

## LEONARDO DA VINCI, *FESTAIUOLO*

Leonardo da Vinci is widely regarded as the epitome of the Renaissance Man. He is universally known for his paintings of the *Last Supper* and the *Mona Lisa*, inventions of flying machines and armored tanks, architectural and civic development plans, anatomical research and drawings, and studies of the natural sciences. Yet one aspect of Leonardo's oeuvre that is often overlooked is his theatrical work as a *festaiuolo*. The term *festaiuolo* originated in the Middle Ages where mystery plays were commonly "introduced by a choric figure, the *festaiuolo*, often in the character of an angel" who served "as a mediator between the beholder and the events."<sup>(1)</sup> By the late fifteenth century, though, the *festaiuolo* had instead, become a "master of revels."<sup>(2)</sup> In this role, Leonardo developed, organized, and directed productions for festival pageants, triumphal processions, masques, and plays, for which he choreographed performances, engineered and decorated stage sets and props, and even designed costumes.

As a young man in Florence of the fifteenth century, Leonardo experienced a spirit of pageantry that was deep rooted in Florentine tradition. Great religious festivals, mytho-allegorical spectacles, triumphal processions, and mock battles and tourneys were presented in private and public forums throughout the year. These Renaissance productions had their origins in medieval mystery plays and religious ceremonies that were especially magnificent in Florence. By the time of Leonardo, such religious events had developed into extended holidays, during which mystery plays still dominated, but frequent *intermezzi* paraded through the streets in perpetual performances, inviting the community to participate.

For the Feast of St. John the Baptist in June, for example, Florence became an enormous, dazzling tapestry of colors. Shops and houses were hung with vividly hued banners and pennants. Chairs and benches were adorned with ribbons and strips of fabric. Piazzas were festooned with swags and wreaths of summer greenery embellished with flowers and fruits. The grand procession of the clergy, dressed in their finest ecclesiastical attire and bearing sacred relics, was accompanied by young boys costumed as angels and adult laymen as saints. Attendants on horseback likewise wore elaborate costumes to complement the painted standards they carried that represented the sixteen quarters of the city. Garlanded ladies strewed the streets with flowers, and musicians led the way to the city's main square, the Piazza della Signoria. There, a caravan of wagons brought in numerous towers painted and decorated to represent Florence's subject towns. Some of the towers were constructed with mechanical devices that revolved so that all sides were visible to the throngs of visitors. Tapestries and painted standards of each of these towns were also hung from the balcony of the Palazzo Vecchio facing the square. Of the greatest importance in the *piazza* were the elaborate stage sets where performers would retell the familiar stories of the city's patron saint, John the Baptist. Actors would appear "sometimes as a wasted wild witness in savage weeds, sometimes as a lost prince of beauty, delicate, sad, perverse."<sup>(3)</sup> Following the religious ceremonies were the *palio*—horse racing and athletic competitions—and the celebrations of the citizenry. "The whole city," wrote one visitor of the 1500s, "is given over to revelry and feasting, with so many

fifes and music, songs, dances and other festivities and merry-making, that this earth seems like a paradise.”(4)

As spectacular as religious celebrations of Leonardo’s time were, many other pageants, processions, and celebratory events were secular in character. Births, deaths, baptisms, betrothals, marriages, and military victories especially were opportunities for spectacles for the ruling classes, and were often spared no expense. Similarly, extravagant masques were sponsored by prosperous guilds, community organizations, and affluent mercantile and banking families, during which performances of mythological or allegorical themes were presented. These Renaissance masquerades and pageants were “solutions of color, music, sweet lighted faces, rainbow wings and gilt armor, sweet fading words.”(5) For an individual lord, such events were “an outlet for many of the dominant passions of the time, for there a man could display all the finery he pleased, satisfy his love of antiquity by masquerading as Caesar or Hannibal, his love of knowledge by figuring out how the Romans dressed and rode in triumph, his love of glory by the display of wealth and skill in the management of the ceremony and above all, his love of feeling himself alive.”(6) Even politicians and government officials of the time indulged in their share of pageantry. For instance, when a *gonfaloniere di giustizia* (prior of justice) was selected by lot to the Signoria, or city council of Florence, he was given a grand procession with fanfare and banners to the Palazzo della Signoria to accept the position. Shops were closed and the citizens would assemble in the square to welcome the new magistrate and escort the outgoing one home.(7)

Mytho-allegorical *trionfi* (triumphal processions) were especially popular in Renaissance Florence and were often presented to the public during the intervals between major religious festivals. The enormous wagons that paraded through the city streets were mobile stages that displayed tableaux of elaborately costumed performers and were accompanied by a procession of choruses who chanted or sang verses explaining the scenes. One of the more famous triumphs that Leonardo would have known about was the *Trionfo di Bacco e Arianna* (*Triumph of Bacchus and Ariadne*), commissioned by Lorenzo d’ Medici in 1490. In addition to performers dressed as the young lovers Bacchus and Ariadne, a procession of masked figures in extravagant costumes represented hunters, nymphs, beggars, hermits, and demons. The nymphs, for example, danced along dressed in crimson blouses over gold embroidered skirts that were scandalously tucked up to bare much of the legs. Their mythical, ethereal appearance was additionally enhanced with colored wings and garlands of leaves and flowers in their hair.(8) In a famous ritornello, Lorenzo explained the event’s humanist intent of sensual abandon:

*Quant'è bella giovinezza,  
che si fugge tuttavia!  
Chi vuol esser lieto, sia:  
di doman non c'è certezza.*  
(How beautiful is youth,  
That always flies away!  
Who would be happy, seize the day:  
For nothing about tomorrow is certain.)(9)

With such a demand for public and private festivities, Renaissance Florence well supported a substantial, skilled workforce to construct sets, paint banners and standards, decorate wagons and stages, and handle the many other preparations for the events. The city's talented artisans and craftsmen were usually affiliated with a *bottega* headed by a *maestro* of diverse experience and skills. One of the functions of the workshop master usually included that of *festaiuolo* to organize and direct festivals, pageants, processions, and masques.

Among the more famous *festaiuoli* of the Renaissance was Andrea del Verrocchio, whose work for the ruler of Florence, Lorenzo d'Medici, included court pageant master. It was to the Verrocchio *bottega* that Leonardo was apprenticed at age fourteen in 1466. There he would have received instruction and guidance from the master and senior assistants as he worked on a variety of assignments, which included painting, sculpture, armor and weapons, and pageant props and sets. One special project commissioned of Verrocchio in 1468 was to crown the city's dome of the *duomo* with a copper orb and cross. The complexity of engineering plans for scaffolding and machinery to raise the eight-foot, two-ton ball 350 feet from the pavement must have fascinated the young Leonardo. Certainly, the lessons of devising and constructing winches, hoists, and pulleys he learned during this time were later applied to his own engineering commissions that ranged from draining the Pontine marshes in Rome to designing revolving stage sets in Milan.

In addition, as a young apprentice, Leonardo likely worked on pageant projects to varying degrees, painting standards and sets, fabricating props and costumes, perhaps even designing some of each. One of his early silverpoint sketches from 1472 depicts a fanciful Greco-Roman warrior costume. (Figure 1.) The winged helmet with repoussé ornamentation, piercings of the bavolet for threading colorful ribbons, and a tiered, sharply pointed visor are unlike anything from antiquity. Likewise, the cuirass features a smoothly polished neckline with two incised rope bands, a high relief winged lion's head on the breast, and segmented pauldrons tied to the armhole with scalloped bits of fabric fluttering in the breeze. A hint of chainmail is evident over the upper arm, tied with a fringed scarf.



Figure 1. Silverpoint drawing by Leonardo of a masque costume for a Greco-Roman warrior, c. 1472-5. British Museum, London.

Moreover, the young Leonardo probably also donned costumes and performed in many of the pageants produced by the Verrocchio workshop. As someone who knew Leonardo, Anonimo Gaddiano wrote in his 1544 biography, “He was attractive, well-proportioned, graceful and handsome, with beautiful hair, arranged in ringlets, falling down to the middle of his chest.”(10) In addition, continued Gaddiano, Leonardo was also somewhat of a dandy who enjoyed attention-getting clothes, such as a rose-colored tunic cut short,(11) “immodestly revealing his strong, well-turned legs.”(12) Deploying handsome young apprentices to such events dressed in the studio’s finest costumes was a common practice and an effective marketing tactic for Verrocchio and other *bottega* masters, not unlike today’s promotional personal appearances of attractive Hollywood stars or the fashion industry’s runway shows.

Leonardo worked as apprentice and eventually assistant to Verrocchio for eleven years. In 1477, at age 25, he set up his own workshop in Florence and engaged apprentices. Almost immediately he received significant commissions for paintings ranging from a large altarpiece for the chapel of the Palazzo Vecchio to small depictions of the Madonna and Child. However, no records of this period indicate that Leonardo was commissioned as a *festaiuolo*. Moreover, as an independent *maestro*, Leonardo quickly gained a reputation for not completing commissions, proven by the abandoned, unfinished paintings of *The Vision of St. Bernard* (1478) for the Palazzo Vecchio chapel, *St. Jerome and the Lion* (1480) for the Rucellai family, and *Adoration of the Magi* (1481) for the monastery of San Donato. Possibly, this reputation prevented Lorenzo de Medici from offering any commissions to Leonardo.<sup>(13)</sup> Likewise, in 1481, when Pope Sixtus IV requested Lorenzo send to Rome the best artists in Florence to decorate the newly restored Sistine Chapel, Leonardo was not included among those chosen. Even after Verrocchio left Florence for Venice in 1480, never to return, Leonardo did not gain commissions from his connection with his old master nor from the city's loss of such a versatile talent. Consequently, Leonardo struggled financially as an independent master. He even reportedly taught music to earn extra money.<sup>(14)</sup>

In 1482, Leonardo left Florence to seek opportunities in Milan, a wealthy and industrious city at the commercial crossroads of northern Italy. According to sixteenth-century biographer Giorgio Vasari, Leonardo was invited to Milan not as a painter or an engineer, but as a musician by the Duke of Milan, Ludovico Sforza. The duke greatly enjoyed music of the *lira da braccio*, a form of seven-string viola tuned with pegs and played with a bow—a forerunner of the violin. Because two of the strings ran outside the fingerboard and were plucked with the thumb, the instrument came to be called a *lira*, or lyre. Leonardo arrived with other musicians during the city's Ambrosian carnival—a major celebration in Milan that combined the feast day of the city's patron saint, Aurelius Ambrosius (St. Ambrose), with a pre-Lenten carnival. Possibly the duke had sponsored an invitation-only music competition as part of the court's festivities. As Vasari notes, Leonardo was a great improviser with the *lira* and verse, and “surpassed all the musicians who had assembled to perform before the Duke.” Leonardo had even designed and built his own *lira* made mostly of silver and shaped like a horse's skull that produced fuller, more resonant sounds.<sup>(15)</sup>

Thus Leonardo gained admission to the Sforza court and would remain in Milan for the next eighteen years. To what degree Leonardo initially profited from Ludovico is not fully clear from the records nor from Leonardo's notebooks. In preparing to depart Florence for Milan, Leonardo had anticipated what might be of particular interest to the duke, and prepared a letter of application for employment, a draft of which survives in the Codex Atlanticus in the Biblioteca Ambrosiana, Milan. Much of the list of skills Leonardo offered was military engineering, including the design of war machines such as “covered wagons...that shall resist the force of the most powerful bombs,” battering rams, and catapults; production of weapons of war like cannons, field guns, and “bombs for throwing showers of missiles”; and methods of constructing fortifications, portable bridges, aqueducts, and tunnels. At the end of the letter, he added almost as an afterthought, “I can execute works in sculpture, marble, bronze, or terracotta, [and] in

painting also I can do what may be done as well as any other, be he who he may.”(16) Curiously, though, of the thirty-six points itemized in his prospectus, he does not mention his experience with pageants during his time at the Verrocchio *bottega*.

