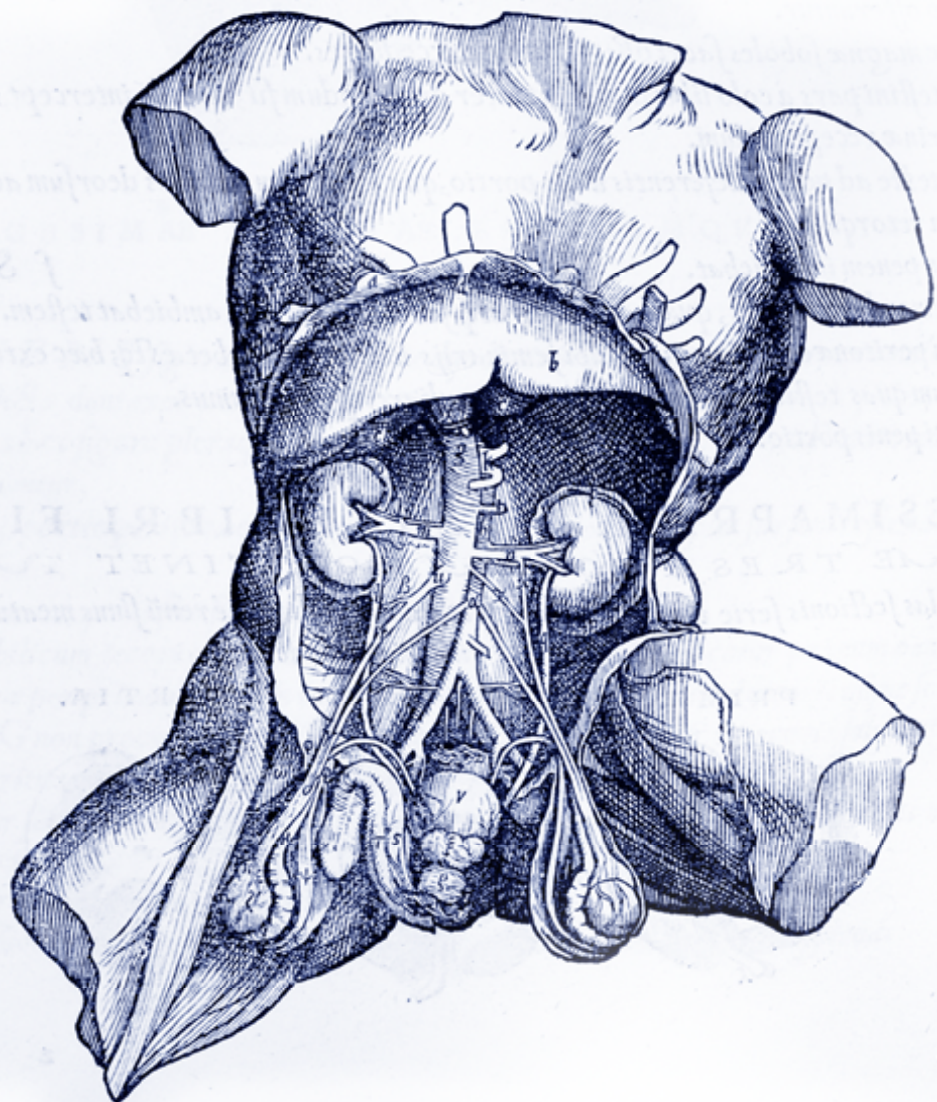


# V Animating Bodies



# Animating Bodies

Flayed bodies posing amid ancient ruins. Fragmented, sculptural torsos with muscles removed and viscera exposed. Roman cuirasses stuffed with entrails. Sixteenth century anatomical illustrations thrust us into a borderland of art and science, past and present, death and life. Accustomed as we are to the de-contextualized cadavers of modern anatomical textbooks, these images, depicted as living, walking artifacts of antiquity, come as a shock. But in a world awash in the revival of classical culture, the credibility of Vesalius's observational anatomy depended on the successful appropriation of classical authority. Placed in ruins or depicted as statuary, the cadaver was re-enlivened as an object that fused the worlds of empiricism and humanism, straddling the material present and an imagined past. The objects exhibited here – from the classicizing woodcuts of the *Fasciculus Medicinae* to Albrecht Dürer's devices for creating perspectively foreshortened portraits – allowed artists and anatomists to reinsert and reintegrate the body into the larger cultural and intellectual world of the sixteenth century. Imbued with the allure of the antique, the anatomical body could captivate universities and princely courts across Europe. It could speak, with a new eloquence and authority, about its mysteries, and in the process establish itself as a credible object of observation and study.





25.

Unknown artist(s)

*Dissection*

Woodcut

In Johannes de Ketham (Austrian, c. 1410-80), erroneously attributed, *Fasciculus medicie [sic]*, Venice: 1522 (first edition 1491)

Houghton Library, Gift of Mr and Mrs Edward J. Holmes, 1951  
(f\*AC85.H7375.Zz522k)

At the end of the fifteenth century, northern Italy was the principal center for the study of medicine and anatomy in Europe. Learned physicians at the universities of Bologna, Padua and Pavia provided students from all over the continent with instruction in dissection; classroom sizes grew and with them the necessity for printed medical texts.

Seizing upon this growing demand, the Venetian printers and brothers Giovanni and Gregorio de' Gregori published this book in 1491, a large-format Latin compendium of medieval medical knowledge conceived for use by university-educated physicians.<sup>1</sup> The book's foundation is a series of six schematic woodblock prints, images that had circulated widely both north and south of the Alps before the brothers committed them to print.<sup>2</sup> The woodcuts depict, among other images, the points on the body for bloodletting ("The Bloodletting Man"), a pregnant woman ("Gravida"), and a urine chart; each print depicted lucidly, the cutter's lines delineating clearly the

content of the woodcuts with uninterrupted contours. Unlike later anatomical illustrations in this section, which portray cadavers with intricately flayed musculature, the corpses in these images resemble classicizing statues, and are characteristic of the so-called 'classical style' of Venetian printmaking in the 1490s, then popular in humanistically inclined and artistic circles of northern Italy.

The brothers added to these illustrations nineteen pages excerpted from conventional medical texts, enlisting a physician at the University of Padua to aid with editorial precision, thus fortifying the book's pedagogical function. Perhaps because of its novelty – it is the first medical text to contain printed images – the 1491 *Fasciculus* (*fasciculus* means 'booklet') became an immediate bestseller.

Spurred by the commercial success of the *editio princeps*, then, and eager to expand their audience to

non-university practitioners and lay readers, the Gregori brothers produced a second, vernacular edition of the *Fasciculus* in 1494. This new edition added an anatomy treatise by Bolognese physician Mondino de' Liuzzi (1275-1326); inserted four newly executed woodblock prints; replaced the compressed Gothic font with legible Roman typeface; translated the book into Italian to render it accessible to those unable to read Latin; and reduced the book's dimensions to enhance its portability. In short, this revamped format created a book supremely suited to the tastes of its humanist clientele, while equally respecting the interests of a nonacademic readership.

Numbers alone confirm *Fasciculus's* enthusiastic reception: Italian printers reissued the compendium numerous times in the next quarter century, in Latin editions (1495, 1500, 1501, 1513), in Italian (1508, 1522), and later in French and Spanish, making it the most widely circulated contemporary text before Vesalius. The prints in this 1522 edition are less precise copies, likely because the original woodblocks were damaged or lost after the 1494 edition went to press.

