psychotherapy

**17 RICHARD ARKWRIGHT 1732-1792** His 1769 invention of a water-powered spinning frame meant that all-cotton cloth could, for the first time, be made in England. But because his creation had to be housed in a large room with a water supply at the ready, Richard Arkwright inadvertently became the founder of the modern factory system, a system in which specialized workers, using specialized machinery, work together in one place-very quickly.

**18 KARL MARX 1818-1883** Though not one of the working-class proletarians about whom he wrote, Karl Marx followed his own advice and renounced his bourgeois roots. Hounded from Germany to France to England, living hand-to-mouth, he devoted his life to political journalism, supported by his patron and writing partner, Friedrich Engels. Marx's vision of a postcapitalist world where the working class owns the means of production has not come to pass, but his critique of the class system has

inspired millions.

**19 NICOLAUS COPERNICUS 1473-1543** The Earth was the fixed center of the universe until 16th century Polish astronomer Nicolaus Copernicus ventured the idea that the sun is the center of the solar system, with the earth and the planets revolving around it. Copernicus, a systematic student of mathematics and astronomy, began to amass evidence disputing Aristotle and Ptolemy's geocentric universe. But he was also a cautious man--one might say a wise man--at a time when heretics were put to death. Copernicus didn't publish *On the Revolutions of the Celestial Spheres*, which revolutionized our concept of the world, until 1543, when he was on his deathbed.

**20 ORVILLE & WILBUR WRIGHT 1871-1948 & 1867-1912** The Wright brothers, who designed and made bicycles for a living, were so distressed after hearing that the German scientist Otto Lilienthal had died in a gliding experiment, that they determined to pursue his dream of flight. For eight years the brothers studied flying buzzards, tested wing models in a homemade wind tunnel, built engines, and launched gliders, most of them doomed, on the windy bluffs of Kitty Hawk, N.C. Finally, in 1903, Orville and Wilbur succeeded in flying the first powered airplane. Flight time: 12 seconds. By 1908, the Wrights were making warplanes. Mankind's view of the world--and of its own power--had changed forever.

**21 ALBERT EINSTEIN 1879-1955** One dreamy, academically lax German youth would follow his curiosity until he had removed Newton from the pinnacle of physics and painted a fantastic new picture of our universe. In the process, Albert Einstein changed the political and scientific balance of power in our century.

**22 MOHANDAS GANDHI 1869-1948** "The candle of non-violence should be able to burn even when the cyclone of violence surrounds it." Mohandas Gandhi was explaining his philosophy, a philosophy that drove India to independence in 1947 after nearly two centuries of British domination. Gandhi's powerful strategy, called satyagraha, involved non-violent non-cooperation, boycotts of all things British, civil disobedience,

marches and fasts. It has been adopted by protest movements throughout the world.

**23 KUBLAI KHAN 1215-1294** Ruler of the Mongols from 1260, Kublai Khan completed the conquest of China that had been started by his grandfather Genghis. In 1271 he became the first emperor of the Yuan dynasty. Establishing Beijing as his capital, Khan boosted agriculture and business, fostered scholarship, encouraged the arts, retained many Chinese institutions, promoted religious tolerance and oversaw generally prosperous times. The splendor of his court stirred the imagination of Western travelers, including that most famous Italian venturer Marco Polo.

**24 JAMES MADISON 1751-1836** Before he served as the nation's fourth President, James Madison was already called the father of the Constitution. He supported checks and balances among the government's branches, and clear divisions between federal and state authority. The Virginian who once considered becoming a minister also drafted the Bill of Rights, which prohibited the establishment of a national religion.

**25 SIMON BOLIVAR 1783-1830** El Libertador devoted his life to fighting for the independence of northern South America. In 1819 Bolivar chased the Spanish out of what is now Colombia by staging one of the most daring attacks in military history. He led 2,500 men over terrain so rough the Spanish thought it was impassable, then surprised the imperialists in the Battle of Boyaca. Military leader, statesman, dictator, Simon Bolivar was also the emancipator of Venezuela, Ecuador, Peru and Bolivia.

**26 MARY WOLLSTONECRAFT 1759-1797** A Vindication of the Rights of Woman, British author Mary Wollstonecraft's landmark plea for women's equality, was published in 1792, at a time when French citizens were demanding reforms and overthrowing their monarchy. Inspired by those democratic principles, Wollstonecraft challenged Rousseau and others, arguing for equal education and employment for women and urging national legislation to guarantee women's rights. Wollstonecraft, who gave birth to her first child while unmarried (her second, Mary Wollstonecraft Shelley, wrote Frankenstein), was criticized for a lifestyle that defied convention, but her

work influenced generations of feminists.

**27 GUGLIELMO MARCONI 1874-1937** In the early days of telephones and telegraphs, the thought of sending messages through thin air (sans wires) was all but inconceivable. Then, in a bold leap of faith, a young Italian proved it could be done. Guglielmo Marconi's transmission of a signal--the Morse Code letter S--across the Atlantic in 1901 was a worldwide sensation. It opened the airwaves for today's complex network of global communications--from radio to radar to orbiting satellites. Interglobal, too, as NASA now pulls in daily messages from the rover pattering across the surface of Mars.

