

INTRODUCTION

VERROCCHIO EXPERIMENTALIST

In January 1468 a group of citizens and artists assembled to discuss the appropriate decoration for the summit of Filippo Brunelleschi's dome (1420–36) of Florence's Cathedral (Figure 1).¹ A decision had already been made for a *palla* (ball) to surmount the lantern (indeed, Brunelleschi's model for the lantern included a bronze ball and cross),² but the choice remained about whether it should be cast or hammered and from what material it should be made. Minutes record that the group of prominent citizens and experts, which included such esteemed citizens as the humanist Matteo Palmieri and Lorenzo de' Medici (soon to become Florence's quasi-ruler) and the artists Luca della Robbia, Antonio Pollaiuolo, and Andrea del Verrocchio, concluded that the *palla* should be cast in one piece and on no account should it be made by hammering. The group also decided that it should be made from copper as fine as possible and alloyed with fine brass. That same month a competition was held to determine which artist should make the *palla*. After models were submitted and considered, a decision was made to give the commission to Giovanni di Bartolomeo and Bartolomeo di Fruosino. On August 1 they cast a bronze *palla*, but for unknown reasons it was deemed unacceptable and was broken up the following year.³

Verrocchio is first mentioned as one of several contestants who submitted models for the *palla*. As he is not referred to in the later document about the casting, it seems he was an unsuccessful competitor. But shortly after the first *palla* was rejected, Verrocchio was given the commission to make a second



FIGURE 1. Filippo Brunelleschi. Cupola, 1420–36, Duomo, Florence.
 Alinari/Art Resource, NY.

(on September 10, 1468), and he did this successfully (Figure 2).⁴ On May 27, 1471, his enormous gilt copper *palla* (measuring about 2.35 m wide and weighing 4,368 Florentine libbre, almost 1,481 kg)⁵ was hoisted into place at the top of the cupola on a crane.⁶ Three days later, when a bronze cross was raised and attached to the ball, Florentines rejoiced and sang the *Te Deum*, as the Florentine apothecary Luca Landucci records in his diary.⁷

Although the *palla* has been overlooked in most art historical discussions of Verrocchio,⁸ Giorgio Vasari made it the centerpiece of his biography of the artist, as a proof of the artist's inventiveness, writing:

[Verrocchio] made [the *palla*] four braccia high, and positioned it on a knob in such a way that the cross above it could be attached securely; the finished work was put in place with great celebration and the delight of the people. Truly great were the ingenuity and skill used in making it so that one can enter it from below, and also in attaching it securely so that the winds cannot damage it.⁹

As Vasari emphasizes, Verrocchio's cleverness lay in particular in the engineering of the enormous *palla* so that it could be positioned atop Brunelleschi's lantern,



FIGURE 2. After Andrea del Verrocchio. *Palla*, hammered copper, installed 1471; damaged, 1601, Duomo, Florence.
 Alinari Archives, Florence.

over 350 feet above the ground. Verrocchio did this by stabilizing his ball with an internal armature and a device that connected it to a bronze knob below and a cross above (Figure 3).¹⁰ Vasari was not the only one to recognize the importance of Verrocchio's *palla*. The author of a fifteenth-century mathematics treatise (probably Pier Maria Calandri) used the dimensions of the *palla* to explain how to calculate the circumference and volume of a sphere, and in the late sixteenth century, Michel de Montaigne expressed wonder at the scale of the *palla*, declaring that it could fit forty men inside.¹¹ Although Montaigne exaggerates, his claim reveals the wonder Verrocchio's *palla* inspired in its beholders.

Verrocchio's ingenuity consisted not only in attaching the *palla* to the lantern but also in how it was made. Surviving documents indicate that between August 1469 and June 1470 Verrocchio had copper sheets hammered with wooden mallets over a stone sphere by three stone carvers (they probably also helped in carving the sphere).¹² Verrocchio had chosen the sheets of metal personally during a special trip to Venice – the best source for copper on the Italian peninsula – in 1469. On his journey, he also visited Treviso, a major center in the manufacture of goods made from *repoussé* (hammering) in copper.