The present woodcut, added in 1494, served as frontispiece for the anatomical treatise of Mondino de' Liuzzi. On the page facing the illustration Mondino proposes to treat "the body of man, and the anatomy thereof." In fulfillment of this aim, the image depicts a public dissection occurring within the ordered space of a university hall. Participants wear the *pallium* and *baretta* characteristic of fifteenth-century humanism. The cadaver, likely an executed criminal, lies on a wooden trestle in the foreground, his arms and legs contracted in rigor mortis. The barber-surgeon, knife in hand and sleeves rolled, poises himself for a first incision.<sup>3</sup> Seven figures loiter behind the table, including an eager student who leans over the barber's shoulder the better to see the corpse as it is opened. Presiding over the event from a richly carved *cathedra* is the anatomist, finger extended in a gesture of address, and gaze directed forward as though speaking to the reader, while a senior figure, the *ostensor* (demonstrator) points out the structures as they are described.<sup>4</sup>

The *Fasciculus* illustrations provide a window into dissection practices around 1500. Katharine Park

has noted, for example, that the book was created "by and for male dissectors... students and physicians, and [it was] disseminated by male editors and printers for lay male readers."<sup>5</sup> Accordingly, all nine inhabitants in the room (not to mention the dead body) are men, evidence that access to dissections and the secrets that they yielded was gendered at that time.

If readers used the book actively to guide their dissections, then it was precisely this acceptance of contemporary dissection procedures that vexed later commentators, most notably the anatomical reformer Andreas Vesalius (1514-1564). The Mondino woodcut verified for the Flemish physician a problem plaguing the medical establishment: a disjuncture between theory and practice, evident here in the separation of physician from surgeon, the former elevated high in his lectern, the latter consigned the menial task of opening the body. For Vesalius, it was imperative that physicians perform their own autopsies, in order to cleanse ancient texts of error by "handling the objects with [their] own hands," a proposition pursued at length in his tradition-breaking anatomy *De humani corporis fabrica*, published in Basel in 1543 (see catalogue no. 29).

In fact, Vesalius made the *Fasciculus* woodcut the explicit subject of satire in the title page of the *De humani corporis*. Here, Vesalius exchanges the *Fasciculus's* university lecturer with a skeleton, and depicts himself dissecting the corpse *with his own hands*, while the surgeon, rendered useless, toils on the floor with his scalpels. In the accompanying text, Vesalius complains of "that detestable procedure by which [those] aloft in their high chair [croak] things they have never investigated."

The *Fasciculus* dissection scene occupied a pivotal role, then, in determining standards for the visual display of anatomical knowledge. It provided a model with which other anatomical illustrations such as Amusco's *Historia de la composicion del cuerpo humano* and Gersdorff's *Feldtbuch* (see catalogue nos. 26 and 30) had to contend, making the book a bridge between older models of dissection and newer practices emerging under Vesalius and his contemporaries.

Daniel Zolli

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<sup>1</sup> The Gregori brothers founded their press in 1481. Prior to the publication of the *Fasciculus*, they had specialized in the printing of law books. For discussion of the Gregori printing press see Jerome Bylebyl, "Interpreting the *Fasciculo* Anatomy Scene," in *Journal of the History of Medicine and Allied Sciences* 45 (1990): 285-316.

<sup>2</sup> The colophon of the first edition writes that the book is "composed by the most excellent doctor of arts and medicine" Ketham, who evidently owned one copy of one of the manuscripts used to print the *Fasciculus*, is frequently (erroneously) called the book's author. It is likely, however, that the Gregori brothers merely appended his name to the printed book to appeal to audiences in Germany. Relatively little is known about Ketham. He is probably Johannes de Ketham (1410-

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1480), a German physician who had traversed the Alps to practice medicine in the Veneto. Ketham brought with him five medical treatises, from both ancient and medieval sources, which had served as fodder for his lectures while instructor at the University of Vienna, and which collectively addressed topics ranging from bloodletting and uroscopy to astrology.

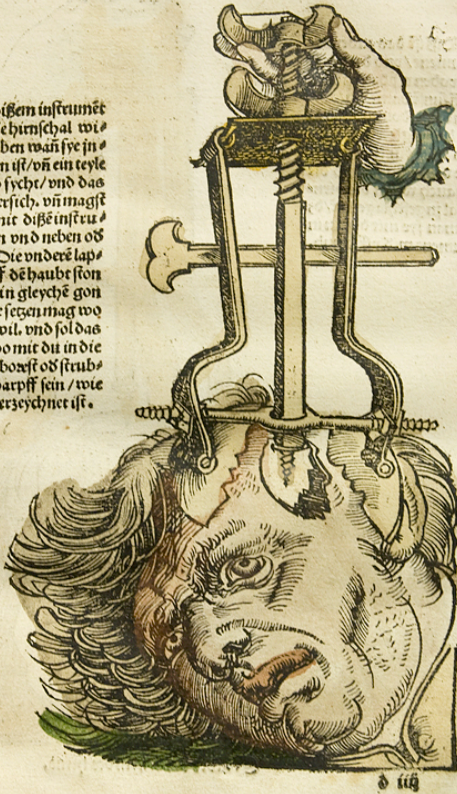
<sup>3</sup> The opening words on the facing page ("here begins the anatomy or dissection of the human body") mirror the image, indicating that the dissection is about to be performed.

<sup>4</sup> See Bylebyl, 285-316.

<sup>5</sup> Katharine Park, *Secrets of women: gender, generation, and the origins of human dissection* (Cambridge: Zone Books, 2006), 119.

Wunden Hauptwunden. XXII

¶ Mit diesem instrument  
solt du die hirnſchal wi-  
der vffriben wann ſye in  
geſchlagen iſt / vñ ein teyle  
vnderſich ſycht / vñ das  
ander ubersich / vñ magſt  
dz thün mit dieſem inſtru-  
ment oben vñ neben oß  
hinden. Die vnder lap-  
pen die vff dē haubt ſon-  
die ſollen in gleyche gon-  
dz man ſye ſetzen mag wo  
hin man wil. vñ ſoldas  
ſtrüblin do mit du in die  
hirnſchal boest oß ſtrüb-  
el gar ſcharpff ſein / wie  
dan hie verzeychnet iſt.



¶ Diß iſt das ander in-  
ſtrument / vñ dz dienet  
mer oben vff das haubt/  
dan ſunſt darneben / oder  
hindenā. dorumb das es  
mit breye gleych hatt als  
das nechſt inſtrument hie  
vor verzeychnet. Vñ die  
net auch wann die hirn-  
ſchal in geſchlagen iſt / dz  
dz man ſye mit dieſem in-  
ſtrument wid vff ſchub.



¶ Wider das würen des hurns.

26.

Hans Wechtlin

German, c. 1480–after 1526

*Instruments for Use in Cranial Surgery*

Woodcut

In Hans von Gersdorff, *Feldtbüch der Wundartzney* [Field Book of Wound Surgery], Strasburg, 1540 (first edition 1517)

Houghton Library, Harvard College Library, Gift of Philip Hofer, 1942(Typ 520.40.421 F)

Image: Hans von Gersdorff, *Feldtbüch der Wundartzney* [Field Book of Wound Surgery], Strasburg, 1517  
Harvard Medical Library in the Francis A. Countway Library of Medicine (f RD151.G32). Catalogue entry describes uncolored copy.

**H**ans von Gersdorff's *Feldtbüch der Wundartzney*, first published in 1517 in Strasbourg, is a field guide for surgeons. In this, his only known publication, Gersdorff describes himself as a lifelong resident of Strasbourg and a surgeon with forty years of experience. Focusing on the treatment of injuries sustained in battle, especially the relatively new category of the gunshot wound, the *Feldtbüch* includes chapters on anatomy and

pharmacy and, as in the image here, presents numerous surgical instruments developed by Gersdorff from earlier models.<sup>1</sup> Densely illustrated and written in accessible, vernacular German, the *Feldtbüch* is largely addressed to an audience of practitioners outside the realm of Latin-dominated University pedagogy. Investing surgery with the authority of printed media, the beautifully produced *Feldtbüch* is part of a contemporary Northern European rise in vernacular literature devoted to the

topic of surgery. As a form of self-fashioning, Gersdorff's treatise was instrumental in elevating the status of those who healed the living body with their hands.