**28 MAO ZEDONG 1893-1976** In 1921, when Mao Zedong was one of a dozen men forming the outlaw Chinese Communist Party, few foresaw him as leader of modern China. It was a Long March indeed for Mao's Red Army, from resistance against the Japanese to defeat of the Nationalists and the rise, in 1949, of the People's Republic. A brilliant warrior, Mao was a despotic dictator. His economic Great Leap Forward failed at a cost of 30 million peasant lives. His Cultural Revolution led to more injustice and death. Mao cast a shadow on the world, a darker one on his own people.

**29 VLADIMIR LENIN 1870-1924** Marx was theory, Vladimir Ilyich Ulyanov (pseudonym, Lenin)--a Russian revolutionary who revered Marx's ideas--was action. Along with Leon Trotsky he led the 1917 revolution that, with its bold assault on the Winter Palace on October 25, brought the Bolsheviks to power and started the worldwide spread of the Soviet form of communism--a form that, though it deviated from Marx's, was nonetheless attractive to many Marxists. Leninists called their regime a "dictatorship of the proletariat," but in reality it was a dictatorship of Lenin and his party. The brutal repression Russians had known under the Czar was replaced by Bolshevik repression. This is a central irony of Lenin's life: A fighter against authoritarian injustice laid the foundation for decades of tyrannical, murderous Soviet totalitarianism. Nevertheless, Lenin built an economic engine that would eventually propel the Soviet Union as a great world power--politically, technologically, militarily. He died in 1924, but the

state he founded helped stop Hitler in World War II, forced the cold war with the U.S. and initiated the space race--and then it finally collapsed in 1989. Before FDR, before Churchill, before Stalin and before Hitler, Lenin shaped the 20th century.

**30 MARTIN LUTHER KING JR. 1929-1968** Born into the segregated society of America's South, the Baptist preacher from Atlanta walked a Gandhian path of nonviolence, and the Civil Rights movement followed. Martin Luther King Jr.'s march for equality started with a protest of the bus system in Montgomery, Ala., in 1955, and peaked in the nation's capital. "One day this nation will rise up and live out the true meaning of its creed," he dreamed aloud during the August 28, 1963, March on Washington, "that all men are created equal." Five years later, at the age of 39, he fell to a sniper's bullet. He was honored in his time and posthumously: King won the Nobel Peace Prize in 1964, and in 1986 he became only the second American whose birthday is observed as a national holiday (the first was George Washington). More important, King was such a force that three decades later, his call to "let freedom ring" still inspires.

**31 ALEXANDER GRAHAM BELL 1847-1922** When Alexander Graham Bell patented the telephone in 1876, he was certain he could transmit sounds between two distant places, but he hadn't yet been able to relay human speech. The legend goes: Three days after the patent was issued, he spilled battery acid on his clothes while working near a transmitter in his lab. His shout for help to his assistant became the first phone transmission of voice. The Scottish-born Bell left the development of his invention to others and refocused his energies on another passion: creating helpful devices for the deaf, including his wife, Mabel.

**32 RENE DESCARTES 1596-1650** A mathematician, scientist and philosopher, Rene Descartes introduced groundbreaking concepts in each of these disciplines. Called the inventor of analytic geometry and a founder of modern philosophy, the Frenchman also made advances in the fields of optics and physiology. He introduced what came to be called the Cartesian method: beginning inquiry with universal doubt, as opposed to medieval philosophy, in which faith played a prominent role. He also identified a split between mind

and body, a dualism that remains an issue in philosophy today. But he is best remembered for a simple phrase: "I think, therefore I am."

**33 LUDWIG VAN BEETHOVEN 1770-1827** Arguably Western music's greatest composer, Ludwig van Beethoven was also one of its prime disrupters. Achieving early success in the classical forms perfected by Haydn and Mozart, inspired by the French Revolution's ideals and afflicted with encroaching deafness and romantic sorrows, he expanded the traditional sonata, quartet, concerto and symphony into personal expressions both sublime and profound. To a doubting contemporary, he replied, "They are not for you, but for a later age."

**34 THOMAS AQUINAS c.1225-1274** Scholars at Europe's universities in the 13th century were arguing about the Greek texts being translated back into Latin from Arabic. Was Christian dogma correct or was the world explainable by the rationalism of Aristotelian science? Both were right, said Thomas Aquinas, a Dominican priest from Italy. Synthesizing the two traditions, he asserted that faith and reason did not conflict, that man is rational but that his highest happiness can be found in the contemplation of God. Aquinas taught in Naples and Paris, advised popes and wrote the unfinished *Summa theologiae*, a dominant influence on Roman Catholic theology.

**35 ABRAHAM LINCOLN 1809-1865** When Abraham Lincoln took his first oath of office in 1861, he faced the greatest crisis in his nation's history. The fabric of the American experiment, "a more perfect Union," was being torn apart. But before an assassin's bullet brought him down in 1865, this son of a poor Kentucky farmer led his countrymen--South as well as North--back to union, and to an eventual understanding that "a new birth of freedom" must be rooted in democracy. The fabric was made whole again, this time without slavery.

**36 MICHELANGELO 1475-1564** He lived to the age of 88, and all he had was his work, but the world is full of Michelangelo's "children." He is considered the greatest sculptor of all time (David, the Pieta); his paintings still take one's breath away (the ceiling of the Sistine Chapel); his designs for St.

