

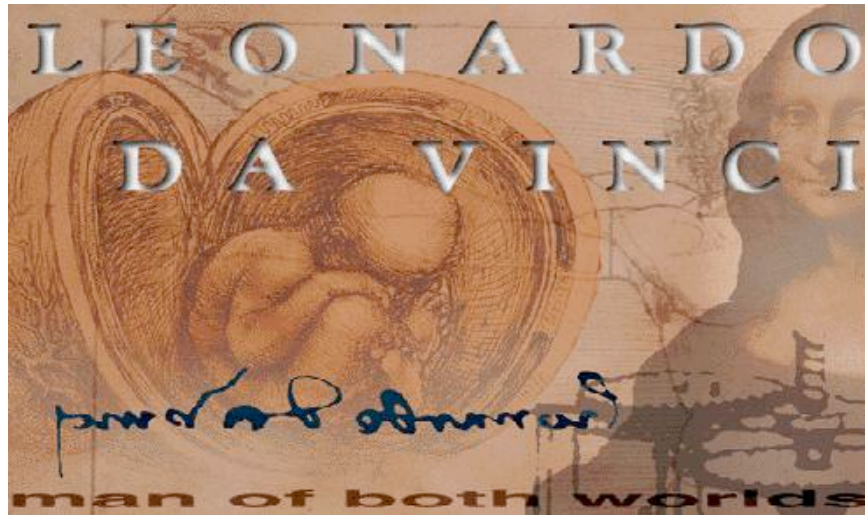
# THE GREAT IDEAS ONLINE

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*Iron rusts from disuse; water loses its purity from stagnation... even so does inaction sap the vigor of the mind.*  
—Leonardo da Vinci



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## LEONARDO AND HIS TIMES

Jacob Bronowski  
and  
Bruce Mazlish

The idea of the Renaissance is a singularly complicated one. Historians differ sharply as to when it began and when it ended. Some see its beginnings as early as the twelfth or thirteenth centuries; others prolong the Middle Ages until as late as the seventeenth century. Some historians date the Renaissance from the fall of Constantinople to the Turks in 1453, on the grounds that this drove Greek scholars westward into Mediterranean Europe; others hold that the Renaissance was really set in motion by the rapid printing of books from movable type, which was introduced about 1451 and became common fifty years later.

These differences in dating arise, naturally, from different conceptions of the character of the Renaissance. For example, did it involve, among other things, the birth of “modern man” and the emergence of individualism? Should the rise of empirical science and the close attention to nature be regarded as part of it? And, on a more trivial level, did it include a new love of mountain climbing? Obviously, one’s decision as to what the Renaissance *was* affects one’s idea of when it *occurred*.

Our purpose in this chapter, however, is not to attempt a frontal attack on the entire problem of the Renaissance; it is, rather, to look upon the period around 1450-1500 as one of transition between the classical beginnings (leaving this date vague) of the Renaissance and its popular spread by the printed book. We thus make a separation: between the aristocratic Renaissance, with, for example, its reading of the Greeks and Romans in manuscript and its taste for a curious Platonic idealism, as discussed in the Platonic Academy at Florence; and another kind of Renaissance which followed or supplanted it—a popular, empirical, less traditional and hierarchical, and more scientific and forward-looking Renaissance. To show concretely this change in the aspect of the Renaissance, we take a single figure, Leonardo da Vinci.

## I

Leonardo lived from 1452 to 1519. He was born near the small town of Vinci, which lies between Pisa and Florence in North Italy. His father was a young lawyer; we cannot be sure who his mother was, but it is likely that she was a village girl, called Caterina. Leonardo’s father did not marry his mother; instead, he married into a good family of Florence. This marriage was childless, and so were two later marriages; only in his last marriage, more than twenty years afterwards, did Leonardo’s father have children again—about a dozen.

Leonardo was thus his father’s only child all through his formative childhood and youth. He was taken into the family, in the house of his grandparents, when very young; and his mother was probably a servant in the house.

