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*The Criminal and the Saintly Body: Autopsy and Dissection in Renaissance Italy**

by KATHARINE PARK

ON THE 17TH OF AUGUST 1308 Chiara of Montefalco died in the small Umbrian monastery of which she had been the abbess. Her fellow nuns did not take any steps to preserve her body. Nonetheless, for five days it remained uncorrupted and redolent of the odor of sanctity, despite the blazing summer heat. At that point—not wanting to tempt fate further—the community decided to embalm the precious relic. In the words of Sister Francesca of Montefalco, testifying some years later at Chiara’s unsuccessful canonization procedure, “They agreed that [her] body should be preserved on account of her holiness and because God took such pleasure in her body and her heart.”¹ They sent to the town apothecary for “balsam and myrrh and other preservatives,” as the apothecary himself testified,² and they proceeded to the next step in contemporary embalming practice, which was evisceration.

Sister Francesca’s narrative continues: “And after the other nuns had left, Sister Francesca of Foligno, who is now dead, and Illuminata and Marina and Elena, who is now dead, went to cut open the body, and the said Francesca cut it open from the back with her own

*This article was initially presented as a paper at the New England Renaissance Conference in 1990. I am grateful to Caroline Bynum and Joan Cadden for criticism and comments on earlier drafts.

¹Sr. Francesca’s testimony transcribed in Menestò, 339. See also Camporesi, 3–7 (based on a seventeenth-century account of the same events) and in general ch. 1; and the various articles in Leonardi and Menestò.

²Menestò, 428.

hand, as they had decided. And they took out the entrails and put the heart away in a box, and they buried the entrails in the oratory that evening. On the following evening, after vespers or thereabouts, the said Francesca, Margarita and Lucia and Caterina went to get the heart, which was in the box, as they later told the other nuns. And the said Francesca of Foligno cut open the heart with her own hand, and opening it they found in the heart a cross, or the image of the crucified Christ.”

Over the course of the next two days, Francesca of Foligno and her fellow nuns cut into the heart yet again, finding even more miraculous marks of Chiara’s sanctity, all formed of flesh: the crown of thorns, the whip and column, the rod and sponge, and tiny nails. Encouraged by these signs, they examined the other organs, which they had disinterred from the oratory, and discovered—again in the words of Francesca of Montefalco—that “inside Chiara’s gall bladder . . . there were three things that seemed to be round, so that they could not relax or rest until they knew what they could be. So they consulted with Maestro Simone of Spello, [the communal doctor of Montefalco and physician to the monastery], in order to ask him if these objects could have been caused by some illness. And they placed the gall bladder in his hand so that he could open it up. He did not want to do this because, as he said, he did not feel himself worthy. So Francesca cut open the gall bladder and found in it three small stones.”³ At this point—and here we take up the testimony of Chiara’s brother, a Franciscan friar also in Montefalco—the nuns then came to the Franciscan convent to show him his sister’s remarkable heart. From there they all proceeded to the church of Santa Croce where they displayed it to a host of townspeople, several of whom were healed by its miraculous power.⁴

I want to make two points about Sister Francesca’s striking narrative. The first is that although we may find her account disquieting, there is no sign that her contemporaries reacted in the same way. Her narrative was corroborated by dozens of witnesses, including the cautious Maestro Simone himself, and neither they nor the ecclesiastical authorities charged with investigating Chiara’s claim to sainthood indicated any reservations—or even any surprise—about the events of that hot week in August. Some questioned the nuns’ credulity, but none impugned their piety. Indeed,

³Ibid., 341.

⁴Ibid., 296, 453.

Chiara's postmortem was not an isolated instance. We can find a close analogue in the case of Margarita of Città di Castello (d. 1320), a Dominican tertiary whose heart was also extracted during embalming and was found to contain three stones engraved with images of the Holy Family, a procedure performed before the high altar in the presence of what her anonymous biographer called a "multitude of friars."⁵

My second point is that the events described by Sister Francesca coincide with the emergence of autopsy and dissection as a regular and integral part of both legal practice and medical training in the cities of northern and central Italy. I aim here to explore the implications of these events and this conjunction—it is, I will argue, no coincidence—for the period between the first recorded Italian autopsy in the 1280s and the work of Andreas Vesalius and his contemporaries in the mid-sixteenth century. In the process I hope to lay to rest the persistent misconception that there was in medieval and Renaissance Europe a deepseated "taboo" connected with corpses and the closure of the body. According to the most recent versions of this myth, opening the body was seen not only as dangerous, contaminating, and polluting, but also as a violation of the divine prohibition on forbidden knowledge—perhaps even "the model for all such prohibitions," in the words of Marie-Christine Pouchelle.⁶ From this point of view, the practice of dissection was essentially punitive. Restricted to the cadavers of condemned criminals, it functioned to prolong their sufferings during execution into death. The medieval and Renaissance anatomist, despite elaborate social, verbal, and pictorial strategies designed to distance himself from these associations, nevertheless acted as an arm of the coercive state. First cousin to the executioner and torturer, he inscribed its penalties on the helpless bodies of those who transgressed its norms.⁷

⁵*Vita beatae Margaritae*, 27. The embalming was done by two surgeons at the request of the municipal government.

⁶Pouchelle, 1990, 82; see also 70 and in general ch. 5. Pouchelle cites as evidence the poor reputation of Nero, who was supposed to have had his mother killed and opened in order to see the womb that bore him—although it is hardly necessary to invoke a taboo against dissection in order to understand medieval reservations concerning his behavior.

⁷Idem; see also Harcourt and esp. Sawday, both evidently influenced by Foucault, pt. I, and Barker. Similar ideas appear in an English context, to which they appear considerably more appropriate, in Richardson, ch. 1.

The myth of medieval resistance to dissection is an old one, and like the flat-earth myth with which it is often associated, it has proved protean and apparently impossible to kill. Its late twentieth-century incarnation is especially vivid and attractive, invoking the traditional schism between medieval religiosity and the scientific rationalism of the Renaissance (here given a novel negative twist) while also mobilizing our liberal sympathies concerning capital and corporal punishment. It is also, like its more triumphalist predecessors, partial and distorted, imposing a false unity on the long millennium between Augustine and Vesalius and ascribing to the people of that period modern anxieties and a modern sensibility essentially alien to their own. The true situation, as it turns out, was considerably more complicated. From at least the early twelfth century, opening the body was a common funerary practice, as the examples of Chiara of Montefalco and Margarita of Città di Castello indicate. Over the course of the fourteenth century, it also established itself in Italian medicine as not only tolerated but frequently requested on the part of individuals and their families. Not until the mid-sixteenth century do we begin to see persistent hints of a new popular suspicion concerning dissection. I will argue that this suspicion was not rooted in age-old taboos; rather, it grew out of dramatic new anatomical practices widely perceived as violating not the sanctity of the body, in the first instance, but the personal and familial honor expressed in contemporary funerary ritual. And it was reinforced by new, and not unwarranted, fears that anatomists themselves occasionally acted as executioners.

OPENING THE BODY: AUTOPSY AND DISSECTION BEFORE 1500

The first recorded case in Italy of a human body being opened for inspection dates from 1286. In that year, according to the chronicler Salimbene, "there was in Cremona, Piacenza, Parma, Reggio, and many other Italian cities and bishoprics, a great mortality among both humans and hens. And in Cremona, one woman lost forty-eight hens in a very short time. A certain physician had some of the [hens] opened and found [that] . . . there was a vesicular aposteme on the tip of each hen's heart. He also had a dead man opened and found the same thing," a coincidence so suggestive that

it moved a Venetian physician to issue a bulletin warning against the dangers of eating chicken and eggs.⁸

The practice of autopsy to determine the cause of death was quickly transferred from a public health to a forensic context in Bologna, which boasted the most advanced medical and legal faculties of the day. From the mid-thirteenth century the commune of Bologna, like several other north Italian cities, had appointed a pool of well respected local doctors who could be called on to testify in trials involving assault and suspected murder. Initially they worked from external inspection, but by shortly after 1300 we find them performing autopsies on victims in order to look for hidden and internal causes of death, most commonly when poison was suspected. In 1302—the first recorded case of this sort—Azzolino degli Onesti was opened up at the judge's request by a commission of two physicians and two surgeons, who concluded from their examination that “the said Azzolino had not died of poison, but rather and more certainly from a large quantity of blood that had gathered around the great vein, called the chilio vein, and the nearby veins of the liver.”⁹ Similarly in 1307, one year before the opening of Chiara of Montefalco, a woman named Ghisetta was autopsied and found to have died as a result of internal bleeding from a wound that appeared superficially as healed.¹⁰ We can find another roughly contemporary example in Pietro d'Abano's *On Poisons*, which mentions the autopsy of a Paduan apothecary who had accidentally swallowed a lethal quantity of mercury.¹¹

It seems clear, therefore, that the first cases in which bodies were opened and their contents inspected all involved autopsies and

⁸Salimbene, 2:894. The practice of autopsy to determine cause of death may have been current considerably earlier in the Byzantine Empire. For a case reported by William of Malmesbury in the twelfth century, see O'Neill, 429–30, n. 5. The most comprehensively documented account of the early history of autopsy and dissection is still Artelt.