Peter's Basilica and the Campidoglio foreshadowed the Baroque. In other words, he was a man of prodigious gifts and achievement. His unfinished work, the half-carved stone, the unfulfilled plans, the sculpture he broke, dismayed by its imperfection, remind us that, though his ambitions were divine, he was only human.

**37 VASCO DA GAMA c.1460-1524** His mission for the king of Portugal was to break up the Muslim, Venetian and Genoese monopolies that controlled the lucrative trade route between Europe and Asia. In time he would achieve this goal, but it was on his first voyage, in 1497, that Vasco da Gama rounded Africa's Cape of Good Hope--the first European to do so--and sailed to India, opening an all-water route from Europe to Asia.

**38 SULEYMAN THE MAGNIFICENT c.1494-1566** Greatest sultan of the Ottoman Empire, Suleyman I undertook bold military campaigns that expanded his realm and generated tremendous riches. Also known as the Lawgiver, Suleyman imposed cohesion on a government that linked three continents. He built fortresses, bridges, aqueducts and mosques, including Istanbul's grand Suleymaniye Mosque. The art and literature that flowered during his reign are still renowned

**39 SAMUEL F.B. MORSE 1791-1872** While returning from a European sojourn to study art, Samuel F.B. Morse fell into a shipboard conversation about the electromagnet. Voila, the idea for his first telegraph machine. Five years later, in 1837, he staged a demonstration, transmitting signals over 1,700 feet of wire. By 1844, when he wired (in Morse Code) the biblical verse "What hath God wrought!" from Washington, D.C., to Baltimore, there was no question that Morse--an influential painter and publisher as well as an inventor--had wrought a revolutionary way to communicate.

**40 JOHN CALVIN 1509-1564** French-born theologian John Calvin wrote one of the most significant works of the Reformation and trained ministers who spread Protestant faith through Europe and North America. His teachings shaped political and social customs in 16th century Europe and in Puritan New England--and they continue to influence Reform theology to this

day. Calvin became a Reformation leader in Geneva, but theological conflicts and the severe penalties he espoused for gambling, drinking and dancing prompted riots that drove him from the city. He returned in 1541, eventually creating a refuge for persecuted Protestants. There was born the Calvinist movement, which included the concept of elected, representative church government.

**41 FLORENCE NIGHTINGALE 1820-1910** She became a nurse in spite of her wealthy family's opposition. A true angel of mercy, Florence Nightingale served with the British army during the Crimean War, turning filthy, vermin-infested camps where the wounded were brought to die into clean wards where they could heal. She returned a hero but refused to participate in any public celebration. Rather, she used her stature to gain Queen Victoria's support for health-care reform in the military. Nightingale then worked for improved conditions in hospitals and workhouses, and established the first school for nurses. She accomplished all this despite spending the last 40 years of her life as an invalid.

**42 HERNAN CORTES 1485-1547** Eager for fame and riches, Hernan Cortes set out in 1519 for Mexico, where gold was said to be abundant. There was no turning back for the few hundred men who landed with him at Vera Cruz: Cortes ordered them to burn the ships. Exploiting local resentment against the Aztecs, who used prisoners of war for human sacrifice, Cortes negotiated alliances as he headed inland toward Tenochtitlan, seat of the Aztec emperor Montezuma. The conquistadors gained the capital, leveled buildings and seized vast amounts of gold before being driven out. Returning in 1521, this time with a new force and a new strategy, Cortes laid siege to Tenochtitlan, conquered the city and finished destroying the Aztecs' most splendid jewel. He thus planted seeds of domination that would continue to grow for the next three centuries.

**43 JOSEPH LISTER 1827-1912** Seeking to cut the postoperative mortality rate in his Glasgow hospital, Lister revolutionized surgery. Inspired by Pasteur, he reasoned that if microbes could cause infection, they could be killed before reaching the open wound. His method, employing carbolic acid as an antiseptic on dressings and instruments as well as on surgeons and

patients, resulted in stunning statistics. The mortality rate among his amputee cases fell from 45 percent to 15 percent. Lister's simple discovery enabled millions to undergo surgery with far less risk.

**44 IBN BATTUTA 1304-c.1377** In 1325 Ibn Battuta left Morocco for a pilgrimage to Mecca. Three decades and 75,000 miles later, medieval Islam's most extraordinary traveler had covered nearly the entire Muslim world. For the sheer adventure of it, Battuta traipsed from Spain to the east coast of China. His book of travels paints an invaluable picture of the 14th century.

**45 ZHU XI 1130-1200** One of China's most influential philosophers, Zhu Xi recast Confucius's teachings by writing more than 100 works, including commentaries on most of the Confucian classics. His teachings--emphasizing morality and logic, condemning popular religion and denying the existence of a personal deity--were a challenge to the spread of Buddhism in China. Zhu's neo-Confucian writings had such a wide influence they became required reading for China's civil service exams for the next 600 years.

**46 GREGOR MENDEL 1822-1884** He could not pass the test to be certified as a biology teacher, but Gregor Mendel, a 19th century monk, discovered a basic principle of biology. Cross-breeding peas in the garden of his monastery in Austria, he learned how to predict the features of the hybrids. Knowing he had achieved a scientific breakthrough, he presented his work to the Natural Science Society in Brunn and published his results, but his research was ignored. Not until 16 years after his death was he recognized for having discovered the fundamentals of genetics.

