

a body that did not itself mark these distinctions clearly.<sup>106</sup> Order and hierarchy were imposed upon it from the outside. The one-sex body, because it was construed as illustrative rather than determinant, could therefore register and absorb any number of shifts in the axes and valuations of difference. Historically, differentiations of gender preceded differentiations of sex.

The second explanation for the longevity of the one-sex model links sex to power. In a public world that was overwhelmingly male, the one-sex model displayed what was already massively evident in culture more generally: *man* is the measure of all things, and woman does not exist as an ontologically distinct category. Not all males are masculine, potent, honorable, or hold power, and some women exceed some men in each of these categories. But the standard of the human body and its representations is the male body.

From Thomas Laqueur,  
Making Sex

## THREE

# New Science, One Flesh

The books contain pictures of all parts inserted into the context of the narrative, so that the dissected body is placed, so to speak, before the eyes of those studying the works of nature.

VESALIUS, 1543

Across a millennial chasm that saw the fall of Rome and the rise of Christianity, Galen spoke easily, in various vernacular languages, to the artisans and merchants, the midwives and barber surgeons, of Renaissance and Reformation Europe. Various Latin translations, compendia, and Arabic intermediaries transmitted the one-sex body of antiquity into the age of print. "La matrice de la femme," writes Guillaume Bouchet in one late sixteenth-century *potpourri* of learning, "n'est que la bourse et verge renversée de l'homme" (The matrix of the woman is nothing but the scrotum and penis of the man inverted). A German doctor of no great fame pronounced, "Wo du nun dise Mutter sampt iren anhangen besichtigst, So vergleich sie sich mit allem dem Mannlichen glied, allein das diese aussershalb das Weiblich aber inwendig ist" (Viewing the uterus along with its appendages, it corresponds in every respect to the male member except that the latter is outside and the former inside). Or "the likeness of it [the womb] is as it were a yarde reversed or turned inward, having testicles likewise," as Henry VIII's chief surgeon says in a matter-of-fact way. There was still in the sixteenth century, as there had been in classical antiquity, only one canonical body and that body was male.<sup>1</sup>

The various vernaculars also replicated in new voices the Latin and Greek linguistic complex of connections between organs to which we, in our medical texts, would give precise and distinctive names. *Bourse*, for example, Bouchet's word for scrotum, referred not only to a purse or bag but also to a place where merchants and bankers assemble. As bag, purse,

or sack it bridges male and female bodies handily. "Purse" could mean both scrotum *and* uterus in Renaissance English.<sup>2</sup> An anonymous German text declares in a commonplace simile, "the uterus is a tightly sealed vessel, similar to a coin purse (*Seckel*)."<sup>3</sup> The womb "shuts like a purse (*bursa*)" after it draws up the male and female ejaculate, says the Pseudo-Albertus Magnus in his immensely popular and much translated *De secretis mulierum*.<sup>4</sup> Scrotum also links up with womb through its more social, economic meaning. *Matrice*, Bouchet's term for uterus, as well as the English variant *matrix*, had the sense of a place where something is produced or developed, as in "mountains are the matrices of gold." There is a suggestion here of the common trope of the uterus as the most remarkable, miraculously generative organ of the body. The "matrice" is thus the place where a new life is produced while "bourse" is a place where a different, and culturally less valued, kind of productivity, an exchange, takes place. Two different kinds of bags, two different ways of making and keeping money, link organs that today have no common resonances.

The body's pleasures also remained as intimately bound with generation as they had been for Hippocrates. "Much delight accompanies the ejection of the seed, by breaking forth of the swelling spirit, and the stiffness of Nerves," says the most ubiquitous sex guide in the western tradition.<sup>5</sup> Through a physiology shared with man, woman "suffers both ways," the sixteenth-century physician Lemnius points out, and feels a double pleasure: "she draws forth the man's seed, and casts her own with it," and therefore "takes more delight, and is more recreated by it."<sup>6</sup>

But amid these echoes of antiquity, a new and self-consciously revisionist science was aggressively exploring the body. In 1559, for example, Columbus—not Christopher but Renaldus—claims to have discovered the clitoris. He tells his "most gentle reader" that this is "preeminently the seat of woman's delight." Like a penis, "if you touch it, you will find it rendered a little harder and oblong to such a degree that it shows itself as a sort of male member." Conquistador in an unknown land, Columbus stakes his claim: "Since no one has discerned these projections and their workings, if it is permissible to give names to things discovered by me, it should be called the love or sweetness of Venus."<sup>7</sup> Like Adam, he felt himself entitled to name what he found in nature: a female penis.

Columbus' account is significant on two levels. First it assumes that looking and touching will reveal radically new truths about the body. The discoverer of the clitoris had nothing but contempt for his predecessors,

who either did not base their claims on dissection at all or failed to report accurately and courageously what they had seen. Mondino de' Luzzi (1275–1326), for example, the premier medieval anatomist, was made the butt of heavy irony for his perfectly commonplace though relatively novel claim that the uterus had seven cells; he "might as well have called them the porches or bedrooms."<sup>8</sup> Columbus' colleagues, meanwhile, attacked him with equal vigor. Gabriel Fallopius, his successor at Padua, insisted that he—Fallopius—saw the clitoris first and that everyone else was a plagiarist.<sup>9</sup> Kaspar Bartholin, the distinguished seventeenth-century anatomist from Copenhagen, argued in turn that both Fallopius and Columbus were being vainglorious in claiming the "invention or first Observation of this Part," since the clitoris had been known to everyone since the second century.<sup>10</sup>

The somewhat silly but complicated debate around who discovered the clitoris is much less interesting than the fact that all of the protagonists shared the assumption that, whoever he might be, someone could claim to have done so on the basis of looking at and dissecting the human body. A militant empiricism pervades the rhetoric of Renaissance anatomists.

Columbus' discovery would also seem to be fatal, or at the very least threatening, to the ancient representations of the one-sex body. Within the constraints of common sense, if not logical consistency, women cannot have a full-size penis within (the vagina) *and* a small homologue of the penis without (the clitoris). But Renaissance writers drew no such inference. Jane Sharp, a well-informed seventeenth-century English midwife, asserts on one page that the vagina "which is the passage for the yard, resembleth it turned inward" and, with no apparent embarrassment, reports two pages later that the clitoris is the female penis: "it will stand and fall as the yard doth and makes women lustful and take delight in copulation."<sup>11</sup> Perhaps these positions can be reconciled in that the vagina only resembles the penis whereas the clitoris actually is one; both maintain the one-sex model's insistence on the male as the standard. But Sharp had no interest in the question. Two seemingly contradictory accounts coexisted quite neatly, and the old isomorphism dwelt in peace with the strange new homologue from another conceptual galaxy.

Just when Columbus threatens to offer a new understanding of sexual difference, his text returns to the old track and the old tensions. Woman disappears, whether the vagina or the clitoris is construed as the female penis. Sexual delight continues to flow from the homoerotic rubbing of

like on like; pleasure is decoupled from the will so that her mind does not matter. "If you rub it [the clitoris] vigorously with a penis, or touch it even with a little finger, semen swifter than air flies this way and that on account of the pleasure, even with them [women] unwilling."<sup>12</sup> There remains but one sex, or in any case only one kind of body.

The discovery of the clitoris and its easy absorption by the one-sex model raises the central question of this chapter. Why did competent observers, self-consciously committed to new canons of accuracy and naturalistic illustration, continue to think of reproductive anatomy and physiology in a manner that is manifestly wrong and egregiously counterintuitive to the modern sensibility? In the first place, much of what is at stake is not empirically decidable. Whether the clitoris or the vagina is a female penis, or whether women have a penis at all, or whether it matters, are not questions that further research could, in principle, answer. The history of anatomy during the Renaissance suggests that the anatomical representation of male and female is dependent on the cultural politics of representation and illusion, not on evidence about organs, ducts, or blood vessels. No image, verbal or visual, of "the facts of sexual difference" exists independently of prior claims about the meaning of such distinctions.<sup>13</sup>

But there are empirically decidable contentions in Columbus' report and in the one-sex model generally. The clitoris (*bulbedo amoris*) he rightly says is the primary locus of venereal pleasure in women. On the other hand, he maintains—wrongly from a modern perspective—that semen, which looks very much like the male's, flies this way and that when it is stimulated and, were it not to do so, women would not conceive.<sup>14</sup> These are meant to be verifiable claims with the body as proof text:

You who happen to read these laboriously produced anatomical studies of mine know that, without these protuberances [the clitoris] which I have faithfully described to you earlier, women would neither experience delight in venereal embraces nor conceive any fetuses.

This is truly noteworthy: testes are produced in women so that they may produce semen. Indeed I myself can bear witness that, in the dissection of female testicles, I have sometimes found semen that is white and thick and very well concocted, as all the spectators have acknowledged with one voice.<sup>15</sup>

The specific claim that female orgasm was necessary for conception was, moreover, known to be vulnerable since antiquity.

