

Jacopo Bellini's *Book of Drawings* in the Louvre  
and the Paduan Academy of Francesco Squarcione



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**DE GRUYTER**

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## PREFACE

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# PART 1

## I. A Precious Collector's Item

The present book argues against the traditional approach of attributing the *Book of Drawings* in the Louvre (R. F. 1475–1556, figs. 1a and b) to Jacopo Bellini (circa 1400–1470), fountain-head of the Venetian school of painting that was to flourish under his sons, Gentile and Giovanni.<sup>1</sup> The title defines Jacopo as merely the owner of this most precious collection of early Renaissance drawings, not its author. What is instead being suggested is that the drawings were actually executed in Padua, mostly during the late 1440s. The mastermind and financier behind the book was the painter Francesco Squarcione (1394–1468), assisted by some of his pupils, the most gifted of whom was Andrea Mantegna (1431–1506).<sup>2</sup> Following this hypothesis, the *Book of Drawings* – valued as a precious artifact ever since – had been passed on from Squarcione's Paduan school of painting into Bellini's possession, most likely upon Mantegna's marriage to Nicolosia, Jacopo's daughter, in 1453. Jacopo certainly regarded it as precious property, since he bequeathed the drawings, among other valuable items, to his widow, not his sons. Thus, they were not considered workshop material. The album was handed down from Anna Bellini to Gentile Bellini (1429–1507), who either sold or presented it as a diplomatic gift on his official mission to Sultan Mehmed II (1432–1481) in Constantinople.<sup>3</sup> Over the course of this trajectory – which witnessed the ascent of the Bellinis, along with the political and economic ascent of Venice over its neighboring territory, the *terraferma* – the provenance and authorship of the *Louvre Album* were forgotten and the drawings were unanimously believed to be by Jacopo's hand.<sup>4</sup>

Material as well as documentary evidence speak in favor of this hypothesis. A first clue is furnished by the book's history. The *Louvre Album* contains, as is well known, parts of an older model book.<sup>5</sup> Its parchment surfaces bore primitive pen drawings that had partly to be coated with a grounding consisting of bone dust or chalk mixed with water before they could be used again. Altogether, seven pages (14 folio sides) can thus be reconstructed.<sup>6</sup> Only two of the original drawings were kept, obviously because the artist liked them: the one, (folio 77v) exhibiting six lions, and the other (folio 95v), a textile pattern (figs. 2 and 37). Thus far, no precise answer has been found for the question of where this costly material might have come from or on which grounds it was meant to be recycled. The prevailing idea is that Jacopo had discovered it on the Venetian art market or inherited from his master Gentile da Fabriano (circa 1370–1427).<sup>7</sup> This assumption, however, makes the use of the identical and unspoiled parchment in the “new” album difficult to understand. Another problem is posed by the drawing's autopsy. The conventionalism in form and subject matter of what can still be seen from this predecessor was believed to justify a date at the



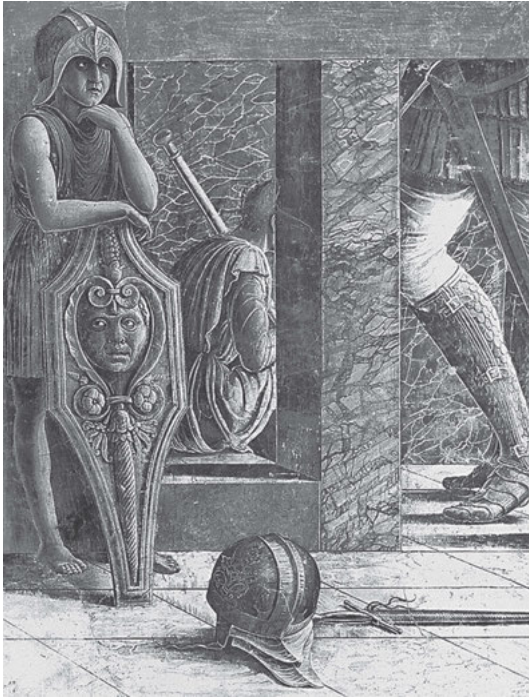
1 Jacopo Bellini, *Book of drawings*, Musée du Louvre, Paris, R. F. 1475–1556

end of the fourteenth century.<sup>8</sup> Doubts, however, are appropriate since the simplicity of the design must be viewed in relation to a difference in function.<sup>9</sup> The fact that twelve (of fourteen) drawings show textile ornaments refers to a clientele not of artists but of artisans and businessmen as well as to a specific place of origin.<sup>10</sup> In the Veneto, Padua is well known for having been an important center of textile manufacturing since the late fourteenth century due to the richness of its canal systems and watermills, the sheep farming in the Oltrebrenta region, and the commitment of the Carrara Lords to engage spinners, weavers, fullers, dyers, combers, sharers and finishers.<sup>11</sup> It was in this business that Squarcione had started his career. His uncle Francesco da Galta was a draper and estate agent, his father-in-law, a certain Bartolomeo degli Uccelli, a draper, and he himself is recorded as having been a draper and textile designer (*sartor et recamator*) from circa 1415 to 1425.<sup>12</sup> This means that he had access to large-size parchments commonly used for textile designs and could easily have taken the sheets from his own stock when he decided to turn his back on this business and become a teacher in the arts instead. Following this hypothesis, the preserved models document the tradition in which Squarcione used to work. They may well represent the starting position for his new academic enterprise, which is why he would have kept them.