Indeed, if Leonardo discussed his many engineering and weapons ideas with the duke, no commissions of this sort resulted. Instead, Leonardo received his first commission through contacts he had made with the well-established and well-connected Florentine contingent in Milan. In partnership with the de Predis family, Leonardo received the major commission in April 1483 to paint the central panel of an altarpiece for the chapel of the Confraternity of the Immaculate Conception in the church of San Francesco Grande. The finished work, *Virgin of the Rocks*, was delivered two years later. The extraordinary painting reportedly impressed Ludovico so much that he purchased it for himself from the Confraternity, and later, sent it as a wedding gift to the Holy Roman Emperor Maximilian I, who married his niece Bianca Maria Sforza in 1493.(17)

Even though records do not show that Ludovico commissioned any of the war machines, armaments, or civil technologies that Leonardo initially outlined in his letter, many scholars propose that Leonardo’s notebooks of the late 1480s suggest he likely continued discussing such possibilities with the duke. Leonardo’s sketches and notes of this time include ideas for submarines, black-sail stealth ships for night assaults, flying machines in both vertical and horizontal constructions, a hand-cranked paddle boat, a harbor dredger, a gigantic Archimedean screw for draining swamps and raising water in wells, a mobile crane tower, fortress scaling ladders and defense mechanisms against scaling ladders, and an eighty-foot crossbow mounted on a six-wheel carriage.(18) Possibly the duke simply found such brainstorming discourses stimulating—and without obligation and expense. Vasari mentions that Ludovico was “enchanted with the admirable conversation of Leonardo... [and] he delighted beyond measure in his society.”(19)

Certainly, this amiable society that Leonardo provided the duke opened the door to the Milan court and contacts there for commissions from other clients. Soon after his arrival in Milan, Leonardo set up a new *bottega*, and by the early 1490s included at least six apprentices working on a variety of projects. “Ò tenuto 6 bocche 36 mesi...” (“I have supported six dependents for three years...”), he noted in a letter to the duke.(20) For Leonardo, though, the first commission from the duke finally came eight years after his arrival in Milan. Sometime during 1489 or 1490, Ludovico commissioned the *maestro* to paint a portrait of the duke’s teenage mistress Cecilia Gallerani. Today the famous painting is known as *Lady with an Ermine*. A number of Sforza commissions soon followed, ranging from major works such as a gigantic bronze equestrian statue and the painting of the *Last Supper* to Leonardo’s first assignments as *festaiuolo* to the court.

One of the most prized commissions from the Sforza family that had been under consideration since 1473 was a bronze equestrian statue of the dynasty’s founder and Ludovico’s father, Duke Francesco. Scholars suggest that drawings of horses in Leonardo’s notebooks made as early as 1486 indicate an on-going campaign by the *maestro* to land the major commission.(21) And, indeed, Ludovico awarded the project to Leonardo in July 1489. The equestrian was to be life size, although Leonardo ultimately

planned for the statue to be three times larger. Consequently, Leonardo was given an enormous palazzo with open courtyards and high ceilings necessary for work on such a monumental scale. Moreover, this new residence, with its prestigious location on the Piazza del Duomo, reflected the status Leonardo had achieved in Milan. In November 1493, Leonardo unveiled the full-scale clay model of the horse for the statue as part of the celebratory events for the proxy wedding of Ludovico's niece, Bianca, to the Hapsburg Emperor Maximilian I. Visitors to the workshop were amazed at the lifelike sculpture. Vasari observed, "All who saw the large model in clay which Leonardo made for this work, declared that they had never seen anything more beautiful or majestic." (22) Unfortunately for Leonardo, the horse was never cast. The metals procured for the project were used by Ludovico as payment for a loan from the Duke of Ferrara in 1494. Even worse, when the French invaded Milan in 1499, a group of crossbowmen used the model for target practice and completely destroyed it.

In the winter of 1488-89, as Leonardo began work on the Sforza commissions of Cecilia Gallerani's portrait and the Francesco equestrian monument, he received his first assignment as a *festaiuolo* for the court of Milan. Plans were made for the Duke Gian Galeazzo Sforza (23) to journey westward across Lombardy in January 1489 to receive his bride, Princess Isabella d'Aragon, granddaughter of the King of Naples. (24) Though the couple had actually been married by proxy in Naples the year before, the young duke and duchess met for the first time January 25, at the town of Tortona. Their host was the nobleman Bergonzio di Botta, whose loyalty to the Sforzas was necessary for the western security of the duchy, where the fortress town of Tortona served as an early-warning post against any invasions by France. Hence, the choice of this first meeting of the couple in Tortona rather than Milan (25) had great practical as well as symbolic and diplomatic significance for Ludovico. And as such, the wedding celebration was to be an extravagant affair, for which Ludovico and Bergonzio enlisted the talents of Leonardo.

At the banquet, each of twenty courses was preceded by an interlude of costumed performers representing ancient mythical figures and the gods of Olympus citing verse, singing, dancing, or playing a musical instrument. Details of the evening's celebrations were described by a guest, Tristano Calco, in a manuscript now at the Biblioteca Ambrosiana, Milan. (26) Jason and the Argonauts offered the Golden Fleece. Mercury introduced a dance by the Three Graces—Aglaia, Thalia, and Euphrosyne, daughters of Zeus—who symbolized charm, grace, and beauty as a tribute to Isabella. They were followed by Apollo with a beautiful calf from King Admetus of Thessaly, whom the god had served as a herdsman during a brief punitive exile from Olympus. Next came Diana the Huntress with a chorus of nymphs bearing a litter adorned with gilded leaves and a stag. Orpheus played his lyre and released an assortment of birds that flew around the banquet hall. Atalanta and Theseus led a troupe of hunters in a pantomime of their fight with the Calydonian Boar. The goddess of rainbows, Iris, entered riding a cart pulled by peacocks and escorted by nymphs wearing transparent garments and carrying silver bowls filled with birds. The goddess Hebe, cupbearer to Zeus, filled the guests goblets with wine. A band of shepherds of Arcadia crowned with ivy brought milk and honey. Thetis, a sea goddess and mother of Achilles, with attendant sea nymphs served the fish

course. Pomona, goddess of fruitful abundance, and her suitor Vertumnus distributed grapes and apples.(27)

One of the more amazing entertainments of the Tortona festivities possibly from Leonardo's hand was a life-size automaton of a mounted knight that had been set up in the *piazza*. The rider wore a black mask or make-up to represent Ludovico, whose nickname was *Il Moro* (The Moor), in part because of his dark hair and complexion, and also because of his support of Milan's silk production, which required the mulberry shrub (*moro*) for the silkworms.(28) The nobility of the knight was further represented by his ermine livery—a gift from the King of Naples, Isabella's grandfather. The mechanics of the robot were operated by a man inside the horse. "It is hard to think of anyone in Milan more likely to have created this than Leonardo, but there seems to be no evidence that he did."(29)

Despite the dazzling first impression the wedding banquet and pageants at Tortona surely made on the new duchess and her Neapolitan entourage, the nineteen-year-old bride soon became known as the most unhappy woman in Christendom. Her husband was frail and ill much of the time, and drank to excess. Consequently, rumors at court were that he was unable to consummate their marriage for more than a year after the wedding.(30) Furthermore, rather than taking their rightful place as the duke and duchess in the court of Milan, Gian Galeazzo and Isabella were sequestered some distance away in Pavia on orders from Ludovico. The couple was given only a minimal allowance and was monitored constantly by physicians and servants placed there by Ludovico. To further isolate the couple and limit their threat to his power, Ludovico even sent Isabella's Neapolitan ladies home to Naples, where they reported of her misery to the king.(31) After the first year of marriage with no indication of a pregnant Isabella, and hence, heir to the duchy, Isabella's grandfather, King Ferdinand I of Naples, grew impatient and threatened to nullify the marriage. The dowry of twenty-thousand ducats had not yet been paid and Ludovico was ever in need of funds. In addition, intelligence from the court of Charles VIII, King of France—and cousin to Gian Galeazzo on his mother's side—indicated an increasing interest in Italy by the French. Perhaps these considerations influenced Ludovico's decision to bring the couple to Milan for a celebration in January 1490 to honor the anniversary of their first meeting in Tortona.

The event was planned as a *spettacolo* (celebration spectacle) even greater than that at Tortona. Every notable of Milan was invited to the Castello Sforzesco, including courtiers, civic officials, and ambassadors from the papacy, Florence, Venice, Naples, and Ferrara. The Ferrarese envoy, Giacomo Trotti, recorded much of the event in a detailed account to Duke Ercole I d'Este, which survives in the Biblioteca Estense, Modena.(32) Following the banquet, everyone gathered into the long, lofty chapel, where the frescoed walls were hung with great swathes of satin and fine tapestries depicting scenes from antiquity and the exploits of Francesco Sforza. At one side of the room was a sloping platform with benches and cushions for the courtiers and dignitaries. Nearby the musicians were seated behind a balustrade. In the center of the room was a dais about three feet high, covered and edged with silver brocade and hung with the ducal coat of arms for Ludovico, Gian Galeazzo, and Isabella. Civic officials and family members of

the courtiers stood around the dais. At the front of the hall at the altar was a curtained stage.