Aristotle had pointed out that women in some circumstances could conceive "without experiencing the pleasure usual in such intercourse" and that conversely "the two sexes could reach their goal together" and the woman still not conceive.<sup>16</sup> Giles of Rome, a thirteenth-century scholar who was known even in that age of prolixity as "the verbose doctor," had argued at great length, on theoretical grounds, that the so-called female seed was essentially irrelevant to conception and that female orgasm was still more irrelevant. But he also offered empirical evidence of various sorts. Women purportedly told him that they had conceived without emission and presumably orgasm. Moreover, a clinical report by no less an authority than Averroës (ibn-Rushd, 1126–1198), the Arabic philosopher and author of a major medical encyclopedia, tells of a woman who became pregnant from semen floating in a warm bath. If, as this case is meant to show, penetration itself is only incidental to fertilization, how much more irrelevant still is female sexual pleasure?<sup>17</sup> And two thousand years after Aristotle, William Harvey repeated the old argument (though based, he says, on the evidence of "an infinite number" or at least "not a few" cases): the "violent shaking and dissolution and spilling of humours" which frequently occurs "in women in the ecstasy of coitus" is not required for the real work of making babies.<sup>18</sup>

It is also hard to believe that the consumers of vernacular medical literature—a wide swath of the literate public and those who might listen to them—needed the weight of tradition and learning to tell them that female orgasm did not always accompany conception.<sup>19</sup> Modern studies are quite consistent in showing that one third and perhaps as many as one half of women never have orgasm from intercourse alone, and certainly nowhere near such a proportion were infertile.<sup>20</sup> Maybe a higher percentage were orgasmic in an age in which what is now called "foreplay" was taken as a requisite prelude to procreative intercourse, but a great deal of everyday experience must nevertheless have belied the purported link between female orgasm and conception. Yet neither the evidence of the learned nor the actual experiences of marriage overturned the old model of bodies and pleasures.

Of course, some might say: those who knew—women—did not write and those who wrote—men—did not know. But this is not so telling a point. In the first place, the Hippocratic corpus and book 10 of Aristotle's *History of Animals*, for example, may well represent the voices of women, and other works give accounts much like these. Moreover, when women beginning in the Renaissance did publish on midwifery and reproduc-

tion, their views regarding the physiology of generation were entirely mainstream: Louise Bourgeois, Jane Sharp, and Madame de la Marche all propounded the common wisdom linking pleasure, orgasm, and generation. The occasional first-person account by women addressing these intimate matters, such as the remarkable autobiography of a seventeenth-century Dutch clergyman's wife, Isabella De Moerloose, further suggests that the literature I am citing reports commonly held beliefs.<sup>21</sup> Despite the growing tendency of the learned tradition to distance itself from "popular errors," my sense is that doctors, lay writers, and men and women in their beds shared a broad view on how the body worked in matters of reproduction.<sup>22</sup> The sort of highly politicized split between women's views of their bodies and that of a medical establishment would have to await the consolidation of a science-based profession beginning in the eighteenth, but not fully in place until the late nineteenth, century.<sup>23</sup>

Finally, there is modern evidence to suggest that women in the past might well have had no more or no less understanding of the timing and physiology of conception than did their doctors. Certainly, if advice columns are any indication, the view that orgasm is necessary for conception lives on today; physicians, both male and female, who in the early twentieth century attempted through interviews to determine the timing of ovulation during the menstrual cycle, failed to come up with consistent answers. And anthropological evidence suggests that living women whom one can interrogate actually hold views similar to those propounded by Renaissance midwifery and health guides. Thus an informant in Suye Mura told a Japanese-speaking woman anthropologist that "she [thought] that if a woman does not reach climax, she cannot conceive because her womb remains shut."<sup>24</sup> The Samo of Burkino Faso give an account of semen—"sex water" discharged by both men and women—blood, milk, and menstruation that is eerily like the one that dominated the western tradition.<sup>25</sup>

None of this argues against the fact that there must have been much local wisdom and a florid oral tradition among women in early modern Europe, which printed sources, no matter how popular, and modern evidence, no matter how wide-ranging, can never recapture. They are forever lost to historians. Nor does it prove that ordinary people, men or women, thought very much in terms of the anatomical isomorphisms of the one-sex model. Nevertheless, it does suggest that the sort of literature

on which I base these chapters—the only sort we are ever likely to have—shares the same conceptual universe of Renaissance people and even of "those who knew (women)," even if it does not speak in their voices.

Evidence bearing on the empirically testable claims of the one-sex model failed to dislodge them not because such data were silenced but because these claims were part of a far more general, intricate, and many-stranded conception of the body which no observations, singly or in combination, could directly falsify. Willard Quine suggests why this should be the case on philosophical grounds. The totality of our beliefs "is a man-made fabric which impinges on experience only along the edges." So-called knowledge, switching metaphors,

is like a field [which] is so underdetermined by its boundary conditions, experience, that there is much latitude as to what statements to reevaluate in the light of any contrary experience. No particular experiences are linked with any particular statements in the interior of the field.<sup>26</sup>

The ancient account of bodies and pleasure was so deeply enmeshed in the skeins of Renaissance medical and physiological theory, in both its high and its more popular incarnations, and so bound up with a political and cultural order, that it escaped entirely any logically determining contact with the boundaries of experience or, indeed, any explicit testing at all.<sup>27</sup>

This is by now so standard an argument in the history and philosophy of science that it even has a name: the Quine-Duhem thesis. But it is worth making again for two reasons. The empirically testable claims of the old model, which represent and are represented by the transcendental claim that there exists but one sex, are so farfetched to the modern scientific imagination that it takes a strenuous effort to understand how reasonable people could ever have held them. It is an effort worth making, if only to unsettle the stability of our own constructions of sexual difference by exposing the props of another view and by showing that the differences that make a difference are historically determined.

Second, by making manifest the web of knowledge and rhetoric that supported the one-sex model, I am setting the stage for its challengers in the eighteenth and nineteenth centuries. If its stability can be attributed to its imbrication in other discursive modes, its collapse will not need to be explained by a single dramatic discovery or even by major social upheavals. Instead, the construction of the two-sex body can then be viewed

in the myriad new, and new kinds of, connections between, and within, sexual and other discourses.

### The practices of anatomy

"When you meet a human being," said Freud in his comments on "Femininity" in *New Introductory Lectures*, "the first distinction you make is 'male or female?' and you are accustomed to making the distinction with unhesitating certainty." Anatomical science at first seems to support this certainty but upon further reflections turns out to be far less authoritative: "what constitutes masculinity or femininity is an unknown characteristic anatomy cannot lay hold of." The more Renaissance anatomists dissected, looked into, and visually represented the female body, the more powerfully and convincingly they saw it to be a version of the male's.

*The body speaks itself.* In large measure the new science greatly strengthened the old model simply because it proclaimed so vigorously that Truth and progress lay not in texts, but in the opened and properly displayed body.<sup>28</sup> A rhetoric of bad-mouthing reinforced the idea that only error and misguided adherence to authority stood in the way and that with care one could see, among many other things, that women were inverted men. Vesalius publicly denounced the whole lot of his predecessors, including his teacher Jacobus Sylvius, for considering Galen infallible, and Columbus could write of the "by no means negligible corrections" he had to make in Vesalius to produce a dissecting guide that "will tell the truth about the human body."<sup>29</sup> Fallopius announced that he would refute the accounts of ancient and more modern writers and completely overturn some of their doctrines, "or at least make them totter."<sup>30</sup>

More important, the new, extravagantly public theatrical dissection and its visual representations advertised the conviction that the opened body was the font and touchstone of anatomical knowledge.<sup>31</sup> What had been hidden before—there was very little if any human dissection in antiquity and no anatomical illustration—and what had been practiced only occasionally and quietly—anatomy in medieval universities—was now made available for general consumption. One need no longer imagine Galen's topographical transformations; one could verify them by sight. As Harvey Cushing argues, the famous frontispiece to Vesalius' *De humani corporis fabrica*, the founding work of modern anatomy (fig. 3), stands as



Fig. 3. Sixteenth-century dissection scene from the frontispiece to Vesalius' epochal *De humani corporis fabrica* (1543).

a rebuke to those who only read ancient texts while barber surgeons did the dissection. Compare it, for example, to the frontispiece to Mondino's *Anathomia* (figs. 4 and 5), the medical-school standard before Vesalius. Text, in the form of the name of the book, or a reader expounding *ex cathedra* dominate the earlier pictures. The body seems almost an afterthought, lying passively within the picture's plane. The anatomist's gaze in fig. 5 lights on the cadaver's face, not on its exposed viscera, as if its humanity, not its value as dead material to be studied, demands attention. Vesalius must have imagined scenes like these when he condemned ana-

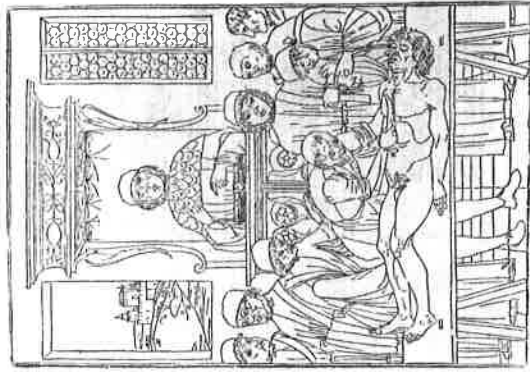


Fig. 4. Frontispiece to Johan Ketham, *Fasciculus Medicinæ* (Venice, 1550), a reworking of Mondino's *Anathomia*.