**47 JOHN LOCKE 1632-1704** Enlightenment philosopher John Locke was noted for his writing on education, science and religious freedom. But the Englishman's ideas about politics--that people by nature have certain rights, including life, liberty and property, and that their consent is the only legitimate basis of government--had a more profound effect. His proposals for legislative representation and free speech influenced the Constitution.

**48 AKBAR 1542-1605** Tolerant and wise, Akbar was the greatest of

India's Mughal emperors. This Muslim leader realized that India's Hindus were too powerful to subjugate, and during his 50 years of rule he allowed the princes to keep their lands in return for allegiance. He offered their subjects careers, along with religious toleration. At his glittering court in Agra, Akbar savored learned discussions. He fostered architecture that melded Mughal and Hindu traditions and that culminated in the building of the Taj Mahal, which was completed by 1650 and was the vision of his grandson Shah Jahan.

**49 MARCO POLO c.1254-1324** History tells of his leaving Venice at age 17 to join his father and uncle on a journey deep into Kublai Khan's China. Marco Polo himself tells, in his writings, how they were welcomed, and spent 20 years in Asia. Some say that Polo's tales are products of the imagination, but whether fact or fiction, he inspired Europeans to seek out the Orient and, in 1492, Columbus to sail the ocean blue.

**50 DANTE ALIGHIERI 1265-1321** The Divine Comedy, Dante Alighieri's epic masterpiece, is an allegorical and literary triumph, a walk through the cultural, political and religious landscape of 13th century Italy. Dante's writing influenced poets from Chaucer to Byron. But his vivid depiction of the nine circles of hell terrified centuries of ordinary readers as well with its descriptions of horrendous punishments after death. "Dante and Shakespeare divide the modern world between them," T.S. Eliot said. "There is no third."

**51 JOHN D. ROCKEFELLER 1839-1937** He was worth more than a billion dollars when a billion dollars meant something. In fact, John Davison Rockefeller was the country's very first billionaire, building his pile on the monolithic Standard Oil Co. A fierce conniver, he slashed costs and dodged anti-trust rulings. Then, at age 58, after three decades as an oilman, the religious robber baron turned to charity. In his lifetime he spent \$540 million--the equivalent of \$5.6 billion today--on projects-- primarily in medical research and education. He died at 97, having never smoked a cigar or drunk a glass of champagne, leaving behind a still active fortune and a family active in many spheres--business, politics and, of course, philanthropy.

**52 JEAN-JACQUES ROUSSEAU 1712-1778** An educational theorist who ranked emotional development and experience above book learning, Jean-Jacques Rousseau abandoned his own five children at a Paris foundling hospital. A believer in living in "a state of nature," where compassion and honesty could flourish, he also wrote that a good society could improve people if they would submit their own desires to the General Will. Both totalitarians and democrats look to the Geneva-born polemicist as their prophet.

**53 NIELS BOHR 1885-1962** The world of Niels Bohr is a strange one: Particles act like waves; looking at something is like giving it a shove; electrons are only probably where they ought to be. Stranger yet, his world is ours. Bohr's elucidation of quantum theory changed how we understand the smallest components of matter and energy, replacing the concrete predictability of classical mechanics with the mathematical complexity and chance of the quantum. Physics and philosophy collided in Bohr, who mentored generations of physicists; the echoes of that collision are with us still.

**54 JOAN OF ARC c.1412-1431** A young peasant who believed she was guided by the voices of saints, Joan of Arc led the French to crucial victories in the Hundred Years War and became a surpassing hero for her countrymen and her fellow Catholics. The teenager who dressed in men's clothing defeated the English at Orleans in 1429; her triumph at Reims not only earned her the nation's adulation but paved the way for the coronation of King Charles VII. On a campaign to free Paris, she was captured, tried for heresy and burned at the stake. Named a saint in 1920, she has been the subject of hundreds of movies, books and plays, including Shaw's classic Saint Joan.

**55 FREDERICK DOUGLASS 1818-1895** The fate of African people in America rested not on his shoulders but on his mind. The son of a slave woman and an unknown father, Frederick Douglass escaped the master's whip in 1838 when, disguised as a sailor, he fled north. A self-made intellectual, he decried the ignorance and bigotry of a slave society. Criss-crossing the Union, he testified about the bonds that held his people's bodies and souls. He was attacked after some speeches, but won adherents as well.

His first autobiography was an overnight success; his North Star newspaper was, like Douglass himself, a never-to-be-ignored beacon of morality.

**56 LOUIS XIV 1638-1715** His egocentrism, which would only grow, was bestowed upon him: As an infant he was given the title the Most Attractive. In 1643, a few months shy of his fifth birthday, he was crowned king of France. He survived a revolt by the nobility and emerged to declare himself a divine monarch--the Sun King. Louis XIV was an absolutist: A passport could not be issued without his permission. He raised a mighty army, fought wars against England, Holland and the Holy Roman Empire--and France's own Protestants--and constructed the sprawling palace of Versailles, where he moved the royal court from Paris. There he lived and ruled, surrounded by indulgence, spectacle and sycophancy. Louis is credited with making France a leading power and blamed for precipitating its decline.

**57 NIKOLA TESLA 1856-1943** He may be second only to his ex-boss Thomas Edison as the most farsighted inventor of the electric age. His work on the rotating magnetic field and alternating current (AC, as in AC/DC, the patents for which he sold to George Westinghouse in 1885) helped electrify the world by enabling power to travel over wires to customers great distances away. A tireless and eccentric inventor, Nikola Tesla came up with some things--for instance, a "death ray" to shoot down attacking aircraft--that don't seem nearly as farfetched now as they must have in his day.