The evening's entertainment opened with a performance of Neapolitan dances by four couples dressed in "Spanish style" as a tribute to the duchess (and to the ambassador from the King of Naples). A series of actors dressed as emissaries from the courts of Spain, Poland, Turkey, Hungary, France, and the Holy Roman Empire cited verses praising the virtues of the duchess. Between the presentations of the foreign ambassadors were more dances with performers dressed in costumes of those nations, some of which Isabella and even Ludovico joined.

At half past midnight, the main event commenced: a dramatic poem titled *Il Paradiso* written by the court poet, Bernardo Bellincioni, with sets and costumes designed by Leonardo. The curtain opened revealing Paradise as a wood ribbed dome "a la similitudine de ino mezo ovo" (similar to the shape of a half egg)(33) covered with golden fabric, beneath which were suspended a great many lamplights as stars and, around the top edge of the dome, painted symbols of the zodiac lit from behind colored glass. Trotti was so astonished by the lavish decoration and splendor of the stage set that he declared he "seemed to be seeing the actual Paradise."(34)

On stage were seven ramps rising to niches or grottoes,(35) possibly of "puffy papier-mâché,"(36) arranged in a semicircle around the rim of the ovoid dome. These sets represented the mountainous home of the gods of Olympus with Jupiter's place at the highest peak in the center and those of the other gods on lesser peaks according to their Olympian rank. Within each grotto stood an actor dressed in Greco-Roman costumes to represent the seven planets of the Ptolemaic solar system: Jupiter, Apollo the sun god, Mars, Saturn, Venus, Mercury, and Diana the moon goddess. Jupiter spoke first, extolling the beauty of Isabella, to which Apollo the sun god expressed surprise since the duchess was unknown to him and the other gods. After some discussion among the gods, Mercury was dispatched to earth to visit Isabella. Concealed behind the fabricated stony mountains were ladders for each of the gods to descend. Mercury returned to Olympus with a report confirming Jupiter's assertion. Then a chorus of the Three Graces and Seven Virtues entered the stage and sang the praises of Isabella. At the conclusion of the performance, the gods descended to meet Isabella in person and Jupiter presented her with a bound copy of Bellincioni's script.

As noted, Leonardo is credited as the *festaiuolo* for the *Paradiso*, for which he designed the stage sets, decorations, and costumes. Indeed, this is the first documented evidence of Leonardo's theatrical work, derived from three sources: the preface of Bellincioni's play published in 1493, the report cited above by Ferrarese representative Giacomo Trotti, and Leonardo's drawings and notes in the Codex Arundel in the British Library, London.

The dramatic poem for *Il Paradiso* by Bellincioni was published in 1493 with a preface that acknowledged "Maestro Lionardo Vinci fiorentino" as the creator of the setting of Paradise and the seven planets, which were "constructed with great ingenuity and artistry."(37) This statement is the earliest known published record of Leonardo da Vinci.

However, the sources for the staging of the planetary gods provide confusing and contradictory ideas. Whereas Trotti describes Leonardo's sets as grottoes ("fessi" or fissures) in which the gods stood(38), Bellincioni's published libretto describes the set "with all the seven planets orbiting around."(39) Some scholars think that Bellincioni envisioned a sort of merry-go-round on which costumed boys representing the planet deities were seated, circling the throne of Jupiter.(40) Or possibly the boy actors were suspended in the dome(41) on a rotating *mazzo*, which was a pole, rod, or tube with branches that unfolded like an inverted open umbrella. Typically, at the end of each branch was a small platform covered in fluffy batting to resemble clouds for lightweight young boys to stand upon, tethered to the pole. Since the *mazzo* had been commonly used for decades in religious mystery plays, as Vasari describes in his *Lives of the Artists*,(42) certainly Leonardo was familiar with the staging device. Yet, since Trotti and Bellincioni seem to indicate that the actors were all adults—given the complexity of their spoken parts—neither a rotating *mazzo* nor merry-go-round seems feasible considering the total weight of a group of seven men, not to mention the dizzying effect on each performer who was required to go before Isabella to recite verses. Furthermore, Bellincioni specifically mentions seven planets orbiting, which would have diminished the preeminent role of Jupiter in the play. Or if Jupiter was on his throne and the other gods circled him, then the count would be six, not seven, in the circle. Hence the fixed sets, as described by the eyewitness Trotti, seem the most plausible.

One other point of confusion is Leonardo's drawings and notes for the stage construction and set designs. For decades, biographers and scholars have asserted that Leonardo designed and engineered a revolving stage for the 1490 production of *Paradiso*. In 1949, Kate Trauman Steinitz examined a reconstruction model of Leonardo's revolving stage based on sketches and notes from folios 224r and 231v of the Codex Arundel in the British Library, London. (Figure 2.) Among Leonardo's details of the stage design are two floor plans, two set landscapes, a cross-section of the stage platform, and an elevation, among others. Steinitz suggests that because the preface of Bellincioni's *Paradiso* mentions the seven planets in rotation, Leonardo "constructed a stage with moveable parts."(43) But Trotti makes no mention of such dramatic special effects, and instead, describes the planet gods as standing in their respective grottoes—a fixed stage set of Mount Olympus. Moreover, Steinitz mistakenly describes paradise as being "in" a mountain. But again, Trotti had declared the domed stage as a wondrous golden sky lit with stars above the mountain peaks. Yet, Steinitz concedes, "With our concept of the heavenly paradise the idea of its being concealed in the depth of a mountain seems peculiar."(44)

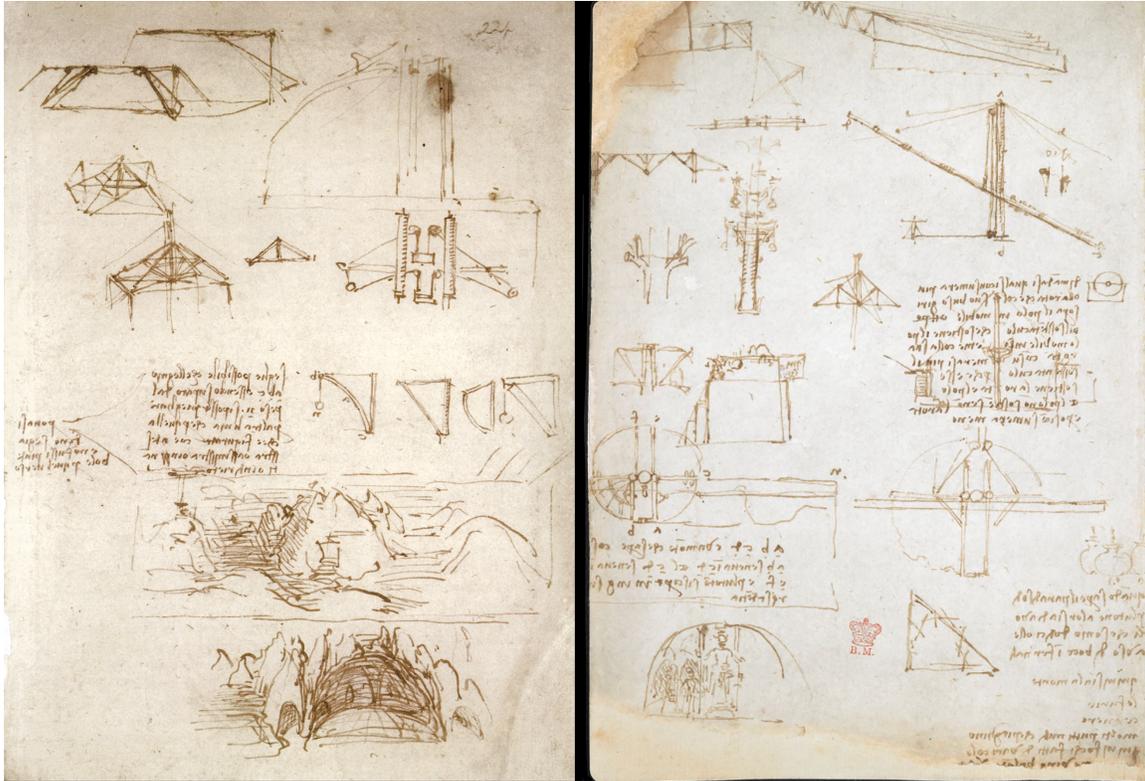


Figure 2. Sketches by Leonardo for a revolving stage and sets, c.1490-97. Pen and ink. Folios 224r and 231v from the *Arundel Codex*. Courtesy of the British Library, London.

Instead, Leonardo's revolving stage with its mountainous and cavernous sets as depicted in the Codex Arundel is more likely a design for a production of *Orpheus* in the underworld. In the ancient Greek myth, Orpheus was a singer who played a golden lyre—a gift from Apollo—so beautifully that he could charm the birds from the sky. When his wife, Eurydice, is bitten by a viper and dies, Orpheus journeys to the underworld to find her. He plays his lyre and sings for Pluto, god of the underworld, who is moved to allow Eurydice to return with Orpheus under one condition: that he lead the way and not look back upon her until they both are above ground. But because Orpheus is anxious about his wife, as soon as he steps out into the upper world, he looks back at Eurydice who had not yet emerged, and then instantly she vanishes back to the underworld, this time forever.

At the time Leonardo sketched his revolving stage, a revival of the 1471 opera *Favola d'Orfeo* (*The Fable of Orpheus*) by Angelo Poliziano was under consideration in nearby Marmirolo, in the province of Mantua. In Poliziano's *Orfeo*, Pluto rules his kingdom, surrounded by the Furies, the three-headed guard dog Cerebus, assorted demons, a chorus of maenads, and weeping putti, who accompany Persephone and Eurydice into Inferno. Leonardo's sketches of the stage sets in the Codex Arundel are of the underground terrain of Inferno rather than the mountaintop of Olympus. In the lower half of folio 224r shown in Figure 2, Leonardo had conceptualized the front view of a mountainous landscape with

steps up to cave entrance at the center through which the underworld could be reached. In the bottommost sketch, according to theatre historian Harold Priest, “the exterior of the mountain splits in half and the two halves independently roll out and back to form a cavernous interior [via] a type of machinery identified by the Romans as *scena ductilis*.”(45) Moreover, Leonardo’s notes specify: “Quando si apre il paradiso di Plutone alor sia diavoli che son in dodici olle a uso di bocche ifernali, quiui sia la morte, le furie, cenere, molti putti nudi che piagino, e uiui fochi fatti vari colori.”(46) (When Pluto’s kingdom is opened, then there will be devils in twelve containers like the mouths of Hell. Here will be Death, the Furies, Cerebus, many naked children weeping, and fires in various colors.)