What effect did Leonardo’s strange upbringing have on his life? What did his age think about his illegitimacy? The answer is that illegitimacy, itself, was a commonplace of the time. Men were proud of making their own way, and cardinals, condottieri, and well-known artists, such as Leonardo’s forerunner, Leon Battista Alberti, boasted that they were born out of wedlock. Indeed, these

men frequently wielded a power which was as illegitimate as their birth. There was an age in which power was often personal, and usurpers existed at the head of many states. As the great historian of the Renaissance, Jacob Burckhardt, said: "The fitness of the individual, his worth and capacity, were of more weight than all the laws and usages which prevailed elsewhere in the West."

It is, therefore, strange that Leonardo's life suggests that he took his irregular birth and boyhood amiss. Something withdrawn in Leonardo's character, his remote and secret air, his lack of male sensuality seem to be the marks of a divided childhood. There is in his actions always some awkwardness, an unspoken but deliberate opposition, which calls up a picture of a silent and willful boy in a home where his mother is not in her rightful place.

## II

When he was about 14, Leonardo was taken by his father to Florence and apprenticed to the distinguished artist Andrea del Verrocchio. Florence was then, about 1465, ruled by the heads of the banking family of the Medici.

For such men, grown rich by trade, Verrocchio and others were making works of art: painting and sculpture, tableware and ornaments. An artist's workshop was a shop, and it was as much his business to make a golden chafing dish as to paint an altarpiece, and to design a chalice as to make improper drawings for the boudoir of a cardinal's mistress. Verrocchio was, in fact, famous as a goldsmith as well as a painter.

This is the setting in which Leonardo became a man: tall, strong, handsome, well known for having a fine singing voice, and endlessly gifted. When he completed his apprenticeship, about 1472, he was the leading painter in Verrocchio's workshop. We know that Verrocchio himself gave up painting, and had probably done so by this time. The story goes that he did so because the young Leonardo, in helping him with a commission, painted a more life-like angel than his master.

Such a story is told of other painters too; for example, of Raphael; it is a characteristic Renaissance story. Here is an age in love with the unexpected, which wants to discover the wonder of childhood and the wonder child. Genius must burst on the ordinary air, native and untaught; and it must instantly convert all those who behold it.

This story is appropriate to its age for another reason. The Renaissance artist could do many things, but his workshop ran better if he did what he could do best. The age was discovering the advantages in the division of labor. If Verrocchio had an apprentice who painted well, it was to everyone's advantage; and Verrocchio would gladly leave him the painting and take over something that no apprentice could do.

Yet, when this has been said of the story, we have still to say that it may actually be true of Leonardo. For we have the painting which bears it out: it is the *Baptism* by Verrocchio. Among the rather stiff figures in it, there is one unlike the others: a curly-haired angel that has come to life, so that it is no longer an angel but a child. No previous figure in Italian painting has this tender yet distant, this dedicated touch. And more than the angel, it is the grass and the rocks that make us guess the hand, at once warm and inhuman, of the young Leonardo: the accurate vision, the loving detail of a man who is fascinated to watch a blade of grass push up through the earth and begin to grow.

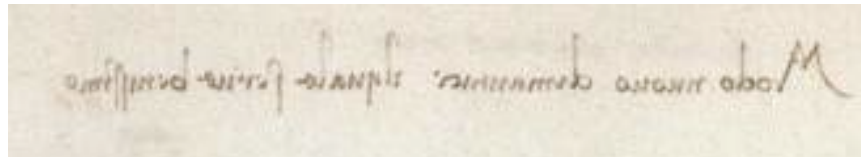
### III

In the official documents of the time, Leonardo in his twenties is mentioned twice: once as having completed his training, and once as having been accused with other young artists of making improper advances to a male model. Although he was acquitted at a trial, many of his contemporaries still entertained suspicions that he was homosexual. Later in his life, the only entries in his diary and the only drawings which show a personal passion concern a man: his pupil Giacomo Andrea Salai, whose curly head and lost looks he went on drawing for twenty-five years with contemptuous tenderness.