⁹Cited in Artelt, 17. On the use of expert medical testimony in Bolognese legal practice, see in general Ortalli and Dall'Osso. On early autopsies in particular, see Premuda, esp. 124–27.

¹⁰Siraisi, 1981, 113. For another example from 1335 involving a woman poisoned by her husband, see Artelt, 18.

¹¹Pietro d'Abano, ch. 3, fol. [5]: “Quidam apotecarius cum de nocte tempore magni estus sitire temptans invenit ampullam plenam argento vivo quod bibit, et mane inventus est mortuus, et invenientes argentum vivum exire de ano, anotomizatus fuit, et inventus fuit sanguis circa cor congelatus et ipsum cor similiter. Inveneruntque in stomacho fere libram unam argenti vivi.”

postmortems—procedures carried out on a corpse to gain information about the physical state of a particular individual. In the cases of Chiara and Margarita the concern was simply extended to their spiritual state. By the middle of the thirteenth century, in fact, it was widely assumed that the saint's body differed from that of other people, in the way that the victim of plague or poisoning was recognizable by certain unmistakable signs. These differences were not confined to incorruptibility and the odor of sanctity but also included external and internal marks, such as stigmata and the alien structures found in Chiara's and Margarita's hearts.¹²

Postmortems of this sort did not destroy the contours of the body. Thus they were fully compatible with contemporary Italian funerary practices, whether these involved embalming the corpse or immediately transporting it to church for burial, wrapped in the traditional pall. They appear in fact to have grown out of the increasingly common practice of embalming, which, as we saw in the cases of Chiara and Margarita, normally involved evisceration and was used to preserve the bodies of saints, of people who had died some distance from their chosen place of burial, and of notables whose funerals might take some time to organize and prepare. The task of preparing the body—one early chronicler even called it an “anatomy”¹³—was often left up to the attending doctor, though cooks and confessors might also serve, and we know of several instances prior to the late thirteenth century in which this provided (apparently incidentally) the occasion for judgments regarding pathology and cause of death.¹⁴

In order to judge the nature and significance of individual anatomical and physiological differences, doctors had to have some idea of human norms. Thus, it makes sense that contemporary with the appearance of formal autopsies in the years around 1300 we find

¹²See in general Vauchez, 499–518; and Bynum, 1989, 163–69, who points out that corporeal marks of sainthood were particularly characteristic of holy women.

¹³Cited in Schäfer, 496. For a survey of late medieval funerary practice, see Finucane, and (for Italy) Strocchia, 1992, pt. 1. On embalming in the Middle Ages, see in general Diepgen, Schäfer, DuParc, and especially von Rudloff, 22–39. The techniques of embalming and autopsy are so similar that it is almost impossible to distinguish them in contemporary images; see, for example, the conflicting interpretations of one of the earliest European representations of an open body, in the Bodleian, MS. Ashmole 399 (ca. 1300), in MacKinney, 100–01 and fig. 96, and Artelt, 12, n. 13. On the other hand, it is clear that the image does not refer, as is often claimed, to a dissection.

¹⁴E.g., Schäfer, 492; and Wolff, 265–66.

the first evidence of a different but related practice—dissections aiming to illustrate and explicate those norms. These were designed to accompany the teaching of medicine and associated with the reformed medical curriculum put into place at the university of Bologna by the circle around Taddeo Alderotti. It is unclear whether the first dissections preceded or followed the first forensic postmortems. Although Taddeo was probably dissecting cadavers a decade before the postmortem of Azzolino in 1302, the first unambiguous account of such a dissection refers to 1316 and appears in the influential anatomy textbook of his student Mondino de' Liuzzi.¹⁵ Certainly the two developments were closely related; thus, one of physicians who autopsied Azzolino's cadaver, Bartolomeo da Varignana, also taught medicine with Taddeo at Bologna.¹⁶

The earliest dissections seem to have taken place in private houses (as did other forms of teaching) and were probably relatively informal, involving only the master and a small group of disciples. They are for that reason relatively difficult to document. To my knowledge, only one such case (presumably quite atypical) made its way into the public record. In 1319 four students of Master Alberto of Bologna were prosecuted for robbing a grave and bringing the corpse to the house where he lectured "so that the said Master Albert could teach them to see what is to be seen in the human body."¹⁷ The practice of dissection seems to have been codified quite quickly, however—partly doubtless to avoid such episodes—in the form of the regular, university-sponsored anatomy. As described by Mondino, these four-day exhibitions took place once or twice a year and were performed on the bodies of condemned criminals, both male and female, supplied to the medical faculty by the *podestà*.

The anatomy differed in purpose and completeness from the civil or forensic postmortem. Rather than explaining the spiritual or physical state of a single individual, it aimed to illustrate to medical students general anatomical and physiological principles. And

¹⁵Mondino de' Liuzzi, [26]. English trans. in Grant, 733. On the early history of anatomy and dissection at Bologna, see Siraisi, 1981, 110–13, and in general Siraisi, 1990, ch. 4; Martinotti, 3–32; Artelt, 18–20.

¹⁶See Artelt, 17; and Siraisi, 1981, 45–49.

¹⁷Trial record transcribed in Giacosa, 603–08 (quotation on 607). The authorities showed no particular interest in the dissection itself but concerned themselves exclusively with the sacrilege involved in disturbing a recent grave.

unlike the more limited autopsies, it involved the complete or near complete disaggregation of the body including the face, as Mondino's description of the anatomy of the eyes and jaws makes clear. The remnants of these dissected bodies may well have been given some sort of funeral by local authorities or by the students and teachers involved, but the ceremonies must have been altered to suit the circumstances, since Italian funerary ritual centered on the physical object of the corpse, normally covered only by a cloth and usually exhibited with its face exposed.¹⁸

Over the course of the fourteenth century both autopsy and dissection became increasingly common, spreading rapidly to other northern Italian cities. During the summer of 1348, for example, the communes of both Florence and Perugia paid doctors to open the bodies of several people who had succumbed to the mysterious new epidemic devastating their inhabitants, and the same thing happened in Padua during the plague of 1363.¹⁹ Similarly, over the course of the mid-fourteenth century the universities of Perugia, Padua, and Florence moved to require attendance at one or more dissections for candidates for the degree of doctor of medicine, a requirement also quickly adopted by the new colleges of doctors springing up within the Italian guilds.²⁰

Dissections of this sort, like autopsies of plague victims, were relatively infrequent: guilds, colleges, and universities typically mandated only one or two a year. Far more common by the time we reach the fifteenth century were the postmortems performed by doctors on their private patients. Consider, for example, the death in 1486 of the Florentine patrician Bartolomea Rinieri, as described by her husband in his *ricordanza*: "Early in the morning my wife Bartolomea died at the age of forty-two or thereabouts. She died of a diseased womb; this caused a flux which had lasted about eighteen months and which no doctors could cure. She asked me to have her autopsied so that our daughter or others could be treated. I had

¹⁸Strocchia, 1992, 21–22 and 39–40; and Cecchetti. See also Chiffolleau, 121 and 132; and Ariès, 168–70. For a graphic illustration of the relatively exposed condition of the corpse during the funeral, see the illumination in the *Liber regulae* of the Roman hospital of Santo Spirito in Sassia from ca. 1300, reproduced in Monachino, Fig. 52.

¹⁹Florence: Park, 1985, 97; Perugia: Busacchi (including transcriptions of two chronicle entries); Padua: Premuda, 127.