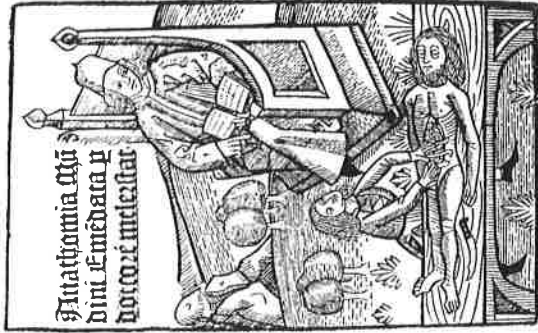


Fig. 5. Frontispiece to Mondino [Mundinus], *Anathomia* (1493).

tomists who "from a lofty chair arrogantly cackle like jackdaws about things they have never tried." A butcher in his meat market could teach a doctor more.<sup>32</sup>

By contrast, in fig. 3 the opened body is the unquestioned font of authority, enforced by the lordly skeleton that presides over the scene. Unlike the bodies in earlier representations, it comes out at us from the plane of the picture; its exposed entrails occupy dead center between the title and the bottom of the picture. An imaginary line passes down the spine of the skeleton, between its breasts and through the viscera, bisecting the image and dividing the magnificent rotunda in which the cadaver lies. Classical statues lend dignity, as they will later in the book, when the viscera are displayed in them, mediate the violence of dissection, and define the features displayed as those of a normative, median body. And, as in the frontispieces to many Renaissance anatomies, a great concourse of assorted observers looks on. This is a picture, in short, about the majestic power of science to confront, master, and represent the truths of the body in a self-consciously theatrical and public fashion.<sup>33</sup>



Fig. 6. Frontispiece to a 1642 Dutch edition of Vesalius' *Epitome* (1543).

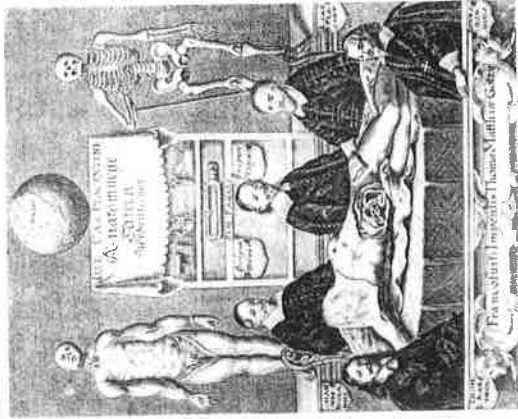


Fig. 7. Frontispiece to G. Cassario, *Anatomische Tafeln* (1656), which is a reworking of the scene in fig. 6.

The picture may seem to be, more narrowly, an assertion of male power to know the female body and hence to know and control a feminine Nature.<sup>34</sup> Vesalius presides here over an assemblage of men who peer into a woman's helpless, naked, and revealed body before them. The cadaver in the frontispiece (fig. 6) to a later Dutch edition of Vesalius' *Epitome*, a sort of student guide to the larger *Fabrica*, is still more shapely, her generative organs more clearly shown, her face mysteriously veiled so as to emphasize the accessibility to her body to the male gaze. Even the banner bearers are men, the sex of the skeleton evident from his cape and gravedigger's shovel.

But the politics of gender in anatomical illustration is not so simple. The frontispiece to Cassario's *Anatomische Tafeln* (fig. 7) takes the engraving used in fig. 6 and substitutes a man's body for the woman's. His face is also draped, his body is if anything more subject to domination by the instruments behind him and by the knife resting on his thigh. The young and extraordinarily eroticized cadaver being dissected in fig. 8, the frontispiece to John Riolan's text, is clearly a man though androgynously del-

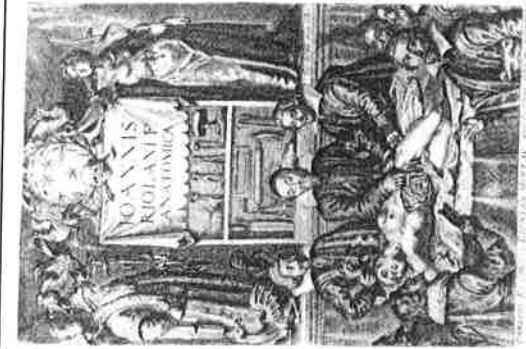


Fig. 8. Frontispiece to Jean Riolan, *Les Oeuvres anatomiques* (1629). The male cadaver is if anything more erotically portrayed than either the male or female in figs. 6 and 7.

icate in his features. More generally, it simply is not true that women, sensual or not, were particularly identified with the object of anatomical study. In the frontispieces of fourteen anatomy books published between 1493 and 1658, the body being dissected is male in nine cases, female in four, and indeterminate in one. Perhaps the availability of material rather than sexual politics determined the sex of the generic cadaver.<sup>35</sup> In any case, the body qua body is what matters, and the programmatic point of the Renaissance anatomical frontispiece is clear: anatomists have the power to open the temple of the soul and reveal its inner mysteries (fig. 9 is paradigmatic on this point).<sup>36</sup>

The bodies of women must be seen in the context of two further representational strategies, both of which emphasize the theatrical display of bodies as testimony for the anatomist's claims. In the first place, even when medieval anatomies—and indeed even Renaissance books before Jacopo Berengario da Carpi's *Isagoge brevis* in 1522—were illustrated, that is, rarely, what pictures they did contain were at best superficially connected with the text, whose authority rested in the words and reputation of the author. In Berengario, however, something novel was happening. He was committed to an *anatomia sensibilibs*, an anatomy of what

could be seen, and illustrations were to be its printed aspect, the graphic substitute for actually seeing the structures in question and thereby vouchsafing the anatomist's words.<sup>37</sup> The frontispieces and the many spectacular engravings in Vesalius and subsequent works continued to invoke the authority, first, of a dramatically opened, exposed body and then, derivatively, of naturalistic representation itself.<sup>38</sup>

Even without words, these new illustrations were advertisements for their own truth. In them the dead act as if they were still somehow alive—not cadavers at all—and thus able to certify personally the facts that the anatomist presents and the epistemological soundness of anatomy generally. The thoroughly classical muscle man in Juan de Valverde's *Anatomia* (fig. 10) flays himself to reveal his surface structures, holding



Fig. 9. Frontispiece, after a drawing by Paolo Veronesi, to Columbus, *De re anatomica* (1559).

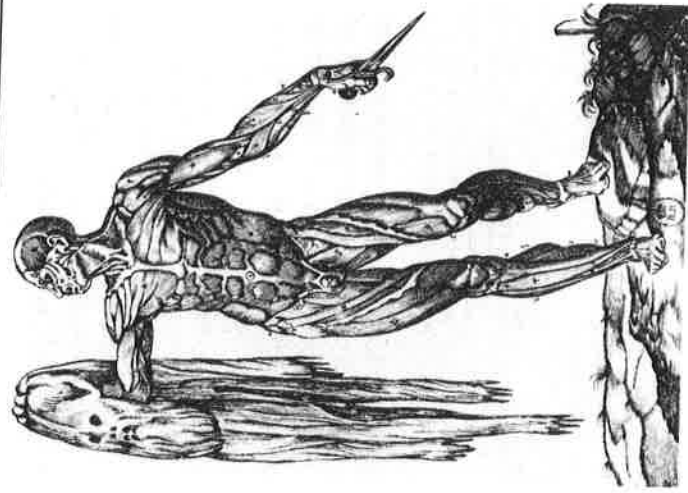


Fig. 10. Classical figure, having flayed himself, displays both his skin and his surface musculature. From Juan de Valverde, *Anatomia del corpo umano* (1560).

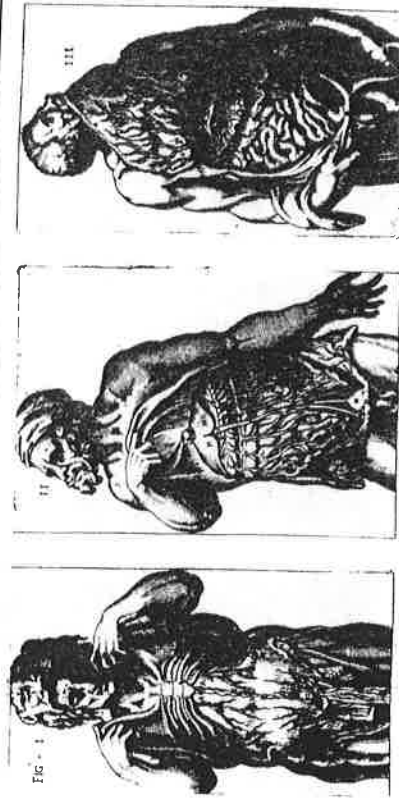


Fig. 11. Three figures in various tortured poses of revealing themselves to the readers of an anatomy text. From Valverde, *Anatomia*.

up his skin—an allusion to Michelangelo's self-portrait, part Marsias, part St. Bartholomew, from the *Last Judgment*—for extra emotional appeal.<sup>39</sup>

Later in Valverde's book a rather self-absorbed creature calmly lifts up his belly's fat and skin to show off his abdominal fascia; for our viewing convenience, the next figure holds up still more of his fleshy clothes to reveal the omentum beneath. He gestures with his left hand and turns, as if modeling or rehearsing on stage, to ask the artist or director who hired him whether this pose or gesture will do. A third fellow needs both his hands and his teeth—they hold up the omentum—to assure us an unobstructed vista of his viscera (fig. 11). In a Belgian edition of the *Epitome* (fig. 12) an opened anatomist—no greater sacrifice in the interests of science is possible—looks heavenward as his fingers resect the ribs of a Vesalian Apollo Belvedere or perhaps himself. Various well-proportioned men in Estienne's *La Dissection des parties du corps humain*, the most lavishly produced of the pre-Vesalian anatomies, look more or less pleased, pained or pathetic, as they tear themselves apart for their viewer's somewhat minimal anatomical edification (figs. 13–14).