Although the reconciliation of surgery and medical theory had begun in southern Italy as early as the twelfth century, in late fifteenth-century Northern Europe they were still mutually exclusive, involving practitioners of distinct social positions.<sup>2</sup> The shift in attitudes represented by Gersdorff was influenced by the spread of Italian and classical models through printed texts, as well the growing need for trained surgeons and new techniques in the era of modern warfare. Gersdorff's work was preceded by the 1497 Strasbourg publication of Hieronymus Brunschwig's *Buch der Chirurgia*, the first printed German treatise devoted to surgery. Both books emphasize the importance of the surgeon's comportment and speech, drawing the contours of a new professional model. Both were best sellers; translated into multiple languages and re-printed throughout the sixteenth century (in Gersdorff's case, twelve editions were printed by 1651), they spread across Europe, simultaneously catering to and creating a community of literate surgeons eager to professionalize and incorporate their work.<sup>3</sup> In the edition on display here, printed in 1540, many new chapters are added to the original four. Covering topics such as chiromancy (palm reading), physiognomy, and astrology, their inclusion suggests that the surgeon's art is a learned one, requiring the coordination of hand, eye and mind to read the subtle bodily signs and macrocosmic alignments necessary for diagnosis and treatment.

It is no surprise that this development should have taken place in the free imperial city of Strasbourg which, standing at the crossroads of major international trade routes, had become an important center for Northern humanism and especially for the printing industry that supported it.<sup>4</sup> Johann Schott (or Hans Schotten), Gersdorff's printer, was a well-educated publisher of humanist texts who went on to produce such scientific works as Otto Brunfels's *Herbarum Vivae Eicones* (1530).<sup>5</sup> Given his sophisticated approach to images, it might well have been Schott who enlisted the services of Hans Wechtlin, the artist to whom the *Feldtbuch* woodcuts have been attributed. Wechtlin, whose approach to woodblock printing was deeply

influenced by Dürer's example, is best known today for his chiaroscuro woodcuts on the theme of the Passion. Although only two images in the *Feldtbuch* are unquestionably of his design, the stylistic consistency and quality of the woodcuts throughout the book suggest his authorship.<sup>6</sup>

The innovative use of images in the *Feldtbuch* was central to its popularity and lasting reputation. Where Brunschwig had employed only narrative scenes of patient consultations in domestic settings (emphasizing the importance of bedside manner), which, though plentiful, were not tied to specific passages of text, the *Feldtbuch* integrated text and image and presented a whole new range of image types. In addition to narrative scenes depicting procedures such as arrow extraction, amputation, cauterization and the diagnosis of leprosy, one finds an abundance of vignettes describing the proper way to use complex surgical apparatuses. These latter often include fanciful plays with scale and the inclusion of poetic texts that transform the scenes into "speaking images" that aid in the memorizing of information (for a discussion of prints as memory aids, see catalogue no. 6).

The present double page opening exemplifies the forcefulness and graphic impact of the *Feldtbuch* woodcuts. According to the inserted text panels, the images are meant to describe how to use the depicted instruments to retrieve shards of skull knocked into the head by blunt force—perhaps from one of the large-bore, low-velocity firearms then in use. The text focuses on the instruments themselves, specifying that one is to be used on the side of the head and the other on top. The degree to which these images refer to the practice of trepanation—in which a hole is drilled into the skull to relieve pressure and, in traditional or folk medicine, to treat insanity or possession—is left unresolved. The texts make clear that the action represented is one of repairing rather than opening the cranium, yet the upright figure at left is wall eyed and sticks out his tongue, suggesting derangement.

Separated from any explanatory visual narrative and scaled to compete for attention with the text, these stunningly naturalistic heads rest in and on the page. Unlike Vesalius's classicizing *écorchés*, they are fully modern, contemporary to the early 16<sup>th</sup> century

reader. Their immediacy is achieved by Wechtlin's forceful depiction of contour and, in the image at right, by the block cutter's remarkable skill in gouging dense, curved parallel lines that seem to emanate from the centrifugal vortex of the mouth, giving the head the appearance of three-dimensionality and dynamism. Rather than present a rational recession into depth, the images both emphasize the flatness of the page and make subtle references to pictorial space, such as the hands emerging from clouds at top and the shadow supporting the man's cheek at right. Indeed this face seems to address us from within the exigency of an invisible yet violent scenario; lips parted in pain or perhaps speech, eyes gazing at the reader from below a wrinkled brow, hair blown sideways by the force of impact or an unseen wind, he convinces us that the operation shown is happening in real time. This focus on immediacy, presence, embodiment and even pain—which engage a compassionate responsiveness in the viewer—might seem to contradict the quasi-diagrammatic, information-carrying purpose of the image. What the head's enlivenment does, however, is emphasize the feasibility of this operation. In contrast to anatomy, surgery is performed on the living body with the purpose of preserving life. Rejecting medical reliance on superficial treatments, Gersdorff advocated for more invasive treatments and more sophisticated instruments; this image is living testimony to his ability to accomplish the paradoxical surgical task of restoring wholeness to the body.

That the surgical endeavor is equated here with the restoration of form is suggested precisely by the formal ambiguities of these images. One must study the two heads at some length to discern what is being presented. On the right, the jagged edges of the pads attached to the instrument initially make them appear to be separate breaks in the skull. The wound itself is presented as an absence of logical form: we are not sure if the un-shaded bone fragment is above or below the level of the skull, nor if it has yet been pierced by the instrument's sharp screw. The head's interior is merely a craggy swath of uniform darkness. In contrast, the instrument surmounting the head is a paragon of formal clarity; its technological sophistication is

echoed in the clean planes used to delineate it. Emerging from clouds at the top of the page, the surgeon's hand is less than subtly likened to the hand of God, emphasizing the wondrousness of this complex instrument and suggesting that the surgeon's purpose echoes, albeit in a belated and workmanlike fashion, the role of God as the giver of form and life to matter.<sup>7</sup> Mediating the surgeon's hand, the instrument pushes back against the absence of form signified by the wound, promising to resolve the planar distortion of the broken skull with its own irreproachable formal logic.

Alexandra Wachtel

<sup>1</sup> As a general introduction to Gersdorff's treatise, focusing especially on his approach to pharmacy, see Jerry Stannard, "Botanical Nomenclature in Gersdorff's *Feldtbuch der Wundtartzney*," in Allen G. Debus, ed., *Science, Medicine and Society in the Renaissance*, volume 1 (New York: Neale Watson Academic Publications, Inc., 1972).

<sup>2</sup> A helpful general guide to this history, containing a number of translations from primary sources, is Leo M. Zimmerman and Ilza Veith, eds., *Great Ideas in the History of Surgery* (California: Norman Publishing, 1993): on Salerno 93-104, on Brunswig and Gersdorff, 203-218. Also R.K. French, *Dissection and Vivisection in the European Renaissance* (Aldershot: Ashgate, 1999).

<sup>3</sup> Lilla Vekerdý explores this phenomenon by focusing on the surgical writing of Paracelsus, who followed in the tradition inaugurated by Brunswig and Gersdorff. See her chapter "Paracelsus's *Great Wound Surgery*," in Elizabeth Lane Furdell, ed., *Textual Healing: Essays on Medieval and Early Modern Medicine* (Leiden and Boston: Brill, 2005), 77-99.

<sup>4</sup> Kenneth F. Thibodeau, "Science and the Reformation: The Case of Strasbourg," *The Sixteenth Century Journal* 7, no. 1 (April, 1976): 35-50.

<sup>5</sup> Peter G. Bietenholz and Thomas B. Deutscher, eds., *Contemporaries of Erasmus: A Biographical Register of the Renaissance and Reformation* (Toronto: University of Toronto Press, 1985), 230-31.

<sup>6</sup> On Wechtlin's production of images for the *Feldtbuch*, especially a fugitive sheet that was published in advance of the book, see Ludwig Choulant's foundational and still helpful *History and Bibliography of Anatomic Illustration* (Chicago, Illinois: University of Chicago Press, 1920), 163-6.