²⁰Ciasca, 279; Park, 1985, 38–39; Ongaro, 94; Premuda, 128.

this done, and it was found that her womb was so calcified that it could not be cut with a razor."²¹

Bartolomea's story was typical; a patrician who could afford the best in medical care, she requested her own postmortem. In many such cases, in fact, the initiative came from the patient or his or her family, and the reason most commonly invoked was the fear of hereditary disease. When people, particularly mothers, died of mysterious and incurable illness, they or their families frequently worried that the same disease might strike their children or siblings, and they hoped that autopsies would provide their family doctors with all possible information concerning prevention and cure.

A similar case was recorded by Bernardo Tornì, professor of medicine at Pisa at about the same time. A Florentine judge had asked Tornì to autopsy his young son, "for to lose one's offspring is hard," Tornì wrote, "harder to lose a son, and hardest [to lose him] to a disease not yet fully understood by doctors. But, for the sake of the other children, I think that to have seen his internal organs will be of the greatest utility." Tornì diagnosed the problem as an obstruction in the vein leading to the liver, and he closed his opinion with a referral to a trustworthy local doctor, prescriptions for several different preventive medicines for the other children, and a promise to keep himself informed regarding their health.²²

Not all clients were motivated by parental love, however. The fifteenth-century Florentine physician Antonio Benivieni recalled one case in which relatives had a man autopsied "rather to expose the ignorance of his doctors than to know the nature of his illness."²³ Benivieni also records the only instance I have found so far of familial resistance to the practice. His treatise *On Some Hidden*

²¹Archivio di stato di Firenze: Conventi soppressi-95, 212, fol. 171; transcribed in Park, 1985, 53-54. For a similar case from 1478, see the *ricordanza* of Filippo di Matteo Strozzi in Archivio di stato di Firenze: Carte strozziane, ser. 5, 22, fol. 97: "El dì sulle 21 hora li comincìo una doglia grande intorno al cuore. Giròssi sul letuccio e di qui se fecie portare ne' letto, ramarichandosi sempre grandemente del cuore. E per molti ripari vi si facessino per donne e per medici nulla govò. Chè circha a hora 23 finì. Fecy aprire il corpo e infra li altri vi fu a vederlo maestro Lodovico, e disse mi poi aver trovato la matricie piena di sangue putrafatto, e che questo la fecie perire. E apresso che avea il feghato molto ghuasto e simile il polmone, e che già il polmone si era cominciato a picchare alle reny. E che se non periva di questo male sarebbe chaduta nel tixicho."

²²Tornì, *Relatio anatomica*, in Thorndike, 1929, 126 and 131; Latin text 290-94.

²³Benivieni, 1952, 636. This edition of Benivieni contains 65 cases omitted from Benivieni, 1954.

and *Wondrous Causes of Disease and Healing*, compiled in the years before his death in 1502, includes almost twenty examples of autopsies he performed or witnessed in the context of his own medical practice. On one occasion, however, when he wanted to open a patient who had died of vomiting and diarrhea, “the relatives refused permission,” as he put it, “through I don’t know what superstition.”²⁴

As this example shows, not all the inhabitants of Renaissance Italy were comfortable with the practice of opening the body. Nonetheless, there is no sign of a general (or even common) prohibition concerning the opened corpse per se. Historians searching for evidence of such a prohibition often invoke the famous bull of Boniface VIII, *Detestande feritatis*, promulgated in 1299 and reissued in 1300. But an informed reading of this bull and its reception reveals a different story. Boniface’s decree condemned not dissection or autopsy but a much more extreme funerary practice that involved dismembering the body and boiling the flesh off the bones in order to allow them to be more easily transported for distant burial.²⁵ Although common among the aristocracy and royalty of northern Europe, this practice was not current among Italians, who seem to have had considerably less investment in their place of burial and who, if they wished temporarily to preserve a cadaver, relied on embalming, as we saw in the case of Chiara of Montefalco.²⁶ Nowhere in the bull did Boniface prohibit evisceration, which seems to have been accepted as a practical necessity even by canonists and theologians with a strong investment in bodily integrity. Several years later, in 1303, he did refuse a French bishop’s request to prepare his brother’s corpse for transportation home from Italy, forbidding him to “cremate, boil, or even cut into it.”²⁷ But neither the bull nor the letter had any discernable impact on either funerary or dissecting practices in Italy (unlike France), except that it prevented Mondino from demonstrating several small bones in

²⁴Benivieni, 1954, 80.

²⁵See Brown for a detailed discussion of the circumstances surrounding the bull and the issues raised by it. Text in Digard, 2:576–77 (no. 3409).

²⁶Details on the history and geography of these practices in Brown, 226–34; and the sources in note 13 above.

²⁷Brown, 239. Text in Digard, 3:754 (no. 5218). In the same year, the French cardinal Jean Lemoine glossed *Detestande feritatis* as applying also to evisceration; see Brown, 250.

the head; these “cannot be well seen unless they are removed and boiled,” he noted, “but owing to the sin involved in this I am accustomed to pass them by.”²⁸ From all available evidence, Boniface’s bull and letter were taken as irrelevant by generations of Italian medical professors, private doctors, judges, city councils, and even by later popes, several of whom were themselves embalmed.²⁹

This is not to say that thirteenth- and fourteenth-century Italians had no interest or investment in the fate of the physical body after death—merely that this seems on the whole to have been a less charged issue in Italy than in northern Europe, both in theory and in practice.³⁰ Unlike their northern counterparts, Italian nobles and princes did not typically make elaborate provisions for their corpses; they neither stipulated that they be dismembered for interment in several separate sites, nor did they request heroic measures of preservation—evisceration, sealing in animal hides, boiling—to allow their bodies to be transported long distances for burial.³¹ Italian embalming techniques usually aimed only to preserve the corpse for a few days to allow for the organization of the funeral, and only candidates for sainthood such as Chiara or Thomas Aquinas had their bodies divided, in order to diffuse their magical powers over as wide a territory as possible. Similarly, the debates over bodily integrity that so exercised northern canonists and theologians seem to have found few echoes among Italian writers.³² Boniface VIII was of course the principal exception, and he may have taken the position he did for personal or political reasons. Certainly he was aware of its novelty.³³

²⁸Mondino, [47]; trans. in Grant, 739. On the bull’s much greater effect in France, see Artelt, 23–24; Alston 229–32; Brown, 250–51.

²⁹Von Rudloff, 19–22; and Wolff, 265. It is not clear how many of the fourteenth-century cases involved opening the body. See Alston, 235–36, for a transcription of the physician Pietro dell’Argelata’s description of eviscerating and embalming Alexander V in 1410.

³⁰See Park, forthcoming.

³¹See Paravicini Bagliani, 244–50, on the differing funerary instructions given by Italian and northern European cardinals in the later thirteenth and early fourteenth centuries, and in general Cecchetti (fourteenth-century examples); and Cohn, 114.

³²On these debates and the philosophical and theological issues they raised, see Bynum 1991², 260–69; Brown, 235–45; Santi.

³³For Boniface’s personal concern with fame, immortality, and the fate of the corpse, see Paravicini Bagliani, 274–79; for his possible political motivations, Brown, 247–49.

If there were no obvious taboos surrounding opening the body, then, how can we explain the often cited fact that formal university anatomies were typically performed on the corpses of condemned criminals? Does the practice indicate a punitive intent? Here I think the answer is complicated and hinges on the universal stipulation that the criminal be of foreign birth and preferably of low degree. In the words of the anatomist Alessandro Benedetti, writing in 1497, "By law only unknown and ignoble bodies can be sought for dissection, from distant regions without injury to neighbors and relatives."³⁴ I would argue that these people were dissected in the first instance qua poor foreigners rather than qua criminals, as is clear from the mid-fifteenth-century statutes of the university of Bologna, which required only that the cadaver belong to a person who came from at least 30 miles away.³⁵ This hypothesis gains further support from the fact that hospital patients were the next major group to come under the dissector's knife, as we will shortly see. Like hospital patients, foreign criminals had no relatives nearby with an investment in a conventional and honorable funeral and usually no money to guarantee one for themselves.