The art and rhetoric of Renaissance anatomies thus proclaim the authority of seeing and the power of dissection. Various stratagems for cre-

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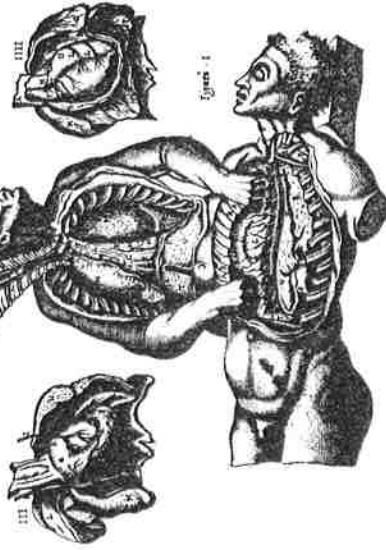
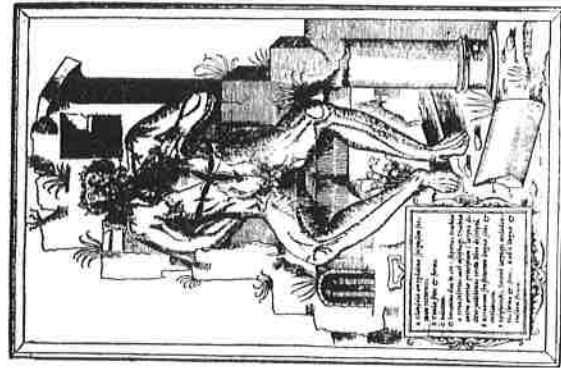
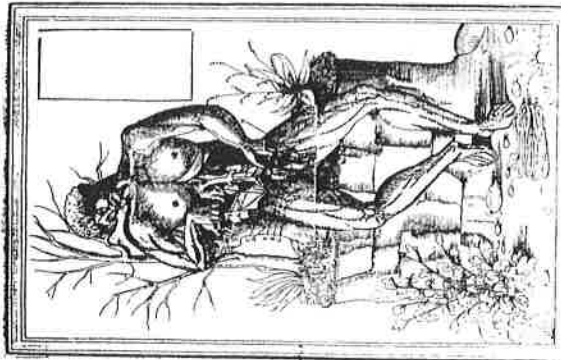


Fig. 12. One anatomized cadaver dissecting another who is represented as a fleshly version of a broken classical statue. Original also from Valverde's *Anatomia* but borrowed by a 1559 Bruges edition of Vesalius' *Epitome*.





Figs. 13-14. Two male figures ripping themselves open for the edification of viewers. The "martyrdom" on the right reveals the tongue and tonsils, the one on the left the lower abdomen and genitals. From Charles Estienne, *La Dissection des parties du corps humain* (1546).

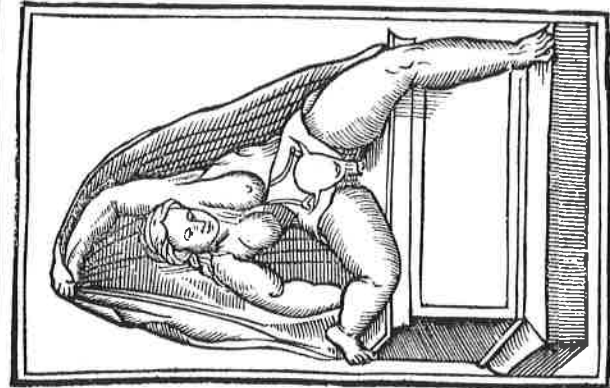


Fig. 15. A female sculpture has suddenly come alive and is leaving her pedestal to demonstrate the text's claim that the uterus is like the penis and that testicles and various vessels also correspond. From Jacopo Berengario, *Isagoge brevis* (1522).

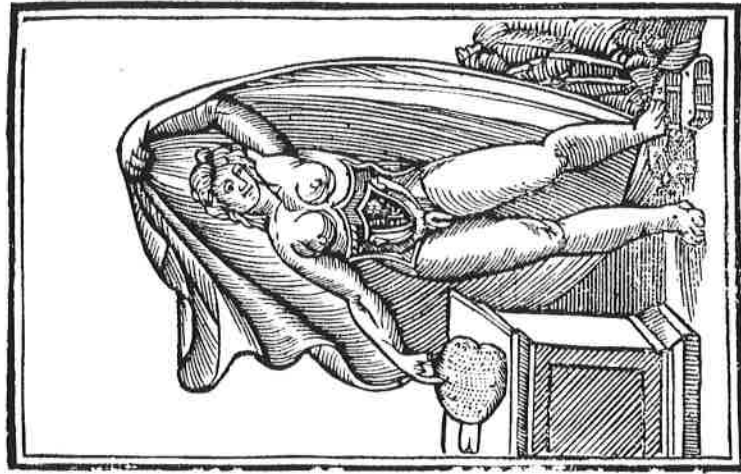


Fig. 16. The model has left her pedestal and gestures flamboyantly to her uterus. "You see," she says, "how the neck of the womb resembles a penis." From Berengario.

ating the "reality effect" make pictures stand in for bodies themselves and witness the truths of texts that viewers are invited to construe as only one remove from the cadaver itself. Seeing is believing the one-sex body. Or conversely:

*Believing is seeing.* The new anatomy displayed, at many levels and with unprecedented vigor, the "fact" that the vagina really is a penis, and the uterus a scrotum.<sup>40</sup> Berengario makes absolutely sure that his readers do not miss or doubt the point: "the neck of the uterus is like the penis, and its receptacle with testicles and vessels is like the scrotum."<sup>41</sup> In the first of the pictures accompanying this by now familiar assertion, a classical statue of a decidedly feminine woman seems miraculously to have come alive; she is in the process of throwing off her wrap and stepping carefully down to confront the reader with proof (fig. 15). In the next one (fig.

16) she flamboyantly tosses her cloak over her head with one hand, while with the other she directs her audience's gaze to what has been removed from her open belly and placed on the pedestal from which she descended: her uterus. She—the now animated cadaver whose voice has become indistinguishable from the anatomist's—gestures epideictically and announces with obvious authority: "you see how the neck [of the uterus] . . . resembles a penis" (p. 78). Finally, a third close-up illustration

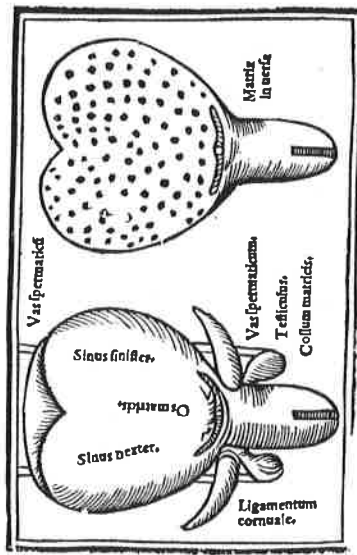


Fig. 17. The uterus and attached vessels labeled so as to make clear once again—"because a tenfold repetition is wont to please"—the correspondences between male and female organs. From Berengario.

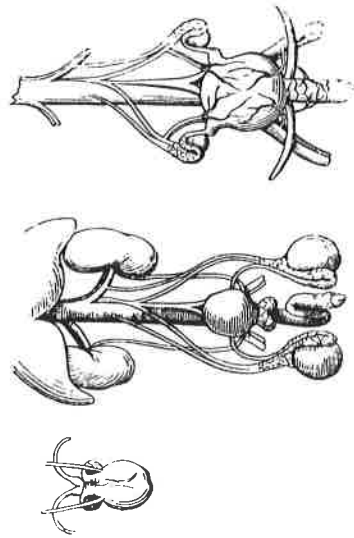


Fig. 18. Male and female organs displayed to demonstrate their correspondences. From Vesalius, *Tabulae sex* (1538).

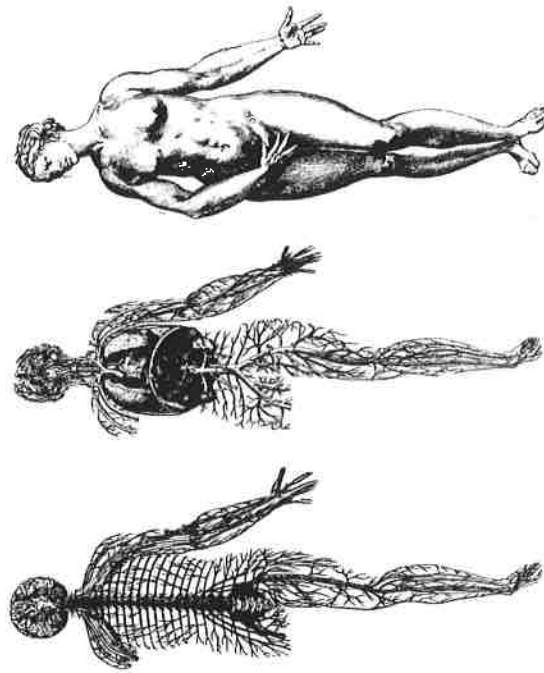
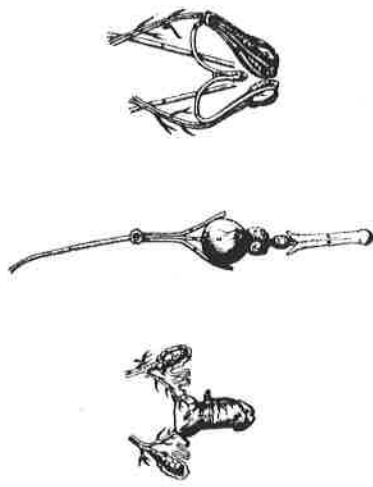


Fig. 19a-d. Top row (19a): the shorter penislike structure is the "uterus with the testes and seminal vessels"; the longer one is the male genitalia to which the student is then asked to attach the male testes. Both male and female organs were then to be glued onto fig. 19b, which in turn fit under 19c and then under 19d, a classical female nude. From Vesalius, *Epitome*.

hammers home the point visually and through labels that identify the ovaries as testicles and the Fallopian tubes as spermatic ducts (fig. 17).