**58 IMMANUEL KANT 1724-1804** His entire life was spent in Konigsberg, East Prussia, and it is said that he was never out of earshot of the town's church bells. But Immanuel Kant made up for his lack of adventure by traveling far in his mind. In the Critique of Pure Reason he examined the nature and limits of human knowledge. He wrote on aesthetics and ethics, and established the direction of modern philosophy.

**59 FAN KUAN c.990-c 1030** A Taoist recluse, Fan Kuan is best known as the painter of Travelers Amid Streams and Mountains, the greatest single example of the monumental landscape style of painting and a model for all Chinese artists. The painting, nearly seven feet tall, is based on the Taoist principle of becoming one with nature. Fan's style--reducing human figures to

minute proportions and dramatizing the awesome power of nature--has led critics to compare his creative powers with those of nature itself.

**60 OTTO VON BISMARCK 1815-1898** It took Prussian statesman Otto von Bismarck nine years, three wars and his legendary cunning to unify his homeland with other German states into a single powerful nation. As Iron Chancellor, he instituted a social-welfare system while crushing the social-democracy movement. Remembered by some as a moderate, he's seen by others as a ruthless conservative who set the stage for fascism.

**61 WILLIAM THE CONQUEROR c.1027-1087** England as we know it began when William, Duke of Normandy, crossed the Channel and went on to win the Battle of Hastings in 1066. Eager to increase his power as king, he dispossessed Anglo-Saxon nobles and divided their lands among his followers. The Norman influence was felt in every pursuit from language to architecture to warfare. William spent his 21-year reign successfully fending off enemies, and no one has invaded England since.

**62 GUIDO OF AREZZO c.991-c.1033** Musical theorist and teacher Guido of Arezzo solved two practical problems. Choirboys were learning new chants by listening, then--not always accurately--imitating. Guido devised a system of musical notation--what has evolved into today's five-line staff--that enabled certainty of pitch. He also used the syllables that began six lines of a popular hymn (Ut, Re, Mi, Fa, Sol, La), along with the notes on which they were sung, to perfect a method of teaching sight-singing still in use today.

**63 JOHN HARRISON 1693-1776** Scientists scoffed when clockmaker John Harrison presented his marine chronometer, a device that allowed seamen to calculate their longitude. But in the 1760s the chronometer's reliability was established, and in 1775 Capt. James Cook used one to chart the South Sea Islands, a feat achieved with the aid, he wrote, of "our never failing guide, the Watch."

**64 POPE INNOCENT III c.1160-1216** Lotario di Segni was only 38 years old when he was elected Pope Innocent III in 1198; his 18-year

reign dominated the Middle Ages. Claiming the right to guide the Holy Roman Empire, he launched two crusades to assert the church's power. Meanwhile, he embraced the poor and saw the church's rolls swell. His Fourth Lateran Council shaped the Catholic Church that we recognize today.

**65 HIRAM MAXIM 1840-1916** He changed the way we wage war. In 1884, Hiram Maxim, an American-born British inventor, developed a recoil mechanism that made it possible to load and eject cartridges from a machine gun without using a hand crank. The fully automatic magazine discharged up to 600 rounds of ammunition per minute. Recognizing its advantages, the British army and royal navy were among the first to adopt the new weaponry--in 1889 and 1892 respectively. Other nations soon followed, to such an extent that World War I came to be called the "machine gun war."

**66 JANE ADDAMS 1860-1935** Born to wealth, Addams founded Chicago's Hull House, one of the first settlement houses in North America, in 1889. Two thousand immigrants a week came to eat, to attend classes, to see plays or hear concerts. They used the nursery, gym, dispensary and playground. Known as the mother of social work, Addams was also a pacifist and a suffragette; she helped found the American Civil Liberties Union and the Women's International League for Peace and Freedom. She was awarded the Nobel Peace Prize in 1931.

**67 CAO XUEQIN c.1715-1763** When *Story of the Stone* was published anonymously around 1765, it caught the attention of the best writers in Beijing. Later, the author was identified as Cao Xueqin, the grandson of a once wealthy minister. The book, eventually expanded and republished as *Dream of the Red Chamber*, tells the story of the rise and fall of a powerful Chinese family. Its panoramic representations of intricate human relationships and everyday experiences have earned it a reputation as the greatest novel written in vernacular Chinese, and its influence on later art forms, including Chinese opera, has been enormous.

**68 MATTEO RICCI 1552-1610** When he moved to China in 1582, little did Jesuit missionary Matteo Ricci realize conversion worked both ways. The Chinese were fascinated by Ricci's possessions: clocks, maps, Western

works on science. After his death, Ricci's manuscript on China was widely read in Europe; Enlightenment thinkers, inspired by the concept of a state ruled by Confucian values, used those ideas to challenge their own state and religion.

**69 LOUIS ARMSTRONG c.1900-1971** Louis "Satchmo" Armstrong's improvisational verve and technical virtuosity defined jazz. An orphan who learned the trumpet on the streets of New Orleans, he popularized the idea of the featured soloist. His trademark "scatting"--singing nonsense syllables to mimic a horn solo--was widely imitated. And his engaging personality and ever-present grin made him a natural as the international ambassador of jazz, America's greatest musical contribution to the world.