<sup>7</sup> For an introduction to philosophical treatments of the relation between form and matter and their expression in images, see David Summers, "Form and Gender," *New Literary History* 24, no. 2 (Spring, 1993): 243-271.



Ein andre meynung.

Wach drey fäden magst du ein rechtlich ding das du mit creycken kauft in ein gemel bringan / auf ein taffel züersehen den thu also.  
 Nimm du in einem satz so schlag ein grosse nadel mit einem weyten o: die darz gemacht ist in ein wand / vnd ses das für ein aug dardurch zuech einen starcken faden / vnd henc vnden ein pley ge weicht daran / damach ses einen tisch oder taffel so weyt von dem nadel o: darinn der faden ist als du wilt / darauff stell stet ein aufrechte ram zwerchs gegen dem nadel o: hoch oder nider auf welche sey ten du wilt / die ein turteln hab das man auf vnd zü mäg than / diß turteln sey den taffel darauff du malen wilt. Damach nagel zwen fäden die als lang sind als die aufrechte ram lang vnd poyrt sie oben vnd mitten in die ram / vnd den anderen auf einer seiten auch mitten in die ram vnd laß sie hangen. Damach mach ein ersinen langen stift der zü federst am spiz ein nadel o: hab dareyn fäden den lan gen fäden der durch das nadel o: an der wand gezogen ist / vnd far mit der nadel vnd langen fäden durch die ram hinauf / vnd gib sie einem anderen in die hand / vnd wart du der anderen zwerch fäden die an der ram hangen. Nun brauch diß also / leg ein lauten oder was dir sunst geset so fer von der ram als du wilt / vnd das sie vnueruckt peyß so lang du jr bedarff / vnd laß deinen gefellen die nadel mit dem faden hinauf strecken / auf die nötigsten puncte der lauten / vnd so oft er auf einem still heyl vnd den langen fäden aufrecht so schlag alweg die zwen fäden an der ram kreuzweyß ggractes an den langen faden / vnd fleß sie zü peden unten mit einem wachs an die ram / vnd henc deinen gefel len seinen langen fäden nach lassen. Damach schlag die turteln zü vnd sechen den selben puncten da die fäden kreuzweyß ober einander gen auf die taffel / damach thu das turteln wider auf vnd thu

27.  
 Albrecht Dürer (German, 1471-1528)  
*Graticola* or Grill (one of two apparatuses illustrated in the book; a later 1538 edition includes four).  
 In Albrecht Dürer, *Underweysung der Messung, mit dem Zirckel unnd richt scheyt, in Linien ebnen unnd gantzen Corporen* [Instruction in Measurement with the Compass and Straight-edge of Lines, Planes and Solid Bodies] Nuremberg, 1525  
 Houghton Library, Harvard College Library, Gift of Mrs. Hugh D. Marshall, 1941 (Typ 520.25.340a F)

Albrecht Dürer is celebrated for his prodigious talents as painter, draughtsman and printmaker. Yet indivisible from these practices was the Nuremberg artist's long-time preoccupation with bodies, the formal study of their proportions, and the space in which they existed.

Dürer's thinking about art developed considerably during his lifetime. The artist's early formation occurred in settings where manual skill was prized above all else, first in the workshop of his father, a goldsmith, and later as apprentice to printmaker Michael Wolgemut (1434-1519). Both activities enabled Dürer to hone his manual skills, whether in the working of gold and other precious metals, the careful design and cutting of woodblock prints, or the incising of engravings.

Visits to Italy in 1494-5 and 1505-7 propelled Dürer in new directions.<sup>1</sup> By his own account,

recorded in a lengthy correspondence with humanist friend Wilibald Pirckheimer, Dürer returned to the North an artist transformed. He commended Italy for rediscovering "the art revered by the Greeks and Romans," and praised that country for its richly articulated theories about human proportion, geometry and perspective – languages then foreign to any southern German printmaker. Upon returning to German soil, the artist embarked on a two-decade long writing project, generating a flurry of texts that demonstrate his up-to-date knowledge of devices and methods known to artists and theorists south of Alps.

The text exhibited here assembles many of these writings.<sup>2</sup> Published initially in 1525 under the title *Underweysung der Messung (Course in Measurement)*, this treatise addresses topics ranging from the uses of geometry within architecture, engineering, and decoration, to a study of Roman and Gothic letters.

One common denominator in the *Underweysung*, however, is the “secret art of perspective,” which Dürer alleged to have learned from an anonymous teacher in Bologna in 1506.<sup>3</sup> For Dürer, the science of perspective, which belonged to the art of measurement (*die Kunst der Messung*), became a prerequisite for all artistic production; just as manual skill mattered in the successful depiction of the human form, without perspective it was impossible to render bodies accurately and with beauty.<sup>4</sup>

Although printed twenty years after his return to Nuremberg, Dürer’s text still bristles with ideas about art advanced by his Italian contemporaries. Consider, for example, the contraption shown here, one of two such machines illustrated in *Underweysung* (there are four woodblock prints in a later 1538 edition). This device, called a *graticola*, was described almost a century earlier in a tract on painting penned by Leon Battista Alberti (1404–72). In Book II of *De Pictura* (written 1436), the Italian polymath hones in on this apparatus, a vertically positioned glass plate partitioned into a grid by means of thread.<sup>5</sup>

Dürer’s lively woodcut portrays the nearly century-old *graticola* in use: the observer fixes his eye with a sight, and anchors himself to the table with his left hand. Wielding a pen in his other hand, and employing pigment from a nearby ink well, the artist traces the contours of the sitter as they appear on the glass, allowing him to capture the form of his subject with relative accuracy, and with sensitivity to perspective (hence the instrument’s frequent identification in modern literature as ‘the perspective apparatus’).<sup>6</sup> In the moments following the scene depicted, Dürer explains in the text, the artist would transfer the sitter’s portrait onto a gridded drawing sheet or canvas for more detailed elaboration.

Such experiments with the science of perspective were common in Italy, as evident, for example, in the work of Piero della Francesca, Paolo Uccello and Filippo Brunelleschi; yet they were virtually without precedent in the North, a point underscored in art historian Erwin Panofsky’s path-breaking 1927 essay “Perspective as Symbolic Form.” By importing an Italian device for rendering the perspectively foreshortened body, argues

Panofsky, Dürer introduced German artists to the mathematical rigors of perspective.

Yet in spite of this novelty, many of Dürer’s northern European peers rejected the book as well as the “perspective apparatus.” Pirckheimer’s sister Eufemia, a nun in Austria, wrote this to her brother: “We had a good time with [the book on painting and measurement by Dürer], but our paintress... does not need it because she can paint just as well without it.”<sup>7</sup> Likewise, Italian artists, including Michelangelo, complained of the futility of Dürer’s endeavor; geometry was mind numbing. Federigo Zuccaro (1542–1609) warned of geometry’s inability to rid art of “errors and wrongness,” and resented the *graticola* for its tendency to enslave “the mind of the artist to mechanical restrictions and [deprive him] of judgment [and] spirit.”<sup>8</sup>

These artists appear to have misunderstood Dürer’s intentions, however: he conceived of the *Underweysung* as an educational tool for fellow artists and craftsmen, an objective reflected in its title (it is a *course* for measurement); and in Dürer’s preference for vernacular German rather than the erudite Latin of universities; and finally in his choice to *print* the book, thus enabling it to circulate broadly. In fact, Dürer declares his pedagogical aim from the outset: “And since geometry is the right foundation of all painting, I [intend to teach here] its rudiments and principles to all youngsters eager for art [for the benefit of not only] painters but also goldsmiths, sculptors, stonemasons, carpenters and all those who have to rely on measurement.”<sup>9</sup>

Just as much as it was a practical tool for draughtsmen, the *graticola* equally served an instructive purpose: to teach the artist how perspective worked. The *graticola* taught the artist a new way of seeing, then, one in which bodies and the world around them are translated neatly into a geometric composition. In this way, Dürer’s *graticola* presented one solution to a problem that preoccupied all artists in the sixteenth century: how best to translate a three-dimensional body onto a two-dimensional picture plane.

