

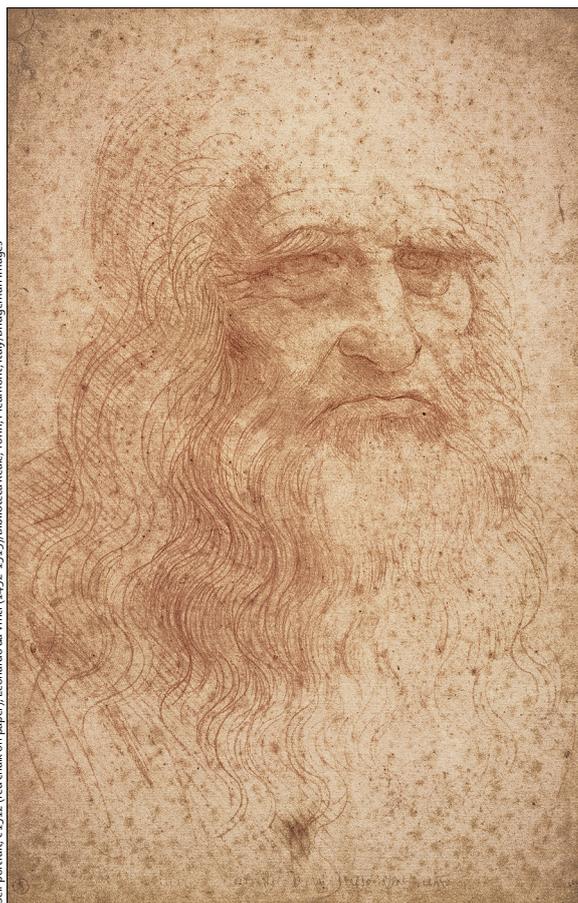


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Self portrait, c 1512 (red chalk on paper), Leonardo da Vinci (1452–1519)/Biblioteca Reale, Turin, Piedmont, Italy/Bridgeman Images

## Leonardo da Vinci

Painter, sculptor, draughtsman, engineer, stage designer, architect, musician, anatomist, naturalist, physicist, astronomer, cartographer, and poet. Born in Vinci, Italy, on April 15, 1452, he died in Amboise, France, on May 2, 1519, aged 67 years.

“It is a sobering thought”, said the satirist Tom Lehrer, “that when Mozart was my age he had been dead for 2 years”. Leonardo di ser Piero da Vinci lived almost twice as long as Wolfgang Amadeus Mozart, but his life and work provoke an even deeper sense of hopeless awe. Leonardo made three of the most influential and most parodied artworks in history—the *Mona Lisa*, *The Last Supper*, and his sketch of *Vitruvian Man*. Throughout his life, he kept notebooks, works of art in themselves, crammed with crisp observations and lists of questions from every field of life. No-one, wrote Giorgio Vasari in his gossipy biography of the Renaissance masters, was ever his peer in “vivacity, excellence, beauty and grace”.

What can we do but throw up our hands and call him a genius?

Calling someone a genius, though, can be a way of making sure you don’t have to think very hard about them. Like William Shakespeare, Leonardo has been reinvented by every age that has known him. 500 years after his death, he has become the icon of Renaissance humanism; he is widely seen as the most influential artist who ever lived; more contentiously, he is named as the “father” of embryology, geology, architecture, and half a dozen disciplines besides. It should come as no surprise that he is also a staple of management seminars, taught alongside the rather less lovable Steve Jobs as an archetype of creative thinking.

Framed in this way Leonardo seems so modern, but if we insist on treating him as our contemporary, we risk overlooking the strange splendour of the world that made him, and the many faces of this joyfully curious polymath. There is Leonardo the dandy: Vasari recalled his comeliness, his wit, and his exuberant sense of style. There is Leonardo the showman, captivating the Sforza court in Milan with his virtuoso improvisations on a silver *lira da braccio*—a kind of violin, perhaps one made to his own design in the shape of a horse’s skull. There is even (whisper it) Leonardo the procrastinator, the painter who left many of his commissions unfinished, the writer who could not complete a single treatise, the investigator who accomplished a fraction of the tasks he set himself, and whose studies of anatomy, technology, and the natural world were—with a few exceptions—not widely known for centuries.

Walter Isaacson, Leonardo’s latest biographer, argues that his life began with a paradox. He was born in the Tuscan hill town of Vinci, and his parents—the Florentine notary Piero da Vinci and a 15-year-old orphan named Caterina—were not married. Leonardo was brought up in his grandfather’s household, but as an illegitimate child he could not be admitted to his father’s guild. Did this impediment save him from a lifetime as a middle-ranking and no doubt stupendously bored official? The young Leonardo learned Italian but never became fluent in Latin, the language of Renaissance scholarship. He remained touchy on this subject, but some scholars have suggested that ultimately it proved an advantage, preserving him from the received wisdom of the classical tradition.

One way or another, Piero noticed his son’s precocious talent for drawing and painting, and at some point in the mid-1460s Leonardo travelled to Florence, the capital of the Renaissance, to take up an apprenticeship in the workshop of the painter and sculptor Andrea del Verrocchio. Here he learned how to work marble, bronze, and terracotta into sculptures, and oil and tempera into frescos and portraits. Surviving drawings show him developing one of his signature techniques: *sfumato*,

from the Italian for smoke, a way of softening edges and surfaces to lend ambiguity to an expression or depth to a landscape.