**70 MICHAEL FARADAY 1791-1867** Although Michael Faraday specialized in chemistry, he laid the groundwork for the electrical age. His discoveries and inventions dealing with magnetic fields and electric currents showed there was promise in power; his original model of a generator and his design of an electric motor are prototypes of those that light the planet and drive everything from subways to vacuum cleaners. Faraday was a humble man who declined many honors in life, including a knighthood.

**71 IBN-SINA 980-1037** Islam's most renowned philosopher-scientist, Ibn-Sina outgrew his teachers as a teenager and educated himself in law, medicine and metaphysics. His intellect served him well: As a court physician in Persia, he encountered intrigue and imprisonment but wrote two of history's greatest works, *The Book of Healing*, a compendium of science and philosophy, and *The Canon of Medicine*, an encyclopedia based on the teachings of Greek physicians. The latter was widely used in the West, where Ibn-Sina, known as Avicenna, was called the "prince of physicians."

**72 SIMONE DE BEAUVOIR 1908-1986** She developed existentialist philosophy in novels and nonfiction, protested for countless causes and wrote the most influential feminist book of the 20th century. In *The Second Sex* (1949) French writer Simone de Beauvoir argued that women have been forced into an inferior position, not by biology or psychology but

by male-dominated society. Although her own 50-year relationship with Jean-Paul Sartre often put her in an inferior position, she inspired women around the globe.

**73 JALAL AD-DIN AR-RUMI c.1207-1273** A 13th century Sufi mystic, Jalal ad-Din ar-Rumi composed passionate love poems while turning in a circle to the beat of drums or the music of rushing water. The poems found Allah outside the Koran--in people, nature and the commonalities of everyday life. Recorded in Persian by a disciple, they helped spread Islam to a wider audience. Rumi is still read today, and his followers, whirling dervishes (holy men), still perform their elegant, hypnotic dances to express the idea that God can be experienced in manifold ways.

**74 ADAM SMITH 1723-1790** Scottish economist Adam Smith advocated open competition and freedom from government regulation, principles that would become the bedrock of modern capitalism. In his 1776 book, *An Inquiry into the Nature and Causes of the Wealth of Nations*, Smith argued that the free market is self-regulating and that by pursuing their own interests individuals would produce the types of goods most needed by society. He saw labor--not land or money--as a thing of primary value. His ideas spurred the study of economics.

**75 MARIE CURIE 1867-1934** The first woman to win a Nobel Prize, Marie Curie experimented with radioactivity (she coined the word) and opened a new territory in physics: the interior of the atom. Curie shared the 1903 Nobel Prize in physics with her husband, Pierre and another scientist for their work with radioactivity, and won the 1911 award in chemistry for her isolation of radium. The Polish scientist, who suffered exhaustion, burns and cataracts from radiation exposure, collected gas from radium for cancer treatments and established a Radium Institute in France, which became a center for nuclear research.

**76 ANDREA PALLADIO 1508-1580** The man who is probably history's most imitated architect began work in a guild of masons and stonecarvers. A Vicenza scholar gave Andrea Palladio his classical name and education. His use of elements from Greco-Roman temples--most notably the

portico, or roofed porch, supported by columns, and topped with a pediment--was one legacy. Another was his Four Books of Architecture, still a bible to builders. His emulators included Thomas Jefferson.

**77 PETER THE GREAT 1672-1725** Peter the Great willed Russia to be a modern world power. He made Russian men shave their beards and replace ancient costumes with Western clothing. He built roads, canals, schools, new industries, a navy. (He battled for warm-water Baltic ports so he could use his fleet.) But he was as repressive as he was forward-thinking, forcing serfs to work in his factories, executing his son Alexis for opposing him. Peter was a great reformer, and a great despot as well.

**78 PABLO PICASSO 1881-1973** Pablo Picasso dominated 20th century art. He helped create Cubism, pioneered innovations in sculpture and lithography, experimented with new media and captivated imaginations around the world with his powerful personality and boundless energy. The prolific Spaniard, who painted subjects ranging from the women he lived with to the devastating effects of war, had a career that spanned 70 years--and an influence that spans generations and cultures.

**79 LOUIS JACQUES MANDE DAGUERRE 1789-1851** In 1826, the Frenchman Joseph-Nicéphore Niépce took a picture (a heliograph, he called it) of a barn. The image, the result of an eight-hour exposure, was the world's first photograph. In 1839, his associate Louis Daguerre devised a way to permanently reproduce an image, and his picture, a daguerreotype, needed just 20 minutes' exposure. (This would soon shorten to less than a minute.) A practical process of photography was born. Portrait studios and, eventually, photo snapping by the masses would follow.

**80 ANTOINE-LAURENT LAVOISIER 1743-1794** Antoine-Laurent Lavoisier, the founder of modern chemistry, demonstrated that combustion results from a burning substance combining with oxygen, and stated the law of the conservation of matter: The weight of the products of combustion equals the weight of the original materials. The French chemist clarified the distinction between elements and compounds and was instrumental in devising the modern system of chemical nomenclature. He also

had a career as a tax collector, for which he was guillotined during the French Revolution.