A document discovered and published by Clifford Brown in 1973 lends credit to the idea that the *Louvre Album* had come into Jacopo Bellini's possession through a prominent member of Squarcione's Paduan academy. On October 24, 1476, the Florentine art dealer Angelo Tovaglia inquired in a letter addressed to the Margrave of Mantua, Ludovico III Gonzaga (1412–1478), about a book of drawings that he had been seeking for a long time.<sup>13</sup> All he could determine about this book was that it contained, for the most part, copies of antiquities, battles between centaurs, satyrs and fauns, as well as images of men and women on horseback and foot (*la più parte sono battaglie di centauri, di fauni et di satiri, così ancora d'uomini et di femine accavallo et appié, et altre cose simili*).<sup>14</sup> A connoisseur himself, Tovaglia was aware that this was a precious collector's item (*io so che queste cose si tengono cari*), not likely to be shared casually (*che gli originali non se mandano atorno*), which is why he suggested making a copy (*me lo facesse copiare*) at his own expense (*et io pagherei la spesa*). Ludovico replied to the letter one month later. He had asked Luca (Fancelli?), who



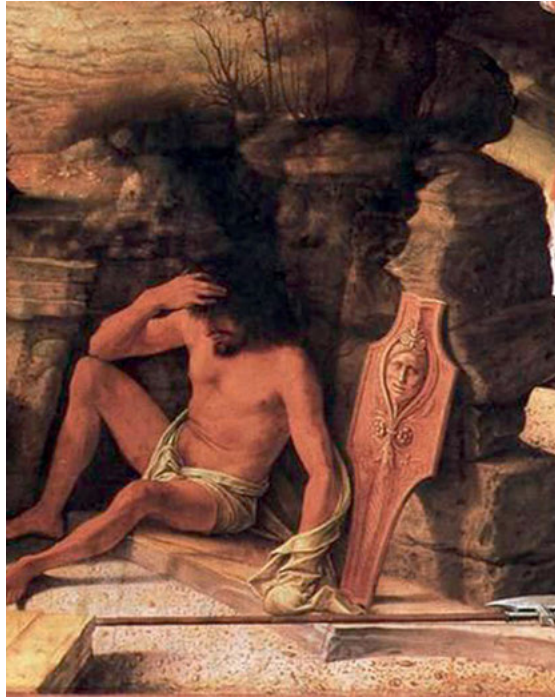
2 Folio 95v, Musée du Louvre, Paris



3 Andrea Mantegna, *Saint James before Herod Agrippa* (det.), Chiesa degli Eremitani, Padua

discovered that the person to ask was his court painter Andrea Mantegna. Upon inquiry, Mantegna remained elusive (*monstra non sapere quello ne fosse facto*). Fancelli, however, believed that the book had been handed over to some other painter.<sup>15</sup> This was all Ludovico could confirm, though he promised to keep Tovaglia informed should additional information surface. However, Ludovico's illness and premature death in 1478 unfortunately put an end to the search.<sup>16</sup>

The *libro del retracto* mentioned in the 1476 letter was never identified as the *Book of Drawings* in the Louvre. Nevertheless, it may be concluded that a relationship exists. For one, the subjects that Tovaglia could list by hearsay – copies of antiquarian subjects, mythological battles, and contemporary scenes – do match the contents of the *Louvre Album* quite precisely.<sup>17</sup> Tovaglia's preference for the term *libro*, instead of the more common *quaderno*, confirms Elen's analysis that the Louvre drawings had been bound together from the outset to form a book and were not intended to be kept as loose sheets within a folder.<sup>18</sup> A book of such extravagant size (427 × 290 mm), almost twice as large as other comparative albums and consisting of more than a hundred exquisite drawings all on parchment of the highest quality, for which the skins from fifty-one goats were required, was indeed a unique treasure in terms of both artistic and material value, unlikely to escape the attention of a professional art dealer like Tovaglia.<sup>19</sup> His emphasis on its uniqueness – too important to be entrusted to any courier – betrays an economic perspective. Tovaglia would have realized that the original might be unobtainable, which is why he suggested a copy be made for him. It might have been the preoccupation with these details that prevented him, unfortunately, from being more explicit on other points. As to the author of the drawings, nothing emerges. Tovaglia probably knew from the beginning that the trail would lead to Mantegna, which is



4 Giovanni Bellini, *Resurrection of Christ* (det.),  
Gemäldegalerie, Berlin

why he contacted his employer. But the passage itself does not supply any information that Mantegna actually owned the drawing book, as has been asserted in the wake of Clifford Brown's publication of the Gonzaga documents.<sup>20</sup> Neither does the name of the painter, who finally came to own this treasure, surface. All that can be ascertained is that the pronoun *questa*, related to *terra*, refers to Mantegna's place of origin, the Veneto, rather than to Mantua or Tuscany, Tovaglia's local identity, in which case Ludovico would have addressed the artist in question as *nostro* or, respectively, *di vostra terra*. There are, therefore, good reasons to believe that the album came from Padua or Venice, where Mantegna had been living before accepting Ludovico's invitation in 1459, and that it was now in the possession of a nearby painter, whether directly through him or at least with his knowledge. Given the book's value, this person must have been somebody of high standing. With all probability, it was, indeed, Jacopo Bellini, Mantegna's most important relative in the art world and, furthermore, a collector of precious items of this kind (see p. 15), whose family firm in Venice was to supersede Squarcione's Paduan academy.<sup>21</sup>

Adding weight to this hypothesis is the extensive plundering of Mantegnesque motifs by the Bellinis, which allowed Jacopo's sons to rise to the leading workshop in the Veneto. Recent exhibitions in London and Berlin have demonstrated the extent to which the transference of Mantegna's genius enabled Gentile and Giovanni Bellini to not only appropriate Mantegna's inventions but also access his work tools.<sup>22</sup> The shield with Medusa's head in Mantegna's fresco *Saint James before Herod Agrippa* (circa 1451) at the Eremitani Chapel in Padua is a case in point.<sup>23</sup> The motif is invoked again in Giovanni's *Resurrection of Christ*, painted for the church of San Michele in Isola some twenty years later (figs. 3 and 4).<sup>24</sup> The shield's provenance may well be traced back to Francesco Squarcione, widely known as a

