Chapter 1

Childhood

Vinci, 1452–1464

DA VINCI

Leonardo da Vinci had the good luck to be born out of wedlock. Otherwise, he would have been expected to become a notary, like the firstborn legitimate sons in his family stretching back at least five generations.

His family roots can be traced to the early 1300s, when his greatgreat-great-grandfather, Michele, practiced as a notary in the Tuscan hill town of Vinci, about seventeen miles west of Florence.* With the rise of Italy's mercantile economy, notaries played an important role drawing up commercial contracts, land sales, wills, and other legal documents in Latin, often garnishing them with historical references and literary flourishes.

Because Michele was a notary, he was entitled to the honorific "Ser" and thus became known as Ser Michele da Vinci. His son and grandson were even more successful notaries, the latter becoming a chancellor of Florence. The next in line, Antonio, was an anomaly. He used the honorific Ser and married the daughter of a notary, but he seems to have lacked the da Vinci ambition. He mostly spent his life living off the proceeds from family lands, tilled by sharecroppers, that produced a modest amount of wine, olive oil, and wheat.

Antonio's son Piero made up for the lassitude by ambitiously pursuing success in Pistola and Pisa, and then by about 1451, when he was twenty-five, establishing himself in Florence. A contract he notarized that year gave his work address as "at the Palazzo del Podestà," the magistrates' building (now the Bargello Museum) facing the Palazzo della Signoria, the seat of government. He became a notary for many of the city's monasteries and religious orders, the town's Jewish community, and on at least one occasion the Medici family.[1]

On one of his visits back to Vinci, Piero had a relationship with an unmarried local peasant girl, and in the spring of 1452 they had a son. Exercising his little-used notarial handwriting, the boy's grandfather Antonio recorded the birth on the bottom of the last page of a notebook that had belonged to his own grandfather. "1452: There was born to me a grandson, the son of Ser Piero my son, on the 15th day

of April, a Saturday, at the third hour of the night [about 10 p.m.]. He bears the name Leonardo."[2]

Leonardo's mother was not considered worth mentioning in Antonio's birth notation nor in any other birth or baptism record. From a tax document five years later, we learn only her first name, Caterina. Her identity was long a mystery to modern scholars. She was thought to be in her mid-twenties, and some researchers speculated that she was an Arab slave, or perhaps a Chinese slave.[3]
In fact, she was an orphaned and impoverished sixteen-year-old from the Vinci area named Caterina Lippi. Proving that there are still things to be rediscovered about Leonardo, the art historian Martin Kemp of Oxford and the archival researcher Giuseppe Pallanti of Florence produced evidence in 2017 documenting her background.[4]

Born in 1436 to a poor farmer, Caterina was orphaned when she was fourteen. She and her infant brother moved in with their grandmother, who died a year later, in 1451. Left to fend for herself and her brother, Caterina had a relationship in July of that year with Piero da Vinci, then twenty-four, who was prominent and prosperous.

There was little likelihood they would marry. Although described by one earlier biographer as "of good blood,"[5] Caterina was of a different social class, and Piero was probably already betrothed to his future wife, an appropriate match: a sixteen-year-old named Albiera who was the daughter of a prominent Florentine shoemaker. He and Albiera were wed within eight months of Leonardo's birth. The marriage, socially and professionally advantageous to both sides, had likely been arranged, and the dowry contracted, before Leonardo was born.

Keeping things tidy and convenient, shortly after Leonardo was born Piero helped to set up a marriage for Caterina to a local farmer and kiln worker who had ties to the da Vinci family. Named Antonio di Piero del Vaccha, he was called Accattabriga, which means "Troublemaker,"
though fortunately he does not seem to have been one.

Leonardo's paternal grandparents and his father had a family house with a small garden right next to the walls of the castle in the heart of the village of Vinci. That is where Leonardo may have been born, though there are reasons to think not. It might not have been convenient or appropriate to have a pregnant and then breast-feeding peasant woman living in the crowded da Vinci family home, especially

as Ser Piero was negotiating a dowry from the prominent family whose daughter he was planning to marry.

Instead, according to legend and the local tourist industry, Leonardo's birthplace may have been a gray stone tenant cottage next to a farmhouse two miles up the road from Vinci in the adjacent hamlet of Anchiano, which is now the site of a small Leonardo museum. Some of this property had been owned since 1412 by the family of Piero di Malvolto, a close friend of the da Vincis. He was the godfather of Piero da Vinci and, in 1452, would be a godfather of Piero's newborn son, Leonardo—which would have made sense if Leonardo had been born on his property. The families were very close. Leonardo's grandfather Antonio had served as a witness to a contract involving some parts of Piero di Malvoto's property. The notes describing the exchange say that Antonio was at a nearby house playing backgammon when he was asked to come over for that task. Piero da Vinci would buy some of the property in the 1480s.