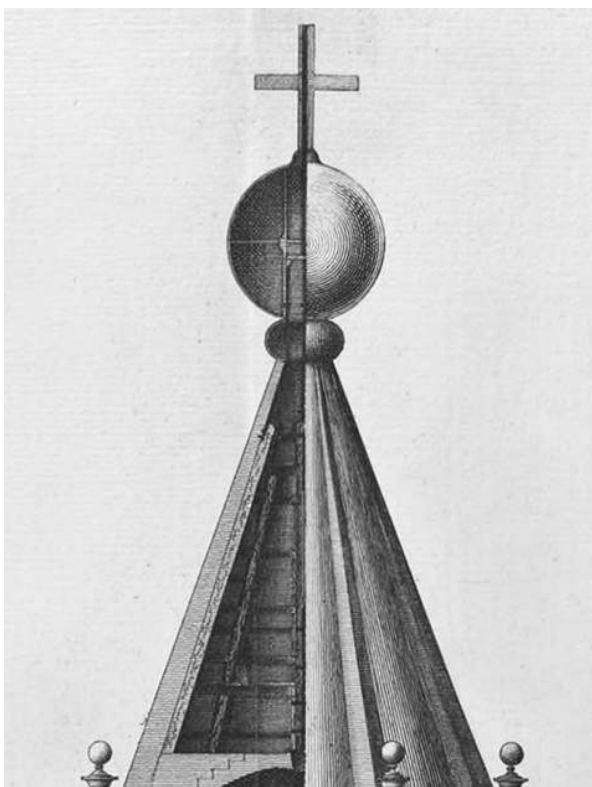


FIGURE 3. Andrea del Verrocchio. *Palla*, hammered copper. Detail (cross-section of sphere as engraved by Bernardo Sansoni Sgrilli and published in *Descrizione e studi dell'insigne fabbrica S. Maria del Fiore, metropolitana fiorentina, in varie carte* in 1733).
 Getty Research Institute, Los Angeles (86-B4853).

Here he would have learned valuable skills, probably through observation and conversations with specialists.¹³

By summer 1470 the hammered sheets were soldered together.¹⁴ Leonardo da Vinci, who was working in Verrocchio's *bottega* (workshop) at the time of the *palla*'s manufacture, wrote many years later (c. 1515): "Remember how the soldering for the *palla* of Santa Maria del Fiore was done."¹⁵ A drawing accompanying the note (Figure 4) demonstrates how it was achieved: it shows a cone representing solar rays being reflected from a burning mirror onto a join between separate pieces of metal to solder them together.¹⁶ Between August and October 1470, Verrocchio's *palla* was gilded and polished.¹⁷

The decision to make the *palla* using *repoussé* is striking, not least because the majority of citizens and artists present at the meeting of 1468 had recommended that the ball be cast and stated that it should not be made by hammering.¹⁸ The choice appears to have been Verrocchio's own, made in response to the failure of the first *palla*.¹⁹ We do not know what went wrong earlier, but probably it was not a casting error. More likely, the problem lay in the gilding.