In one particular passage in his notebooks, Leonardo interrupts a scientific description of the flight of the vulture to recall, suddenly, a childhood dream. This is the dream: "It seems that it had been destined before that I should occupy myself so thoroughly with the vulture, for it comes to my mind as a very early memory, when I was still in the cradle, a vulture came down to me, opened my mouth with his tail and struck me many times with his tail against my lips." Sigmund Freud interprets this dream as evidence that Leonardo was a latent homosexual. The exegesis of Freud is brilliant and original in the extreme; it has the same flavor as a detective story in which one unlikely clue after another is linked together to provide the convincing, though improbable, solution. However, arresting as is Freud's interpretation, it has been seri-

ously challenged and must be held to be based on tenuous evidence.

We are on firmer ground when we say that Leonardo was left-handed. The shading in the pictures of a right-handed man runs from the bottom left-hand corner to the top right-hand corner; in Leonardo's pictures, it runs the other way, from the bottom right-hand corner to the top left-hand corner. The many notebooks he left behind are in mirror writing, clearly formed but running from right to left, and this is one reason why they were unread for more than two centuries after his death. Nevertheless, it is possible that Leonardo did the more delicate parts of his drawings and paintings with his right hand and only used his left hand for the coarser daily work, because he had injured his right hand in Florence.



Leonardo's life and work, alike, are characterized by a kind of impatience and self-assertion, which also typify the age of which he is such a dominating figure. He was self-taught and self-willed. He did everything, almost truculently, in his own way. Some of his pictures have perished by ill luck, but others more simply because he insisted on mixing the paints with unusual ingredients or on drying them in odd ways. He never followed the career that was expected of him, and seemed almost to need to be at odds with everything that he could do best. In a profound sense, Leonardo was a perverse man.

#### IV

In 1481, Verrocchio went to Venice to work on his great statue of the condottiere Colleoni on horseback, which still stands there. There was no plain reason why Leonardo should have left Florence. Yet he did. Already famous as an artist, he wrote the following letter to Lodovico Sforza, the usurper of Milan, nicknamed the Moor.

Most Illustrious Lord, Having now sufficiently considered the specimens of all those who proclaim themselves skilled contrivers of instruments of war, and that the invention and operation of the said instruments are nothing different from those in common use: I shall endeavour, without prejudice to anyone else, to explain myself to your Excellency, showing your Lord-

ship my secrets, and then offering them to your best pleasure and approbation to work with effect at opportune moments on all those things which, in part, shall be briefly noted below.

(1) I have a sort of extremely light and strong bridges, adapted to be most easily carried, and with them you may pursue, and at any time flee from the enemy; and others, secure and indestructible by fire and battle, easy and convenient to lift and place. Also methods of burning and destroying those of the enemy.

(2) I know how, when a place is besieged, to take the water out of the trenches, and make endless variety of bridges, and covered ways and ladders, and other machines pertaining to such expeditions.

(3) Item. If, by reason of the height of the banks, or the strength of the place, and its position, it is impossible, when besieging a place, to avail oneself of the plan of bombardment, I have methods for destroying every rock or other fortress, even if it were founded on a rock, etc.

(4) Again, I have kinds of mortars; most convenient and easy to carry; and with these I can fling small stones almost resembling a storm; and with the smoke of these cause great terror to the enemy, to his great detriment and confusion.

(5) Item. I have means by secret and tortuous mines and ways, made without noise, to reach a designated [spot], even if it were needed to pass under a trench or a river.

(6) Item. I will make covered chariots, safe and unassailable, which, entering among the enemy with their artillery, there is no body of man so great but they would break them. And behind these, infantry could follow quite unhurt and without any hindrance.

(7) Item. In case of need I will make big guns, mortars, and light ordnance of fine and useful forms, out of the common type.

(8) Where the operation of bombardment might fail, I would contrive catapults, mangonels, trebuchets and other machines of marvellous efficacy and not in common use. And in short, according to the variety of cases, I can contrive various and endless means of offence and defence.

(9) And if the fight should be at sea I have many kinds of machines most efficient for offence and defence; and vessels which will resist the attack of the largest guns and powder and fumes.

(10) In time of peace I believe I can give perfect satisfaction and to the equal of any other in architecture and the composition of buildings public and private; and in guiding water from one place to another.