One other indication that possibly connects Leonardo’s sketches in the Codex Arundel to the production of *Orfeo* is a series of letters during May, June, and July 1491 between Mantuan agents and the Marquess Gianfrancesco Gonzaga of Mantua about the Marmiolo production of the opera. But because the recommended singer who best knew the difficult part of Orpheus was not available, the opera was not performed.(47) That lead singer was Atalante Migliorotti, to whom Leonardo had given music lessons in Florence, and who accompanied Leonardo to Milan in 1482 for Lodovico Sforza’s music competition. It is probable then, that Leonardo’s sketches for the revolving stage with sets for Inferno were preliminary ideas for a proposed 1491 production of *Orfeo*, starring his old friend Atalante, but were never executed because the opera was not performed.

Nevertheless, with the successes of the Tortona pageant and the *Paradiso* production, Leonardo was very much in demand as a *festaiuolo* for the Sforzas. As Leonardo’s contemporary Paolo Giovio wrote of the *maestro*, “His genius was astounding, and he was the arbiter of all questions relating to beauty and elegance, especially in pageantry.”(48) In January 1491, two important events for the Sforza family were cause for major celebrations, to which Leonardo contributed his talents: Ludovico married Beatrice d’Este, the Duchess of Bari and daughter of the powerful and wealthy Duke Ercole d’Este of Ferrara; and Ludovico’s niece, Anna Sforza, married Beatrice d’Este’s brother Alfonso. Preparations for Ludovico’s wedding had begun the previous summer, of which the Ferrarese ambassador reported to Duke Ercole, “Here all hands are busy and Ludovico takes care that for the duchess nothing is done by halves.”(49) Further missives listed names of some of the renowned artists and craftsmen working on the wedding preparations, including *Magistro Leonardo*. Among the extravagant decorations was a ceiling painting in the great hall on the first floor of the *castello* done in lustrous azure dotted with gold stars to simulate the twilight evening sky. The walls were hung with tapestries and paintings depicting the glorious deeds of Francesco Sforza—perhaps the same ones that had been hung in Tortona. Especially impressive was a triumphal arch constructed at the front entrance to the hall, beneath which was placed a life-size equestrian effigy of Francesco, with an inscription “recalling his greatness, and saying that by virtue of these mighty exploits his children now triumph.”(50)

One of the highlights of the wedding celebrations was a three-day jousting tournament at Pavia, just outside of Milan to the south, led by a dashing captain of the Milanese military, Galeazzo da Sanseverino. A number of sources describe various costumes

Sanseverino wore during the tourney. One day he appeared in a golden helmet with curling ram's horns at the front and a winged serpent at the back, and rode an enormous horse that had been painted to appear as if covered with shimmering fish scales that changed color with each stride.(51) Another costume featured a damascened helmet shaped like a golden globe, representing the captain's military successes, on top of which was perched a peacock with a spread tail, signifying his glory. A matching cloak of gold fabric was painted with peacock feathers, for which Leonardo is said to have developed an iridescent paint to realistically replicate the feathers.(52)

Although we cannot be certain if Leonardo designed these costumes or invented an iridescent paint for them, at least in one instance we have written evidence of his contribution to the wedding celebrations. In the Codex Atlanticus, a note dated January 26, 1491, confirms he was "in the house of Messer Galeazzo da Sanseverino to organize the festival for his joust." There, Leonardo recorded that he assisted some of the participants in trying on their costumes for their roles as "omini salvatichi" (wild men of the forest).(53) At the Pavia tourney, Sanseverino and his band of wild men rushed into the *piazza*, whooping and pounding drums to frighten the onlookers. On the shield carried by Sanseverino was painted a bearded man, or barbarian, and upon reaching the ducal dais, he announced to Ludovico that he was the son of the King of India.

In the collection of Leonardo drawings in the Royal Library, Windsor Castle, are five costume designs for masques, including one thought to be for the pageant of wild men of 1491.(54) (Figure 3.) The costume is a mix of late fifteenth-century men's fashion with Leonardo's imagining of what a wilderness man might wear. The short tunic is made of some type of textile possibly painted or block printed with spots to simulate a pelt. The hemline is cut irregularly to resemble the edges of a rough hide, although the full gathers at the waist indicate that a fabric rather than real skins was used. The bodice has the typical deep oval neckline of a men's doublet of the time, except instead of being filled to the throat with a collared linen shirt underneath, the upper torso is shockingly bare, as are the forearms. The sleeves feature puffs at the shoulder with vertical slashes, a fashion trend that would continue well into the sixteenth century. At the upper arm, a feathered band secures a slit lower sleeve extending to about knee length and billowing behind the figure. Diagonally across the torso is a strap or cord, to which is affixed a bag of some sort and an animal horn at the hip. Presumably tights are worn, and a few oval lines across each shin suggest short boots. A skullcap with a rolled brim and feather ornament in the front completes the costume of the wilderness man.



Figure 3. Leonardo's costume design for one of the "*omini salvatichi*" (wild men of the forest) for the pageant and joust held in celebration of Ludovico Sforza's wedding, January 1491. Charcoal with pen and ink. Royal Library, Windsor Castle, 12575.

Another costume sketch of the same period in the Windsor collection is of a mounted rider thought to be one of the Scythians of the tourney pageant. (Figure 4.) During one of the days of the tourney, Sanseverino led a troop of wild Scythians galloping into the Pavia *piazza* and halting before the dais of the ducal party. With his golden lance he signaled a "giant Moor" to come forward and recite verses in honor of Beatrice.<sup>(55)</sup> This costume is supposed to present the exoticism of the mounted warriors of the Central Asian Steppes, where, according to the ancient Greeks and Persians, the Scythians were believed to have lived. However, as with the wilderness men's costumes, the dress of these nomadic warriors as envisioned by Leonardo combined elements of *quattrocento* fashions with fanciful embellishments. Here, the rider is dressed in multiple layers typical of upper class men of the 1490s. The waist-length doublet and knee-length, open front surcoat are made of a fabric with a pattern that seems to represent black ermine tails—a

reminder that Ludovico was invested by the King of Naples as L'Ermellino (the Ermine). The doublet has a typical deep front neckline, revealing underneath a fine linen shirt stitched with rows of gathers. The surcoat is open down the front but belted at the waist. The drawing suggests an attached hood at the back collar, a common visual representation of eastern warriors in ancient Greek art. The upper sleeves are made of the same ermine-look textile and are gathered at the shoulder seam and armband, to which a fringe of ribbons adds motion to the rider. The snug-fitting sleeve over the forearm is a quilted diamond pattern with studs or cabochon buttons at each intersection. The same diamond textile treatment is used for the tights over the thighs. Tall boots are decorated with fashionable vertical slashes across the knees and in a smaller row in a band below the knee, through which puffs of a lining protrude. The hat has a wide brim turned up and notched at the sides. At the back the brim has cutwork, and in the front it is rolled into a pointed visor. Bobbing feathers of gradating lengths ornament the front.



Figure 4. Leonardo's costume design for one of the "Scythian horsemen" for the wedding celebrations of Ludovico Sforza, January 1491. Charcoal with pen and ink. Royal Library, Windsor Castle, 12574.

The wedding celebrations were a tremendous success and everyone was pleased with Leonardo's contributions as a *festaiuolo*. Duke Gian Galeazzo sent a lengthy, detailed letter to his uncle in Rome, Cardinal Ascanio Sforza, requesting that Pope Innocent VIII be informed of the great event. Ludovico, likewise, had his secretary send a similar report to the Milanese envoy at Bologna.(56) In the following years, though, we only have hints of the continued work Leonardo did for pageants, plays, and festivals at the Sforza court.

In November 1493, Ludovico's niece, Bianca Maria Sforza, married by proxy the Holy Roman Emperor, Maximilian I, in Milan. The bejeweled Bianca rode from the *castello* to the *duomo* in a decorated wagon drawn by four horses, accompanied by her aunt, Beatrice d'Este, and the Duchess Isabella d'Aragon. The streets along the route were hung with heraldic banners of both families, and the doors and windows of homes and shops were embellished with garlands of ivy, laurel, and myrtle. The *duomo* inside was brightly lit with many candles and fragrant with incense. Although there is no documentation of Leonardo serving as the *festaiuolo* for the wedding decorations or festivities, witnesses noted that his model for the Sforza horse had been moved from his studio to the *duomo*, and placed inside the nave beneath a specially constructed triumphal arch, possibly the same structure that had greeted guests at the ducal *castello* two years earlier during the wedding celebrations for Ludovico and Beatrice. The ceremony and festivities afterward were described in verses by Ludovico's chancellor, Baldassare Taccone, as well as a letter from Beatrice d'Este to her sister Isabella d'Este in Mantua. In addition to a great banquet, there were dances and a tourney, in which the famous Galeazzo da Sanseverino once again triumphed.(57)

Certainly opportunities for Leonardo's theatrical talents were abundant at the court of Milan. In 1495, Beatrice favored a new court poet, Gaspare Visconti, over Bernardo Bellincioni, who was still at court, but displeased Beatrice by continuing as an intermediary between Ludovico and his former mistress Cecilia. Among the plays we know Visconti provided to the duchess was *Paolo and Daria* (1495), an early version of Romeo and Juliet, and a comedy in five acts with eleven characters called *Pasitea* (1495). If Leonardo or his *bottega* provided sets or costumes for either performance, no documentation is known. Unfortunately, "his sketches for these occasions passed from hand to hand, to the tailors and dyers, carpenters and mechanics, and were swept away and burnt with the carnival rubbish."(58)