In other words, these people risked dissection because they were marginal members of society, but they were marginal on account of their poverty and geographical origin as much or more than their judicial status. The latter merely provided a jurisdictionally tidy solution to the problem of supplying medical faculties with cadavers, since the rector of the university, who oversaw dissections, and the podestà, who oversaw executions, were both municipal officials. There was indeed a stigma associated with public dissection—"may God preserve us from such a fate," wrote one early fifteenth-century doctor³⁶—but this did not arise from the opening of the body per se, as is clear from the widespread private practice of autopsy and embalming. It lay rather in the dramatic violation of personal and family honor involved in public dissection, as Benedetti's reference to relatives and neighbors implies. Not only was public

³⁴Benedetti, fol. 10v; trans. in Lind, 83. See in general Martinotti, 50; Ciasca, 280; Nardi, 242. Thus, the 1388 statute of the university of Florence required the dissector to be "captiva progenie, paucorum amicorum, et propinquorum" (Gherardi, 74).

³⁵Malagola, 319 (amendment of 1442); note that no such restrictions were mentioned in the statute of 1405 where the dissection had only to be licensed by the rectors to avoid "rixae et rumores in reperiendis seu querendis corporibus" (Malagola, 289).

³⁶Bertapaglia, fol. 299v. This account is certainly not by Bertapaglia but by one of his contemporaries at Padua; see Thorndike, 1929, 68–69.

dismemberment the dramatic penalty for particularly loathsome crimes, but dissection required lengthy public exposure of the naked body (also used as a humiliating punishment). This gave the anatomization of female subjects a particular charge in a society that associated female honor with chastity and avoidance of the public eye.³⁷ Furthermore, dissection compromised the identifiability and hence also the personal identity of the corpse, symbolized by its exposed face, and forced alterations in the ritual of the funeral, which played such an important part in family honor and prestige.³⁸

The importance of funerary ritual appears clearly in the university and municipal statutes and records concerning dissection. In Florence, for example, students attending a dissection were required to pay five lire for “having the cadaver brought to the church after the anatomy, and having it buried, and celebrating an office for its soul,”³⁹ while the books of the *Otto di Guardia*, the police magistracy that supplied criminal bodies to the university, scrupulously noted that these were to receive a proper funeral.⁴⁰ Faced in the middle of the fifteenth century with a shortage of foreign criminal cadavers for their public dissections, the Venetian college of doctors and surgeons required students attending the dissection not only to pay for but also to attend the subsequent funeral in hopes of encouraging local families to offer their dead for dissection.⁴¹ It would be interesting to know if anyone agreed.

THE ANATOMICAL RENAISSANCE

As this last provision suggests, the supply of cadavers for public dissection was sharply limited. Executions were rarer in fifteenth-century Italian cities than we often imagine—Florence averaged

³⁷On dismemberment, Pertile, 269; Camporesi, 19–22. On public exposure, Edgerton, 65.

³⁸Strocchia, 1989. Boniface VIII, who objected to any mutilation of the corpse, laid particular stress on its face; see Paravicini Bagliani, 255.

³⁹Gherardi, 75 (statute of 1388). According to the books of the confraternity of Santa Maria della Croce al Tempio in Florence, the remains of dissected criminals were buried in the confraternity’s chapel of Santa Maria in Campo; see Biblioteca Nazionale di Firenze: MSS. II, I, 138, e.g., ad annos 1421 (no. 25), 1436 (no. 169), 1444 (no. 206). The Bolognese statute of 1405 set maximum expenses at sixteen lire for the dissection of a man and twenty for that of a woman, but does not further specify where the money is to go, or why female cadavers were more expensive. See Malagola, 289–90.

⁴⁰See, for example, Landucci, 273, n. 1.

⁴¹Ciasca, 280. Prosperi, 962, points out that it was often hard to find people to attend the funerals of the executed and that this was one of the principal motivations behind the founding of the confraternities for the comfort of condemned criminals.

between six and seven a year, for example—and only a very small proportion of executed criminals fit the criteria established by the university and guild: foreigners of low birth hanged during the winter months. (In the days before refrigeration summer dissections were unusual, for obvious reasons.)⁴² Nonetheless, the problem of supply did not appear critical, thanks largely to the limited demand for cadavers. Anatomy in this period was a static discipline, and dissections had a pedagogical end. It was widely acknowledged that “no one can be a good or fully trained doctor unless he is familiar with the anatomy of the human body,” in the words of the 1388 statute of the University of Florence,⁴³ but there was little sense of anatomy as an arena for research. In this sense, dissections functioned rather like an extension of anatomical illustration. Their goal was not to add to the existing body of knowledge concerning human anatomy and physiology but to help students and doctors understand and remember the texts in which that knowledge was enclosed.⁴⁴

The situation changed dramatically in the years around 1490 with a remarkable flowering of interest in anatomy as a problem not just of teaching but also of research. This enthusiasm for anatomy was not confined to doctors but swept up contemporary artists and other laymen, as is well known. Some artists began to perform their own dissections,⁴⁵ while prominent citizens became a fixture at university anatomies, which later in the sixteenth century developed into theatrical events attracting an enthusiastic and often raucous crowd. The reasons for this change are complicated. They include the revival of antique art, with its interest in naturalism; the new enthusiasm of humanist doctors and scholars for the works of the Greek medical writer Galen of Pergamon, whose lost treatise on anatomy was recovered at exactly this time; and as we move into the sixteenth century the increasing availability of printed and il-

⁴²Figures based on the first fifty years (1420–69) of records kept by the confraternity of Santa Maria della Croce al Tempio. Of the 331 people executed during that period, fewer than a fifth were foreigners and only ten were women. See Biblioteca Nazionale di Firenze: MS. II, I, 138, ad annos 1420–1469, tabulated according to form of execution in Edgerton, App. B.

⁴³Gherardi, 74.

⁴⁴Siraisi, 1990, ch. 4. French, 1979, 465–68, explores the way in which medieval anatomists applied the rhetorical techniques of textual commentary to the explication of physical structures in the body.

⁴⁵See Schultz, chs. 2–4.

lustrated works of anatomy designed as coffee table books for a general audience interested in medicine and the secrets of the natural world.⁴⁶

Here, however, I want to focus not on the causes of this renewed interest in anatomy but its effects. The size of the audience increased dramatically in formal university dissections, which now began to assume a truly public character. The 1405 statutes of the University of Bologna allowed no more than twenty students at the anatomy of a male cadaver and thirty at that of a female. In his *Commentaries on Mondino* (1521), in contrast, Jacopo Berengario da Carpi claimed to have demonstrated the placenta of a hanged woman to “almost five hundred students at the university of Bologna, together with many citizens.”⁴⁷ These larger audiences could no longer be accommodated in private houses but required more spacious quarters: temporary structures of seats and risers set up in the interiors of churches, for example, and later in the sixteenth century, permanent anatomy theaters.⁴⁸ As part of the same process, the demand for dissectable bodies quickly escalated beyond the meager but regular trickle supplied by the local gallows and families (if any) swayed by the prospect of a free funeral. We can get some sense of the numbers involved when we consider that the fifteenth-century medical professor Bartolomeo da Montagnana wrote with considerable authority, having opened at least fourteen bodies. By 1522 Berengario claimed to have anatomized several hundred.⁴⁹

Berengario’s *Commentaries* give a clear sense of the new hunger for cadavers that drove early sixteenth-century anatomists.⁵⁰ He dismissed public dissections as useless displays, of interest only to tyros and curious townspeople. The true anatomist, he emphasized, worked in private, slowly and methodically, surrounded only by a handful of students. Rather than choosing his bodies for their size and typicality (the case with public dissections), he sought out bodies of all descriptions: male and female, virgin and sexually experienced, young and old, healthy and sick, starved and well fed.

⁴⁶See in general Ferrari, 55–61; French, 1985; Lind, 3–19; Schultz, ch. 2.

⁴⁷Malagola, 289 (statute of 1405), trans. in Thorndike, 1944, 283; Berengario, fol. 222v.

⁴⁸See Ferrari, 61–66, 72–87; Martinotti, 76–78.

⁴⁹Bartolomeo da Montagnana, fol. 202v (consilium 134); Berengario, 1523, fol. 2 (preface); trans. in Berengario, 1959.

⁵⁰References in French, 1985, 54–61.