Item. I can carry out sculpture in marble, bronze, or clay, and also I can do in painting whatever may be done, as well as any other, be he who he may.

Again, the bronze horse may be taken in hand, which is to be the immortal glory and eternal honour of the prince your father of happy memory, and of the illustrious house of Sforza.

And if any of the above-named things seem to any one to be impossible or not feasible, I am most ready to make the experiment in your park, or in whatever place may please your Excellency—to whom I commend myself with the utmost humility.

This sober and prophetic list of inventions to make war was accepted by the Moor, and Leonardo went to the Court of Milan, carrying with him a silver lute which he had made for himself in the shape of a horse's head. He remained at that treacherous, turbulent court through the most creative years in his life, until Lodovico Sforza was deposed in 1499.

Why did Leonardo leave Florence? One reason was that Verrocchio had gone. So had the other known Florentine painters: Botticelli, Ghirlandaio, Perugino, and Cosimo Rosselli. They had gone to Rome at the invitation of Pope Sixtus IV to paint competitively in the Sistine Chapel. So Leonardo may have felt that Florence was no longer the center for artists which it had once been.

It may be that Leonardo went for no better reason than that Lodovico Sforza was looking for an artist to make a statue of his father on horseback. Verrocchio, as we have said, had gone to Venice to finish the statue of a mounted condottiere. Leonardo was not a sculptor, but he was a man who had to do everything, and do it better. The father of Lodovico Sforza had been a greater condottiere

than Colleoni, and perhaps Leonardo could not resist the itch to set up his statue against Verrocchio's.

Perhaps so; but there was also a deeper reason. Florence under the Medici was a city of tradition. Here was the classical Renaissance: the beautiful libraries, the Greek and Roman texts in manuscript, the Platonic Academy set up earlier by Cosimo de' Medici. It was graceful, literary, and derivative; its golden dream was of the past.

This first form of the Renaissance was now changing to another, and Leonardo personifies the transition. It is the transition from a classical to a popular, from an idealistic to an empirical Renaissance; from a worship of past humanism to a fierce belief in the human present. The Medici had given up the medieval ideal of an unapproachable godhead; but man and nature were still remote ideals to them, to be found mainly in books. The self-made men of the new Renaissance, however, wanted to grasp man and nature through the senses, physically, in handfuls. As Leonardo wrote in his notebooks: "He who has access to the fountain does not go to the water-pot."

By the standards of Florence, Leonardo was in fact an uneducated man. He taught himself Latin later, in his forties in Milan, but he never learned Greek. To the aristocratic bankers of Florence, proud of their schools, Leonardo was an unscholarly and unlettered painter.

Things were different in Milan. There the court had for some years been ruled by a family of condottieri, the Sforzas. They lived by their wits and by their popularity. The first Sforza had left his son three maxims: "Let other men's wives alone; do not strike your followers; and do not ride a hard-mouthed horse." The grandson, Lodovico, still boasted that he was a self-made man, and claimed kinship with all who, like himself, stood on their personal merits—with scholars, poets, artists, and musicians. Leonardo, who went to Milan when it was just becoming the center of the new printing in Italy, was attracted to this ruffian who was the son of his own deeds.

Leonardo, too, was interested in what was new. He was not willing to look back: his look was outward and forward into nature. He looked at her with two passions: a passion for the exact, which turned him toward mathematics, and a passion for the actual, which urged him to experiment. These two strands, the logical and the experimental, have remained the two sinews of the scientific method ever since.



Leonardo had already begun anatomical studies in Florence, and carried out elaborate dissections. With his extraordinary camera of an eye that could stop the hawk in flight and fix the rearing horse, he saw everything, and saw it precisely. It was the detail, the articulation of nature which fascinated him. Leonardo was the first to see that the detail has a meaning; and he wanted to find the meaning. Step by step he wanted to observe, to discover, and to invent. There is a mounting impatience, in Leonardo's notes as well as in his drawings, with all that merely catches an effect—a movement or a likeness—of light, of water, of face or flower. He wanted to understand and uncover, layer by layer, the muscle under the skin and the bone under the muscle. He was in a rage to know.