Daniel Zolli

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<sup>1</sup> There is evidence that Italian thinking about art impacted Dürer even before he set foot in that country – the artist was familiar with Italian models through widely circulated loose-leaf engravings of classicizing subjects – whose outlines the artist allegedly copied directly – and books, which his learned humanist friends stockpiled in their libraries, and which would have been ready at hand for Dürer.

<sup>2</sup> Dürer published the remainder of his writings in 1528 as the *Vier Bücher von menschlicher Proportion*. The text, whose manuscript was essentially completed in 1512-13, is a series of exhaustively detailed studies on human proportions.

<sup>3</sup> Erwin Panofsky, *The Life and Art of Albrecht Dürer* (Princeton: Princeton University Press, 2005), 9.

<sup>4</sup> Dürer's belief that artists needed to be understand geometry before they could harness the lessons in the *Vier Bücher von menschlicher Proportion* sheds light on his choice to wait to publish the treatise on proportion until after the *Underweysung*.

<sup>5</sup> Dürer makes little effort here to conceal his indebtedness to Alberti. When he writes that the device enables the

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draughtsman to produce a picture “as if the observer of the picture were looking through an open window,” he is almost literally repeating a sentence by Alberti.

<sup>6</sup> The Latin verb *perspicere* means, roughly, ‘looking through,’ a word analogous to the drawing act performed by the observer here.

<sup>7</sup> Panofsky, 270.

<sup>8</sup> Quoted in Panofsky, 282. Artists criticized the printmaking process along similar lines. A drawing or painting celebrates both the *body depicted* and the *body that draws or paints*, foregrounding in its facture the hand of the artist. Printmaking, by contrast, introduces through its mechanical process a rift between artist's hand and the work produced. Printmaking bothered precisely because it *disembodied* – it was not artwork, according to critics like Vasari, because it lacked a hand (Vasari would revise his opinion considerably in the second 1568 edition of his book). Ironically, it was precisely its qualities of “objectivity” and mass dissemination that appealed to Dürer.

<sup>9</sup> Preface to *Underweysung*, quoted in Panofsky, 254.



A L'arriere faiz  
separé / iuf-  
ques a la mé-  
brane allan-  
toide.  
B L'endroit &  
face dudict  
arriere faiz /  
qui touche  
l'allantoide.

28

Étienne de la Rivière

French, d. 1569

After Jean "Mercure" Jollat

French, act. 1530-1545

*Female Anatomy*

Woodcut

In Charles Estienne, *De dissectione partium corporis humani libri tres* [Three Books on the Dissection of the Parts of the Human Body], Paris: Apud Simonem Colinaeum, 1545

Harvard Medical Library in the Francis A. Countway Library of Medicine (1.Mw.1546.S)  
Facsimile in exhibition

Although published two years after the *Fabrica* of Andreas Vesalius, Charles Estienne's *Dissection* was largely complete by 1539, making it an important work of illustrated pre-Vesalian anatomy. Estienne, part of a well-established family of French printers, was trained in medicine and botany in Padua and Paris. He was a polymath and hugely prolific writer, publishing numerous dictionaries, classical thesauri, city histories, and road guides in addition to works on agriculture, geography and poetry. The *Dissection* was published by Estienne's father in law Simon de Colines, first in Latin and in French the following year (the current volume belongs to this 1546 edition). It represents a collaboration between Estienne and the surgeon Étienne de la Rivière, who is credited in the introduction with aiding in dissections and designing the images. However, discord between the collaborators led to a lawsuit brought by Rivière against Etienne, which

suspended production of the book for six years, allowing the *Fabrica* to reach the market first.<sup>1</sup>

In the first book of the *Dissection*, Estienne explains his reason for undertaking anatomical study: man has been made by God to contemplate and investigate His works, and it is in man himself that the power of God is best revealed. The purpose of anatomy, he writes, is to open to sight "those parts of the body which are less perceived by our eyes, or of which we have a knowledge otherwise uncertain or to a high degree hidden." It is this emphasis on the meaning of vision that informs Estienne's then relatively revolutionary decision to rely heavily on images in describing the body's interior. Images, he acknowledges, function differently than text: they can elucidate form and position in a way that words cannot, and, in their immediacy, they are more easily retained in memory.<sup>2</sup>



transmission of classical knowledge. His young companion, encouraging him with a touch of the elbow, points to the remarkable scene before them and explains that it presents to the eye the true and exact disposition of the ventricles in cross section, information until then almost impossible to demonstrate. This remark describes more than advances in anatomical practice; it is about the power of printed images to make this revolutionary demonstration possible. No longer subject to the vagaries of scribal reproduction (embodied by the old man), knowledge of the bodily interior can move forward into the era of shared visual experience.

This enigmatic image, however, belies the young man's assertion of its absolute clarity; indeed, by its compositional logic, he does not even see the brain. Unlike Vesalius's *écorchés*, which are absorbed in their surroundings, the collapsed perspective of Estienne's image is almost aggressively oriented towards the viewer. In the absence of a pictured anatomist, our own act of looking is implicated in the body's violation. This complex definition of spectatorship is even more starkly apparent in Estienne's famous depictions of female reproductive anatomy, many of which transport us into the intimate space of the boudoir. These compositions were made by repurposing woodblocks based on erotic engravings of the 'loves of the gods' by the Italian printmaker Jacopo Caraglio,<sup>5</sup> themselves adaptations of Guido Reni's non-mythological pornographic print series *I Modi* [the positions].<sup>6</sup> The present image is adapted from an engraving of Venus and Cupid done after a drawing by the Mannerist painter Perino del Vaga (figure 2); here Cupid has disappeared, his bow and arrow replaced by instruments of dissection, while Venus's smooth belly has been opened to reveal the placenta in her pregnant womb<sup>7</sup>. Looking closely, we can see where the original block has been cut to accommodate the image's change of purpose.

By using such borrowed imagery, Estienne casts dissection as an erotic act that enhances the voyeuristic pleasure offered by Caraglio's print. In so doing he exposes the intimacy of the anatomical endeavor more generally and implicates the viewer's role in it. As in the depiction of brain anatomy, the instruments of dissection lie in the foreground, seemingly within our reach. As transmutations of

Cupid's arrows, they are charged with the potency of desire and the promise of bodily action. The Albertian window, gridded interface between viewer and viewed (see Durer's depiction of the *graticola*, catalogue no. 27) loses its implication of spectatorial dispassion and is here transformed into the voyeur's point of entry.

Alexandra Wachtel

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<sup>1</sup> For basic information on Estienne: George P. Burris, "Estienne's *De Dissectione* (1545), an example of Sixteenth Century Anatomical Illustration," *Bios* 37, no. 4 (Dec., 1966): 147-156.

<sup>2</sup> For more on memory and cognition in the early modern period, see section "Thinking Visually."

<sup>3</sup> Charles E. Kellett has published extensively on the influence of Mannerism on Estienne. See his *Medical Illustration and the School of Fontainebleau* (Newcastle upon Tyne: King's College Printing Section, 1957); "A Note on Rosso and the Illustrations to Charles Estienne's *De Dissectione*," *Journal of the History of Medicine and the Allied Sciences* 12, no. 3 (1957): 325-36; and "Perino del Vaga et les illustrations pour l'anatomie d'Estienne," *Aesculape* 37 (1955): 74-89. On Rosso's impact on anatomical imagery more broadly, see Monique Kornell, "Rosso Fiorentino and the Anatomical Text," *The Burlington Magazine* 131, no. 1041 (Dec., 1989): 842-847.

<sup>4</sup> Ludwig Choulant describes these bodily positions as "queer and repulsive," and is an early proponent of attributing the woodcut designs to Rosso Fiorentino. *History and Bibliography of Anatomic Illustration* (Chicago, Illinois: University of Chicago Press, 1920), 153.