This allowed him both to explore normal anatomy and develop a sense of the range of natural variation. Berengario in particular advocated dissecting fetuses at different stages of development, and he called for repeated dissections, since exploring one organ often involved destroying others.⁵¹ (“May the reader note how much I have labored to understand the *rete* [*mirabilis*] and its location,” he wrote, “and I have dissected more than a hundred human heads almost solely on account of this *rete*.”)⁵² Only by dint of such varied and repeated observations could the anatomist truly come to understand the divine craftsmanship with which the human body had been created.

But how were all of these bodies to be obtained? The most obvious source for doctors was of course postmortems, and there is considerable evidence that they began increasingly to recommend these to their patients’ families, even when the family was itself satisfied as to the cause of death, as we already saw in the case of Antonio Benivieni.⁵³ But few doctors had practices large enough to generate vast numbers of corpses, and this was obviously not an option for artists at all. Thus, they looked more and more to the other traditional source of cadavers: poor foreigners and others without families nearby to worry about their funerary rites. Only a very few of these ended up on the gallows; far more died in local hospitals, many of which were founded as charitable institutions to serve precisely this group of people. Beginning in the 1480s there is increasing evidence of this new source of supply. Thus, we find Leonardo da Vinci working with cadavers obtained from hospitals in Florence, Rome, and apparently Milan.⁵⁴ In Venice, similarly, the anatomist Niccolò Massa had an ongoing relationship in the 1520s and 1530s with the Hospital of Saints Peter and Paul, which had also become the site of the annual dissection sponsored by the Venetian

⁵¹See also Massa, 1536, fol. 26, trans. in Lind, 193: “Therefore, let those who desire to know the perfect anatomy of man realize that it can by no means be attained except through many, and as many as possible, dissections of different bodies varying in age, sex, complexion, amount of flesh, and in emaciation, since in one body certain members are better examined than in another.”

⁵²Berengario, 1521, fol. 459.

⁵³See note 24 above.

⁵⁴On Leonardo’s anatomical work, see in general Schultz, 67–100; Kemp, 257–61, 285–94. On his work at the hospital of Santa Maria Nuova in Florence, Kemp, 257; on his dissections in Milan (probably at the Ospedale Maggiore), Biaggi; on those in Rome (probably at the hospital of Santa Spirito), Pazzini. For a survey of the functions of Italian hospitals in this period, see Park, 1991.

College of Surgeons, and he managed on one occasion to convince the surgeon employed by a local monastery to convey to him the body of one of his patients there, “a stranger passing through town on a pilgrimage.”⁵⁵

In time, however, even the hospitals proved inadequate to the task. They could not meet Berengario’s need for fetuses, for example, and he was reduced to buying them clandestinely from local midwives.⁵⁶ But it is only in the next generation that anatomists began to rely heavily on unofficial or extralegal sources of supply. This shift is already evident in Massa’s *Introductory Book of Anatomy* (1536) where he discussed cranial sutures on the basis of “the heads of dead people in cemeteries.”⁵⁷ Massa’s skulls probably came not from private graves but from ossuaries where the bones of those long dead were stored after being exhumed to provide more space in the crowded urban burial grounds. Some of his colleagues, however, were less discrete. Grave-robbing was not a new phenomenon; we have already come across the early fourteenth-century case of the students of Master Alberto of Bologna, while the university statutes from 1405 refer vaguely to “quarrels and rumors . . . in finding or searching for bodies.”⁵⁸ But the lack of surviving documentation suggests that such cases were rare. Furthermore, the grave violated by Master Alberto’s students had not been chosen at random: hanged the previous day, its occupant belonged to the class of condemned criminals earmarked as appropriate anatomical subjects. In the early days of dissection, respectable citizens, however scandalized by the sacrilege involved, could still count themselves safe from a similar fate.

With the increasing currency of dissection, this was no longer clear. In Bologna, according to Lodovico Frati, students attempted to remove corpses awaiting burial from private houses while Alfonso Corradi says that in Padua they also assaulted funeral processions.⁵⁹ But Vesalius marks the real turning point. One of the most

⁵⁵Massa, 1536, fol. 56v; see also fols. 10 and 26 (translated in Lind, 216 and 181–82). On the Venetian College of Surgeons: Lind, 82, n. 7.

⁵⁶French, 53.

⁵⁷Massa, 1536, fol. 78; trans. in Lind, 233.

⁵⁸Malagola, 289; trans. in Thorndike, 1944, 283. For the 1319 case, see note 17 above.

⁵⁹Frati, 118, recounting (without sources) a case in which the body of a young girl was successfully stolen and another in which the friends of a spinner who had recently been killed drove off the students with rocks and the help of the police. Corradi, as cited in Martinotti, 37, n. 1.

surprising aspects of his great treatise *On the Fabric of the Human Body* (1543), compared to the works of his predecessors, is his lack of respect for persons and his candid pride in the acts of daring and deception required to obtain what he considered an adequate supply of cadavers. He and his students forged keys, rifled tombs and gibbets, and stole in and out of ossuaries in a series of nighttime escapades that he recounts with evident relish and amusement, particularly when female bodies were involved. (This was often the case, given the small number of women executed for capital crimes.)⁶⁰ The following passage is typical: “The handsome mistress of a certain monk of Sant’Antonio . . . died suddenly, as though from strangulation of the uterus or some quickly devastating ailment, and was snatched from her tomb by the Paduan students and carried off for public dissection. By their remarkable industry they flayed the whole skin from the cadaver lest it be recognized by the monk who, with the relatives of his mistress, had complained to the municipal judge that the body had been stolen from its tomb.”⁶¹ It was this sort of practice that inspired a Venetian law from 1550 that punished grave-robbing, which it associated with the growth of private dissection, by heavy fines.⁶²

It is not until the middle of the sixteenth century, in other words, that we begin to find clear signs of persistent public concern regarding anatomical practice in Italy, and even then this concern coexisted with well documented popular enthusiasm for the spectacle of dissection.⁶³ The reservations of Italian city dwellers, unlike their English counterparts, concerned not dissection in general but the specific prospect that they or their loved ones might come under the anatomist’s knife. Initially these reservations focused on traditional issues: funerary ritual and family honor—hence Vesalius’s own decision to delete from the revised edition of the *Fabrica* (1555) some of the more lurid passages concerning his quest for cadavers.⁶⁴

⁶⁰On Vesalius’s female cadavers, see O’Malley, 436, n. 7.

⁶¹Vesalius, 1543, 538; trans. based on O’Malley, 113–14.

⁶²Facciolati, 2:208–09: “Anatomicum studium in dies magis cum vigeret non publicae modo, sed privatae quoque exercitationes, passim habebantur; quibus si forte cadavera non suppetere, ne sepultis quidem iuventus parcebat. Quapropter Senatus consultum VI. id. febr. factum est gravissimarum poenarum sanctione adversus illos, qui per hujusmodi causas [*sic*] sepulchra violarent.”

⁶³Ferrari, 98–99.

⁶⁴O’Malley, 278.

Increasingly, however, popular anxieties began to find another focus—the fear of vivisection. Beginning in the 1530s a haze of unsavory stories on this topic gradually collected around the names of famous anatomists. Berengario became an early target, and Falloppia noted the rumor that he lost his position at the University of Bologna for having vivisected Spanish twin brothers with syphilis.⁶⁵ Similar rumors also attached themselves to Vesalius, supposed to have undertaken his fatal pilgrimage in penance for autopsying a still living Spanish noble.⁶⁶

There is no evidence to support these particular allegations. Nonetheless, the accusations are not completely preposterous. It was not unknown for the hanged to revive (in which case they went free, presumably on the principle of double jeopardy); Antonio Benivieni recorded an incident of this sort.⁶⁷ More to the point, Berengario emphasized the importance of vivisection while noting that this was only incidentally practiced by doctors suturing wounds, lancing boils, trepanning skulls, and performing other surgical operations.⁶⁸ Vesalius included an even more striking and suggestive observation in his discussion of moisture in the cardiac membranes, which, inconveniently for the anatomist, dissipates shortly after death. “Eager to see this water,” as he put it, he opened the body of a man who had just died in an accident and took out what he described as “the still pulsing heart.”⁶⁹

Thus, the rumors concerning human vivisection are themselves telling, even as rumors, reflecting what was seen as (and may well have been) the dangerous and unseemly haste with which sixteenth-century anatomists appropriated fresh cadavers for dissection. These anxieties were not confined to the uninitiated, and they merged with the increasing fear of being buried alive. One of the growing number of Italian testators to specify an unaccustomed

⁶⁵Falloppia, *De morbo gallico* (1563), in Falloppia, 1:728. This statement does not appear in all editions, and its authenticity is dubious; see Martinotti, 103, n. 1, and Putti, 91–95.