There is a beautiful portrait,—which Leonardo painted soon after he came to Milan, of a mistress of Lodovico Sforza holding in her arms his emblem, a stoat. She was probably Cecilia Gallerani, so that the stoat with her is also a Greek pun on her name. Yet, behind that smooth Renaissance wit, the picture is more cruel than either of the delicate and handsome, yet stupid, heads that it paints, because it matches the skull behind the girl's temples with the stoat's, and the bones of her hand with his paw. The man who painted it is less an artist than an explorer; and the portrait is less a likeness than a work of discovery—an emblematic research into anatomy and character together. Indeed, if one looks closely at the painting, there is a sense in it in which the skull of the stoat and the skull of the girl, both looking the same way, are so alike that the whole theory of evolution is, as it were, contained in the picture.

In Milan, Leonardo was free to follow his interest in science wherever it led him. These were the mature and active years of his life, from the age of 30 until he was nearly 50. The scope of his researches was prodigious. There are, first, his anatomical drawings, for example of the hollows and blood vessels in the head. These are so exact that, even today, it is striking to compare them point by point with X-ray photographs and with photographs taken with radioactive tracers. It is worth citing at length a characteristic quotation from the notebooks, to show how absorbed and meticulous Leonardo was in this work, and how intently he looked for the mechanism behind what he saw:

And this old man, a few hours before his death, told me that he had lived a hundred years, and that he did not feel any bodily ailment other than weakness, and thus while sitting upon a bed in the hospital of Santa Maria Nuova at Florence, without any movement or sign of anything amiss, he passed away from this life.



And I made an autopsy in order to ascertain the cause of so peaceful a death, and found that it proceeded from weakness through failure of blood and of the artery that feeds the heart and the other lower members, which I found to be very parched and shrunk and withered; and the result of this autopsy I wrote down very carefully and with great ease, for the body was devoid of either fat or moisture, and these form the chief hindrance to the knowledge of its parts.

The other autopsy was on a child of two years, and here I found everything the contrary to what it was in the case of the old man.

The old who enjoy good health die through lack of sustenance. And this is brought about by the passage to the mesaraic veins becoming continually restricted by the thickening of the skin of these veins; and the process continues until it affects the capillary veins, which are the first to close up altogether; and from this it comes to pass that the old dread the cold more than the young, and that those who are very old have their skin the colour of wood or of dried chestnut, because this skin is almost completely deprived of sustenance.

And this network of veins acts in man as in oranges, in which the peel becomes thicker and the pulp diminishes the more they become old. And if you say that as the blood becomes thicker it ceases to flow through the veins, this is not true, for the blood in the veins does not thicken because it continually dies and is renewed.

What Leonardo looked for when he drew men and animals and plants was the structure, because to him this was how Nature showed her meaning: she expressed the purpose in the structure. He was looking for the mechanism which moves the creature.

Instrumental or mechanical science is the noblest and above all others the most useful, seeing that by means of it all animated bodies which have movement perform all their actions; and the origin of these movements is at the centre of their gravity, which is placed in the middle with unequal weights at the sides of it, and it has scarcity or abundance of muscles and also the action of a lever and counter lever.

It is only a step from this to inventing a flying machine, and a dozen other machines. Some of these, of course, were impracticable, because that age did not command (and did not understand) the mechanical energy needed, for example, to fly—though Leonardo did invent a screw helicopter and a parachute which worked. But most of his machines which control an action or a process are thoroughly practical. There are in his notebooks machines for grinding needles and mirrors and for cutting screws and files, there is a rolling mill, and a special lathe, all of which work and all of which are original. There are lock gates and excavators and girder bridges; there are instruments for measuring wind and water; there is the clock pendulum. And there are others, particularly engines of

war, of whose originality we are less certain, yet to which Leonardo certainly added some neat device from his own springing invention.

## V

Leonardo's life at the court of Milan kept him busy with other schemes, too. He designed buildings and canals, he made surveys and maps, he was expected to mount the elaborate masques with which the courts of the Renaissance decorated a public occasion. He is said to have made a mechanical lion to welcome the King of France, in order that it would spill a shower of lilies from its breast at his feet.