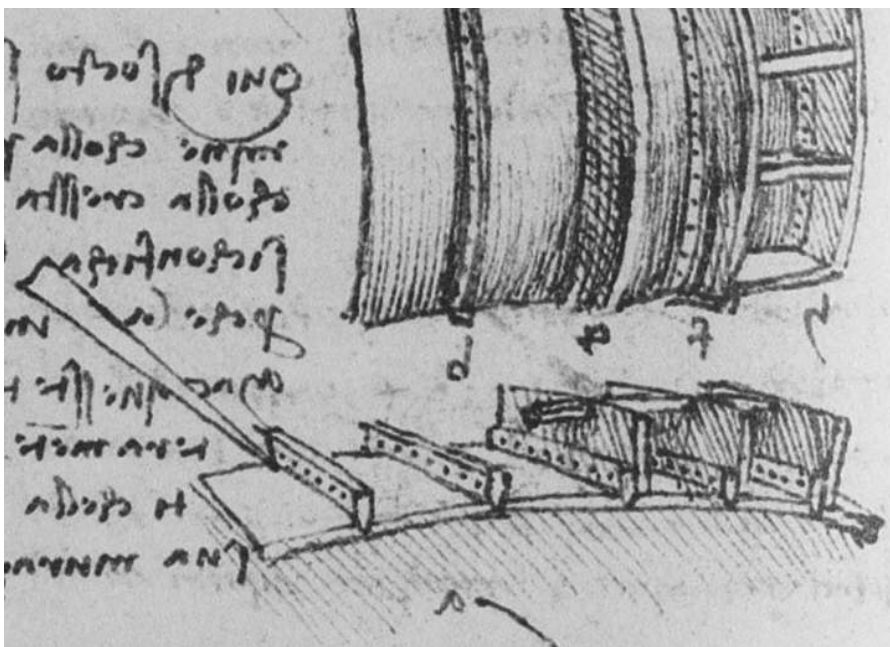


FIGURE 4. Leonardo da Vinci. Ms. G, 1510–1516, fol. 71v, pencil and ink, Bibliothèque de l'Institut de France, Paris. Detail.
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Hammering rather than casting the ball was a clever solution on Verrocchio's part because beaten pure copper sheets would have lent themselves well to mercury gilding.²⁰

Although the *palla* no longer survives (it was brought to the ground by lightning and damaged in 1601 [modern style]), it tells us much about Verrocchio's approach to making in general. The *palla* speaks to the artist's experimental methods of manufacture (in using *repoussé* rather than casting), his facility with acquiring new skills (learning how to do *repoussé* on a large scale and soldering using mirrors), and his ability to meet the demanding expectations of his patrons, all of which, as we shall see, was typical of this ingenious Florentine.

Verrocchio was arguably the most important sculptor between Donatello and Michelangelo, and many of his works are considered groundbreaking – most notably his *Christ and Saint Thomas* and Colleoni monument (Figures 5 and 6). In his *Christ and Saint Thomas*, Verrocchio succeeded in creating a sculpture of unprecedented compositional complexity. Thomas, placed on the step outside the niche, is depicted actively moving toward Christ, who is positioned behind and above Thomas. Christ responds to Thomas' gesture of reaching forward by raising his arm and pulling back his robe to reveal his side wound. This careful choreography contrasts with the tendency of sculptors up to this point, who showed figures in more static poses, regardless of the subject.²¹ The Colleoni monument is equally revolutionary. Although Verrocchio



FIGURE 5. Andrea del Verrocchio. *Christ and Saint Thomas*, bronze, c. 1467–83, Orsanmichele, Florence.
 Scala/Art Resource, NY.

did not cast the statue himself, he was responsible for its extraordinary design. As an equestrian monument, it surpasses its predecessors (both ancient and Renaissance) in its sense of movement and naturalism. The horse's raised foreleg and corresponding balance of the rest of its body creates a sense of movement, as if the horse is in the process of stepping forward. Moreover, the horse's anatomy is impressive in its accuracy, such that Pomponius Gauricus declared the horse was "denudatus" (like an *ecorché* – a figure shown without its skin to reveal the musculature).²² Verrocchio designed his sculpture to be seen from multiple viewpoints, a departure from all contemporary and ancient examples, which were limited in the number of principal viewpoints.²³

Verrocchio exerted considerable influence on artists of the following generation (many of whom probably trained with him, including Leonardo, Sandro Botticelli, Domenico Ghirlandaio, and Pietro Perugino) and beyond. Yet Verrocchio's achievements have been overshadowed by those of later artists, especially Leonardo, his most famous pupil. This is due in large part to Vasari's negative assessment of Verrocchio in his *vita*. Vasari tells how Leonardo assisted on Verrocchio's *The Baptism of Christ* (a painting probably executed



FIGURE 6. Andrea del Verrocchio. Equestrian Monument to Bartolomeo Colleoni, bronze (formerly gilded) on a marble and Istrian pedestal with a bronze frieze, designed by Andrea del Verrocchio, early 1480s–1488 completed by Alessandro Leopardi between 1490 and 1496, Campo di SS. Giovanni e Paolo, Venice.
 Scala/Art Resource, NY.