collector of suchlike rarities.<sup>25</sup> The same holds true for some antique sculptures in marble and reproductions in plaster, listed in Jacopo's estate in 1471 (see below). Similar objects are known to have been on display in the "house of reliefs" to be used in Squarcione's academy (see page 24). There is, therefore, reason to believe that Jacopo Bellini had profited from the disintegration of the Paduan studio and that his new son-in-law played a part in these transactions. This might have taken place in the late 1450s, after Mantegna had become independent from Squarcione, or else in the early 1460s, after the latter took up permanent residence with his entire household (*chon tuta la ffamegnia*) in Venice.<sup>26</sup> The documents relating to Mantegna's legal disputes with his former master reveal that their quarrels concerned material indemnification.<sup>27</sup> In his second trial, from 1455 to 1456, Mantegna had asked to be compensated for works carried out for Squarcione estimated at 400 ducats, a considerable amount, of which he petitioned half of the sum.<sup>28</sup> The documents do not specify what happened afterwards – all that can be deduced from similar lawsuits between Squarcione and his belligerent apprentices is that if the former consented to pay, which was likely, he would have cleared his debts not with money but in kind.<sup>29</sup> It is noteworthy that the six years for which Mantegna sought recompense in this trial, from 1443 to 1448, coincide with the assumed genesis of the *Louvre Album*.<sup>30</sup> Since no other important work is documented for this period of time, the precious book could have been part of his indemnification.<sup>31</sup>

The next noted instance to mention the *Book of Drawings* is the testament of Anna Rinversi, Jacopo's widow, dated November 25, 1471. To her eldest son, Gentile, Anna bequeathed not only the *Louvre Album* but also other books of drawings (*omnes libros de dessiniiis*), together with Jacopo's collection of classical sculptures and reliefs in marble or plaster (*omnia laborerie de zessio, de marmore et de relevijs*).<sup>32</sup> It is significant that none of these valuable items were ever included in the inventory of Jacopo's workshop, in which case they would have been left to his sons. Instead, they were part of his private estate that went first to his widow. Upon their coming into his possession, Gentile was well aware of their value and saw to increase it with the help of humanist friends (see page 40). The next step was to sell them altogether. It is not clear what happened to a statue or statuette of Venus "with naked breasts" – perhaps identical with the statue of the goddess "colla testa rotta e colle braccia" that Ghiberti had seen upon his visit to Padua<sup>33</sup> – but Niccolò and Giovanni Bellini had offered the bust of Plato "with the point of the nose in wax" to Isabella d'Este in 1512.<sup>34</sup> The re-working of the images in the *Louvre Album* in pen and ink by an apprentice in Gentile's workshop was undertaken with a similar intent to increase their visibility and value once it was decided to sell or donate the book to Sultan Mehmed II during Gentile's 1479 trip to Constantinople.<sup>35</sup> Likewise, the second book of drawings "in leadpoint on rag paper" from Jacopo's inheritance (*fuit praedati quondam patris nostri*) that Gentile had bequeathed to his half-brother, Giovanni Bellini, on February 18, 1507, was considered a collector's item and therefore intended to be sold.<sup>36</sup> Though similar in size and content, it was less valuable than the *Louvre Album*, having been executed on paper rather than parchment. The buyer was with great likelihood the Venetian collector Gabriele Vendramin (1484–1552) in whose *Palazzo Santa Fosca* Marcantonio Michiel saw the book and subsequently described it in 1530 as: "The large book of drawings in bombazine paper in leadpoint from the hand of Jacopo Bellini."<sup>37</sup> For the first time, Jacopo is referred to not as a previous owner but as the author of the drawings

(*de man de Jacopo Bellino*).<sup>38</sup> The cover page of this book of drawings, which later came into the possession of the British Museum (BM 1855.0811.1), bears the same attribution to the father of the Bellini dynasty (*de mano de ms. iacobo bellino veneto 1430 in venetia*), perhaps in Vendramin's handwriting.<sup>39</sup> The addition of Jacopo's name and the predating of the text to the year 1430 – the start of his career – must have occurred out of a desire to raise the book's fame and to establish Jacopo's role as the founder of the modern school of painting – *padre di tutta la pittura narrativa veneziana* (Fiocco).<sup>40</sup> This referred to Venice's dominant position as "most triumphant city" at that time.<sup>41</sup> Accordingly, Padua's artistic contribution was marginalized.

Despite the importance attached to the books of drawings as they were being handed down – which finds a parallel in the upgrading of the antiquities by attributing the marble 'Venus' to the famous Greek sculptor Praxiteles (circa 395–330 BC) and restoring the so-called 'Plato' – the family documents of the late fifteenth century (Anna's testament and Gentile's donation to Giovanni) name Jacopo Bellini simply as the owner and not the creator of the books of drawings. They are listed in one row, along with the other *laborerie de zessio, de marmore et de relevis* in Jacopo's collection, for which his authorship must be excluded (as fn. 32). From here emerges an aspect not adequately addressed by scholars: Jacopo's interest in the art market and his personal collection of artworks related to the painter's study (*pertinentia pictorie et ad dipingendum*).<sup>42</sup> As early as 1440, he had intended to form, together with Donato Bragadin (1438–1470), a five-year partnership (*societas*) directed at selling and buying paintings and other works of art (*picturarum cuiuscumque sortis et conditionis*), in Venice as well as abroad, and to share the profit made from this business.<sup>43</sup> The plan failed, perhaps because Bragadin was the wrong partner, but it can safely be assumed that this did not deter Jacopo from putting together a collection of valuable items.<sup>44</sup> Apart from the influence of Venice as Europe's foremost center of trade, the idea to extend his artistic practice into professional entrepreneurship and, at the same time, merchandize paintings and drawings produced in his workshop, might have been encouraged by Squarcione in nearby Padua who had been building up an impressive collection since the 1420s. Therefore, there are plausible reasons to believe that the arrangement to have Mantegna marry into his family was part of Bellini's plan to become heir to the Paduan heritage.<sup>45</sup>