**81 PHINEAS T. BARNUM 1810-1891** The patron saint of promoters, he had a flair for the spectacular that was--and perhaps still is--unmatched. Through shameless hucksterism, his American Museum, a menagerie of freaks and curiosities, attracted millions a year. One outrage: He bought a slave and passed her off as 161 years old. A more legitimate P.T. Barnum enterprise, the circus he dubbed the Greatest Show on Earth, plus a stunt that involved moving an elephant named Jumbo from the London Zoo to the U.S., sealed his reputation as the consummate showman.

**82 EDWIN HUBBLE 1889-1953** Edwin Hubble's 1924 discovery that the Andromeda nebula is located beyond the known boundaries of the Milky Way forced other astronomers to revise their thinking: The existence of multiple galaxies meant the universe was far larger than imagined. Next, Hubble determined that all galaxies are receding from each other--hence, the universe is expanding. Today, as it orbits the earth, the Hubble Space Telescope, named in his honor, searches deep into the galaxies whose existence he proved.

**83 SUSAN B. ANTHONY 1820-1906** Her tireless campaign for women's suffrage made her a leader in the first wave of American feminism. The daughter of Quaker abolitionists, Susan B. Anthony was incensed that women were barred from speaking at temperance meetings. She barnstormed for equality and was insulted, vilified, even pelted with rotten eggs for her trouble. After brazenly casting a vote in 1872, she was arrested and fined \$100 (which she never paid). The ratification of the 19th amendment in 1920, 14 years after her death, finally confirmed her credo, "Failure is impossible."

**84 RAPHAEL 1483-1520** Italian art soared in the early 1500s for three major reasons. One of them was Raphael. And it is he--more than Leonardo or Michelangelo--who has influenced artists ever since. Raphael's portraits were at once serene and incisive, human and sublime. During his final 12 years, spent in Rome, he produced a series of masterpieces, including perhaps his greatest work, The School of Athens, a Vatican fresco showing

Plato and Aristotle surrounded by philosophers past and present that perfectly embodies the Renaissance spirit.

**85 HELEN KELLER 1880-1968** An illness when she was 19 months old left her deaf, blind and mute. But there was an exceptional mind--and a strong will--trapped within the tiny girl's body. With the help of a teacher named Anne Sullivan--"the miracle worker"--Helen Keller learned to understand language (by having words finger-spelled onto her palm), read (by feeling raised letters and Braille), write (by following the movements of a writer's hand), hear (by placing her fingers against a speaker's nose, lips and larynx) and speak (usually with sign language and occasionally with her voice). Keller went on to graduate with honors from Radcliffe in 1904 and then became a renowned author, antiwar activist and advocate for the rights of workers and women, as well as the deaf and blind. She remains proof to the world that disability does not mean inability.

**86 HOKUSAI 1760-1849** At the age of 74, Hokusai, one of the greatest artists of the millennium, bemoaned his lack of talent. "Of all I drew prior to the age of 70 there is truly nothing of any great note," he wrote, predicting that "at 100 I shall have become truly marvelous." The master painter, illustrator and printmaker of the Japanese Ukiyo-e school of art didn't make it to his century mark, but he did create thousands of treasured images--of landscapes, flora, fauna, historical scenes--including the print series Thirty-six Views of Mount Fuji. His work influenced the French Impressionists, especially Paul Gauguin.

**87 THEODOR HERZL 1860-1904** Although he did not invent Zionism, Theodor Herzl is considered the father of the movement that eventually led to the founding of a Jewish state. No stranger to anti-Semitism in his native Austria-Hungary, he was shocked to find it flourishing in Paris when he moved there as a journalist in 1891. Herzl's belief that Jews must organize and emigrate to their homeland displeased assimilationists. But it resonated with nationalistic Jews (in turn heightening nationalist aspirations among Arabs). Herzl organized a world congress in 1897 and later wrote in his diary: "At Basel I founded the Jewish state. If I said this aloud today, I would be greeted by universal laughter. Perhaps in five years, and certainly in

fifty, everyone will agree." Almost precisely a half century after Herzl's declaration of a Jewish nation, Israel was born.

**88 ELIZABETH I 1533-1603** Daughter of Henry VIII, Elizabeth ascended the throne in 1558. A supremely skilled diplomat, the Virgin Queen--she never married--fended off suitors as cleverly as she manipulated foreign negotiators and domestic factions. She was pragmatic: Although she disliked waging war, she built up England's navy and in 1588 defeated Spain's Armada, not only staving off invasion but laying the basis for empire. She was visionary: She supported Shakespeare, the poet Edmund Spenser and Walter Raleigh, who dispatched settlers to Virginia, a colony named in her honor. The Elizabethan era: a 45-year span of stability, growth and achievement.

**89 CLAUDIO MONTEVERDI 1567-1643** Claudio Monteverdi was already known outside Italy for his madrigals and church works when he became interested in opera, an experimental form joining storytelling and dialogue with music. His Orfeo of 1607, employing theatrical music effects, a climactic aria and orchestral interludes, was the first work to show opera's potential. In The Coronation of Poppea, a far more complex work performed 35 years later, he conveyed, far in advance of his time, the expression of character and emotion through music.

**90 WALT DISNEY 1901-1966** Entertainment was more than child's play to Walt Disney. A gifted animator and motion picture producer, he created a stable of unforgettable cartoon characters, starting with Mickey Mouse, that provided comic relief to men, women and children alike during the Depression, and later charmed audiences all over the world. A multimedia visionary, Disney produced the first feature-length animated film, Snow White, opened a theme park, adapted popular children's books into movies and produced a weekly TV series in color, all with the Disney moniker. Today his name is synonymous with family fun.