However, some brief notes and quick sketches on a page from one of Leonardo's notebooks for 1496 does verify his involvement in the play *La Danae*. Baldassare Taccone, wrote the five-act play, which was performed on January 31, 1496, at the villa of Count Giovan Francesco Sanseverino, older brother of the jousting champion Galeazzo. The storyline is based on the Greek myth of Danae, daughter of the king of Argos. Because the Oracle of Delphi prophesied that Danae would bear a son who would kill the king, he imprisoned his daughter to keep her chaste. Yet, Zeus, enamored of Danae's beauty, entered her chamber as a shower of gold particles, impregnating her. She gave birth to a son, Perseus, who, as a young man, accidentally killed the king with a javelin during a sports competition. Taccone, though, transformed the story into a comedy and the king is not killed at the end. The notes Leonardo jotted down about the play include a list of the actors and their roles. Next to each name are numbers, which to Carmen Bambach, possibly represent the placement measurements of the actors on a machine-driven moving platform for the stage sets.(59) To Constance Moffatt and Sara Tagliagambara, the numbers "correspond more or less to the numbers of metric units, mostly *ottave*, spoken by each actor."(60) Next to the notes are sketches for the stage design, including an elevation and an aerial view of a floor plan. (Figure 5.) The elevation

features a niche constructed with converging ribs or coffering to visually represent the perspective of a lofty arch. Within the niche is an almond-shaped *mandorla* with a flaming aura around the seated figure, thought to be the “anuntiatore” on Leonardo’s list of performers. In Taccone’s text, that central figure is the poet himself, who announces the prologue and narrates the storyline. One other special effect Leonardo planned for *Danae* was a descent from the sky by Mercury, probably on a *mazzo* as previously discussed, or something similar that would allow the actor to twirl in the sky.(61)

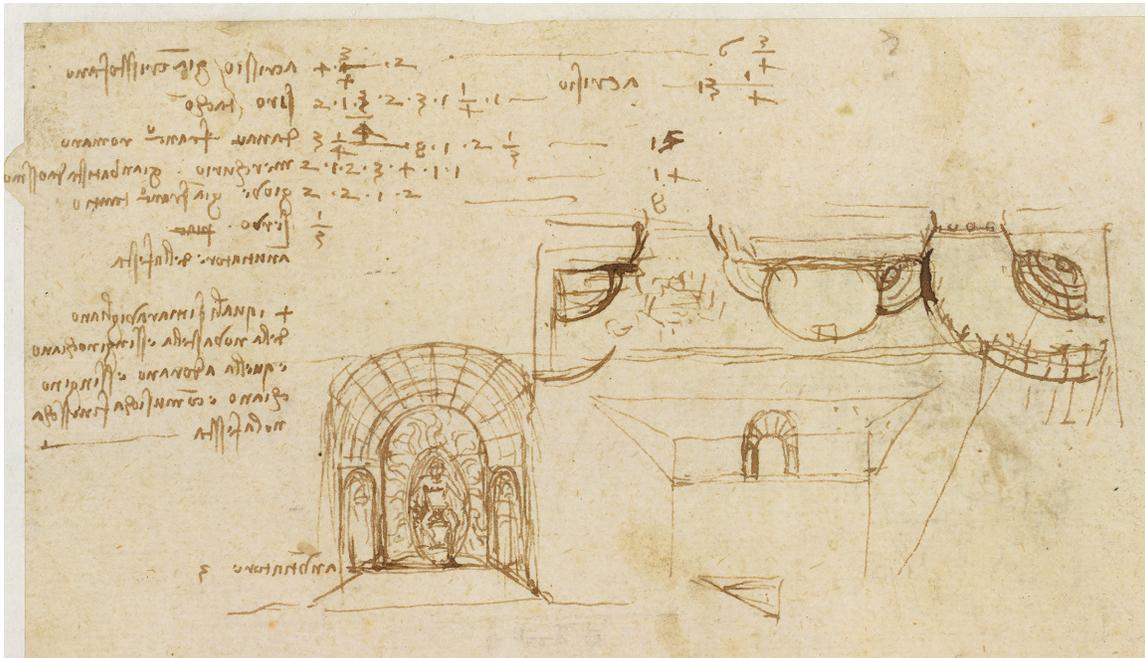


Figure 5. Leonardo’s notes and stage set sketches for the play *La Danae* by Baldassarre Taccone, performed January 31, 1496. Pen and ink. Courtesy of the New York Metropolitan Museum of Art, Rogers Fund, 1917.

Through the second half of the 1490s, Leonardo was immersed in work on the *Last Supper* (1495-7) as well as fresco decorations for the apartments of the Castello Sforzesco. But at the end of 1499, Leonardo left his Milan home of eighteen years when the French invaded. The new French king, Louis XII, had hereditary claims to both Lombardy and Naples. During the battle for Milan, Ludovico was captured and sent to France, where he died in prison eight years later. For a few weeks following the French occupation of Milan in October 1499, Leonardo remained in the city where, as the famous painter of the *Last Supper*, he possibly met the French king. Two years later, Leonardo was working on the painting *Madonna of the Yarnwinder* (1502) for the French king’s secretary of finance, Florimond Robertet, and turning down commissions, as he asserted to an agent for Isabella d’Este, due to his obligations to the King of France.(62) Also during his time in French-occupied Milan, he likely met one of the king’s commanders, Cesare Borgia, who would later engage Leonardo for his military engineering skills.

At the end of December 1499, Leonardo left Milan and entered a peripatetic six years, during which he had little opportunity to work on pageants and theatrical productions. First he went to Mantua as a guest of Isabella d'Este for a few weeks. In February 1500, he next went to Venice, where he may have worked a few weeks for the Venetian Senate as an engineer, developing plans to fortify the Isonzo River against the threat of invasion by the Turks. By April, Leonardo was back in Florence. There he accepted the major commission of a huge ten-foot painting of the *Virgin and Child with St. Anne and the Infant St. John the Baptist* for the church of Santissima Annunziata, which he abandoned a year later after only producing the preliminary drawing (cartoon). In the summer of 1502, he accepted a position with Cesare Borgia, now Duke of Romagna, as a sort of military inspector and advisor. By March 1503, he was back in Florence as a canal engineer consultant in a war with Pisa. In October of that year, he accepted the commission for a gigantic wall mural in the Sala del Maggiore Consiglio—the city council chamber—on the first floor of the Palazzo Vecchio. The painting was to depict a Florentine battle victory in 1440 against an invasion by Milan near the town of Anghiari. Although Leonardo began the mural in oils at the end of 1504, and actually completed a large section of the center, he ultimately abandoned this project too when, in May 1506, he was asked by one of his former partners to return to Milan to resolve contractual disputes over the *Virgin of the Rocks*.

The French governor of Milan, Charles d'Amboise, was delighted to have such an esteemed artist in Milan. The French had been so impressed with Leonardo's painting of the *Last Supper* that King Louis had explored having the wall removed and taken to France. "For ourselves, we loved him before ever meeting him," wrote d'Amboise of Leonardo, "but now that we have shared his company and can speak from direct acquaintance of his many talents, we see truly that although his name is famous for painting, he has received little of the praise he deserves for his other abilities, which are of extraordinary power." (63) Leonardo's other extraordinary abilities that d'Amboise so glowingly admired was that of *festaiuolo*. After a dearth of opportunities for over six years to indulge his theatrical creativity as pageant master, Leonardo was at last back at a lively, affluent court where his more fanciful talents were once again in demand. Possibly one of his first theatre engagements for the French governor's court involved a lion with a dragon's tail, flying angels, and a rain of thunderbolts. Art historian Kenneth Clark looked at a drawing in the Windsor collection from Leonardo's second Milan period that he suggests may depict a stage set design. The sketch seems to show a figure "flying forward with outstretched arms supported by angels," which is about to be intercepted by another figure "lunging forward." From a "rectangular building in a classical style" emerges a lion with a curling "dragon's tail"—possibly one of Leonardo's automatons. The sketch also seems to indicate the inclusion of a "Deus ex Machina" seated on a cloud beneath an arch, next to which are clouds with "a rain of thunderbolts." (64) However, since no known play, dramatic poem, or special event of 1507-8 called for a lion, angels, and thunderbolts, it is possible Leonardo's sketch was for a performance that did not take place, like his *Orfeo* of 1491, or the event has been lost to history.

The first major spectacle with which Leonardo was likely involved for d'Amboise was a *trionfi* for King Louis XII in the spring of 1507. In April that year, Louis personally led the French army into Italy to quell a rebellion in Genoa. After a siege of about three weeks, the city surrendered. Louis spent a month restoring order in Genoa and taking retribution, after which he proceeded to Milan for a victory celebration. Leonardo had not had much time to organize the festivities and city decorations, but he managed to mobilize the city's guild workshops to erect triumphal arches, hang garlands and standards along the parade route to the *castello*, and arrange a jousting tourney on the *piazza*. The king's procession was preceded by a wagon bearing a tableau of figures representing Victory supported by Fortitude, Prudence, and Renown. Ahead of the king was a troupe of children waving *fleurs-de-lis*, followed by Milanese armorers clad in shimmering silver cuirasses. The parade passed beneath a triumphal arch that was decorated with paintings depicting Louis' military victories and surmounted by an equestrian statue of the king.(65) At the king's banquet there was "informal dancing before and after supper," reported attendee Isabella d'Este in a letter to her sister-in-law, Elisabetta Gonzaga, Duchess of Urbino. As to the tourney, Isabella further observed, "Certainly I have seen better-managed jousts, but I never saw, and do not think that, in all Christendom, it would be possible to see a greater number and variety of people!"(66) Despite the less than stellar joust, according to Isabella, a familiar face to her was once again the champion—Galeazzo da Sanseverino, now a close companion to the king and Grand Ecuyer (Equerry) of France.

Louis enjoyed but a moment of peace in Italy before returning to the battlefield in July 1509 against Venice, which had occupied territory claimed by the Duchy of Milan. In an alliance with Pope Julius II and Holy Roman Emperor Maximilian I, Louis defeated the Venetians and reclaimed the Lombard conquests made by Venice. The following year, the Italian Wars took a different turn when the treacherous Julius II, envious of the hold the French had on northern Italy, organized the *Lega Santa*, or Holy League, to drive the French out of Italy. Ultimately the coalition included the Swiss, Germans, Venetians, English, and Spanish, who became involved to varying degrees in battles that extended from central Italy to northern France during the next four years. In May 1512, the French abandoned Milan and retreated back across the Alps. That August, Milan greeted the return of the Sforzas, Duke Massimiliano, son of Ludovico, who had died in a French prison four years earlier.

During these battles and movements of armies, Leonardo remained in Milan, working for Charles d'Amboise. But in March 1511, that refined courtier and ardent admirer of Leonardo died, to be replaced by a governor too preoccupied with the exigencies of war to indulge in court luxuries that required the services of famous artists and *festaiuoli*. With the invasion of Lombardy by the Swiss in December 1511, Leonardo once again left Milan and began an unstable period of wandering. He spent some time in 1512 with the family of a pupil in Vaprio before moving south for a brief visit to Florence in September. By October, he was in Rome.