Women's organs are represented as versions of man's in all three of Vesalius' immensely influential and widely plagiarized works. Among the

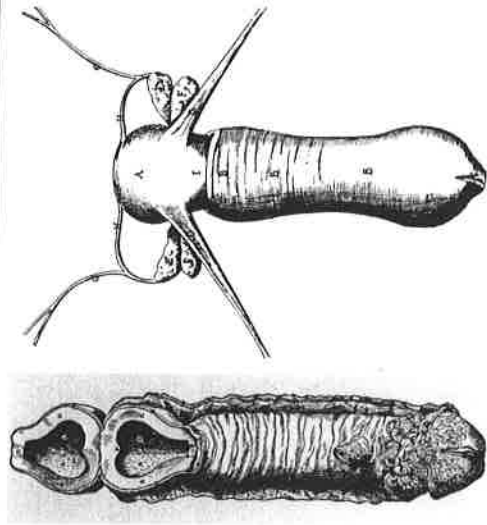


Fig. 20. (left) Vagina as penis from Vesalius, *Fabrica*.

Fig. 21. (right) The vagina and uterus from Vidius Vidius, *De anatome corporis humani* (1611)

founding images of modern anatomy is a powerful new register for the old ordering of bodies. His most reprinted image of the vagina as penis, and also the most explicit, is one of the illustrations (fig. 18) from the *Tabulae sex*, a set of cheaply printed pictures, so-called fugitive plates prepared for medical students or for lay consumption. In the *Epitome*, engravings of almost indistinguishable male and female reproductive organs are included for students to cut out and glue onto figures provided for that purpose (fig. 19).<sup>42</sup> But the most visually striking of Vesalius' pictures on this theme is in the *Fabrica* itself. Here (fig. 20) the uterus, vagina, and external pudenda of a young woman are not specifically arrayed, as in the *Tabulae* or the *Epitome*, to demonstrate that these structures are isomorphic with those of the male; they are just *seen as* such.

I emphasize "seeing as" because these images, and many more like them, are neither the result simply of representational conventions nor the result of error. A whole world view makes the vagina look like a penis to Renaissance observers. Of course a representational convention, a schema, is at work; Renaissance anatomical illustrators learned to depict the female genitalia from other pictures and not from nature alone (see figs. 21–24). But this does not mean that stylistic concerns kept them from seeing genital anatomy "as it really is," or as moderns see it.<sup>43</sup>

Nor is the strange quality of images in figs. 15–24 the result of someone's efforts to make the female body conform to some erroneous text or to distort women's genitalia so that they become a caricature of men's. The draftsman who produced fig. 21, for example, is not guilty of clandestinely substituting animal for human anatomy, as Vesalius coyly accuses Galen of doing in the *Fabrica*'s famous juxtaposition of a woodcut of a canine premaxillary bone and suture with those of a man (fig. 25). He is, moreover, innocent of what Vesalius himself did on occasion: "seeing" something that does not exist because an authority declares it to be present.<sup>44</sup> There are gross errors of this sort in Renaissance illustrations of the female genitalia, but they are irrelevant to the rhetorical purposes of the illustrations. In fact, if they were more accurate, they would make their point even more powerfully. If, for example, in figs. 16–17 the nonexistent "coryleons"—the dots representing the anastomosis of veins in the uterus—were rubbed out, the suggestion of two chambers eliminated, and the vagina drawn in correct proportion to the uterus, the organs would resemble a female scrotum and penis more closely. Expung-

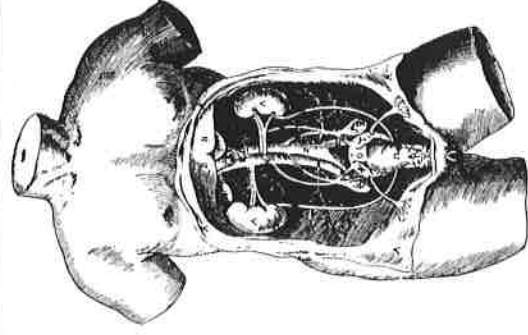


Fig. 22. The female torso, in the form of a piece of broken classical art, from which the penis-like vagina in fig. 21 was taken, following the artistic and scientific conventions of the time.

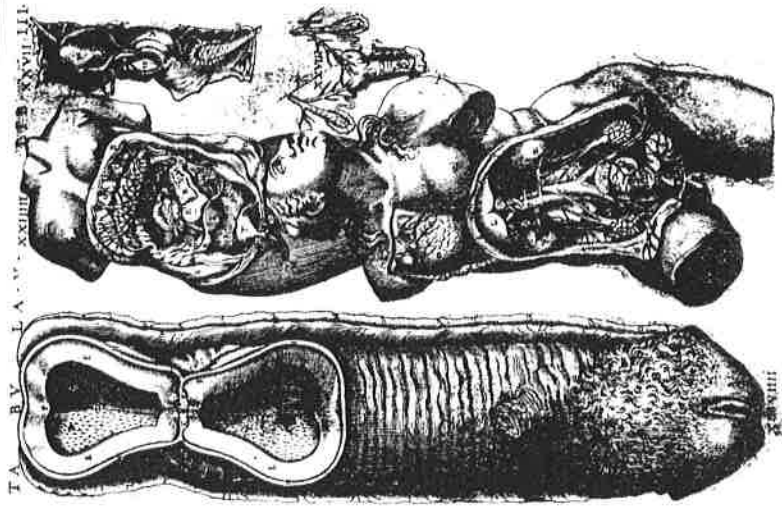


Fig. 23. This reworking of Vesalius in a 1586 edition of Valverde follows the same convention illustrated in figs. 21-22. On the left is a structure that looks like a penis; on the right are the classical female forms from which it was taken.

ing the "horns of the uterus" (GG) from John Dryander's representation of the female reproductive organs (fig. 26) or from other Renaissance illustrations (figs. 32-33 for example) would make the uterus and vagina look more, not less, like a bladder and penis; and redrawing, in the interests of accuracy, the ovarian artery and vein EE in fig. 26 so that they appear less like the epididymis, II in fig. 27, would, at worst, leave the overall effect the same.<sup>45</sup>

However grotesque or monstrous the woodcut of the female genitalia

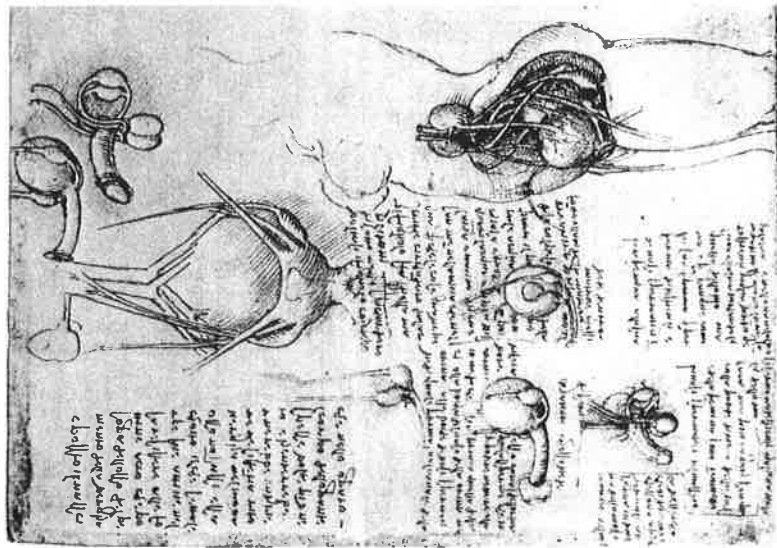


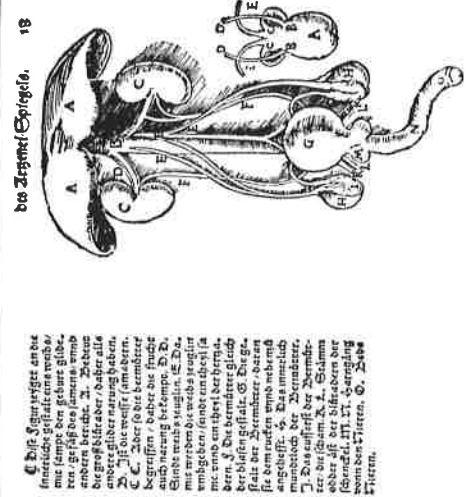
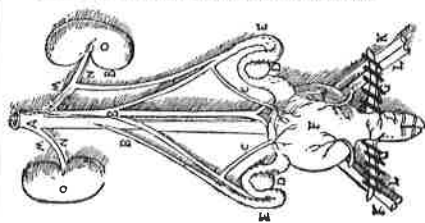
Fig. 24. Leonardo's version of the isomorphism between the womb and scrotum—upper right and lower left—is peculiar in that he renders it by making the vas deferens of the male curve around to resemble the shape of the uterus. The penis/vagina imagery is more conventional.

depicted in the *Fabrica* has appeared to some modern commentators, it is not incredible or "wrong." Its proportions are roughly those of "accurate" nineteenth-century engravings (fig. 28) and illustrations from a modern text (fig. 29), though these of course were not drawn to illustrate the isomorphism between male and female organs.<sup>46</sup>

Subsequent discoveries that would force changes in the labels of illustrations are of equally minor importance in the history of "seeing as." The *Zengin*, or testes, and the *Samadern*, seminal vesicles, did not exist, as



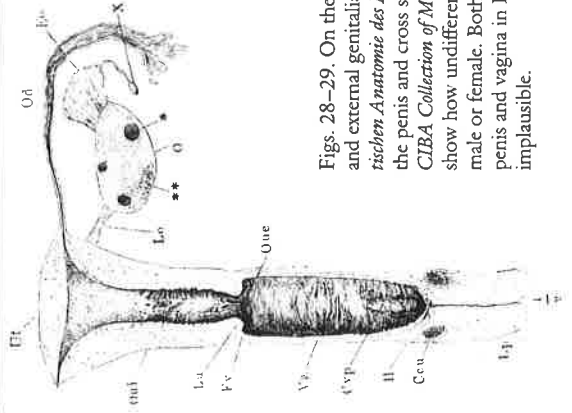
Fig. 25. "We have placed," Vesalius says in this polemical illustration from the *Fabrics*, "the skull of a dog beneath that of a man so that anyone may understand Galen's description of the bones of the upper jaw without the slightest difficulty."