At the time of Leonardo's birth, Piero di Malvoto's seventy-yearold widowed mother lived on the property. So here in the hamlet of Anchiano, an easy two-mile walk from the village of Vinci, living alone in a farmhouse that had a run-down cottage next door, was a widow who was a trusted friend to at least two generations of the da Vinci family. Her dilapidated cottage (for tax purposes the family claimed it as uninhabitable) may have been the ideal place to shelter Caterina while she was pregnant, as per local lore.[6]

Leonardo was born on a Saturday, and the following day he was baptized by the local priest at the parish church of Vinci. The baptismal font is still there. Despite the circumstances of his birth, it was a large and public event. There were ten godparents giving witness, including Piero di Malvoto, far more than the average at the church, and the guests included prominent local gentry. A week later, Piero da Vinci left Caterina and their infant son behind and returned to Florence, where that Monday he was in his office notarizing papers for clients.[7]

Leonardo left us no comment on the circumstances of his birth, but there is one tantalizing allusion in his notebooks to the favors that nature bestows upon a love child. "The man who has intercourse aggressively and uneasily will produce children who are irritable and untrustworthy," he wrote, "but if the intercourse is done with great love and desire on both sides, the child will be of great intellect, witty, lively, and lovable."[8] One assumes, or at least hopes, that he considered himself in the latter category.

He split his childhood between two homes. Caterina and Accattabriga settled on a small farm on the outskirts of Vinci, and they remained friendly with Piero da Vinci. Twenty years later, Accattabriga was working in a kiln that was rented by Piero, and they served as witnesses for each other on a few contracts and deeds over the years. In the years following Leonardo's birth, Caterina and Accattabriga had four girls and a boy. Piero and Albiera, however, remained childless. In fact, until Leonardo was twenty-four, his father had no other children. (Piero would make up for it during his third and fourth marriages, having at least eleven children.)

With his father living mainly in Florence and his mother nurturing a growing family of her own, Leonardo by age five was primarily living in the da Vinci family home with his leisure-loving grandfather Antonio and his wife. In the 1457 tax census, Antonio listed the dependents residing with him, including his grandson: "Leonardo, son of the said Ser Piero, *non legittimo*, born of him and of Caterina, who is now the woman of Achattabriga."

Also living in the household was Piero's youngest brother, Francesco, who was only fifteen years older than his nephew Leonardo. Francesco inherited a love of country leisure and was described in a tax document by his own father, in a pot-calling-the-kettle way, as "one who hangs around the villa and does nothing."[9] He became Leonardo's beloved uncle and at times surrogate father. In the first edition of his biography, Vasari makes the telling mistake, later corrected, of identifying Piero as Leonardo's uncle.

"A GOLDEN AGE FOR BASTARDS"

As Leonardo's well-attended baptism attests, being born out of wedlock was not a cause for public shame. The nineteenth-century cultural historian Jacob Burckhardt went so far as to label Renaissance Italy "a golden age for bastards."[10] Especially among the ruling and aristocratic classes, being illegitimate was no hindrance. Pius II, who was the pope when Leonardo was born, wrote about visiting Ferrara, where his welcoming party included seven princes from the ruling Este family, among them the reigning duke, all born out of wedlock. "It is an extraordinary thing about that family," Pius wrote, "that no legitimate heir has ever inherited the principate; the sons of their mistresses have been so much more fortunate than those of their wives."[11] (Pius himself fathered at least two illegitimate children.) Pope Alexander VI, also during Leonardo's lifetime, had multiple mistresses and illegitimate children, one of whom was Cesare Borgia,

who became a cardinal, commander of the papal armies, an employer of Leonardo, and the subject of Machiavelli's *The Prince*.

For members of the middle classes, however, illegitimacy was not as readily accepted. Protective of their new status, merchants and professionals formed guilds that enforced moral strictures. Although some of the guilds accepted the illegitimate sons of their members, that was not the case with the Arte dei Giuduci e Notai, the venerable (founded in 1197) guild of judges and notaries to which Leonardo's father belonged. "The notary was a certified witness and scribe," Thomas Kuehn wrote in *Illegitimacy in Renaissance Florence*. "His trustworthiness had to be above reproach. He had to be someone fully in the mainstream of society."[12]

These strictures had an upside. Illegitimacy freed some imaginative and free-spirited young men to be creative at a time when creativity was increasingly rewarded. Among the poets, artists, and artisans born out of wedlock were Petrarch, Boccaccio, Lorenzo Ghiberti, Filippo Lippi, his son Filippino, Leon Battista Alberti, and of course Leonardo.