Behind all this activity, however, stood one shadow: the unfinished commission for a monument to Lodovico Sforza's father. As always, Leonardo was full of plans and preparations. He made numberless sketches of a horse—for, to him, that was the center of the monument, which he simply called "the horse." The horse on which Verrocchio had mounted Colleoni was one of the first to raise one foot from the ground; Leonardo was determined to have a horse rearing with both forelegs in the air. This scheme posed many mechanical difficulties, for example, in the casting: at once, Leonardo began to sketch devices for casting and transporting the horse. Meanwhile, the years passed, and the statue remained a series of sketches.

Something had to be done, after ten years, in 1493 at the ceremony to usher in the wedding of Lodovico's niece to the Emperor Maximilian. Leonardo made a model of the statue, full size, in clay. With that, the bronze to cast the statue was got together too, at last. But the metal had to be sent off again next year to found cannon in order to help Lodovico's allies. Lodovico was now intriguing with one city-state after another, and was inviting the French and even the Turks to help him. The French came and marched up and down Italy; but the tyrant whom they deposed at last was Lodovico the Moor himself.

When the French archers conquered Milan, they used the clay horse as a target, and gaily shot it to pieces.

Leonardo fled from Milan when the French came in 1499. Characteristically, he left in the company of Luca Paccioli, who had made important advances in algebra and in the mathematics of gaming, and who was now writing a book on geometry for which Leonardo was drawing the diagrams. Nothing remained of the full years in Milan but the *Last Supper*, which began to molder on its damp convent wall before Leonardo died. The picture, which has been repainted so many times since that it is impossible to conceive that any single touch of paint that Leonardo put on remains, was one of the first paintings of the *Last Supper* in which Judas sat on the same side of the table as Christ. The decision to bring Judas around to the same side as Christ produces a heightened dramatic and artistic effect; it accords, psychologically, with what we conceive to have been the real relationship of the betrayed and his betrayer.

## VI

With the fall of the court of Milan, Leonardo's life seemed to fall to pieces. He wandered from one unhappy task to another. In 1502 he became military engineer to Cesare Borgia for a short time, in one of the most treacherous of Borgia's campaigns (in fact, the one so brilliantly described by Machiavelli). Then Florence recovered from the long hysteria during which the monk Girolamo Savonarola had expelled the Medici and burned their wonderful treasures. Thereupon Leonardo and his young rival Michelangelo were commissioned by Florence to paint two patriotic pictures, neither of which was finished. Working now and again, arguing about the money, Leonardo seems to have spent his leisure time for four years in painting the third wife of an obscure merchant. The picture is the *Mona Lisa*, which still faintly glows through a green sea of varnish. Freud makes the interesting suggestion that all the smiling women—St. Anne, the Virgin, Mona Lisa—who occur in Leonardo's pictures were attempts to capture the peculiar air of tenderness and humility, which the memory of his mother, the servant-girl Caterina, called to his mind.

From time to time, Leonardo went back to Milan to plan, of all things, a monument to the condottiere Trivulzio in the service of the French who had defeated Lodovico Sforza. But nothing came of this either. Then, in 1513, the son of Lorenzo (Medici) the Magnificent was elected to be the Pope Leo X. He invited Leonardo to Rome, where Raphael and Michelangelo were now painting, and offered him a commission. It is said that Leonardo at once began to make the varnish for the picture, and that Leo X said, sadly and

rightly, “This man will never do anything, for he begins to think of the end before the beginning.”

At last, in 1516, Leonardo was offered a retreat from this aimless and restless life. The king invited him to France, and there he remained in the country seat of Charles d’Amboise until he died in 1519. Though the setting was peaceful, his mind was not at peace. The later notebooks are filled with whirling patterns of storm and flood, clouds and waterspouts, in a vision of apocalyptic ruin. And on page after page, one phrase is scribbled: “Tell me if anything at all was done. . . .” “Tell me if anything at all was done. . . .”