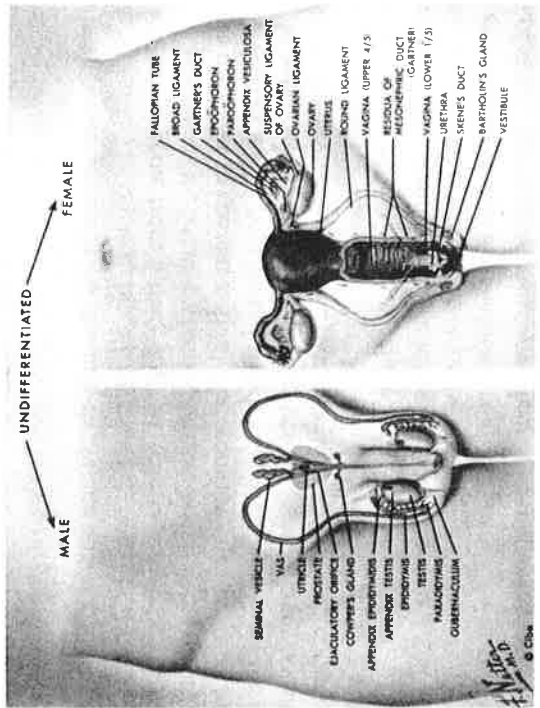
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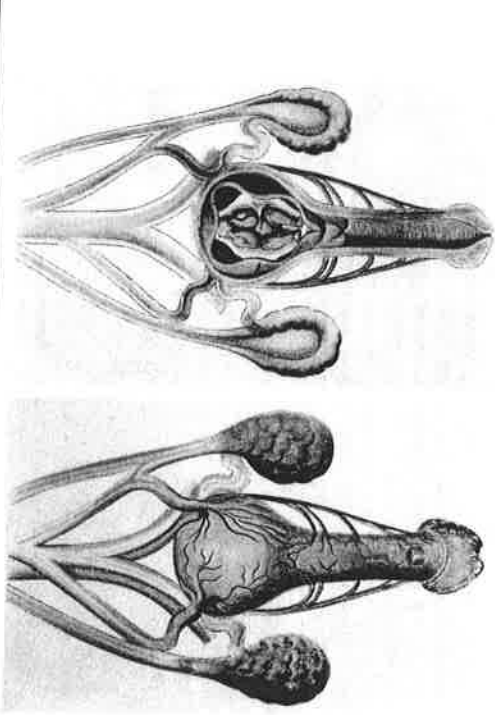
Figs. 26-27. The male and female reproductive systems adapted from Vesalius' *Epitome* in Johann Dryander, *Der Gantzten Artzney* (1542). In fig. 26 I have blocked out the nonexistent horns of the uterus to show that making a drawing like this more accurate would also make them more convincing as illustrations of the penis/vagina isomorphism. Elongating the vagina so that it is in proper proportion to the uterus would have the same effect.

Dryander's labeling claims, in both men and women; nineteenth-century histology would teach that nothing of interest follows from the observation that the uterus, labeled F in fig. 26, has the same shape as the male bladder, G in fig. 27. But these advances pale beside facts that Renaissance anatomists did know and that did nothing to discredit the whole representational convention of seeing the female genital anatomy as an interior version of the male's. The uterus bears children but the scrotum



Figs. 28-29. On the left is a frontal section of the uterus, vagina, and external genitalia from Jakob Henle, *Handbuch der systematischen Anatomie des Menschen*, vol. 2 (1866). Below is a drawing of the penis and cross section of the female genitals by Frank Netter, CIBA Collection of Medical Illustrations, vol. 2 (1954), made to show how undifferentiated embryological structures end up as male or female. Both show that the geometrical relations between penis and vagina in Renaissance engravings are not intrinsically implausible.





Figs. 30–31. On the left are the penislike female organs of generation from Georg Barnisch, *Kunstbuche* (1575). On the right the front of the uterus is cut away to reveal its contents.

does not; babies are delivered through the vagina and not through the penis. So what? The organ in fig. 30, for example, might be a vagina from a woman or a penis from a man. Fig. 31 relieves the suspense. It is a vagina, we now know, because what might have been either a scrotum or a uterus turns out to contain a child! The womb with its penislike extension in Walther Ryff's popular and widely translated book plays the same trick, as it becomes strangely transparent to allow readers a view of the fully formed baby within (fig. 32). A little window has been cut into the female scrotum, the uterus, in figs. 33–34, an illustration from another well-known midwifery book, to show a fully formed child, its back turned to intruders and to the penile vagina through which it will pass.

The history of the representation of the anatomical differences between man and woman is thus extraordinarily independent of the actual structures of these organs or of what was known about them. Ideology, not accuracy of observation, determined how they were seen and which differences would matter.

*Seeing difference differently.* Renaissance “common sense,” and critical observation directed against the view of woman as man turned outside in,

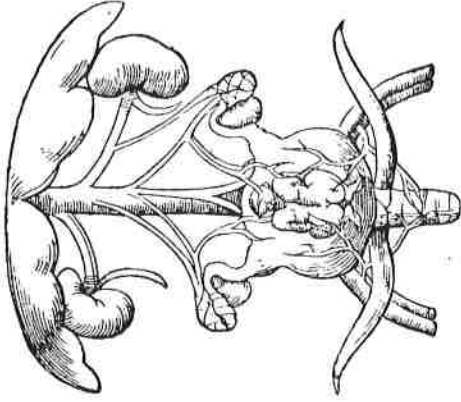


Fig. 32. The female organs of generation from Walther Ryff, *Anthomia* (1541). In this and the next illustration note that the vagina and uterus would look more like a penis and scrotum if the horns were expunged and the vagina drawn in correct proportion, that is, if they were more accurate.

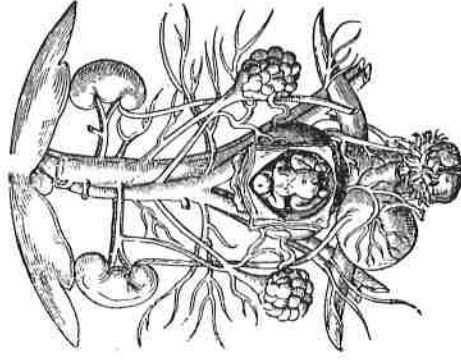


Fig. 33. The female organs of generation from Jacob Rueff, *Habammenbuch* (1583), which appeared in English as the widely plagiarized and popular *The Expert Midwife* (1637). Note that the left ureter has been cut and the bladder pushed to the right from its natural position so that we might look into the window of the womb and see the child.

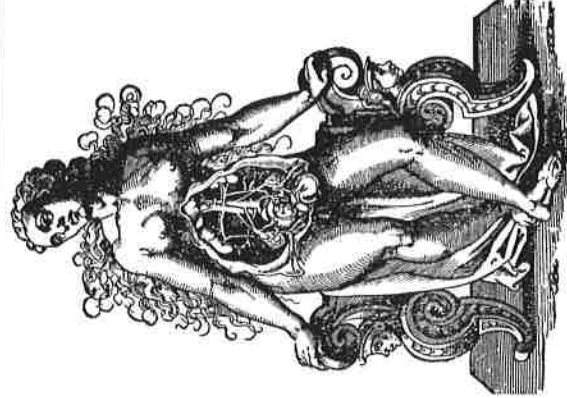


Fig. 34. The gravid uterus with its penile vagina of fig. 33 *in situ*. The bladder has been pushed left, and the child shows its profile.

failed to make a dent in the one sex-model. Arguments against the vagina as penis, for example, are to the modern imagination stranger even than the claim itself. At the simplest level, an apparent failure to find equivalences between men and women could be saved by the sort of wishful thinking that daily saves phenomena in normal science. Except in moments of revolutionary crisis, there is always a way out. Women may not seem to have a scrotum, and indeed other parts of man might be difficult to find in woman or vice versa. But these difficulties, argues Charles Estienne, can be resolved by reference to position: "You would agree this is true: if you turn a womb removed from the body inside out (quoth Galen) you will find testicles bulging out from its outer surface, by which the womb itself, by outer appearances is as a scrotum."<sup>47</sup> We might or might not be able to find what this anatomist claimed if we followed his instructions, but the exercise would be entirely irrelevant to a world that believes in two sexes. No pushing or pulling of surfaces would convince us to see the womb as a scrotum, any more than a topologist could make us regard a tea cup as a doughnut even if her procedures were sound, which Estienne's were not.