Being born out of wedlock was more complex than merely being an outsider. It created an ambiguity of status. "The problem with bastards was that they were part of the family, but not totally," wrote Kuehn. That helped some be, or forced them to be, more adventurous and improvisational. Leonardo was a member of a middle-class family but separate from it. Like so many writers and artists, he grew up feeling a part of the world but also detached. This limbo extended to inheritance: a combination of conflicting laws and contradictory court precedents left it unclear whether a son born out of wedlock could be an heir, as Leonardo was to find out in legal battles with his stepbrothers many years later. "Management of such ambiguities was one of the hallmarks of life in a Renaissance city-state," explained Kuehn. "It was related to the more celebrated creativity of a city like Florence in the arts and humanism."[13]

Because Florence's guild of notaries barred those who were *non legittimo*, Leonardo was able to benefit from the note-taking instincts that were ingrained in his family heritage while being free to pursue his own creative passions. This was fortunate. He would have made a poor notary: he got bored and distracted too easily, especially when a project became routine rather than creative.[14]

DISCIPLE OF EXPERIENCE

Another upside for Leonardo of being born out of wedlock was

that he was not sent to one of the "Latin schools" that taught the classics and humanities to well-groomed aspiring professionals and merchants of the early Renaissance.[15] Other than a little training in commercial math at what was known as an "abacus school," Leonardo was mainly self-taught. He often seemed defensive about being an "unlettered man," as he dubbed himself with some irony. But he also took pride that his lack of formal schooling led him to be a disciple of experience and experiment. "Leonardo da Vinci, disscepolo della sperientia,"[16] he once signed himself. This freethinking attitude saved him from being an acolyte of traditional thinking. In his notebooks he unleashed a blast at what he called the pompous fools who would disparage him for this:

> I am fully aware that my not being a man of letters may cause certain presumptuous people to think that they may with reason blame me, alleging that I am a man without learning. Foolish folk! . . . They strut about puffed up and pompous, decked out and adorned not with their own labors, but by those of others. . . . They will say that because I have no book learning I cannot properly express what I desire to describe—but they do not know that my subjects require experience rather than the words of others.[17]

Thus was Leonardo spared from being trained to accept dusty Scholasticism or the medieval dogmas that had accumulated in the centuries since the decline of classical science and original thinking. His lack of reverence for authority and his willingness to challenge received wisdom would lead him to craft an empirical approach for understanding nature that foreshadowed the scientific method developed more than a century later by Bacon and Galileo. His method was rooted in experiment, curiosity, and the ability to marvel at phenomena that the rest of us rarely pause to ponder after we've outgrown our wonder years.

To that was added an intense desire and ability to observe the wonders of nature. He pushed himself to perceive shapes and shadows with wondrous precision. He was particularly good at apprehending movement, from the motions of a flapping wing to the emotions flickering across a face. On this foundation he built experiments, some conducted in his mind, others with drawings, and a few with physical objects. "First I shall do some experiments before I proceed further," he announced, "because my intention is to consult experience first and then with reasoning show why such experience is bound to operate in such a way."[18]

It was a good time for a child with such ambitions and talents to be born. In 1452 Johannes Gutenberg had just opened his publishing house, and soon others were using his moveable-type press to print books that would empower unschooled but brilliant people like Leonardo. Italy was beginning a rare forty-year period during which it was not wracked by wars among its city-states. Literacy, numeracy, and income were rising dramatically as power shifted from titled landowners to urban merchants and bankers, who benefited from advances in law, accounting, credit, and insurance. The Ottoman Turks were about to capture Constantinople, unleashing on Italy a migration of fleeing scholars with bundles of manuscripts containing the ancient wisdom of Euclid, Ptolemy, Plato, and Aristotle. Born within a year of Leonardo were Christopher Columbus and Amerigo Vespucci, who would lead an era of exploration. And Florence, with its booming merchant class of status-seeking patrons, had become the cradle of Renaissance art and humanism.

CHILDHOOD MEMORIES

The most vivid memory Leonardo had of his infancy was one he recorded fifty years later, when he was studying the flight of birds. He was writing about a hawk-like bird called a kite, which has a forked tail and elegant long wings that allow it to soar and glide. Observing it with his typical acuity, Leonardo perceived precisely how it opened its wings and then spread and lowered its tail when it landed.[19] This aroused a memory from when he was a baby: “Writing about the kite seems to be my destiny since among the first recollections of my infancy, it seemed to me that, as I was in my cradle, a kite came to me and opened my mouth with its tail and struck me several times with its tail inside my lips.”[20] Like much of what came from Leonardo’s mind, there was probably some fantasy and fabulism in the brew. It is hard to imagine a bird actually landing in a cradle and prying open a baby’s mouth with its tail, and Leonardo appears to acknowledge this by using the phrase “it seemed to me,” as if it were perhaps partly a dream.