A few months later, in February 1513, Julius II died, and a less belligerent pope, Leo X, took the papal mitre. Perhaps through his former music student, Atalante Migliorotti, who

was now the superintendent of works at St. Peter, Leonardo was given lodgings in the Villa Belvedere, the papal summer palace. Since Leo's court was extensive, Leonardo was not employed as a *festaiuolo*, although there is some indication that the Pope may have commissioned a painting from him, but with little expectation of its completion. Vasari noted that Leonardo had set to work immediately on preparing the varnish, to which Leo remarked, "Alas, this man will assuredly do nothing at all, since he is thinking of the end before he has made a beginning to his work."(67) Leo did not receive any painting from Leonardo.

In November 1515, Leonardo was among the papal retinue that went to Florence for a convocation of cardinals. A week later, Leo's procession made its way to Bologna to meet with the new French king, Francis I, successor to Louis XII, who had died in January. During the previous summer, Francis had marched his enormous, seasoned army into Italy to retake the Duchy of Milan and oust the Sforzas. Undoubtedly, Francis already knew of Leonardo from the *maestro's* paintings in the French royal collection and from the famous *Last Supper* he would have seen in Milan. Thus, while in Bologna, Leonardo met Francis, who would become his last and most devoted patron.

Leonardo returned to Rome with Leo for the winter of 1515-16, but the following summer left for Milan. He still owned a small vineyard and house there, managed by his former protégé Salai. Possibly while in Milan, an emissary from Francis entreated Leonardo to join the king at the French court at the Chateau d'Amboise. No written invitation is known, though.

Leonardo's wealth of knowledge and life experience, along with his easy conversation, fascinated the twenty-two-year-old Francis. The king appointed Leonardo "paintre...et ingénieur et architecte du roy" (painter...and engineer and architect to the king)(68) with a generous pension and a beautiful, spacious manor house located less than half a mile from the royal chateau. Although Leonardo did no further painting in his final years, he worked on engineering projects such as canals for draining the swamps of the Sologne and planimetric mapping of roads. He also provided architectural ideas to Francis for the new royal palace at Romorantin. Leonardo's plans, which survive in the Codex Atlanticus, show "a complex organism, rich in architectural solutions for its inhabited structures, made more pleasant though gardens and gladdened also for practical uses, by a dense orthogonal net of waterways and water courses."(69) But of special delight for Leonardo was reviving his role as *festaiuolo*.

Across several weeks in May and June 1518, the royal court celebrated two major events—the baptism of the king's long-awaited son, the Dauphin Henri, and the wedding of his niece Madeleine de la Tour d'Auvergne to Lorenzo di Piero de' Medici, nephew of Pope Leo X. Certainly, Leonardo had an army of artisans and workers with experienced foremen to manage them to execute his ideas. And the king's generous budget allowed for lavish materials to be used in the stage sets, props, and costumes. The celebrations included grand processions, opulent pageants, exciting tourneys, and sumptuous banquets with entertainment, many details of which were conveyed in a series of letters from the Gonzaga envoy, Stazio Gadio, to the ducal court in Mantua.(70)

For the christening of the dauphin, the forecourt of the chateau was covered by a roof lined with many yards of blue fabric spangled with *fleurs-de-lis* and walls hung with tapestries depicting scenes from the Trojan War. To the north of the courtyard, a triumphal arch was erected, on which stood a statue of a nude classical hero holding lilies in one hand, symbol of the state, and a dolphin in the other hand, representing the dauphin. On one pillar of the arch was painted a salamander with the king's motto, "*Nutrisco et extinguo*," and on the other pillar, an ermine and the conclusion of the motto, "*Potius mori quam foedari*." ("Better to die than be dishonored.") Within the *salle d'honneur* of the chateau, the infant prince was displayed in a magnificent bed upon a dais, canopied with cloth of gold embroidered with the Valois coat of arms. The visiting dignitaries passed the bed en route to the chapel, walking upon a raised platform lined by four hundred torchbearers, lighting the way.(71)

At one of the banquets for the wedding celebrations, Leonardo presented an automaton of a lion. The lifelike creature moved on its own(72) into the room from the hallway and halted before the king, causing ladies to scream and men to gasp. Leonardo, dressed in the costume of a hermit with a long, flowing beard, offered Francis a wand, which he used to tap the lion's head three times causing its breast to open, revealing a turquoise-blue chamber filled with lilies.(73) The lion was a tribute to Florence, the home of the groom, which had adopted the beast as its heraldic emblem in the thirteenth century; the color turquoise-blue was that of the French coat-of-arms and, to the French, was symbolic of love. No known drawings or diagrams exist that explain the robotics of the lion, nor has the prop survived.

Another mechanical wonder from Leonardo that appeared at one of the wedding banquets was presented by a French knight dressed in golden armor. Baron Guillaume de Montmorency clanked into the banquet hall bearing a huge container shaped like a heart, which he placed before the king. When the mechanical heart opened, a miniature hybrid figure standing on a globe emerged. One half of the figure's body was robust and healthy, clad in golden armor like its bearer, and the other half was emaciated and sickly, dressed in rags. Such allegorical figures had been of interest to Leonardo for years. For example, in his notes for the sketch of a bilaterally conjoined entity symbolizing pleasure and pain from c. 1480-85, he wrote that they are "represented as twins because the one is never separated from the other. They are made with their backs turned to each other because they are contrary the one to the other. They are made growing out of the same trunk because they have one and the same foundation; for the foundation of pleasure is labor with pain, and the foundations of pain are vain and lascivious pleasures."(74) At the wedding banquet, Leonardo did not reveal the purpose of the knight's gift, leaving the courtiers to speculate on its meaning.

One morning during the festivities, the wedding guests woke to discover the courtyard of the chateau had been transformed into a citadel made from scaffolding sheathed with linen painted to represent stone ramparts and turrets. The stage Leonardo created was for a pageant to commemorate Francis' greatest military victory, the Battle of Marignano near Milan in September 1515, during which the French defeated the Swiss and retook

the duchy from the Sforzas. Among the theatrical surprises Leonardo had prepared for the courtiers was live cannon fire from real falconets that had been hoisted up to the bastions. Instead of firing cannonballs, showers of colorful paper confetti rained down on the spectators. Of special delight were the booming mortars that shot inflated bladders into the air, which bounced harmlessly around the field for the guests to dodge and kick. In the mock reenactment of the battle, Francis led the charge against the trompe l'oeil walls of the wooden castle, defended in vain by costumed Swiss mercenaries, led by the Duke of Alençon, the husband of his sister, Marguerite.

On June 19, 1518, as a finale for the celebrations, Leonardo presented an encore of a performance from his happiest days in Milan—Bellincioni's *Il Paradiso*. Leonardo staged the new version of the play in front of his little manor house, where he somewhat recreated the sets of 1490. Instead of the great half-egg dome, though, he had constructed a carpeted platform about sixty feet wide and a hundred feet long, over which was stretched a canopy of blue fabric painted with stars, the planets, the sun, and the moon.<sup>(75)</sup> When the king and his guests arrived, they were astonished at their enchanted surroundings. This revisit with *Paradiso* was also a finale for Leonardo the *festaiuolo*, for he died the following spring in May 1519.

Many scholars treat Leonardo, the *festaiuolo*, in the briefest, most general terms, if at all. For them, his importance as a painter, scientist, sculptor, architect, or engineer seems to outweigh his contribution as a pageant master during a time in which this role of a *maestro* was of considerable importance. But for Leonardo, as a *festaiuolo*, his imagination could be given free rein to create automatons of dragons and lions, revolving stages that split open mountains, costumes for wild men of the forest and the gods of Olympus, and special effects for the heavenly planets and colored fires of Inferno. Some of his happiest times throughout his life were those in the realm of theatre. And it is only fitting that some of his last artistic endeavors were as a *festaiuolo* for a king and court that adored him.

## NOTES

1. Philip Butterworth, *The Narrator, the Expositor, and the Prompter in European Medieval Theatre* (Turnhout, Belgium: Brepols, 2007), 78.
2. Heather Dubrow, *The Challenges of Orpheus: Lyrical Poetry and Early Modern England* (Baltimore, MD: Johns Hopkins University Press, 2008), 60.
3. Rachel Annand Taylor, *Leonardo the Florentine* (New York: Harper and Brothers, 1928), 26.
4. Jean Lucas-Dubreton, *Daily Life in Florence in the Time of the Medici* (New York: MacMillan, 1961), 136.
5. Taylor, 29.
6. Bernard Berenson, *Masters in Art: Raphael through Verrocchio* (Boston: Bates and Guild, 1905), 281.
7. Lucas-Dubreton, 24.
8. *Ibid.*, 134-6.