One documented instance indicates the type of objects that were of interest to Jacopo. On December 6, 1439, he bought a *tavola intarsiada* (a picture composed of illusionistic wooden inlays in contrasting colors) from the estate of the painter Jacobello del Fiore (circa 1370–1439).<sup>46</sup> No longer in existence and not even necessarily made by Jacobello himself, this piece of marquetry was anyhow a rare and valuable art object for which Jacopo Bellini was willing to pay a considerable price.<sup>47</sup> What mattered here, with all probability, was less the work of art in itself, as far as style and iconography were concerned, than the perspectival games in design which *intarsie* were famous for at that time. Filippo Brunelleschi (1377–1446) and Leon Battista Alberti (1404–1472), the early investigators into painterly perspective, were attracted to specialists working in *intarsia* for the same reason. Vice versa, the influence of Brunelleschi's *tavolette prospettiche* can also be seen in the wooden panels that Antonio Manetti and Agnolo di Lazzaro created for the sacristy of the Florence Cathedral (1436) (fig. 5).<sup>48</sup> At an even earlier date, Arduino da Baiso, a carpenter (*magistrum lignarium*



5 Antonio Manetti and Agnolo di Lazzaro, *Intarsia*, S. Maria del Fiore, Florence

*subtilissimum*) from the Apennine region who joined Ghiberti's workshop in the 1420s, was famed for his *intarsie* in Lucca, Ferrara, and Mantua.<sup>49</sup> Squarcione, himself a specialist in linear perspective (see page 26), made designs for the *intarsie* of the sacristy of the Basilica di San Antonio (the Santo) in Padua in 1462, to be executed ten years later by Lorenzo Canozi da Lendinara for the price of 250 gold ducats.<sup>50</sup> As was the case with the two books of drawings, the abovementioned shield, and ancient sculptures, this *intarsia* was not just a valuable object but an exemplary artwork that went beyond Jacopo's style and expertise. Instead of being conditioned aesthetically, the interest in this and similar items of his collection was steered by the modern ambition to transform the traditional workshop (*bottega*), restricted as it was to the accomplishment of the master – the *capo bottega* – into a study (*studio*) of more universal academic standing.<sup>51</sup>

The *Louvre Album* is the first example of what may be called a proto-academic “database.”<sup>52</sup> It differs considerably in both size and scope from the large group of earlier pattern books dating from around 1400 that were studied by Robert W. Scheller and Joseph Rushton.<sup>53</sup> These were mostly travel sketchbooks or *taccuini*, that is, a collection of specific motifs in small format, such as animals, designs for fabrics or parts of the human figure – a “no-man's land between one work and another” (Scheller) – but not an album in the proper sense of the word.<sup>54</sup> This is also true for drawings based on antiquities that were begun by Gentile da Fabriano and subsequently handed down to Pisanello to be completed by him and his studio in the early 1430s. They document specific gestures and attitudes meant to be used in the form of a “repertoire” (Casu) rather than to display truly antiquarian or archeological interests.<sup>55</sup> By contrast, the drawings under discussion here are not at all concerned

with the fragmentation of motifs for the sake of collecting artistic material but rather present accomplished compositions that reflect upon intellectual and historical dimensions.<sup>56</sup> They are final and self-sufficient in the sense that they exemplify solutions to specific theoretical challenges that were meant to be not simply copied but studied as a way to understand the underlying principle.<sup>57</sup> Conceptually, the *Louvre Album* resembles, therefore, a precious scientific treatise rather than a catalogue or figurative archive.<sup>58</sup> The form of its presentation as a leather-bound book as well as the volume's content, manifesting a variety of subject matter that necessitated a table of contents, mark the difference. The fields of reference, presented almost systematically, are as follows: perspective and anatomy, archeology and architecture, botany and zoology, mythology and religion, contemporary chronicle and fashion, landscape and portrait. Finally, it is, therefore, not so much the visualization of artistic skill but rather that of theoretical knowledge – nourished by the want to partake in discussions traditionally reserved for a different strata of society by establishing a superior intellectual and, ultimately, social status within the figurative arts – that distinguishes the *Louvre Album*.<sup>59</sup> The impulse for this reform did not originate in Venice, nor was it brought about by Jacopo Bellini, the son of a tinworker or plumber, who had not received any humanist education.<sup>60</sup> Instead, the development was rooted in Padua, the most progressive center of academic teaching in Europe at the time.

## II. The Paduan Tradition of Scientific Painting

The recovery of the long-forgotten sciences of the ancients – *scienze non udite e mai vedute* (Alberti) – was an essential impetus for the renaissance of the arts.<sup>61</sup> Before both the approach to learning in the arts and the novel interest in antiquity could migrate to Florence and then to Venice, Padua was singular among Italian cities for its endeavors, documented since the Middle Ages, to ascertain its roots in Roman history and revivify its glorious past. Local men of letters were influential in establishing the *preumanesimo Padovano*, based on literary erudition and visual recreation.<sup>62</sup> The first in a long row of *litterati* was the Paduan native Lovato Lovati (circa 1241–1309), considered the “father of Humanism” by no less than Francesco Petrarch himself.<sup>63</sup> Lovato succeeded in retrieving three chapters (*decades*) of the *Ab urbe condita* by his “compatriot,” the Roman historian Titus Livy (59 BC–17 AD), and in getting his fellow citizens enthused about ancient history.<sup>64</sup> Padua's venerable ancestry is recalled through the Trojan Antenor, said to have founded the city in 1183 BC and to have chosen it as his burial site.<sup>65</sup> From this testimony, which was based on the authority of the Roman poet Virgil (*Aeneid*, I, 246–8), Lovato, along with his followers like Albertino Mussato (1261–1329), inferred that Padua was owed a primary position in the Veneto and equaled (if not surpassed) Rome itself.<sup>66</sup> To lend visible proof to the strong link between past and present, two public monuments were erected side by side: one to contain the bones of the Trojan hero (1283) and the other dedicated to his modern re-discoverer, Lovato Lovati (circa 1300) (fig. 6).<sup>67</sup> A similar monument was planned, though never fully realized, to commemorate Titus Livy on the occasion of finding an antique tombstone in Santa Giustina that bore the inscription VF / T LIVIVS / LIVIAE F / QUARTAE L / HALYS / CONCORDALIS /