⁶⁶On this rumor and its sources, see O’Malley, 304–05, with accompanying notes. In a variation on this theme, Michelangelo, who also engaged in dissection, was rumored to have murdered a porter in order to depict more accurately the sufferings of the dying Christ. References in Martinotti, 102, n. 1.

⁶⁷Benivieni, 1954, 162–63; see also Linebaugh, 102–05.

⁶⁸Berengario, 1521, fol. 4v–5.

⁶⁹Vesalius, 1542, 584.

waiting period between death and interment was the anatomist Niccolò Massa, who—drawing perhaps on personal experience—asked to be left unburied for two days “to avoid any mistake.”⁷⁰

Whether or not the sixteenth-century anatomical hunger for cadavers actually put the living at risk, it certainly forged unprecedented links between anatomists and the administrators of criminal justice. Sometimes anatomists’ enthusiasm for corpses, no matter what their provenance, served the interests of criminals. In 1518, for example, Caterina di Lorenzo was hanged in Rome after killing a man and handing his body over for dissection, in an apparently novel attempt to dispose of the corpse.⁷¹ More often anatomists collaborated with the judges in concrete and sometimes disturbing ways. In his *Letter on the China Root* (1546) Vesalius lamented the burden of negotiating with judges concerning time and mode of execution,⁷² and there are clear indications that anatomists sometimes eliminated the middleman by carrying out capital sentences themselves. Alessandro Benedetti noted in his *History of the Human Body* (1497) that “those who live in prison have sometimes asked to be handed over to the colleges of physicians rather than to be killed by the hand of the public executioner,” adding that “cadavers of this kind cannot be obtained except by papal consent.”⁷³ Fifty years later Falloppia offered an even more explicit recollection: “The Grand Duke of Tuscany ordered a man to be given over to us, for us to kill as we wished and then dissect. I gave him two drams of opium, but he suffered from quartan fever, and its crisis halted the effect of the drug. The man, exulting, asked that we give him a second dose, so that if he did not die, we would intercede for a pardon with the duke. I gave him another two drams of opium, and he died.”⁷⁴

There is no evidence here that dissection itself, at least in this period, was considered part of the criminal’s penalty—a way, as it became in England, of intensifying the ultimate sentence.⁷⁵ Nor does it seem to have been seen by either judges or criminals as specifically punitive in intent. There is no particular reason to doubt Benedetti’s

⁷⁰Text of will in Lind, 325–27; quotation from 326. See also Cecchetti, 265–66, and—for two near misses in the late fifteenth century—Benivieni, 1952, 650 and 651.

⁷¹Paglia, 125.

⁷²Vesalius, *Epistola . . . radices chynae*, in Vesalius, 1725, 2:680.

⁷³Benedetti, fol. 10–v; translated in Lind, 83.

⁷⁴Falloppia, *De tumoribus praeter naturam*, ch. 14, in Falloppia, 1:632.

⁷⁵Linebaugh, 76.

claim that criminals might prefer the anatomist's opium to the public humiliation of the executioner's rope. Nonetheless, the new enthusiasm for dissection brought anatomist and executioner into ever closer association. Anatomists had no cause to regret the dramatic increase in executions that accompanied the rise of absolutist government in Italy from the middle of the sixteenth century, while their own methods echoed their rulers' increasing recourse to unusual and extreme forms of execution—what Samuel Edgerton has called “an officially sanctioned policy of desecration and mutilation of the criminal's body.”⁷⁶

The later sixteenth-century fascination with flaying and dismemberment was not confined to the arenas of medicine and justice; as William Heckscher has pointed out, it also marked the arts of the period, with their graphic images of torture, punishment, martyrdom, and rape. It is too simple to argue, as Heckscher does, that public anatomies directly inspired artists to produce work of this sort.⁷⁷ But the dissections, the images, and the grisly executions may all reflect in one way or another a culture of coercion and exemplary violence that characterized the theory and practice of absolutist rule.⁷⁸

THE CRIMINAL AND THE SAINTLY BODY

As Caroline Bynum has argued, the body has a history, and “there is something profoundly alien to modern sensibilities about [its] role in medieval piety. . . . Medieval images of the body have less to do with sexuality than with fertility and decay. Control, discipline, even torture of the flesh is, in medieval devotion, not so much the rejection of physicality as the elevation of it—a horrible yet delicious elevation—into a means of access to the divine.”⁷⁹ Few of us can identify with the relish with which pious men and (especially) women of the thirteenth, fourteenth, and fifteenth centuries embraced—at least as a vicarious ideal—not only penitential practices such as drinking pus or saliva, but also the experiences of mutilation and dismemberment. By the same token we should not read our own anxieties back into the earlier period. The people of the

⁷⁶Edgerton, 145; see also Edgerton, 232–33; and Paglia, 111. Graphs and statistics for Rome in Paglia, apps. I and II, and for Florence in Edgerton, app. B.

⁷⁷Heckscher, 87.

⁷⁸Ibid., 46. See also Carroll's interpretation of contemporary rape imagery; and Foucault, pt. I, on corporal punishment as a paradigm of absolutism.

⁷⁹Bynum, 1989, 161–62.

Middle Ages and early Renaissance had a heavy investment in the integrity of their funerary rituals, but this did not necessarily extend to the integrity of the corpse. At the center of popular Christianity, as Chiara of Montefalco's story reminds us, lay the magical charisma of relics: the dead and dismembered bodies of the saints. The association of dismemberment and sanctity continued to permeate popular attitudes well into the sixteenth century and may help to explain the general Italian tolerance of anatomy and dissection.

We can gain some insight into the nature and logic of that association through the story of the martyrdom of the first Saint Ignatius, as recorded in the *Golden Legend* (ca. 1260) of Jacopo da Varagine. Condemned by the emperor Trajan to a daunting series of tortures, including being eaten by wild animals, Ignatius welcomed these with equanimity: "O salutary beasts," he cried, "when will they come, when will they be granted to me, when will they be allowed to use my flesh? I will invite them to devour me, and I will pray them not to hold back in any way, nor to fear touching my body. . . . I know well the things that are useful to me: fire and the cross, animals, the division of the bones, those who will rend all my members and my entire body."⁸⁰ When his executioners asked why he continually called on Christ, he told them, "'I have his name written on my heart, and for that reason I can't help remembering it,' so that after his death those who had heard him, wanting to test this, extracted his heart from his body and split the whole heart down the middle [and] found written on it the name of Jesus Christ in letters of gold. Whence many believed in God."⁸¹

Jacopo's version of this story reflects the intensely somatic nature of Christian spirituality in the late Middle Ages and the central role it assigned to the opened and dismembered body. Ignatius's body, like that of Chiara of Montefalco, acted not only as his avenue to sanctity, but also as the site of the signs that attested to that sanctity and (through his relics) as the instrument of his holy power.⁸² At the same time Ignatius' story reaffirmed the importance of proper funerary ritual: Jacopo emphasized that the lions at the end refused

⁸⁰Jacopo da Varagine, 308.

⁸¹*Ibid.*, 311.

⁸²Chiara's own martyrdom was self-imposed in the form of strenuous ascetic practices. Testimony in Menestò, e.g., 98–99, 167–68, 330. On the role of the saint's body in late medieval Christianity, see in general Bynum, 1989; Bynum 1991; Vauchez, 499–518; Pouchelle, 1976.

to eat the saint's mutilated body so that his fellow Christians could give it an "honorable burial."⁸³

These same themes resonate through the history of Renaissance anatomy, linking the saint and the criminal with the martyr as the middle term. Not only did many of the more creative Italian methods of execution—grilling, rolling in a spiked barrel, pulling the flesh off with red hot pincers—echo the torments of famous martyrs, but the confraternities that took as their mission the comfort of condemned criminals regaled them on the way to their deaths with the stories of those martyrs whose modes of execution most closely echoed their own.⁸⁴ As recent historians of those confraternities have shown, the Renaissance ideology of execution exploited these associations, portraying the criminal's death as exemplary; in addition to being an act of vengeance and a warning to others, it was also the culmination of a process that aimed to reconcile the criminal with those that condemned him through a final act of atonement explicitly identified with Christ and the saints.⁸⁵ This served to legitimize those executions by associating the justice of the state with the will of God.