Conversely, perfectly sound anatomical observations adduced against the old homologies seem, from a modern perspective, so curiously peripheral—even perverse—that they serve only to cast further doubt on the whole enterprise of searching in bodies for any transcultural signs of difference. The distinguished English anatomist Helkiah Crooke argued, for example, against "any similitude betwene the bottome of the womb inverted [the cervix], and the scrotum or cod of a man," on the grounds that the skin of the "bottom of the wombe is a very thicke and tight membrane, all fleshy within" while "the cod is a rugous and thin skin." (True, but scarcely compelling, and not among the more telling differences that spring to mind between the cervix and the sack that holds the testicles.) Crooke's rejoinder to the claim that the vagina really is a penis is still more amazing. "Howsoever the necke of the wombe shall be inverted, yet it will never make the virile member," he proclaims. Why? Because "three hollow bodies cannot be made of one, but the yard consisteth of three hollow bodies" and, as we have already been told, "the necke of the womb hath but one cavity." (As figs. 35–36 make clear, Crooke is anatomically correct, however strange his argument seems to the modern sensibility.) Furthermore: "neither is the cavity of a man's yard so large and ample as that of the necke of the wombe." In short, the

The XXIV TABLE

The Replication of the FIGURES. All the Parts of the Yard are represented in this TABLE.

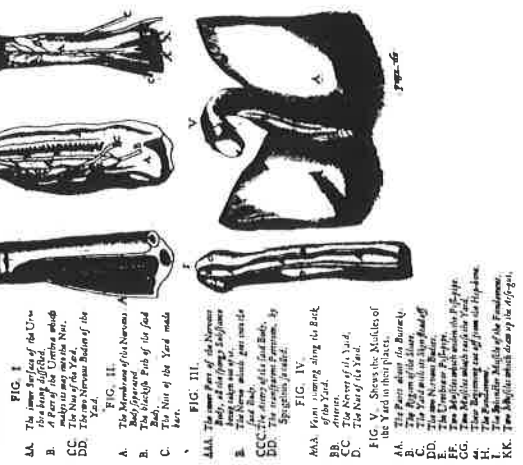


Fig. 35. Table 24 from Kaspar Bartholint, *Anatomy* (1668), showing "the parts of the yard." The drawing on the lower left shows the corpus spongiosum penis through which the urethra passes. In the drawing upper left, this passage is left intact and one of the two corpora cavernosa penis, the "nervous bodies" that were thought to produce erection, is excised: three hollows in all.

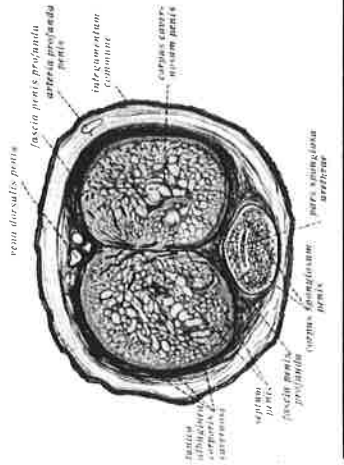


Fig. 36. Cross section of the penis from a modern atlas showing that indeed the penis does have three hollows, as Crooke said.

penis is not a vagina either because it is thrice hollow or because it is not hollow enough.<sup>48</sup> But for others the hollowness test figured on the opposite side—in support of the Galenic isomorphisms—or at worst as irrelevant:

Whatever you see as a kind of opening in the entrance to the vulva [vagina] in women, such indeed is found in the foreskin of the male pudenda, like a

kind of outgrowth hollow inside. The only difference between them is that this hollowness is much greater in woman than in the man.<sup>49</sup>

At work here is a sensibility radically different from that of doctors in the world of two sexes.

Even when the broader cultural context of the one-sex model was clear to a critic of the Galenic isomorphisms, a web of significance kept the attack narrowly focused and harmless to overarching structures. Bartholin, for example, understood Galenic sexual politics perfectly. "We must not," he argued, "think with Galen . . . and others, that these female genital parts differ from those of Men only in Situation," because to do so would be to fall prey to an ideological plot "hatched by those who accounted a Woman to be only an imperfect Man." Its perpetrators, in talking about how the woman's "coldness of temper" kept female organs inside, were simply articulating their prejudices in the language of science. (One would like to know how and why Bartholin developed so political and so astute a critique.) But, quite apart from politics, Bartholin criticized Galen and his followers for not getting their story straight. Was the "neck of the womb" or the clitoris the female penis; was the womb the female scrotum, or was at least part of it her version of the "nut of the yard"? And the spermat preparatory vessels, he pointed out, differed in number, origin, and function in men and women, and the male has a prostate, which the female does not have.<sup>50</sup> Finally, illustrations hampered home the point. The clitoris is clearly rendered as *the* female penis while the womb and the vagina are portrayed in an unambiguously unpenile fashion (fig. 37).

But despite these well-developed and thoroughly articulated criticisms, Bartholin seemed incapable of transcending the ancient images he explicitly rejected. The orifice, or inner mouth of the womb (the cervix), he explained, functions "like the Hole of the Nut of the Yard," so that "no hurtful thing may enter in." The "neck of the womb"—note the use of the conventional term for the vagina—"becomes longer or shorter, broader or narrower, and swells sundry ways according to the lust of the woman." Its substance "is of a hard and nervous flesh, and somewhat spongy, like the Yard." The vagina, in other words, became once again in his imagination a penis. But the clitoris too, like the vagina, was also like the penis. It is "the female yard or prick," because it "resembles a man's yard in situation, substance, composition, repletion with spirits, and erec-

## The FIGURES • The XXVTH TABLE

This TABLE comprehends the Situation of the Womb, the Body of the Uterus, the external Female Privy, both in Virgins, and such as are delicate.

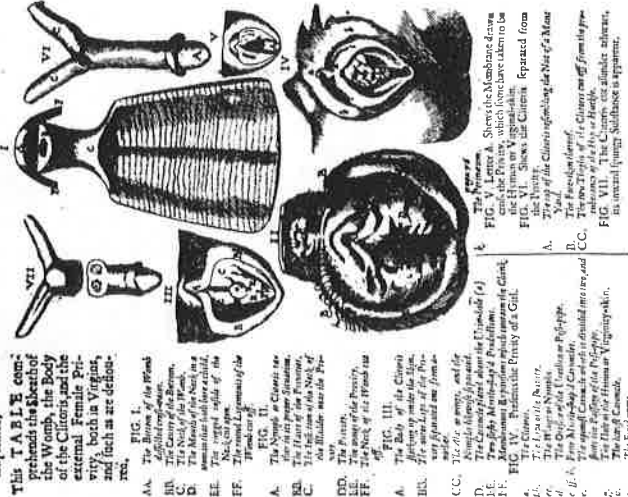


FIG. I. The Blower of the Wind, Affected with the Stone. FIG. II. The Neck of the Womb. FIG. III. The Mouth of the Neck, in a Virginal Situation. FIG. IV. The external Female Privy, in a Virginal Situation. FIG. V. The internal Os of the Uterus. FIG. VI. The external Os of the Uterus. FIG. VII. The external Female Privy, in a delicate Situation.

Fig. 37. Table 28 from Bartholin's *Anatomy* in which the vagina (I) is shown with its wall open and folded back so as to emphasize its hollowness. The external pudenda are no longer represented to look like the foreskin of the penis, and the clitoris (VI and VII) is clearly rendered as the female penis. These images were stolen by Venetie and reprinted in his *Art of Comyugal Love* and its many translations.

tion" and because it "hath somewhat like the nut and foreskin of a Man's Yard."<sup>51</sup> Clearly Bartholin was caught up in a way of looking that kept him tied to the images of one sex. Indeed, the more he looked, the more he saw and the more muddled the picture became for him, with not one but two female penises to accommodate.

It did not, moreover, escape Renaissance observers that Galen's topological inversions led to ludicrous results. Again, nothing followed. The one-sex model absorbed yet another category of simile. Jacques Duval, a prominent seventeenth-century physician, for example, tried Galen's thought experiment and concluded quite rightly that "If you imagine the



vulva (*ruhre*) completely turned inside out . . . you will have to envisage a large-mouthed bottle hanging from a woman, a bottle whose mouth rather than base would be attached to the body.”<sup>52</sup>

This bottle then “would bear no resemblance to what you had set out to imagine.” To some, however, a bottle shaped like the vagina and womb hanging by its mouth *did* resemble a penis or scrotum enough to serve as the basis for a descriptive metaphor. William Harvey, discoverer of the blood’s circulation, described a prolapsed uterus as “so rough and wrinkled as to take on the appearance of scrotum”; it hangs down, he said a few paragraphs later, “like the scrotum of a bull.”<sup>53</sup>

Rabelais, in describing how Gargantua was dressed, also elided the distinction between the womb or, as in George Gascoigne’s verse quoted below, a childbearing cradle, on the one hand, and the codpiece containing the penis and scrotum on the other.<sup>54</sup> True, the orange-sized emeralds on Gargantua’s codpiece are said to be appropriate because “this fruit has an erective virtue.” But then the pouch begins to appear as a finely embroidered and bejeweled horn of plenty, like that given by Rhea to the nymphs who nursed Jupiter. It is, the narrator says, while promising more in his forthcoming *On the Dignity of Codpieces*, “always brave, sappy, and moist, always green, always flourishing, always fructifying, full of humours, full of flowers, full of fruit, full of every delight.”<sup>55</sup> The codpiece seems, in short, to have been transformed into the womb, which is not so odd given the ancient notion of the uterus as a belly and the late medieval sense of cod as a belly or bag. (Chaucer’s Pardoner in *The Canterbury Tales* proclaims: “O wombe! O bely! O stynkyng cod.”)<sup>56</sup>

Moreover, the womb that to Duval seemed like a bottle hanging by its neck, and thus not a good candidate for the penis inverted, is the precise form of the codpiece, an obvious phallic sign in clothing whose visual representations are at the same time often decidedly unphallic (figs. 38–39). The codpiece tended to be, like Duval’s bottle, broader at the end than at the base, blunt not sharp, decorated with ribbonlike braids. In the portrait of an unknown young aristocrat (fig. 40), it remains ambiguous whether the flower of betrothal he holds is an allusion to the hoped-for generative power of his penis or of the uterine structure in which it is coddled.<sup>56</sup> The codpiece indeed seems to bear a remarkable resemblance not just to a prolapsed uterus but to a swaddled child.