PATAVI / SIBI ET SVIS / OMNIBVS.<sup>68</sup> The mausoleum next to the Santo church (circa 1325), built from Roman remains and dedicated to Lovato's pupil Rolando da Piazzola, testifies to the continuity of this tradition into the fourteenth century, as do Altichiero's frescoes in the *Sala Virorum Illustrium* of the Carrara palace (1368ff.), which are based on Petrarch's biographies of heroes from Greek and Roman history (*De viris illustribus*) as well as on his collection of Roman coins.<sup>69</sup>

The University of Padua, founded in 1222, but believed to date back to as far as the time of ancient Egypt, actively took part in this discourse.<sup>70</sup> Its Faculty of Medicine and Philosophy, together with the Sorbonne in Paris and the University of Oxford, became a leading center for the study of Aristotle, regarded as the foremost philosopher in Paduan history.<sup>71</sup> Available in Latin translations from Arabic, his writings facilitated the investigation of phenomena of the external world and subsequently the emergence of empiricism and natural sciences, which had been neglected under the rule of theology and Neoplatonic philosophy during the preceding centuries.<sup>72</sup> This gave rise, in particular, to two important disciplines, which likewise were to play a role in the *Louvre Album*: anatomy (the science of the human body) and optics (the science of vision and space).<sup>73</sup> Pietro d'Abano (1257–1316), who devised a synthesis of medicine and philosophy, Jacopo Dondi (circa 1290–1359) and Giovanni Dondi dell'Orologio (1318–1388), father and son, who were physicians, astronomers and constructors of an astronomical clock set up in public, and, eventually, Biagio Pelacani (1355–1416), who explored the relationship between optics and perspective, were lumineers in their respective disciplines and are widely recognized as the leading authorities of the time.<sup>74</sup> They were all active in Padua and it was from here that the minor arts, to which painting belonged, were able to partake in the exploration of the visible world.

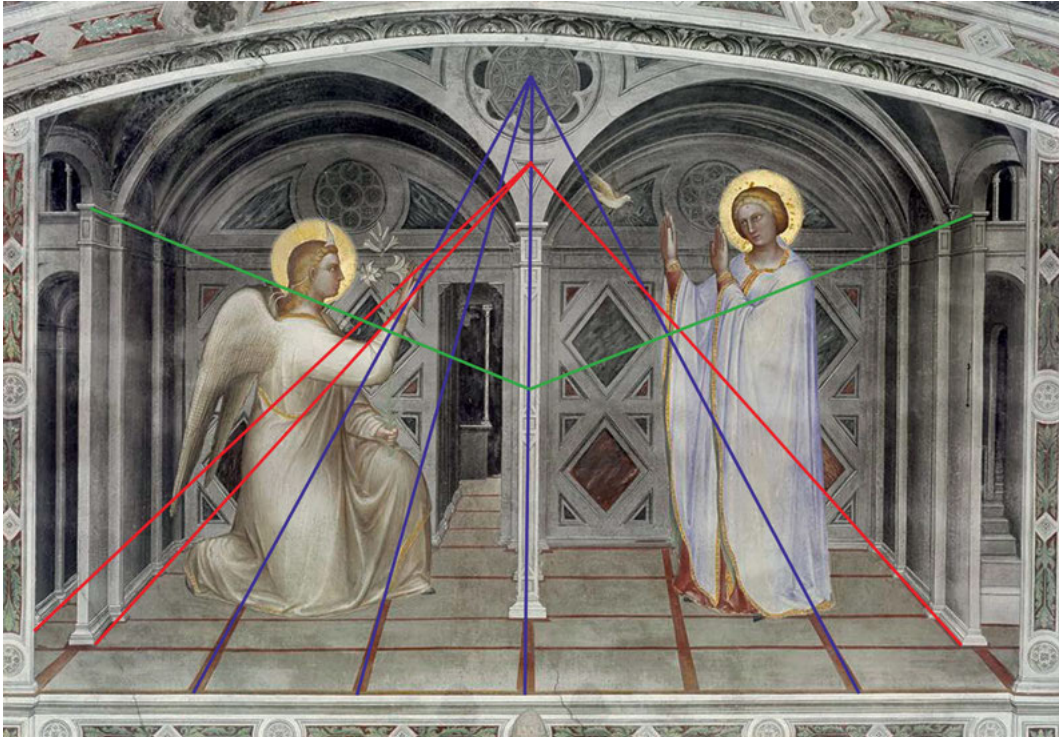
Accessing the subjects of science and philosophy and surmounting the rigid barrier which separated the liberal arts (*artes liberales*) from the mechanical arts (*artes mechanicae*), to which painters and sculptors were confined, required another intermediary discipline. Poetry, not philosophy, set the paradigm into motion, the primary initiator of which was Francesco Petrarca (Petrarch, 1304–1374).<sup>75</sup> In 1349, he moved to the Court of Giacomo II da Carrara and was to serve the Carrara Lords in Padua until his death.<sup>76</sup> It was due to Petrarch's conviction about interdisciplinary study, nourished by the reading of Pliny the Elder's *Natural History* (circa 77 AD), that painting was afforded a prominent position within the acknowledged sciences.<sup>77</sup> This conviction of Europe's foremost intellectual was echoed in the first comprehensive manual on art, which aspired to the rank of a treatise of the early modern era, written in Padua at the end of the fourteenth century by the Tuscan painter Cennino Cennini (circa 1370–1440), another member at the Carrara court. His "Craftsman's Handbook" (*Il Libro dell'arte*) served two aims: on the one hand, it explained certain technical innovations related to Giotto (circa 1276–1337) and his school, and, on the other, addressed the newly acquired dignity of the figurative arts. Painting was no longer considered a mere craft but an intellectual discipline, as it embraced practice and theory.<sup>78</sup> In his preface, Cennini argues that it befits the painter to be of equal rank as the poet, the reason being that his imagination (*fantasia*) makes him free to illuminate whatever is hidden under the surface appearance of things (*cacciandosi sotto ombra di naturali*).<sup>79</sup> The idea of the sisterhood of the arts and their common foundation in science was crucial for the concept of modernity in Early Renaissance Italy.<sup>80</sup>