All of this—a childhood with two mothers, an often absent father, and a dreamlike oral encounter with a flapping tail—would provide great fodder for a Freudian analyst. And it did—from Freud himself. In 1910 Freud used the kite tale as the foundation for a short book, *Leonardo da Vinci and a Memory of His Childhood*.[21]

Freud got off to a stumbling start by using a poor German translation of Leonardo’s note that mistakenly called the bird a vulture

rather than a kite. This sent him into a long tangential explanation about the symbolism of vultures in ancient Egypt and the etymological relationship of the words for *vulture* and *mother*, all of which was irrelevant and, Freud later admitted, embarrassing.[22] Leaving aside the bird mix-up, the main thrust of Freud's analysis was that the word for *tail* in many languages, including Italian (*coda*), is slang for "penis" and that Leonardo's memory was related to his homosexuality. "The situation contained in the fantasy, that a vulture opened the mouth of the child and forcefully belabored it with its tail, corresponds to the idea of fellatio," Freud wrote. Leonardo's repressed desires, he speculated, were channeled into his feverish creativity, but he left many works unfinished because he was inhibited.

These interpretations have prompted some devastating critiques, most famously by art historian Meyer Schapiro,[23] and they seem, at least to me, to reveal more about Freud than about Leonardo. Biographers should be cautious about psychoanalyzing someone who lived five centuries earlier. Leonardo's dreamlike memory may have simply reflected his lifelong interest in the flight of birds, which is how he framed it. And it does not take a Freud to understand that sexual drives can be sublimated into ambition and other passions. Leonardo said so himself. "Intellectual passion drives out sensuality," he wrote in one of his notebooks.[24]

A better source for insight into Leonardo's formative character and motivations is another personal memory he recorded, this one about hiking near Florence. The recollection involved chancing upon a dark cave and pondering whether he should enter. "Having wandered some distance among gloomy rocks, I came to the mouth of a great cavern, in front of which I stood some time, astonished," he recalled. "Bending back and forth, I tried to see whether I could discover anything inside, but the darkness within prevented that. Suddenly there arose in me two contrary emotions, fear and desire—fear of the threatening dark cave, desire to see whether there were any marvelous thing within."[25]

Desire won. His unstoppable curiosity triumphed, and Leonardo went into the cave. There he discovered, embedded in the wall, a fossil whale. "Oh mighty and once-living instrument of nature," he wrote, "your vast strength was to no avail."[26] Some scholars have assumed that he was describing a fantasy hike or riffing on some verses by Seneca. But his notebook page and those surrounding it are filled with descriptions of layers of fossil shells, and many fossilized whale bones have in fact been discovered in Tuscany.[27]

The whale fossil triggered a dark vision of what would be, throughout his life, one of his deepest forebodings, that of an apocalyptic deluge. On the next side of the sheet he described at length the furious power once held by the long-dead whale: “You lashed with swift, branching fins and forked tail, creating in the sea sudden tempests that buffeted and submerged ships.” Then he turned philosophical. “Oh time, swift despoiler of all things, how many kings, how many nations hast thou undone, and how many changes of states and of circumstances have happened since this wondrous fish perished.”

By this point Leonardo’s fears were about a realm far different from whatever dangers might be lurking inside the cave. Instead they were driven by an existential dread in the face of the destructive powers of nature. He began scribbling rapidly, using a silverpoint on a red-tinted page, describing an apocalypse that begins with water and ends with fire. “The rivers will be deprived of their waters, the earth will no longer put forth her greenery; the fields will no more be decked with waving corn; all the animals, finding no fresh grass for pasture, will die,” he wrote. “In this way the fertile and fruitful earth will be forced to end with the element of fire; and then its surface will be left burnt up to cinder and this will be the end of all earthly nature.”[28]

The dark cave that Leonardo’s curiosity compelled him to enter offered up both scientific discoveries and imaginative fantasies, strands that would be interwoven throughout his life. He would weather storms, literally and psychologically, and he would encounter dark recesses of the earth and soul. But his curiosity about nature would always impel him to explore more. Both his fascinations and his forebodings would be expressed in his art, beginning with his depiction of Saint Jerome agonizing near the mouth of a cave and culminating in his drawings and writings about an apocalyptic deluge.

* Leonardo da Vinci is sometimes incorrectly called “da Vinci,” as if that were his last name rather than a descriptor meaning “from Vinci.” However, the usage is not as egregious as some purists proclaim. During Leonardo’s lifetime, Italians increasingly began to regularize and register the use of hereditary surnames, and many of these, such as Genovese and DiCaprio, derived from family hometowns. Both Leonardo and his father, Piero, frequently appended “da Vinci” to their names. When Leonardo moved to Milan, his friend the court poet Bernardo Bellincioni referred to him in writing as “Leonardo Vinci, the Florentine.”