From this point of view the criminal's subsequent dissection, which in the days before the permanent anatomy theater sometimes took place in church, itself resembled a sacrament—the penultimate act in a potential drama of redemption. (The last act, as in the story of Ignatius indicates, still consisted of the reunion of the criminal's dismembered parts in a Christian grave.)⁸⁶ Similar associations permeated the *écorchés* in the anatomical treatises of Berengario da Carpi, the most elaborately illustrated works of their kind before Vesalius's *Fabric*. These included two male figures in the stance of saints holding their instruments of martyrdom, the executioner's rope and axe (figs. 1 and 2), as well as a series of heroic nudes—one complete with aura—willingly participating in their own dissection

⁸³Jacopo da Varagine, 310.

⁸⁴Pertile, 5:265; Paglia, 84.

⁸⁵See in general Edgerton, ch. 5; Paglia; and esp. Prosperi, who argues (983–86) that this identification of criminal and martyr was rooted in the need of the authorities to be forgiven by their victim and to assimilate their legal judgments to the law of God.

⁸⁶See Bynum, 1991², for a compelling statement of the significance of this ultimate emphasis on the unity of the body. There are strong eucharistic resonances in Jacopo da Varagine's version of Ignatius's final speech: "Io sono grano di Cristo, sarò macinato co' denti de le bestie, acciò ch nasca uno pane bianchissimo (310)."

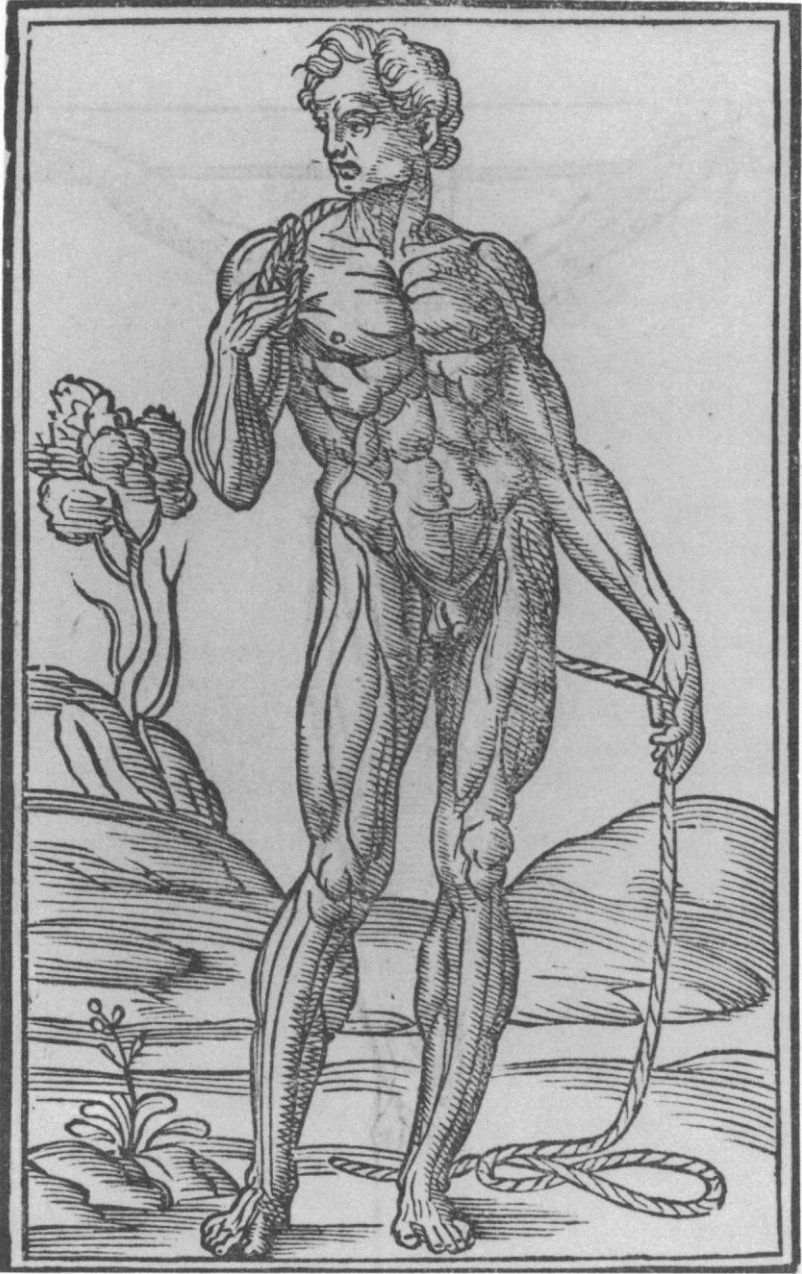


FIG. 1. *Ecorché* showing the exterior muscles of the front. Jacopo Berengario da Carpi, *Commentaria cum amplissimis additionibus super anatomia Mundini*, fol. 519. Bologna, 1521. (Photo: National Library of Medicine.)

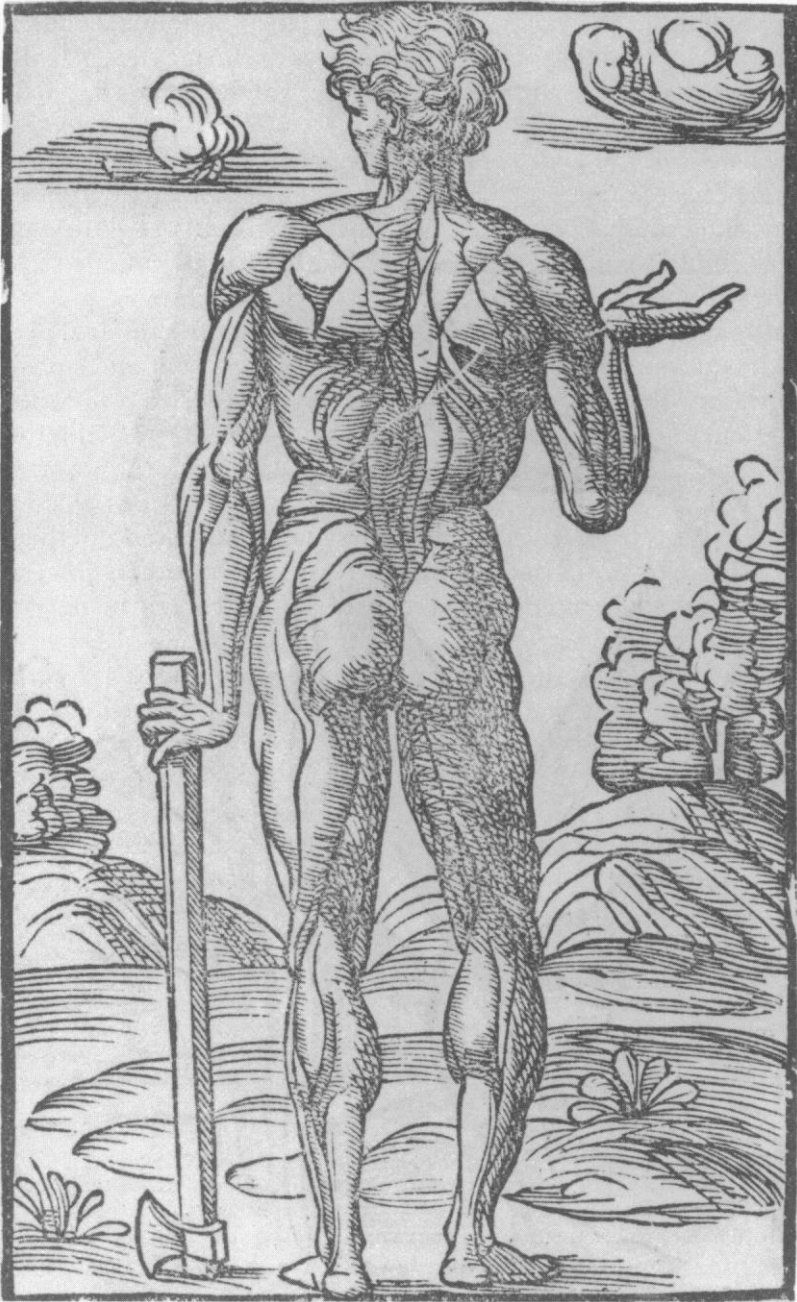


FIG. 2. *Ecorché* showing the exterior muscles of the back. Berengario, *Commentaria*, fol. 520v. (Photo: National Library of Medicine.)