6 *Tombs of Antenor and Lovato Lovati, Piazza Antenore, Padua*

Petrarch and Cennini only confirmed what a group of painters active in Padua during the 1370s had already put into practice. The Veronese painter Altichiero da Zevio (circa 1330–1390), having worked in the Carrara palace under Petrarch's and Lombardo della Seta's direction in around 1368, may well have been aware of the high expectations imposed upon him by the intellectual ambiance he was working in.<sup>81</sup> In his subsequent frescoes of the *Oratorio di S. Giorgio* (1378–1384), Altichiero increased the illusionism of his settings by creating a unified architectonic space whose orthogonals meet at the vertical axis in the middle of the painting and by relating the proportions of his figures to the scale of this painted architecture, thereby establishing a symbiosis between the reality of the depicted scene and the rationality of perception – a concept that Giotto had only started to approach in the frescoes of the Arena Chapel (1305).<sup>82</sup> The fresco decoration of the baptistry in the Duomo by the Florence-born artist Giusto de Menabuoi (1320–1391), created almost concurrently to Altichiero's frescoes (1375–1378), displays a similar knowledge of basic geometric perspective (fig. 7).<sup>83</sup> They both refer, as recent studies by Peter Scholz and Simone Westermann confirm, to a theory about optics developed by Euclid's *Optica* in ancient Greece (third century BC) and expanded upon in Alhazen's eleventh-century Arabic *Book of Optics* (*Kitab al-Manazir*) that had been brought to new conclusions by the physician Biagio Pelacani, professor at the University of Padua from 1384 to 1388 and 1407 to 1411.<sup>84</sup> Graziella Federici Vescovini and Hans Belting were among the first to have highlighted the impact of Pelacani's teachings for a new understanding of the dialectics of space and visual perception in terms of a rational system of information that was to be decoded on purely mathematical terms by the human intellect (*potentiam activam quam intelletiva dicitur*).<sup>85</sup> Pelacani's treatise dedicated to this problem, the *Quaestiones super perspectiva comuni*, thus became relevant not only for the Paduan school of painters but for the *Studio Fiorentino* as well, where he had continued to teach from May to September 1388, and where copies of the *Quaestiones* are attested for as late as 1428.<sup>86</sup> He is the first to have extended the purely mathematical theory of sight to a model of graphic representation, even if rudimentary in its definition.<sup>87</sup> The *punctus centricus*, the pivotal point of the Albertian construction, however, was yet unknown to him (see p. 44). This is the reason why Pelacani can be called a precursor of Alberti's *costruzione legittima* only in a very limited sense (Appendix II). Nevertheless, he seems to have incited painters, and probably patrons in his surroundings as well, to reflect further on the application of his theory, which explains the precocity of the Paduan school in comparison to any other in Europe.<sup>88</sup> Altichiero's fresco *Saint George Baptizing of the Pagan King* (circa 1380) foreshadows similar experiments in Florentine fifteenth-century when viewed in relation to, for example, Lorenzo Ghiberti's relief *The Meeting of King Salomon and the Queen of Sheba* (circa 1435) in the *Gates of Paradise* (figs. 8 and 9).<sup>89</sup>

The sophistication of the painters in late-fourteenth century Padua did not go unnoticed. Michele Savonarola (1385–1468), in his *Report Concerning the Magnificent Decorations of the Royal City of Padua* (circa 1466), praised the local school (*pictorum schola*) starting with Giotto (circa 1300), regarded as their prince (*princeps*), and including Guariento, Giusto de Menabuoi, Jacopo Avanzo, Altichiero, and Stefano da Ferrara.<sup>90</sup> The superiority of these painters in comparison to other schools, Savonarola argues, was based on the university environment that led to their advancement through their use of certain theoretical prin-



7 Giotto di Bondone, *Annunciation*, Baptistery, Padua

principles for their own needs.<sup>91</sup> Due to the appropriation of science, painting was no longer considered a mechanical craft based on manual experience but could be classed among the liberal arts that were based on theory.<sup>92</sup> A renowned physician himself, Savonarola confirmed Cennini's assessment concerning the modern relationship between theory (*scienza*) and practice (*operazione di mano*) yet was more germane in determining the result of this impact, which established the fame of Padua as a national center of studies:

And I do not belittle the university (*studium*) of painting, which is a singular ornament to our city, since it is associated to the study of letters and the liberal arts more than the other arts are, as it is a part of perspective, which deals with the projection of rays. This indeed is a part of philosophy. For Giotto, prince of painters, lives in our city through his many glorious and beautiful pictures, many of which are worthy of admiration, and so too the other four [painters], about whom we spoke earlier. Painters assemble from all of Italy in order to see them, and youths come, eager to study in this area, in order that they may then return to their own homes having been made more learned by them.<sup>93</sup>

What establishes the link between the painter's studio and the lofty sphere of academia is no longer the force of imagination that painters shared with poets, as noted in Cennini's *Libro dell'arte* (see above). Rather, it is the science of perspective which is considered part of philosophy and which is based on mathematics:

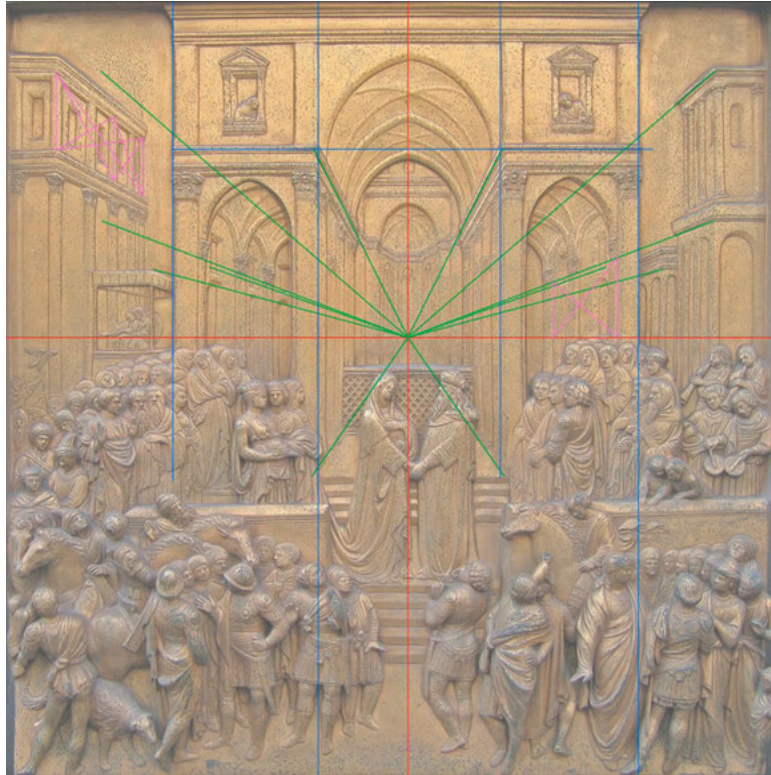
I turn at last to the glorious skilled craftsmen, and the men illustrious in their art, whose knowledge is not remote from philosophy, and is the application of the mathematical arts. These are the painters, to whom it is given to know the outlines of the figures and the projections of the rays; as their knowledge of perspective is famous, so too it may be demonstrated by them as practitioners.<sup>94</sup>



8 Altichiero, *St. George Baptizes the Pagan King*, Oratorio di S. Giorgio, Padua

Savonarola does not mention Pelacani's groundbreaking research in this context, yet there is little doubt that he was well aware of this affiliation, having been a member of the Paduan Faculty of Medicine and Philosophy in 1434 and perhaps due to his having met Pelacani personally upon his return from Florence to Padua in the years from 1407 to 1411.

Thus, Padua, not Venice, gave birth to modern painting. This development led from Giotto's *Arena Chapel* (1305) via Altichiero's *Oratorio di S. Giorgio* to Mantegna's frescoes in the *Ovetari Chapel* at the Eremitani Church (1448–1457). In the beginning, it was a small group of painters attracted to Pelacani's theories. Building upon Menabuoi's and Altichiero's experiments, a more systematic investigation of optical phenomena and the projections of lines in an empty space led to the establishment of an apparatus of rules that formed the basis of what may be called the first academy of painters – a modest yet efficient forerunner of Giorgio Vasari's *Accademia del Disegno*, founded in 1563. A figure of prime interest in this respect is the painter Francesco Squaricone (1397–1468), whom Savonarola does not mention as he seems to refuse to discuss *quattrocento* art in general.<sup>95</sup> However, Squaricone is discussed at length in Bernardino Scardeone's (1482–1574) book on Padua and its famous citizens.<sup>96</sup> Among other sources, Scardeone could rely upon Squaricone's autobiography written down in his (*libellum*), which is lost today.<sup>97</sup>



9 Lorenzo Ghiberti,  
*The Meeting of King  
Salomo and the Queen  
of Sheba*, Doors of  
Paradise, Baptistery,  
Florence

### III. Squarcione's Academy

Squarcione came from an affluent background. The family originated from Bovolenta, a small municipality 15 kilometers away from Padua. His father Giovanni had been secretary (*officialis, scriba*) to Francesco Novello da Carrara (1359–1405) and later notary.<sup>98</sup> In the early 1420s, together with his father-in-law, Francesco had started in the textile business in Padua, deciding to become a painter only somewhat later (as fn. 12). Writing about his early years, Scardeone conveys an impression of a carefree and privileged life:

From boyhood, he had taken the greatest delight in the study of painting, and shortly – as he writes of himself (*sic*) – on emerging from adolescence and being able from his age to live for himself after his own fashion, he determined to see the world and travel to distant cities and through different peoples and nations. Wherefore, he sailed to Greece and wandered all over that country, whence he brought home with him, both in his mind and in drawings, many things worthy of note that seemed likely to promote skill in his art. He journeyed in similar fashion all over Italy and won the friendship of many noblemen by his affability and virtuous disposition.<sup>99</sup>

This odyssey, paralleling Ciriaco d'Ancona's (1391–1452) career as a tradesman and antiquarian, lasted from about 1424 to circa 1426 when Squarcione decided to settle down and devote himself to the arts.<sup>100</sup> Abounding in theory and judgement – *humanitatis plenus*, as Scardeone has it – and without ever having obtained thorough training in any painter's studio and therefore possessing few practical skills (*non multae exercitationis*), he nevertheless wanted to pass his knowledge down to the next generation and instruct as many as possible (*delec-*

*tabatur eam ipsam quam callebat artem posteris tradere, et docere quamplurimos*).<sup>101</sup> He was the first to realize (*primus omnium sui temporis*) that in order to promote modern painting (*pingere in recenti*) it was no longer enough to follow the style of one single master; instead, a critical assessment of objective standards was required.<sup>102</sup> This is why he declared himself a professor of painting (*pictorum gymnasiarcha*) rather than the head of a workshop in the traditional sense (Scardeone). This could only be achieved, to make use of Cennini's terminology, by extending the realm of practice (*operazione di mano*) into that of theory (*teorica*) and science (*scienza*).<sup>103</sup> Recognized for its innovative potential, the success of his academy was immediate. Students came from all over Italy as well as from Germany, Dalmatia and Slavonia, confirming once again the international atmosphere of Padua at this time.<sup>104</sup>