in two campaigns, one beginning c. 1468 and the other c. 1476; Figure 7), executing the divinely illuminated turning angel on the left, so different from the pedestrian angel beside him, painted by Verrocchio. In Vasari's tale, when Verrocchio first laid eyes on Leonardo's angel, the older master threw down his paintbrushes in frustration at the superiority of his pupil's contribution, never to paint again. Vasari's topos of the older master giving up painting in the face of greater talent is repeated many times throughout the *Lives* (it is told, for instance, of Giotto and Cimabue, and Raphael and Francesco Francia)²⁴ and thus deserves to be treated with skepticism. Furthermore, the evidence does not support it. Inventories of Verrocchio's workshops in Florence and Venice drawn up after his death record ten paintings left in the workshops,²⁵ and a document of 1485 records the near completion of a painted altarpiece for San Zeno in Pistoia (Figure 8), a commission that had been granted to Verrocchio.²⁶ Although his authorship of the Pistoia painting is often doubted, there is reason to accept at least part of it as autograph.²⁷ Yet even today scholars perpetuate the implication inherent in Vasari's tale that Leonardo was a genius who came from nowhere with an innate talent that required no teacher.²⁸



FIGURE 7. Andrea del Verrocchio and workshop. *Baptism of Christ*, tempera and oil on panel, 1460s and 1470s, Galleria degli Uffizi, Florence.
 Alfredo Dagli Orti/Art Resource, NY.

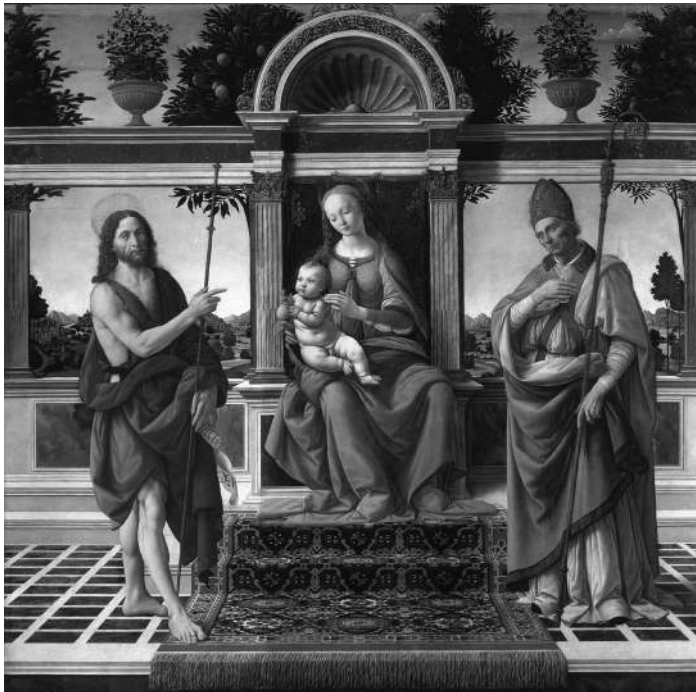


FIGURE 8. Andrea del Verrocchio and workshop. *Madonna di Piazza (Pistoia altarpiece)*, tempera and oil on panel, c. 1474–85 San Zeno, Pistoia.
 Scala/Art Resource, NY.

Just as influential has been Vasari's characterization of Verrocchio's style as "somewhat hard and crude, as one who acquired it rather by infinite study than by the facility of a natural gift."²⁹ For Vasari, the greatest artists were those who endowed their figures "with motion and breath." To achieve these qualities, artists observed nature and absorbed its lessons but departed from it to invent something entirely new.³⁰ Inherent in Vasari's assessment of Verrocchio, and his history of art, is a bias toward artists who pointed the way to the style of the High Renaissance (and thus to his own art), most notably Leonardo and Michelangelo. It was in the work of these two artists that art, according to Vasari, came closest to nature ("truly heavenly and admirable was Leonardo").³¹ Unfortunately for Verrocchio, Vasari's unfavorable judgement has meant that his place in the history of art has suffered ever since. He has been treated as a kind of buffoon (the sulky teacher who Leonardo did not need) and an artist whose achievements were quickly superseded by the artists who followed him. The point of this book in part, then, is to reassess Verrocchio's accomplishments. More importantly, it argues that Verrocchio was one of the most experimental artists in fifteenth-century Florence, itself one of the most innovative centers of artistic production in Europe, and that the artist's unusual practices of making had meaning.