<sup>5</sup> This was first pointed out by Kellett, 1955.

<sup>6</sup> For a discussion of the *I Modi* and the role of print in the dissemination of pornographic images in the early modern period, see Bette Talvacchia, *Taking Positions: On the Erotic in Renaissance Culture* (New Jersey: Princeton University Press, 1999).

<sup>7</sup> All of Estienne's images of women focus solely on the anatomy of the uterus. The first two woodcuts in the chapter specifically describe methods for removing living and dead infants from a dead body. On the historical and medical reasons for this attention the womb, see Katharine Park, *Secrets of Women: Gender, Generation, and the Origins of Human Dissection* (New York: Zone Books, 2010).



29.  
 Jan van Calcar, attributed  
 Netherlandish, c. 1499-1546  
*Portrait of Andreas Vesalius*, 1542  
 Woodcut  
 In Andreas Vesalius, *De humani corporis fabrica libri septem* [Seven Books on the Fabric of the Human Body], Basel: Johannes Oporinus, 1543  
 Harvard Art Museum/Fogg Museum, Gray Collection of Engravings Fund (G5157)

The Flemish anatomist Andreas Vesalius' *De Humani Corporis Fabrica*, first published in Latin in 1543, marks a turning point in the history of anatomical representation. Lavishly illustrated with woodcuts attributed by Giorgio Vasari to the Netherlandish-born artist Jan van Calcar, the *Fabrica* undertakes to replicate in text and image the experience of witnessing a dissection at first hand.<sup>1</sup> Vesalius's overriding concern was to unite what he saw as an artificial and detrimental separation between medical theory and surgical practice (a separation illustrated in the frontispiece to Mondino de Liuzzi's treatise, included in Johannes de Ketham's *Fasciculus Medicie*, catalogue no. 25). As a professor of surgery and anatomy at the University of Padua, Vesalius intended his book to demonstrate to an educated audience the value of hands-on dissection. To that end, he departed from standard practice in paying for and personally overseeing the production of woodcuts that present anatomy as a culturally meaningful endeavor that

mediates between classical authority and the realities of the material body.

Immediately translated into the vernacular, the *Fabrica* came to influence medical practice and representation beyond the elite realm of the university. The pictorial solutions it offered – particularly the deployment of seriality to transform the act of reading into the process of seeing the body dissected, the fiction of the “enlivened” écorché, and the use of classical statue fragments as imagined anatomical subjects<sup>2</sup> – were taken up and modified in anatomical treatises across Europe, and remained dominant until challenged by new models in the seventeenth century (in this exhibition, see catalogue no. 30). The *Fabrica*'s series of skeleton images, strongly inflected by the *memento mori* tradition, were also especially influential in other media, being transformed into tomb sculpture and medals as well as graphic arts. The wash drawing of a mourning skeleton presented here, which

combines the lamenting skeleton and the inscribed tomb (“Genius lives on, all else is mortal”) from two facing pages of the *Fabrica*, is an excellent example of this mode of reception.

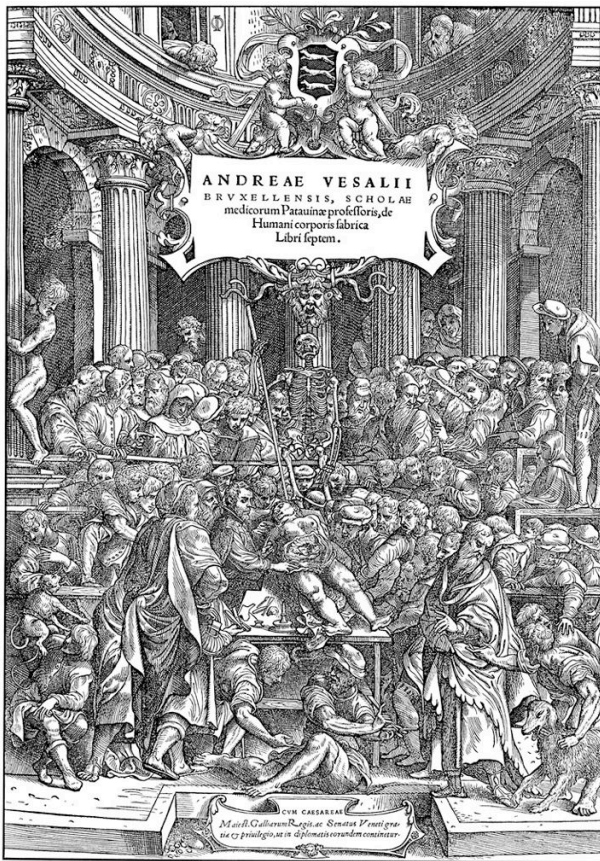
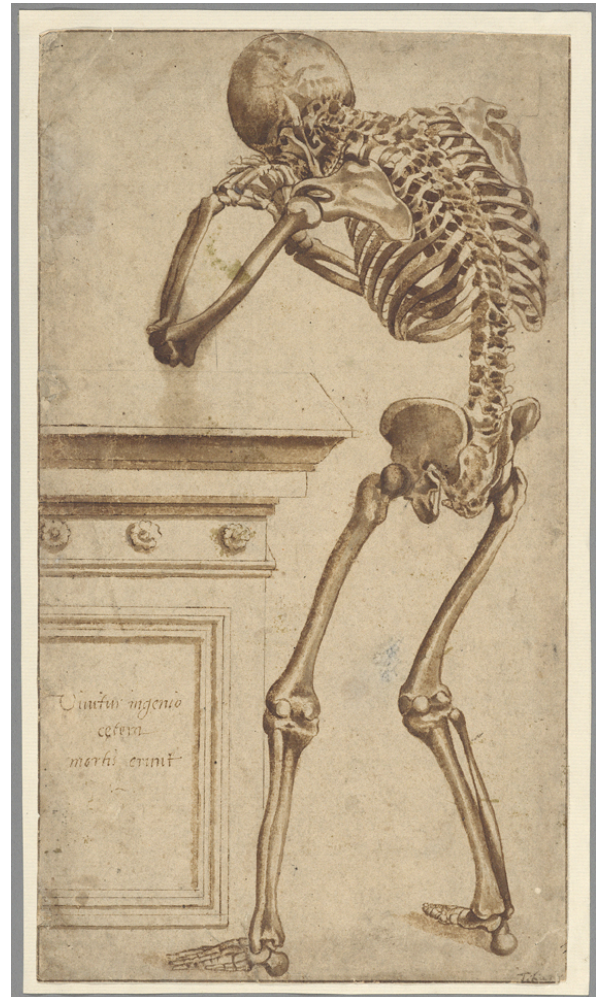


Fig. 1. Jan van Calcar, attributed, *Frontispiece*, 1542, woodcut, in Andreas Vesalius, *De humani corporis fabrica libri septem* [Seven Books on the Fabric of the Human Body], Basel: Johannes Oporinus, 1543 Houghton Library, Harvard College Library, Gift of Philip Hofer, 1942 (Typ 565.43.868 F)

The *Fabrica* begins with two images, the famous frontispiece (fig 1.) and the author portrait, which work in unison to fashion Vesalius as both learned physician and surgeon—one whose modernity is defined by his willingness to get his hands dirty. Both images present Vesalius dissecting a cadaver; in the frontispiece he does so in the context of a public demonstration,<sup>3</sup> surrounded by a carnival-like scene within which are placed symbolic references to Vesalius’s project and to his relationship with classical authority. For example, the monkey and dog at the lower corners of the composition refer to Galen’s anatomical treatises, which were based on animal dissections. By

including them Vesalius sets the tone for his entire undertaking, signaling both his knowledge of and respect for Galenic theory and his determination to correct its inaccuracies.<sup>4</sup> Strikingly, it is a female body laid out on the anatomist’s table. Her flower-like abdomen commands the gaze of the



Unidentified Artist, Vesalian Skeleton, pen and brown ink with wash over graphite. Houghton Library, Harvard College Library, Bequest of Frances Hofer, 1978 (Typ Dr 525.A147.40d Sz2)

rubbernecking onlookers who struggle to see and comprehend the structures that gave them life.<sup>5</sup> This opening is an appropriately generative portal into Vesalius’s tome; indeed, looking closely, we see that the peeled-back layers of her tissue closely resemble the leaves of a book turned by Vesalius’s hand. His other hand is raised in a gesture indicating pedagogical speech. The point here is his radical turn away from the authority of received knowledge to the book of the body itself – a book

that, transmuted once again into the medium of ink on paper, the reader can now also touch.