**91 NELSON MANDELA 1918-** He roused South Africa's black majority--and sympathizers abroad--to rebel against the system of racial tyranny known as apartheid. Originally a proponent of nonviolence, he started a military wing of the African National Congress after watching police

brutalize unarmed protesters in 1960. He languished in prison for a quarter century before his release in 1990. Nelson Mandela's courage and resolve earned him a Nobel Peace Prize, the presidency of his country and the admiration of millions.

**92 ROGER BANNISTER 1929-** The elements were elemental: one mile, four minutes. For the longest time, perhaps forever, man could not run a mile in under four minutes. It was one of those perplexing barriers. Then, on May 6, 1954, an Englishman who was just finishing his medical studies was paced by teammates at a dual meet in Oxford, crossing the line in 3:59.4. Why did the world stand hypnotized for so long before a wall that didn't exist? Hard to say. But when Roger Gilbert Bannister showed us it can be done, dreams were encouraged, and human potential was suddenly seen as limitless. Bannister made us question and then redefine our concepts of human possibility.

**93 LEO TOLSTOY 1828-1910** The son of a Russian nobleman, Leo Tolstoy began wrestling with questions about the purpose of life while writing *Anna Karenina*. He rejected the divinity of Jesus, renounced violence, condemned private property and tried to live simply, working in the fields on the estate he shared with his wife and 13 children. Excommunicated by the Russian Orthodox Church, the author of *War and Peace* attracted admirers from around the world, including a fellow believer in nonviolence, Mohandas Gandhi.

**94 JOHN VON NEUMANN 1903-1957** One obituary of von Neumann referred to him as "the greatest mathematician of his time." Perhaps: He was a vital contributor to the development of both the hydrogen bomb and the digital computer. Von Neumann's intellect was dizzying--he worked on problems ranging from the minutiae of quantum mechanical calculations to the real-world applicability of game theory--but he was always able to explain his most complicated explorations to the uninitiated.

**95 SANTIAGO RAMON Y CAJAL 1852-1934** At the end of the 19th century most scientists still thought brain fibers were fused together to form a continuous net. But Spaniard Santiago Ramon y Cajal showed that the

brain was made up of distinct nerve cells. His work helped point the way to the understanding that these cells, or neurons, communicated with each other. Ramon y Cajal's work is the basis for modern neuroscience, the study of everything from the biological basis of psychology to how a person learns, remembers, smells, sees, walks and talks--in essence, how the brain makes us what we are.

**96 JACQUES COUSTEAU 1910-1997** Whenever Jacques-Yves Cousteau donned his red knit cap and sailed off on the Calypso, he brought along millions of television viewers drawn by his motto, "We must go and see for ourselves." An inventor of scuba-diving equipment, the French author and adventurer popularized exploration of the two thirds of the earth's surface covered by water. Through him we got up close and personal with long-lost shipwrecks, giant octopuses, killer sharks. In 1957 Cousteau won the first of his three Academy Awards, for *The Silent World*. Not a scientist, but nonetheless an early critic of water pollution, he also founded the Cousteau Society to promote marine conservation.

**97 CATHERINE DE MEDICIS 1519-1589** The Italian-born queen of France and mother of three French kings, Catherine de Medicis engaged in such ruthless political maneuvering that she was called Madame la Serpente. She also had a touch of elegance, introducing the fork to France and, in 1581, commissioning the first court ballet. The Paris performance of *Circe* included specially written music, elaborate costumes and scenery, choreography and a single dramatic theme. The five-hour extravaganza, costing more than three million francs, marked the birth of a new art form.

**98 IBN-KHALDUN 1332-1406** Shuttling between both Mediterranean coasts, Tunisian diplomat Ibn-Khaldun may qualify as the 14th century's most frequent flee-er; he was surely one of its most brilliant minds. In and out of favor, and prison, he scrutinized human nature. When he wrote a history of the Muslim world, his stunning array of ideas included the importance of a group's social cohesion in attaining its goals, as well as history's cyclical nature. Five centuries later, historian Arnold Toynbee described Khaldun's pioneering work as "undoubtedly the greatest of its kind that has ever yet been created by any mind in any time or place."

**99 KWAME NKRUMAH 1909-1972** Kwame Nkrumah's radical push for Ghanaian self-governance in the 1950s triggered decolonization throughout Africa, which led to the end of European domination. Inspired by Marx and Marcus Garvey, Nkrumah's "positive action" campaign of nonviolent protest won Ghana its independence from Britain by 1960. Nkrumah was a better revolutionary than a president, and civil unrest led to a coup in 1966. African nations continue to grapple with the upheaval he began.

**100 CAROLUS LINNAEUS 1707-1778** His 18th century contemporaries called Carl von Linné bold, even salacious, when he used sexuality as the starting point for his botanical classification system. He described calyxes as "nuptial beds," corollas as their "curtains," but by using the number and length of stamens to group plants into classes, and pistils to subdivide these into orders, he enabled students in the field to identify a specimen quickly and simply, by counting. The Swedish physician, writing in Latin as Linnaeus, also devised the system of naming the genus and species of plants--and, later, animals. His work was adopted by naturalists worldwide in his time and is evident everywhere in ours.