by holding up the layers of skin hiding their abdominal muscles (fig. 3). Most striking of all, however, was the image chosen by Berengario to illustrate the muscular anatomy of the arms: a flayed figure of the crucified Christ (fig. 4).⁸⁷

There is in fact considerable evidence for the continuing association of the criminal and the saintly body in Renaissance Italy. Both saint and criminal were exemplary figures, models of all that was to be emulated or shunned. The deeds of both were assumed to be supernaturally inspired, whether by God or the devil, and their bodies were sites of special power. As anatomists themselves demonstrated, the criminal's body, like the saint's, could differ physically from that of other people. Benivieni autopsied a notorious thief and found his heart covered with hair, while Realdo Colombo described the extra rib and swollen uterine veins of a notorious "demoniac" and infanticide.⁸⁸ Some of these deviations could be explained by medical principles—Benivieni attributed the thief's hairy heart to an unusually hot complexion—but others smacked clearly of the supernatural, especially in the cases of repentant criminals.⁸⁹ In one of her most famous letters Catherine of Siena described the blood of the decapitated Niccolò di Toldo as so fragrant that she could not bear to wash it off, while others attributed incorruptibility to the bodies of great sinners and healing virtues to the body parts of the executed.⁹⁰ Thus, according to Vasari the sixteenth-century sculptor Silvio Cosini of Fiesole made a vest out of the skin of a criminal corpse he had stolen for dissection and wore it over his shirt for its magical and protective powers.⁹¹

⁸⁷On Berengario's illustrations, see Lind, *Introduction*, in Berengario, 1959, 23–27; and esp. Putti, 165–99. Figs. 1 and 2 appeared in the *Commentaries on Mondino* (1521) as well as in the *Short Introduction to Anatomy* (first edition 1522). Fig. 3 and the other self-demonstrating *écorchés* appeared first in the *Short Introduction*. Fig. 4 appeared in both the *Commentaries* and the first edition of the *Short Introduction*, but was omitted—probably because of questions concerning its appropriateness—from later editions of the latter.

⁸⁸Benivieni, 163–66; Colombo, 60 and 173–74.

⁸⁹The boundary between natural and supernatural disease and healing was extraordinarily permeable and fluid in this period; see Park, 1985, 50–52.

⁹⁰Catherine of Siena, letter to Raimondo da Capua (1375), 63. On incorruptibility, Ariès, 360; Thomas, 42–43. On healing powers, Camporesi, 19; Linebaugh, 109–10; Spierenburg, 30; Grabner; Heckscher, 164–66, n. 180. The confraternities for the comfort of the condemned sometimes gathered up their body parts and instruments of execution, in the manner of relics. Proserpi, 994, n. 8.

⁹¹Vasari, 4:483. Vasari is most disapproving of this episode and notes that Cosini buried the vest ("lo ripose in una sepoltura") after being reprimanded by a priest.



FIG. 3. *Ecorché* showing the abdominal muscles. Berengario, *Isagogae breves per lucidae ac uberrimae in anatomiam humani corporis*, fol. 6v. Bologna, 1523. (Photo: National Library of Medicine.)

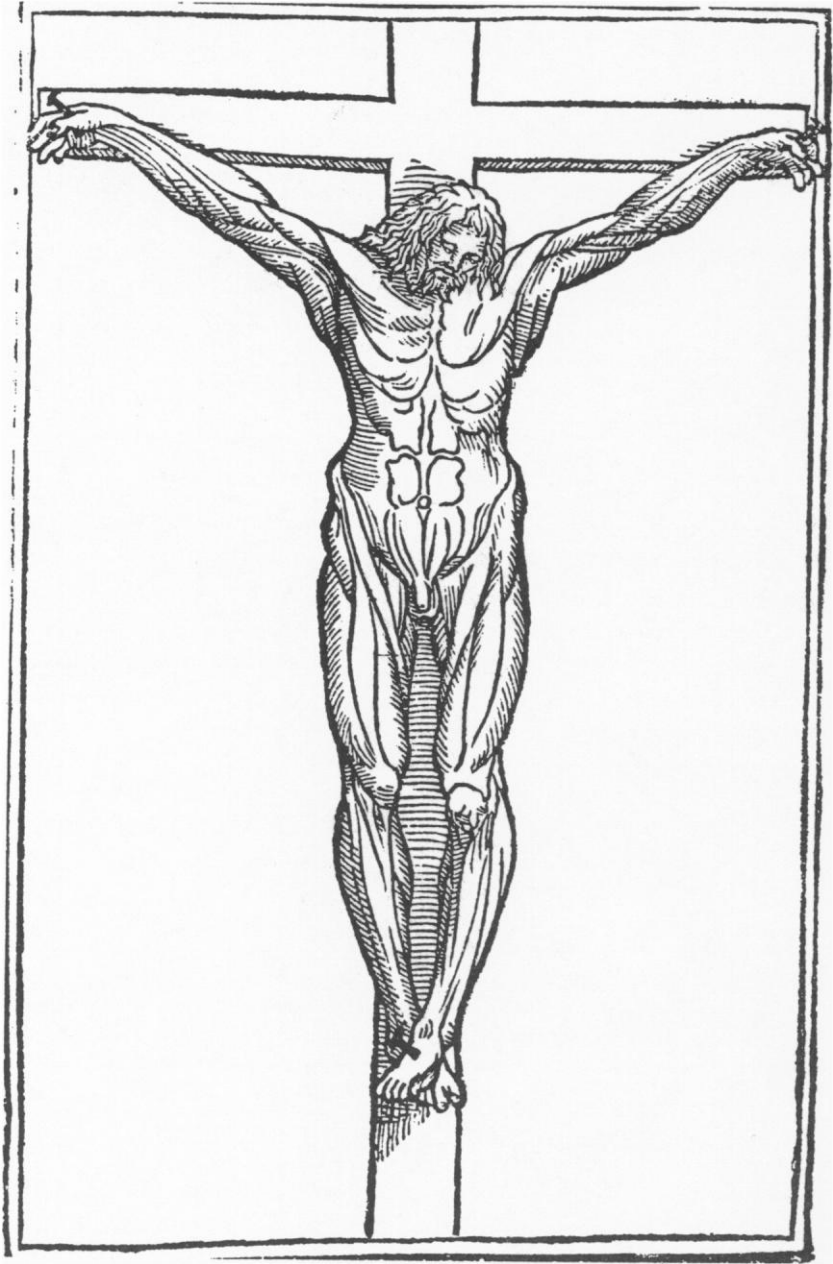


FIG. 4. *Ecorché* showing the muscles of the arm. Berengario, *Commentaria*, fol. 519v. (Photo: National Library of Medicine.)

We can see other remnants of this saintly aura in an anecdote in Benedetti's otherwise quite sober anatomy textbook. "It happened once when a dissection had been completed at the university of Padua," he wrote, "that a certain student kept the bones for his own use. Halfway on his journey to Venice at night, he left his boat to dine and went to an inn with his companions. Along came a most impudent squad of tax collectors looking for contraband merchandise and found the box of bones the student had left behind in the boat. When they asked to whom these belonged and received no reply, the tax collectors carried off the bones and opened the box next morning in the presence of their overseers. When they found the bones, picked clean of flesh and shining white, lying among odorous herbs, they began to worship them with bared heads as though they were the relics of some saints. Then they brought the box to the highest magistrate. In the crowd that assembled before him Francesco Sanudo, a man of high reputation and standing in the legal profession, revealed that the bones were the remains of an anatomical dissection and ordered them to be restored to the student of medicine, who had by this time lodged a complaint about the stolen box. Everyone laughed loudly to see the frustrated greed of the tax collectors. And now," Benedetti concluded, "let us return to the vertebrae of the neck."⁹²

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⁹²Benedetti, fol. 121-v; translated in Lind, 132-33.

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