The author portrait again presents Vesalius turned in three-quarter view, following contemporary trends in painted portraiture. The image is secluded from the text, placed alone on a page with only Vesalius's Latinized name to introduce it. From the grand architectural space of the frontispiece we have moved into more intimate surroundings. Here the frontispiece's opening salvo is transformed into a complex theoretical elaboration of "hands-on" dissection. The image puts emphasis on the hand as the privileged instrument of both surgical skill and of writing, reiterating the relationship between book and body; the sheet of paper on the table, freshly inscribed by the quill resting in an inkpot behind it, records Vesalius's anatomical observations on the dissected hand and seems to emerge from it like the flaccid length of skin shown curving along the tabletop directly below. This page of notes is presumably the manuscript of the book now before the reader, emphasizing the identity between authorial intent and final product and investing the printed image with the immediacy of real-time discovery. By focusing on hand anatomy, this image suggests its importance as a locus of philosophical and theological meaning, a defining characteristic of humanity and emblem of God's intricate design.<sup>6</sup> It may also refer to the reemergence in this period of classical rhetoric, in which the gestural language of the hand was understood to be inextricable from the persuasive function of speech. This author portrait emphatically argues that to understand such an intricate piece of machinery as the human hand, one must skillfully, learnedly employ one's own.

The female anatomical subject of the frontispiece has been replaced, in the author portrait, with an upright, oversized male body. His scale and the way his body is cropped within the image—cutting off the face—make his identity mysterious. It seems likely that this irresolution is intentional, allowing for a plurality of readings that is in line with the complexity of images throughout the *Fabrica*. On the one hand, his maleness is appropriate to the image's focus on the hand as the instrument of intellect, just as the frontispiece's female cadaver is associated with generation. His scale may also ally him with the classical statue fragments populating

Book Five of the *Fabrica*, as an ideal or normative body from which to measure deviation. However, the position of his arm, the presence of the tabletop and its front edge (on which is incised Vesalius' age, 28, and the date), the placement of the loincloth and the solitary curl draped over his intact shoulder point to another category of image. They are strongly reminiscent of a particular iconographic type of the Man of Sorrows, popular in Italy from the fourteenth century, in which Christ, standing in the tomb and flanked by Mary and John, is presented to the viewer's for devotional contemplation. Vesalius and Calcar deploy this adaptation of Christian iconography—not itself a new idea in medical images, which had long drawn on scenes of martyrdom and the Passion—in a way that is unusually rich with meaning. On one level, this association between Christ's body and the anatomical subject serves to redeem a potentially abject undertaking, or at least to imply the necessity of the bodily abjection in the larger project of re-enlivening both the body and history. On another level, Vesalius here occupies the Virgin's intercessory position at the right hand of Christ, taking on her dual action of tender touch and outward presentation. Where she functions as the medium through which the Word becomes flesh, Vesalius, in a daring visual pun, becomes the agent of the body's expression as text—through the supremely skilled instrument of his hand.

Alexandra Wachtel

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<sup>1</sup> Calcar was long associated with the workshop of Titian. For a recent dismantling of that possibility, see Patricia Simons, "Annibal Caro's After-Dinner Speech (1536) and the Question of Titian as Vesalius' Illustrator," (with Monique Kornell), *Renaissance Quarterly* 61 (Winter 2008). An earlier discussion of the issue is in J.B. deC. M. Saunders and Charles D. O'Malley, *The Anatomical Drawings of Andreas Vesalius* (New York: Bonanza Books, 1982).

<sup>2</sup> A great deal has been written about these pictorial solutions. On the use of sculptural fragments, see specifically Glenn Harcourt. "Andreas Vesalius and the Anatomy of Antique Sculpture," *Representations* 17 (Winter 1987): pp. 28-61. For a discussion of the early modern relationship between art and science, see Bernard Schultz, *Art and Anatomy in Renaissance Italy* (Michigan: UMI Research Press, 1985). More generally: William Ivins, "What About the 'Fabrica'?" and Erwin Panofsky, "Artist, Scientist, Genius: Notes on the

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‘Renaissance-Dämmerung,’” in Wallace K. Ferguson, ed., *The Renaissance: Six Essays* (New York: Harper & Row, 1962); Martin Kemp, “A Drawing For the *Fabrica*: And Some Thoughts Upon the Vesalius Muscle-Men,” *Medical History* 14 (July, 1970) p. 277; James Elkins, “Two Conceptions of the Human Form: Bernard Siegfried Albinus and Andreas Vesalius,” *Artibus et historiae* 7 (1986): 91-106.

<sup>3</sup> On the history of public dissections see Giovanna Ferrari, “Public Anatomy Lessons and the Carnival: The Anatomy Theater of Bologna,” *Past and Present* 117 (1987): 50-106, and William Heckscher, *Rembrandt’s Anatomy of Dr. Tulp: An Iconological Study* (New York: New York University Press, 1958), chapters 6 and 7.

<sup>4</sup> On Vesalius’ relationship to Galen, see especially Sachiko Kusukawa, “The Uses of Pictures in the Formation of Learned Knowledge: The Cases of

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Leonhard Fuchs and Andreas Vesalius,” in *Transmitting Knowledge: Words, Images, and Instruments in Early Modern Europe*, ed. Sachiko Kusukawa and Ian Maclean, (Oxford: Oxford University Press, 2006), 73-96.

<sup>5</sup> On the importance and meaning of this use of a female cadaver see Katharine Park, “The Empire of Anatomy,” in *Secrets of Women: Gender, Generation, and the Origins of Human Dissection* (New York: Zone Books, 2010), 207-259.

<sup>6</sup> On the hand as an exemplar of God’s design, the “instrument with respect to instruments,” see Martin Kemp, “The Handy Work of the Incomprehensible Creator,” in Claire Richter Sherman, ed., *Writing on Hands: Memory and Knowledge in Early Modern Europe*. Carlisle, Pennsylvania: The Trout Gallery, 2000, 22-27.



### 30. a

Nicolas Beatrizet

French, 1517 or 1515-c. 1555

After an illustration by Gaspar Becerra,  
attributed

Spanish, c. 1520-c. 1570

*Intestinal cuirasses*

Engraving

In Juan Valverde de Amusco (Spanish, c. 1525-c. 1588), *Historia de la composicion del cuerpo humano* [History of the Composition of the Human Body], Rome: Salamanca and Lafreri, 1556

Harvard Medical Library in the Francis A. Countway Library of Medicine (Inv. No. QM21 .V24)

### 30.b

Jacques Guillemeau

French, 1550-1613

*Tab[le] II du ventre interieur* [Table II on the Interior of the Belly]

Engraving

In *Tables anatomiques, avec les pourtraicts et declaration d'iceulx* [Anatomical Tables with their Portraits, Explained], Paris: I. Charron, 1586

Houghton Library, Harvard College Library, Gift of Philip Hofer, 1942 (Typ 515 86.440 F)

(Not reproduced)

The publication of Vesalius's *De humani corporis fabrica* in 1543 represents a watershed in the history of anatomical illustration (See catalogue no. 29). Never before had the body been displayed and catalogued with such thoroughness, artistry, and attention to detail. Based on a careful, first-hand observation, the *Fabrica's* images of animated skeletons, viscerated sculptures, and musclemen parading across classicized landscapes became the standard for anatomical illustration through the middle of the seventeenth century.