9. Jacob Burkhardt, *The Civilization of the Renaissance in Italy* (New York: Phaidon, 1960), 260.
10. Anonimo Gaddiano, *Il Codice dell' Anonimo Gaddiano* (National Library of Florence: Codex Magliabechian XVII, 17, c.1544), folios 88, 90, 121; translated by Leonard Shlain, *Leonardo's Brain: Understanding Da Vinci's Creative Genius* (Guilford, CT: Lyon's, 2014), 20.
11. Gaddiano, folio 121.
12. Larry J. Feinberg, *The Young Leonardo: Art and Life in Fifteenth-Century Florence* (Cambridge, MA: Cambridge University Press, 2011), 61.
13. Bulent Atalay and Keith Wamsley, *Leonardo's Universe: The Renaissance World of Leonardo Da Vinci* (Washington, D.C.: National Geographic, 2009), 92-5.
14. Vasilii P. Zubov, *Leonardo da Vinci*, trans. David H. Kraus, (Cambridge, MA: Harvard University Press, 1968), 256.
15. Giorgio Vasari, *Lives of Seventy of the Most Eminent Painters, Sculptors, and Architects*, eds. E.H. and E.W. Blashfield, (New York: Charles Scribner's Sons, 1896), 383-4.
16. Ibid.
17. Cecil Gould, "The Early History of Leonardo's *The Virgin of the Rocks* in the Louvre," *Gazette des Beaux-Arts*, December 1994, 215-22; W. S. Cannell, "Leonardo da Vinci, *The Virgin of the Rocks*: A Reconsideration of the Documents and a New Interpretation," *Gazette des Beaux-Arts*, October 1984, 99-108.
18. Charles Gibbs-Smith and Gareth Rees, *The Inventions of Leonardo da Vinci* (New York: Charles Scribner's Sons, 1978), 12-79.
19. Vasari, 384.
20. F. Bottazzi, "Leonardo da Vinci," *Rivista d'Italia*, January 1907, 14.
21. Charles O'Malley, et al, *Leonardo on the Human Body* (New York: Dover, 1983), 19; Virginia Bush, "Leonardo's Sforza Monument and Cinquecento Sculpture" in *An Overview of Leonardo's Career and Projects until c. 1500*, Claire Farago, ed., (New York: Garland, 1999), 407-16.
22. Vasari, 389-90.
23. Gian Galeazzo Sforza became the sixth Duke of Milan at age eight when his father, Galeazzo Maria, was assassinated in 1476. The boy's uncle, Ludovico, ruled Lombardy as regent and assumed the role of guardian and mentor to the child. When Gian Galeazzo died at age twenty-five under suspicious circumstances, Ludovico took the title of duke, even though Gian Galeazzo had produced a male heir, Francesco, in 1491.
24. This is often a point of confusion for researchers who find references to Isabella as either the daughter or the granddaughter of the "King of Naples" when the monarch's name is not specified. Both are accurate since, while as Duchess of Milan, Isabella's grandfather was King of Naples, Ferdinand I (1458-1494), and her father became King Alfonso II (1448-95).
25. The actual wedding ceremony was held in Milan's cathedral, February 2, 1489.
26. Tristano Calco's *Nuptiae Mediolanensium Ducum* (Weddings of the Dukes of Milan) is a manuscript in Latin from 1489 dedicated to Ludovico Sforza on the occasion of the wedding of his nephew, Gian Galeazzo Sforza, and Isabella of Aragon, granddaughter of the King of Naples. (Milan: Biblioteca Ambrosiana, ms. H 55 sup.)
27. Giulio Ferrario, *Il Costume Antico e Moderno Di Tutti I Popoli*, vol. 2, (Milan: Dalla Tipografia dell'Editore, 1823), 808-10.

28. Stefan Klein, *Leonardo's Legacy: How Da Vinci Reimagined the World*, trans. Shelly Frisch, (Cambridge, MA: Da Capo, 2010), 48.
29. Charles Nicholl, *Leonardo da Vinci: Flights of the Mind* (New York: Viking, 2004), 531.
30. Monica Azzolini, *The Duke and the Stars: Astrology and Politics in Renaissance Milan* (Cambridge, MA: Harvard University Press, 2013), 151.
31. Lacy Collinson-Morley, *The Story of the Sforzas* (New York: E.P. Dutton, 1934), 143.
32. The report by Giacomo Trotti was transcribed from the manuscript and published in 1904 by Edmondo Solmi with additional interpretations by Laura Malinverni in 2012. Edmondo Solmi, *Archivio Storico Lombardo* (Milan: Giornale della Società Storica Lombarda, 1904), 80-9; Laura Malinverni, "13 Gennaio 1490: La Festa del Paradiso: Un'opera in Musica, Rime di Bellincioni, 'Machine' di Leonardo" ([lauramalinverni.net](http://lauramalinverni.net), December 2012), 2-7.
33. Solmi, 86.
34. *Ibid.*, 87.
35. Malinverni, 9.
36. Paul Oppenheimer, *Machiavelli: A Life Beyond Ideology* (London: Continuum, 2011), 256.
37. Solmi, 76.
38. *Ibid.*, 86-7.
39. Nicholl, 257.
40. David Mateer, ed., *Courts, Patrons and Poets* (London: Open University, 2000), 138; Mariangela Mazzocchi Doglio, *Leonardo e gli Spettacoli del Suo Tempo* (Milan: Electa, 1983), 46.
41. Harold Priest, "Marino, Leonardo, Francini, and the Revolving Stage," *Renaissance Quarterly*, Spring 1982, 42.
42. Thomas Pallen, *Vasari on Theater* (Carbondale, IL: Southern Illinois University Press, 1999), 52-3; Alessandra Buccheri, *The Spectacle of Clouds 1439-1650* (Farnham, UK: Ashgate, 2014), 47.
43. Kate Trauman Steinitz, "A Reconstruction of Leonardo da Vinci's Revolving Stage," *Art Quarterly*, Autumn 1949, 329.
44. *Ibid.*, 330.
45. Priest, 43. Domenico Laurenza also studied the Leonardo's sketches and notes for a revolving stage in the Codex Arundel. In his book, *Leonardo's Machines*, Laurenza provides a sequence of computer-generated images of how the *scena ductilis* may have been developed by Leonardo. Initially the half-dome is closed toward the audience, which is the "mountain scenery...made in various shapes out of papier-maché and painted very realistically." The half dome then splits in the center and the two halves roll away in opposite directions from each other to come together again in the back of stage, revealing the inside of the dome and the stage sets of Inferno. Domenico Laurenza, *Leonardo's Machines: Da Vinci's Inventions Revealed* (Cincinnati, OH: David and Charles, 2006), 197-201.
46. J.P. Richter, *Scritti Letterari di Leonardo da Vinci*, vol. 1, (London: Sampson Low, Marston, Searle and Rivington, 1883), 354.
47. Alessandro d'Ancona, *Origini del Teatro Italiano*, vol. 2, (Torino: Ermanno Loescher, 1891), 363-4.
48. A. Richard Turner, *Inventing Leonardo* (Berkeley: University of California Press, 1992), 62.
49. Julia Cartwright, *Beatrice d'Este, Duchess of Milan 1475-1497* (London: J.M. Dent and

- Sons, 1920), 66.
50. Ibid, *Beatrice d'Este*, 67.
51. Bruno Nardini, *Portrait of a Master: Leonardo*, trans. Catherine Frost, (Florence, Italy: Giunti Editore, 1999), 66.
52. Rachel Taylor, *Leonardo the Florentine* (New York: Harper and Brothers, 1928), 191.
53. Richter, vol. 2, 439.
54. For decades, art historians have debated the dates of the Windsor drawings. Some scholars, such as Carmen Bambach, date these drawings to Leonardo's first Milan period because of the "ornamental script" of his notes, and the "figural type" of the drawings "recalls the male nudes in Antonio del Pollaiuolo's exercises in anatomical drawing...Next to Andrea del Verrocchio, Pollaiuolo was the artist who most influenced the young Leonardo." Carmen Bambach, ed., *Leonardo da Vinci: Master Draftsman* (New York: Metropolitan Museum of Art, 2003 ), 411.
- Other Leonardo scholars, such as Carlo Pedretti and Kenneth Clark, date the Windsor drawings to Leonardo's French period (c.1515-17). To Clark, these drawings exhibit "a subtly French flavor...by the way in which the black chalk is used." In addition, the watermark of the paper is of the later date. Kenneth Clark, *Leonardo da Vinci: An Account of His Development as an Artist* (Harmondsworth, UK: Penguin, 1958), 142. And Pedretti, dates the drawings later because "the paper and the handwriting are the same as in a sheet with studies for the Romorantin Palace." Carlo Pedretti, *Leonardo: A Study in Chronology and Style* (Berkeley, CA: University of California Press, 1973), 174.
55. Cartwright, *Beatrice d'Este*, 71-3.
56. Ibid., 73.
57. Felice Calvi, *Bianca Maria Sforza-Visconti* (Milan: Antonio Vallardi, 1888), 20-9.
58. Antonina Vallentin, *Leonardo da Vinci: The Tragic Pursuit of Perfection*, trans. E.W. Dickes, (New York: Viking, 1938), 168.
59. Bambach, 447-50.
60. Constance Moffatt and Sara Tagliagambara, eds., *Illuminating Leonardo: A Festschrift for Carlo Peretti Celebrating His Seventy Years of Scholarship* (Leiden, The Netherlands: Brill, 2016), 230-1.
61. Bambach, 449.
62. Stated in a letter from the Florentine agent to Isabella d'Este, April 14, 1501. David S. Chambers, *Patrons and Artists in the Italian Renaissance* (London: Palgrave MacMillan, 1970), 146.
63. Neil Grant and D.M. Field, *Leonardo da Vinci* (Edison, NJ: Wellfleet, 2002), 361.
64. Kenneth Clark, *An Exhibition of Drawings by Leonardo da Vinci from the Royal Collection* (London: Buckingham Palace, Queen's Gallery, 1969), 22.
65. Roy Strong, *Splendor at Court: Renaissance Spectacle and the Theatre of Power* (Boston: Houghton Mifflin, 1973), 27-31.
66. Julia Cartwright, *Isabella D'Este, Marchioness of Mantua, 1474-1539*, vol. 1, (London: John Murray, 1907), 298-9.
67. Vasari, 402.
68. Luca Beltrami, *Documenti e Memorie Reguardanti la Vita e le Opere de Leonardo da Vinci*, (Milan: F. Trevis, 1919), 151, 156.
69. Carlo Starnazzi, *Leonardo from Tuscany to the Loire* (Foligno, Italy: Cartei and Bianchi, 2008), 217.

70. Beltrami, 150.
71. Martha Walker Freer, *The Life of Marquerite d'Angouleme, Queen of Navarre*, vol. 1, (Cleveland, OH: Burrows Brothers, 1895), 93; Nicholl, 494; Starnazzi, 215.
72. The mechanical lion has been the subject of much controversy among scholars for decades. The first issue is the lion's locomotion. The artist Giovanni Paolo Lomazzo wrote in his memoirs that he had been told by Leonardo's assistant, Francesco Melzi, that the lion "paced the banquet hall." Vallentin, 500-1. But Mark Rosheim suggests that the lion was seated like the many depictions of the Florentine heraldic symbol, and moved into the room on a mechanized wheeled base. Mark Rosheim, *Leonardo's Lost Robots* (Berlin: Springer, 2006), 35.
- The second issue is the original purpose of the lion. Possibly, the lion at the wedding celebrations of Lorenzo and Madeleine in May 1518 may have been the same one that Leonardo had made in 1515. Martin Kemp and Simona Cremante think the lion was originally commissioned by the Medici in Florence and shipped to Lyon where a group of Florentine merchants hosted a banquet in honor of the new king in July 1515. The lion served a dual symbolism as a representation of Florence and the city Lyon. Martin Kemp, *Leonardo da Vinci: The Marvelous Works of Nature and Man* (Oxford, UK: Oxford University Press, 2006), 344; Simona Cremante, *Leonardo da Vinci: Artist, Scientist, Inventor*, vol. 2, (Florence: Giunti, 2005), 60.
- But Paul Barolsky and George Stanley suggest the lion was a commission by Pope Leo X, representing Leo the Lion, which he presented to Francis during their meeting in Bologna in December 1515. Paul Barolsky, *Why Mona Lisa Smiles and Other Tales by Vasari*, (University Park, PA: Pennsylvania State University, 1991), 61; George E. Stanley, *Leonardo Da Vinci: Young Artist, Writer, and Inventor* (New York: Aladdin, 2005), 162.
- The lion also made an appearance at Argentan in October 1517 when the king visited his sister, Marguerite de Valois. R.J. Knecht, *Renaissance Warrior and Patron: The Reign of Francis I* (Cambridge, UK: Cambridge University Press, 1994), 427.
73. Vallentin, 500-1; Rosheim, 22, 41.
74. Edward McCurdy, *The Mind of Leonardo da Vinci*, (Mineola, NY: Dover, 2005), 195. Pen and ink drawing, c. 1485, in the collection of Christ Church Library, Oxford, UK.
75. Vallentin, 528.