One of the first to join the Paduan *studio* in 1431 was a certain Michele di Bartolomeo from Vicenza.<sup>105</sup> Mantegna, who was to become the greatest beneficiary of Squarcione's teaching method, had entered the Paduan painters' guild between 1441–1445, after being formally adopted by his master.<sup>106</sup> By that date, Squarcione had enlarged his house in *contrata Bersagli* towards Ponte Corvo and in the vicinity of the Santo church by adding a new building to accommodate his collections and the growing number of students.<sup>107</sup> Coming from different towns, these amounted altogether to 137, an astonishing number if one is to believe Scardeone.<sup>108</sup> Among them were Dario da Pordenone, Niccolò Pizolo, Matteo dal Pozzo, Marco Zoppo, Giorgio Schiavone [Ciulinovich], Carlo Crivelli, Agnolo di Silvestro, Dario da Udine, Michele Pannio, Giovanni Vendramin da Padua (1466) and Giovan Francesco di Ugucione (1467).<sup>109</sup> With the help of Squarcione's most gifted apprentices, the Paduan school of painting was to take the lead in Lombardy and the Veneto, if only for a brief period.<sup>110</sup> Squarcione's ambition and greed, however, undermined his capacity as an academician. It soon became evident that he was less knowledgeable than he pretended to be and was exploiting his most talented students to compensate for his own artistic shortcomings.<sup>111</sup>

Squarcione's innovative teaching method needs, nevertheless, to be set apart from his character.<sup>112</sup> Instead of confronting his students with what "he had executed himself or worked up from modern examples provided for copying" (Scardeone), considered common practice in the fifteenth-century painters' guilds in Padua and elsewhere, he wanted them to study models of different types and origins.<sup>113</sup> These may be divided into two groups: accomplished works of art mostly intended to be copied by the novices, as opposed to drawings and diagrams of a more theoretical and didactic character that were studied by advanced pupils.<sup>114</sup> The first group consisted of Squarcione's personal collection and the models derived herefrom that he had amassed and copied during his extensive travels in Italy and Greece.<sup>115</sup> These were modern paintings and engravings as well as classical sculptures (for the most part reliefs in marble as well as reproductions in plaster), medals and icons.<sup>116</sup> Placed at the disposal (*commoditatem*) of his pupils, they were meant to be studied following Squarcione's directions, who wanted his pupils – as is to be derived from his criticism of Mantegna's Ovetari frescoes – to maintain a critical stance between classicist forms and a naturalistic coloring.<sup>117</sup> The idea behind his method and the displayed teaching models that constituted the academy's major attraction might well have been derived from literary studies, as scholars have speculated before.<sup>118</sup> Gasparino Barzizza (circa 1360–1431), a professor of rhetoric and philology at the University of Padua from 1407 to 1421 and the highest authority on

Cicero in his time, was of particular importance in this regard.<sup>119</sup> He taught grammar and rhetoric in Padua and Venice (1407–1421) and had opened a private gymnasium for Latin and various liberal studies in Padua that was frequented by the contemporary *jeunesse dorée*: soon-to-be renowned humanists like Guarino da Verona (1374–1450), Vittorino da Feltre (1378–1446) and Pier Paolo Vergerio (1370–1444) counted among his most gifted pupils.<sup>120</sup> It is known that the young Leon Battista Alberti also studied under Barzizza between 1416 and 1421 as he made his way to Bologna.<sup>121</sup> The ancient model of a household company, where the master presides over a student family – as practiced by Squarcione one generation later – clearly originated in Barzizza's *contubernium* in the contrada del Pozzo del Campion.<sup>122</sup> The same is true for his teaching method, the “fomulario barzizziano” (Révest), based as it was on a collection of oratory prototypes as well as exemplary letters that had been carefully emended and adapted for the students to study, copy, and imitate (*ad exercitationem accommodatae*).<sup>123</sup> Spreading throughout the universities of Italy and Europe since the 1420s and greatly successful in purifying the Latin language in a neo-Ciceronian sense, it could not fail to impress Squarcione.<sup>124</sup> Squarcione's painters' academy was challenged, furthermore, by the accomplishments of Giotto's Paduan followers, including Cennini, and their recognition by Savonarola and other contemporaries (see above). Barzizza himself is reported to have occasionally made reference to this school – the teaching standards of “good painters” (*boni pictores*) who confront their apprentices with chosen figures and images (*quasdam egregias figuras, atque imagines, velut quaedam artis exemplaria*).<sup>125</sup> Comparison with the figurative arts is indeed an ancient topos in literature and does not necessarily document the philologist's familiarity with contemporary artistic practices.<sup>126</sup> Nevertheless, Barzizza seems to have invited painters and writers into a dialogue, and it was left to Squarcione to define his academy on similar terms.

The sequence of drawing first from drawings or prints, then from casts and originals and finally from the living model, in addition to lectures on perspective, geometry and anatomy, was to remain the standard program of academic curricula from Vasari's Florentine *Accademia del disegno* (1563) onwards.<sup>127</sup> Nicolaus Pevsner rightly pointed out that “theorists such as Félibien, in the fourth of his *Conversations on the Lives and Works of the Most Excellent Painters* (1666), also pleaded for it, conscious or unconscious of its being the old program of Squarcione.”<sup>128</sup> The novelty of his method for artistic learning was based on the authority of objective norms instead of personal style. It can best be illustrated by comparison with the experience that Michelangelo (1474–1564), at the age of fourteen, had upon entering Domenico Ghirlandaio's workshop in Florence in 1488. Unsatisfied with what his master had to offer, Michelangelo decided to abandon the workshop and study models as wide-ranging as Giotto, Masaccio, and Schongauer, from whom he had bought a print at the market in Florence on his own. It was up to Lorenzo de Medici (1449–1492) to provide a remedy for this dilemma by founding an academy and inviting Michelangelo to become a part of it.<sup>129</sup> Bertoldo di Giovanni (circa 1425–1491), the school's elected headmaster, was to challenge his pupils with the best of what was available in art – in great part classical models supplied by Lorenzo's personal collection.<sup>130</sup> Lorenzo may indeed have had some knowledge of the Paduan academy, even more so since Squarcione's *museum* was a point of general interest for distinguished visitors – Emperor Frederick III (1415–1493) having been one of them.<sup>131</sup>