Beyond his apprenticeship, other aspects of Florentine culture had a profound influence on Leonardo's emerging sense of himself. Leon Battista Alberti was another illegitimate polymath—although with an extensive formal education—who had set out an innovative analysis of perspective in his treatise *On Painting* (1435). Leonardo probably never met Alberti, but he read him and seems to have taken him as a model of what a Renaissance man could achieve. *On Painting* insisted that to depict the human form properly an artist had to understand anatomy—one expression of a new concern among the Florentine masters with the “science of arts”. Leonardo's omnivorous inquiries carried him far beyond the usual preoccupations of Renaissance artists, but his work was always rooted in experience and observation: if you could depict something clearly and accurately, you had in an important sense understood it.

Leonardo's sexuality has been the subject of speculation by many writers, notoriously Sigmund Freud. He seems to have been entirely at ease among Florence's homosocial elites, and, like most artists of the age, spent his working days with male students and assistants. Throughout his adult life, he sought out male companions—notably, the gorgeous and wayward Gian Giacomo Caprotti, nicknamed Salai, “little devil”.

As Leonardo completed his apprenticeship, he faced a question both personal and practical: how to make a career in the fractious political landscape of the Tuscan city states? In 1482 Lorenzo de' Medici sent him to Milan as an act of artistic diplomacy, and early in his stay he wrote to Duke Ludovico Sforza, offering his services as a civil and military engineer and adding, almost as an aside, that in painting he could “do everything possible”. As a military engineer, he was more imaginative than experienced, but he became, in the words of the art historian Martin Kemp, the intellectual and aesthetic “maestro” of the Sforza court.

In Milan, Leonardo painted *The Last Supper*; he worked on a vast equestrian statue of Sforza, never completed; and, following Alberti's example, he made notes for his own treatise. A 1489 outline shows that he had in mind a comprehensive study of the human body, taking in conception and growth, “veins, nerves, muscles and bones”, and “the four universal conditions of man”—joy, weeping, fighting, and labour. This would, he knew, require a great deal of “human material”, and with his Sforza connections, he might—as the curator Martin Clayton and the anatomist Ron Philo suggest—have obtained body parts from one of Milan's many charitable hospitals. As he worked, he drew on another humanist touchstone—Vitruvius' *De Architectura* (c 30–15 BCE)—to imagine the body as a kind of harmonious architectural composition.

In 1499, disharmony triumphed: Sforza was deposed, and Leonardo returned to Florence, a poorer and less confident city after the reign of the radical preacher Girolamo Savonarola. Here again, Leonardo became the ideas man for the ruling Borgia family. Working on a canal led him to speculate on the depths of Earth history; he dissected and drew the corpse of a centenarian to discover the “the cause of so sweet a death”; he began the *Mona Lisa* and the *Salvator Mundi*, and became the subject of intense jealousy from the young Michelangelo. Studies for a mural of *The Battle of Anghiari* led him back to anatomy, and over the next decade or so, as he moved between Florence, Milan, and the family villa of his assistant Francesco Melzi, he made a series of studies of the human skeleton, muscles, and heart.

Leonardo's place in the canon of western art seems unassailable, but his role in the history of medicine remains the subject of debate. What has come down to us in Leonardo's notebooks is a series of private works in progress, reflecting Leonardo's astonishing gift for visual thinking and representation, but also the intellectual world in which he moved. His work on the heart, for example, reveals what Clayton and Philo have called “a disconcerting mix of physiologies”. Acute observation and ingeniously simple experiments led him to see the heart as a pump, but one embedded—literally and metaphorically—in a thoroughly classical view of the body. If Leonardo had published his projected treatise in the last decade of his life, would it have revolutionised anatomical thought and medical practice? The answer, most likely, is no. Andreas Vesalius' *De humani corporis fabrica libri septem*, a foundational text of the “New Anatomy”, appeared only 24 years after Leonardo's death and took, arguably, a generation and more to achieve its greatest influence. And Vesalius was a university-trained anatomist and a fluent Latinist; would the professors of Padua, Paris, and Oxford even have opened a treatise by a painter who wrote in the vernacular?

As he turned 60, Leonardo largely abandoned his anatomical studies. After 3 years at the papal court in Rome, the French king, Francis I, offered him a pension and an opulent house at Amboise in the Loire valley where he died, according to one story, in Francis' arms. True to form, he left behind a mess: unfinished paintings, flaking murals, and a heap of manuscripts that took centuries to sort—a fitting memorial for what the art historian Kenneth Clark called “the most relentlessly curious man in history”. But the “disciple of experience”, as he once signed himself, also left a humanist paradise in paint and ink, revealing the world as it might have wished to depict itself.

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#### Further reading

- Clayton M, Philo R. Leonardo da Vinci: anatomist. London: Royal Collection Publications, 2012
- Isaacson W. Leonardo da Vinci: the biography. New York: Simon & Schuster, 2017
- Kemp M. Leonardo da Vinci: the marvellous works of nature and man, revised edn. Oxford: Oxford University Press, 2007