## BIBLIOGRAPHY

- Atalay, Bulent and Keith Wamsley. *Leonardo's Universe: The Renaissance World of Leonardo Da Vinci*. Washington, D.C.: National Geographic, 2009.
- Azzolini, Monica. *The Duke and the Stars: Astrology and Politics in Renaissance Milan*. Cambridge, MA: Harvard University Press, 2013.
- Bambach, Carmen, ed., *Leonardo da Vinci: Master Draftsman*. New York: Metropolitan Museum of Art, 2003.
- Barolsky, Paul. *Why Mona Lisa Smiles and Other Tales by Vasari*. University Park, PA: Pennsylvania State University, 1991.
- Beltrami, Luca. *Documenti e Memorie Reguardanti la Vita e le Opere de Leonardo da Vinci*. Milan: F. Trevis, 1919.
- Berenson, Bernard. *Masters in Art: Raphael through Verrocchio*. Boston: Bates and Guild, 1905.
- Bottazzi, F. "Leonardo da Vinci," *Rivista d'Italia*, January 1907, 5-36.

- Buccheri, Alessandra. *The Spectacle of Clouds 1439-1650*. Farnham, UK: Ashgate, 2014.
- Burkhardt, Jacob. *The Civilization of the Renaissance in Italy*. New York: Phaidon, 1960.
- Bush, Virginia. "Leonardo's Sforza Monument and Cinquecento Sculpture" in *An Overview of Leonardo's Career and Projects until c. 1500*, Claire Farago, ed. New York: Garland, 1999.
- Butterworth, Philip. *The Narrator, the Expositor, and the Prompter in European Medieval Theatre*. Turnhout, Belgium: Brepols, 2007.
- Calco, Tristano. *Nuptiae Mediolanensium Ducum*. Biblioteca Ambrosiana, Milan, ms. H 55 sup.
- Calvi, Felice. *Bianca Maria Sforza-Visconti*. Milan: Antonio Vallardi, 1888.
- Cannell, W. S. "Leonardo da Vinci, *The Virgin of the Rocks*: A Reconsideration of the Documents and a New Interpretation," *Gazette des Beaux-Arts*, October 1984, 99-108.
- Cartwright, Julia. *Beatrice d'Este, Duchess of Milan 1475-1497*. London: J.M. Dent and Sons, 1920.
- Cartwright, Julia. *Isabella D'Este, Marchioness of Mantua, 1474-1539*, vol. 1. London: John Murray, 1907.
- Chambers, S. *Patrons and Artists in the Italian Renaissance*. London: Palgrave MacMillan, 1970.
- Clark, Kenneth. *An Exhibition of Drawings by Leonardo da Vinci from the Royal Collection*. London: Buckingham Palace, Queen's Gallery, 1969.
- *Leonardo da Vinci: An Account of His Development as an Artist*. Harmondsworth, UK: Penguin, 1958.
- Collinson-Morley, Lacy. *The Story of the Sforzas*. New York: E.P. Dutton, 1934.
- Cremante, Simona. *Leonardo da Vinci: Artist, Scientist, Inventor*, vol. 2. Florence: Giunti, 2005.
- d'Ancona, Alessandro. *Origini del Teatro Italiano*, vol. 2. Torino: Ermanno Loescher, 1891.
- Doglio, Mariangela Mazzocchi. *Leonardo e gli Spettacoli del Suo Tempo*. Milan: Electa, 1983.
- Dubrow, Heather. *The Challenges of Orpheus: Lyrical Poetry and Early Modern England*. Baltimore, MD: Johns Hopkins University Press, 2008.
- Feinberg, Larry J. *The Young Leonardo: Art and Life in Fifteenth-Century Florence*. Cambridge, MA: Cambridge University Press, 2011.
- Ferrario, Giulio. *Il Costume Antico e Moderno Di Tutti I Popoli*, vol. 2. Milan: Dalla Tipografia dell'Editore, 1823.
- Freer, Martha Walker. *The Life of Marquerite d'Angouleme, Queen of Navarre*, vol. 1. Cleveland, OH: Burrows Brothers, 1895.
- Gaddiano, Anonimo. *Il Codice dell' Anonimo Gaddiano*. National Library of Florence: Codex Magliabechian XVII, 17, c.1544.
- Gibbs-Smith, Charles , and Gareth Rees, *The Inventions of Leonardo da Vinci*. New York: Charles Scribner's Sons, 1978.
- Gould, Cecil "The Early History of Leonardo's *The Virgin of the Rocks* in the Louvre," *Gazette des Beaux-Arts*, December 1994, 215-22.
- Grant, Neil, and D.M. Field, *Leonardo da Vinci*. Edison, NJ: Wellfleet, 2002.
- Kemp, Martin. *Leonardo da Vinci: The Marvelous Works of Nature and Man*. Oxford, UK: Oxford University Press, 2006.
- Klein, Stefan. *Leonardo's Legacy: How Da Vinci Reimagined the World*, trans. Shelly Frisch. Cambridge, MA: Da Capo, 2010.
- Knecht, R.J. *Renaissance Warrior and Patron: The Reign of Francis I*. Cambridge, UK: Cambridge University Press, 1994.

- Laurenza, Domenico. *Leonardo's Machines: Da Vinci's Inventions Revealed*. Cincinnati, OH: David and Charles, 2006.
- Lucas-Dubreton, Jean. *Daily Life in Florence in the Time of the Medici*. New York: MacMillan, 1961.
- Malinverni, Laura. "13 Gennaio 1490: La Festa del Paradiso: Un'opera in Musica, Rime di Bellincioni, 'Machine' di Leonardo." lauramaliverni.net, December 2012.
- Mateer, David, ed. *Courts, Patrons and Poets*. London: Open University, 2000.
- McCurdy, Edward. *The Mind of Leonardo da Vinci*. Mineola, NY: Dover, 2005.
- Moffatt, Constance, and Sara Tagliagalamba, eds., *Illuminating Leonardo: A Festschrift for Carlo Peretti Celebrating His Seventy Years of Scholarship*. Leiden, The Netherlands: Brill, 2016.
- Nardini, Bruno. *Portrait of a Master: Leonardo*, trans. Catherine Frost. Florence, Italy: Giunti Editore, 1999.
- Nicholl, Charles. *Leonardo da Vinci: Flights of the Mind*. New York: Viking, 2004.
- O'Malley, Charles, et al, *Leonardo on the Human Body*. New York: Dover, 1983.
- Oppenheimer, Paul. *Machiavelli: A Life Beyond Ideology*. London: Continuum, 2011.
- Pallen, Thomas. *Vasari on Theater*. Carbondale, IL: Southern Illinois University Press, 1999.
- Pedretti, Carlo. *Leonardo: A Study in Chronology and Style*. Berkeley, CA: University of California Press, 1973.
- Priest, Harold. "Marino, Leonardo, Francini, and the Revolving Stage." *Renaissance Quarterly*, Spring 1982, 36-60.
- Richter, J.P. *Scritti Letterari di Leonardo da Vinci*, vol. 1. London: Sampson Low, Marston, Searle and Rivington, 1883.
- Rosheim, Mark. *Leonardo's Lost Robots*. Berlin: Springer, 2006.
- Shlain, Leonard. *Leonardo's Brain: Understanding Da Vinci's Creative Genius*. Guilford, CT: Lyon's, 2014.
- Solmi, Edmondo. *Archivio Storico Lombardo*. Milan: Giornale della Società Storica Lombarda, 1904.
- Stanley, George E. *Leonardo Da Vinci: Young Artist, Writer, and Inventor*. New York: Aladdin, 2005.
- Starnazzi, Carlo. *Leonardo from Tuscany to the Loire*. Foligno, Italy: Cartei and Bianchi, 2008.
- Steinitz, Kate Trauman. "A Reconstruction of Leonardo da Vinci's Revolving Stage," *Art Quarterly*, Autumn 1949, 325-38.
- Strong, Roy. *Splendor at Court: Renaissance Spectacle and the Theatre of Power*. Boston: Houghton Mifflin, 1973.
- Taylor, Rachel Annand. *Leonardo the Florentine*. New York: Harper and Brothers, 1928.
- Taylor, Rachel. *Leonardo the Florentine*. New York: Harper and Brothers, 1928.
- Turner, A. Richard. *Inventing Leonardo*. Berkeley: University of California Press, 1992.
- Vallentin, Antonina. *Leonardo da Vinci: The Tragic Pursuit of Perfection*, trans. E.W. Dikes. New York: Viking, 1938.
- Vasari, Giorgio. *Lives of Seventy of the Most Eminent Painters, Sculptors, and Architects*, eds. E.H. and E.W. Blashfield. New York: Charles Scribner's Sons, 1896.
- Zubov, Vasilii P. *Leonardo da Vinci*, trans. David H. Kraus. Cambridge, MA: Harvard University Press, 1968.

### Further Reading

I originally wrote this essay in 1974 as an undergraduate research paper for an art history course at the University of West Florida. In 1980, I expanded the essay for a graduate seminar in Italian Renaissance art at Virginia Commonwealth University. In 2017, I found the paper in storage and updated some citations before adding it to my website. My thanks to Dr. Jennifer Richards of Newcastle University, UK, for noting that at the same time this paper was revised in 1980, Marialuisa Angiolillo published a similar study: *Leonardo: Feste e Teatri*. Naples, Italy: Società Editrice Napoletana, 1979; hence the absence of her study from the notes and bibliography.