The popularity of the *Fabrica* spawned a number of imitations and copies throughout the sixteenth century. In a letter printed at the beginning of the 1543 edition of the work, Vesalius launched a scathing attack on authors and publishers in Augsburg, Cologne, Strasbourg, Marburg, Frankfurt, and Paris, accusing them of stealing illustrations and abusing imperial privilege.<sup>1</sup> The letter did little to quell subsequent imitations, however, and the *Fabrica* became a paradigm for

many subsequent anatomical works of the sixteenth century. The two books here, Juan Valverde de Amusco's *Historia de la composicion del cuerpo humano* and Jacques Guillemeau's *Tables anatomiques*, demonstrate the extent of Vesalius's influence.



Fig. 1. Jan van Calcar, attributed, *Belvedere Torso*, 1542, woodcut, In Andreas Vesalius, *De humani corporis fabrica libri septem* [Seven Books on the Fabric of the Human Body], Basel: Johannes Oporinus, 1543, Francis A. Countway Library of Medicine (ff QM21 .V63 C.4)

The more famous of the two—indeed the most famous of all of the sixteenth-century iterations of the *Fabrica*—is Juan Valverde de Amusco's *Historia de la composicion del cuerpo humano*, first published in Spanish in 1556 by the printing shop of Lafreri and Salamanca, then in Italian in 1560. Valverde, a physician from the Kingdom of Leon, borrowed

heavily from Vesalius in his work—all but four of its forty-two illustrations, mostly likely drawn by Gaspar Becerra and engraved by Nicolas Beatrizet, are copied directly from the *Fabrica*. In a letter, Vesalius complains bitterly about these borrowings and blasts the quality of the book. But as Valverde himself notes in his preface to the *Historia*, “[Vesalius’s] illustration are so well done that it would look like envy or malignity not to take advantage of them.”<sup>2</sup>

Despite its affinities with the *Fabrica* Valverde's *Historia* features some significant innovations. In the first place, its use of the vernacular, condensed length, and relatively inexpensive price made Vesalius's work accessible to a wider audience. Unlike the *Fabrica*, the *Historia* could be purchased and read not just by court physicians and other wealthy scholars, but by surgeons and students as well. Within the book, Valverde attempted to correct and clarify several of Vesalius's illustrations, writing in his preface that using copper engraving and grouping all the images at the end of each section of text renders them “more readable and accommodating.”<sup>3</sup>

Valverde's most original contribution, however, remains the four original illustrations he designed with his fellow Spaniard, Gaspar Becerra. The engraving shown here, for example—which depicts six images of the intestines assembled within a single plate, with four individual organs on the right and two interconnected torsos on the left—represents a remarkable departure from the Vesalian model. While the *Fabrica*, with one exception, presents the viscera emerging from fragments of classical sculpture, Valverde and Becerra show the stomach and intestines enclosed between the breast and belly plates of Roman armor. The effect is striking: the classicism of the Vesalian model remains, but any sense of the organs' corporeality has been effaced. While this mannerist turn owes something to changes in contemporary taste, Valverde's suppression of the body and reanimation of the viscera in cuirasses foreground the contents of the body as discrete objects of observation to be dissected, categorized, and represented. In this manner, the illustration evinces another mode of integrating the anatomical body into the broader humanist culture of the Renaissance, of rendering the cadaver—and the muscles and bones and organs

within it—a credible object of study and, ultimately, knowledge.<sup>4</sup>

Valverde's *Historia* enjoyed almost as much popularity as Vesalius's *Fabrica*—by the seventeenth century, even the Jewish physicians of the Ottoman court were using it. The ascent and dissemination of Valverde's anatomy only confirmed the prestige of Vesalius's work. One of the works to follow in the wake of Vesalius and Valverde is the rare book on display here, Jacques Guillemeau's *Tables anatomiques*, first published in Paris in 1586. Not nearly as well known as Valverde's *Historia*, the *Tables anatomiques* demonstrates the continued relevance of Vesalius's *Fabrica* at the end of the century.

Born in Orléans, Jacques Guillemeau was the royal surgeon to Charles IX, Henri III, and Henri IV of France. Most famous for his contributions to dentistry and obstetrics, he published his *Tables anatomiques* as an anatomy book for French surgeons unable to read Greek or Latin. Unlike Valverde's *Historia*, the *Tables anatomiques* contains few noteworthy innovations. In fact, most of Guillemeau's anatomical plates are mirror-image copies of the engravings in the 1560 Italian translation of Valverde's *Historia*, which, as we know, were themselves mostly copies of Vesalius's woodcuts.<sup>5</sup>

The plate shown here, *Tab[le] II du ventre interieur*, shows two male torsos with their abdomens cut away to reveal the urinary and reproductive organs; the individual organs are laid out below. As many scholars have noted, these Vesalian torsos clearly evoke fragments of antique statuary. Although the source—if there is one—has not been identified for the torso on the right, the torso on the left as been identified as the Belvedere Torso. A fragment of antique Greek sculpture, the Belvedere Torso entered the Vatican collected by the mid-sixteenth century and became a major catalyst for the revival of classical aesthetics, especially through its large-scale dissemination in print after around 1515. Regardless of the specific sources of the anatomical torsos, however, their transformation on the printed page into both antique artifact and object of anatomical study allowed them to become sources of wonder and fascination for audiences beyond the confines of university and the surgical chamber.

As the illustrations of Vesalius, and their subsequent reappearances in the work of Valverde and Guillemeau, make clear, the model of classicism became essential not only for the study of the human body, but also for the cultural and intellectual legitimization of illustrated anatomy textbooks.<sup>6</sup> The printed anatomical body of the sixteenth century was not merely a representation of a lifeless cadaver, but a work of art, a sculpture, an artifact, a spectacle, and a curiosity—a sign invested with a thick accretion of meanings. By representing the classical body, fragmented by time, as re-enlivened through its evisceration—by bringing antiquity back to life on the engraved page—the illustrations of Valverde and Guillemeau helped fuse the sometimes-competing projects of humanism and empiricism, of art and science. They lent new authority to the study of anatomy, and they firmly established the body as a site of fascination, inquiry and knowledge.

Aaron Wile

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<sup>1</sup> Robert Herrlinger, *History of medical illustration from antiquity to 1600* (New York: Editions Medicina Rara, 1970), 121.

<sup>2</sup> Quoted in K. B. Roberts and J. D. Tomlinson, *The Fabric of the Body: European Traditions of Anatomical Illustration* (Oxford: Clarendon Press, 1992), 211.

<sup>3</sup> Quoted in Rose Marie San Juan, "Restoration and Translation in Juan de Valverde's *Historia de la composicion del cuerpo humano*" in *The Virtual Tourist in Renaissance Rome: Printing and Collecting the Speculum Romanae Magnificentiae*, ed. Rebecca Zorach (Chicago: University of Chicago Library, 2008), 54.

<sup>4</sup> For other interpretations of Valverde's cuirasses, see San Juan, "Restoration and Translation in Juan de Valverde's *Historia de la composicion del cuerpo humano*," 53-61; Stephanie Nadalo, "Armed with Scalpel and Cuirass: Violence, Masculinity, and Juan Valverde de Amusco," <http://anatomyofgender.northwestern.edu/nadalo01.html>.

<sup>5</sup> Harvard College Library Dept of Printing and Graphic Arts, Ruth Mortimer, Philip Hofer, and William A. Jackson 1905-1964, *Catalogue of Books and Manuscripts* (San Francisco: Wittenborn Art Books, 1998), 267.

<sup>6</sup> On classicism and Vesalian anatomical illustration, see Glenn Harcourt, "Andreas Vesalius and the Anatomy of Antique Sculpture," *Representations* no. 17 (Winter, 1987), 28-61.

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