Verrocchio worked in a wide array of media and often moved between them. His production in sculpture alone is remarkable: he created works in bronze, marble, wood, terracotta, and wax. This range is extraordinary, as most sculptors are thought to have mastered the skills of only one medium. He was also a master goldsmith and a painter. Verrocchio's skills as a draftsman merited specific praise from Vasari. In addition, Vasari refers to Verrocchio as an architect. Verrocchio was not the only fifteenth-century artist to work in more than one medium; indeed, one could argue that it was the norm.³² What is unusual is the extent to which Verrocchio worked in different media and the frequency with which he transferred tools and techniques from one material to another.³³ Although his tendency to work across and between media was integral to Verrocchio's artistic production, it has not been examined in studies on the artist. Instead, monographs consider his work in different media separately.³⁴ Part of the reason for this may be due to Vasari, who implied that Verrocchio often moved from one object to another simply to avoid boredom.³⁵ Vasari's assertion has had the effect of foreclosing any discussion of the implications of Verrocchio's transferal techniques. Scholars since Vasari have tended to be interested in issues other than Verrocchio's practice (focusing especially on iconography or attribution), and when they have considered the topic, those studies have tended to concentrate on individual objects. Because of this, the possible meanings of Verrocchio's unusual practices have been obscured. This study seeks to address

what Verrocchio achieved by working in this way. Verrocchio's practices, it will be argued in Chapter 1, were a response by the artist to the tastes of his audience and thus must be seen within the broader artistic context of Renaissance Florence. Although some other artists worked across media, Verrocchio's is a paradigmatic case because he appears to have developed a self-conscious attitude toward the potential for art making to express ideas. It will be explored in the chapters that follow how Verrocchio's approach to making provided him with a hermeneutic framework, one in which he developed a sophisticated system of expressing complex ideas – theological, political, economic, poetic – metaphorically, and that he did this through visual puns on making and his use of materials.

Chapter 1 introduces Verrocchio as an experimentalist, and each of the chapters that follow is a case study of an object dating from the 1470s. I have chosen to focus on this decade because it was especially productive for Verrocchio, when he was particularly experimental and moving between many different materials. It was also a moment of intense creativity in Florence in general, due in part to the remarkable rise to power of Lorenzo de' Medici ("il Magnifico"), who used art to further his political ambitions.³⁶

Chapter 2 argues that Verrocchio's tomb of Piero and Giovanni de' Medici (Figure 9) should be read as an oration for the interred and as a defense of wealth gained through usury (about which the Medici were perpetually anxious). Chapter 3 proposes that Verrocchio's *Christ and St. Thomas* (Figure 5) should be considered a material meditation on the experience of faith. Unlike his contemporaries, Verrocchio showed Thomas reaching in *as if* to touch Christ's wound, but he does not. This chapter addresses the theological and artistic implications of this unusual emphasis. In Verrocchio's *Ideal Head of a Woman* (Figure 10) – the focus of Chapter 4 – the artist depicts a woman in profile in black chalk. Through the use of *sfumato* within the woman's face and the strict maintenance of an outline around it, the drawing resembles a marble relief sculpture coming to life. Verrocchio's technique here is explored in the light of vernacular poetry, in which the theme of the beloved's metamorphosis was popular. The final chapter investigates Verrocchio's unusual methods of making in his *Crucifix* (Figure 11) in relation to devotional practices. It argues that although much of the sculpture's making is invisible to the naked eye, it was meaningful for an artist interested in animation.

Verrocchio emerges from this study as an artist who used materials and techniques to express ideas. My focus on materials and their meanings is part of a larger scholarly interest in materiality in recent years.³⁷ Indeed, Michael Cole has declared it a "subfield" of Renaissance studies.³⁸ However, although much of the art of fifteenth-century Florence has been well studied, it has not tended to be treated in studies of materiality.³⁹ Instead, scholars interested in this topic have tended to focus on medieval art, or Italian art of the sixteenth and seventeenth centuries. These range from studies of specific materials⁴⁰ to