Did Leonardo fail? His contemporaries did not think so; and not fifty years after his death, in 1568, he was a hero to his first biographer, Giorgio Vasari. True, he did much less than he might have done, and much of what he did was destroyed or forgotten. Yet he contained in himself, and brought to life, the aspirations of an age. In this sense, he was the Renaissance man.

He was, first, the boy wonder: the personification of the belief in the native genius of man. His story is that of the painter who, still in his teens, enters the studio of a distinguished artist and immediately outshines him. As the genius leaping perfect into the world, he embodied and made real the Renaissance feeling that every individual carries in him unlimited potentialities and requires, not an elaborate indoctrination or a lifetime of monastic devotion to one kind of work, but simply the proper environment in which, like a flower, he can unfold. It was this feeling of the way all human achievement is contained in the individual which was one main point in Renaissance belief.

Second, Leonardo was the man of the people: what he saw he saw for himself, with little attention to the learning of ancient predecessors. Indeed, the books of the great Greek and Latin authors were to him rather second-hand, already the water-pot which we quoted earlier, because he believed that the things about which they talked were discoverable in nature herself. His belief marks a critical change in the Renaissance. The humanists before him, by 1450, had superseded in importance the medieval scholastics and their speculations and returned to the classic pagan authors—to Greek and Latin literature. Leonardo was one of the first to break with this break; his interest was not in the authority of the ancients but in a direct appeal to nature.

This brings us to our third point. Leonardo was the discoverer: the man who saw in the detail of nature the meaning which had been

missed for centuries. He approached the world through his drawings, and showed nature's lineaments beneath the surface of his pigments. His new vision pierced to the structure of things which lay hidden behind outward appearances; he was concerned with the bone underneath the muscle as much as with the rendering of the skin color.

Was Leonardo a scientist? He found nothing that we should now call a scientific theory, because he lacked the gift to isolate those abstract concepts—gravitation, momentum, energy—in which science seeks the unity under the chaos of natural phenomena. His mind leaped to the concrete and the particular.

Yet, to an age still dominated by the traditional categories of Aristotle and St. Thomas Aquinas, he brought the right mind. When almost all thinking was still guided by universal and a priori plans of nature, he made a single profound discovery. He discovered that Nature speaks to us in detail, and that only through the detail can we find her grand design.

This is the discovery at the base of modern science, all the way from atomic structure to genetics. In the nature of things, this discovery had to be made by an artist. The Renaissance painters before Leonardo had already taken the first step in it; they had shown that the detail of nature marks one scene from another and gives meaning to each. What Leonardo did was to take this discovery from the studio into the laboratory. He made the artist's eye for meaningful detail become part of the essential equipment of the scientist.

Leonardo's insight was always instant and astonishing. Before Copernicus, he wrote, "The sun does not move." He thought of sound and perhaps of light as waves. He understood, before Galileo, that perpetual motion is impossible. He read the rings in trees and the history of fossil shells.

Stubborn, prodigal, and perverse, with his gifts, balked, Leonardo lived in the richest and in the most menacing age of Europe. There was suddenly disclosed to the men of his generation a store of wealth and power in the world which they were too stunned and intoxicated to use well. For this the condottieri fought and marched, for this popes bribed and princes poisoned, and for this artists fawned and played away their lives at the courts of their unruly masters. Leonardo, too, was fascinated and dominated by power in others; he lay under the spell that has bound men for 500

years, so that they cannot tear themselves away from the loved and brutal image of the gangster and the tyrant.

Leonardo left fewer than 20 paintings, not a whole statue, machine, or book, and 5000 pages of notes and sketches which lay unread for 250 years. His way of painting had a lasting influence, his dissections some, and his inventions none. Raphael and Dürer learned from him, he was the friend of Machiavelli and Paccioli and the contemporary of Martin Luther and Christopher Columbus. In that heady, modern-seeming age, he was the prototype of the inveterate explorer of the unknown, the inspired man of genius who gazed in a new way at the microcosm within and the macrocosm without. 📖

From their book, *The Western Intellectual Tradition: From Leonardo to Hegel*, Harper & Brothers, NY (1960)

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