And this of course completes the circle back to Galen, to the womb as



Figs. 38–39. Jacopo Pontormo, *Albadiere* (1529–30). The codpiece in these pictures (close up on right) very much resembles Jacques Duval’s bottle.



Fig. 40. Detail of *Portrait of a Young Man Before a Broad Landscape*, anonymous German painting of the 1530s, in which the codpiece is a sort of bundle for the penis. The boy holds the flower in his right hand; the bloom is to the right of his penis in the picture.

unborn penis, and to the Renaissance trope to the male organ as infant. Here is Gascoigne’s “The Lullaby of a Lover”:

Eke Lullaby my loving boye,  
My little Robyn take thy rest . . .  
With lullaby now take your leave,  
With Lullaby your dreams deceive,  
And when you rise with waking eye,  
Remember then this Lullaby.<sup>57</sup>

Duval's argument thus turns in on itself and in a curious way makes the case against which it was directed. Seeing opposition in organs before the eighteenth century was far more problematic than would seem possible later.

*The language of difference and sameness.* I want to shift now from images to words. The absence of a precise anatomical nomenclature for the female genitals, and for the reproductive system generally, is the linguistic equivalent of the propensity to see the female body as a version of the male. Both testify not to the blindness, inattention, or muddleheadedness of Renaissance anatomists, but to the absence of an imperative to create incommensurable categories of biological male and female through images or words. Language constrained the seeing of opposites and sustained the male body as the canonical human form. And, conversely, the fact that one saw only one sex made even words for female parts ultimately refer to male organs. There was in an important sense no female reproductive anatomy, and hence modern terms that refer to it—vagina, uterus, vulva, labia, Fallopian tubes, clitoris—cannot quite find their Renaissance equivalents. (I think anatomy, more than physics, provides the paradigmatic case of Thomas Kuhn's argument that one cannot translate between theories across the chasm of revolution.)

There has, of course, always been in most languages a vast metaphoric elaboration of terms for organs and functions that are risqué or shameful. (When adolescent boys talk today about "getting a piece of ass," they are not referring to the anus.) Until the late seventeenth century, however, it is often impossible to determine, in medical texts, to which part of the female reproductive anatomy a particular term applies.<sup>58</sup>

"It does not matter," says Columbus with more insight than he was perhaps aware of, "whether you call it [the womb] matrix, uterus, or vulva."<sup>59</sup> And it does not seem to matter where one part stops and the other starts. He does want to distinguish the true cervix—the "mouth of the womb (as matrix)," which from the outside "offers to your eyes . . . the image of a tenchfish or a dog newly brought to light," which in intercourse is "dilated with extreme pleasure," and which is "open during that time in which the woman emits seed"—from what we would call the vagina, "that part into which the penis (*mentula*) is inserted, as it were, into a sheath (*vagina*)."<sup>60</sup> (Note the metaphoric use of "vagina," the standard Latin word for scabbard, which was otherwise never used for the

part to which it applies today.) But he offers no other term for "our" vagina, describes the labia minor as "protuberances (*processus*), emerging from the uterus near that opening which is called the mouth of the womb," and calls the clitoris, whose erectile and erotogenic qualities he is in the process of extolling, "this same part of the uterus (*hanc eandem uteri partem*)."<sup>61</sup> The precision Columbus sought to introduce by calling the cervix the true "mouth of the womb" vanishes as the vaginal opening becomes the mouth of the womb and the clitoris one of its parts. The language simply did not exist, or need to exist, for distinguishing male from female organs. This same sort of tension is evident in other anatomists. Fallopius is anxious to differentiate the cervix proper from the vagina, but has no more specific name for it than "female pudenda," a part of a general "hollow" (*sinus*). The Fallopian tubes, as he describes them, are not the tubes that convey eggs from the ovaries to the womb, but twin protuberances of sinews (*nervei*), which do penetrate the peritoneum, are hollow, and do not have an opening into the uterus. Fallopius remained committed to the male-centered system and, despite his revolutionary rhetoric, assumed the commonplace that "all parts that are in men are present in women."<sup>62</sup> Indeed if they were not, women might not be human.

Gaspard Bauhin (1560–1624), professor of anatomy and botany in Basel, sought to clear up the nomenclature, but with equal lack of success. The drive to see all genital organs with reference to man is too deeply embedded in language. "Everything pertaining to the female genitalia is comprehended in the term 'of nature' (*phuseos*)," he declares, but then informs his readers that some ancient writers called the male genitalia *phuseos* as well. Among the words for the labia he cites is the Greek *metochela*, meaning snout, with its obvious phallic connection, or more explicitly translated, "penile lips."<sup>63</sup> This in turn fits the usual conflation of labia with foreskin that goes back at least to the tenth-century Arabic writer who points out that the interior of the vagina—a curious description—"possesses prolongations of skin called the lips," which are "the analogue of the prepuce in men and has as its function protection of the matrix against cold air."<sup>64</sup> According to Mondino, the labia guard the "the neck of the womb" in the same way that "the skin of the prepuce guardeth the penis," which is why "[Haly Abbas calleth them *praputia matricis* [prepuce of the uterus, of the vagina?]."<sup>65</sup> Berengario simply uses the word *nymphæ* to refer to both the foreskin of the penis and the fore-

skin of the vagina, the labia minora.<sup>66</sup> (And when a new female penis appears, the labia become its foreskin as well. So John Pechy, a popular English writer during the Restoration, describes the “wrinkled membranous production cloath the clitoris [not the vagina] like a foreskin.”<sup>67</sup>)

Much of the controversy around who discovered the clitoris arises out of just such a blurring of metaphorical and linguistic boundaries, the consequence of a model of sexual difference in which unambiguous names for the female genitals do not matter. I will offer only one example here. When Thomas Vicary, writing in 1548 before Columbus published, reports that the vulva “hath in the midst a Lazartus pannicle, which is called in Latin *Tentigo*,” the reference would seem to be unambiguous. Moreover, *tentigo* in early seventeenth-century English means “a tennesse or lust; an attack of priapism; an erection.” There is even less question that the structure in question is the female penis, the clitoris. But when Vicary reports on the functions of this part, its “two utilities,” he seems to be discussing an entirely different organ. There is no mention of pleasure. “The first [utility] is that by it goeth forth the urine, or else it should be shed throughout al the Vulva: The seconde is, that when a woman does set hir thies abroad, it altereth the ayre that commeth to the Matrix for to temper the heate.” What the name led us to expect, a female penis, turn out to be a pair of workaday flaps, a dual-purpose female foreskin.<sup>68</sup> But whatever Vicary means, it is impossible to translate across the chasm that divides this world from ours.

A web of words, like the constellation of images discussed in the previous sections, was redolent with a theory of sexual difference and thus sustained the one-sex model against more general testing. There was in both texts and images a quality of obsessive insistence, a constant circling around, always back to the male as standard. An almost defensive quality suggests that the politics of gender off the page might well have engendered the textual insistence that there really were no women after all.

### The truth of the one-sex model

As I said, parts of the one-flesh model were in principle open to empirical verification and hence also to falsification. But it remained untested, not only for the reasons mentioned above but also because it was woven into a whole fabric of interpretation, clinical practice, and everyday experience

that protected it from exposure to what we would construe as contrary evidence.

*Orgasm and conception.* It is scarcely surprising that men and women should think that there was a phenomenological correlative to so awesome and mysterious a process as generation. (Orgasm remains even today linked to conception in the imaginations of many people.) On the other hand, counterevidence must have been readily at hand that women frequently conceived without it. For a number of reasons, however, the old view survived. Systematic evidence on the subject is very difficult to gather and, even if women had been asked, it is more than likely that they would have answered what tradition dictated. They would have remembered the night of conception or misreported their feelings because it is all too easy to dismiss a nonorgasmic conception as an anomaly or, many months later, simply to have forgotten the circumstances of conception, especially when to do otherwise would have been to fly in the face of accepted wisdom. Experience, in short, is reported and remembered so as to be congruent with dominant paradigms.

On a more technical level, it was not difficult to refute, or push to the margins, unwelcome facts. Aristotle, for example, was easy game. His own dictum that “nature never makes anything without a purpose and never leaves out what is necessary” was routinely turned on him.<sup>69</sup> Since women have organs that resemble the male testicles, and since they obviously experience sexual orgasm—“ye shall observe the same delight and concussion as in males”—there seemed no reason to deny them as active a role in human generation as men. “Why should we suppose Nature, beyond her custome, should abound superfluidities and uselesse parts,” asks the progressive Oxford physician Nathaniel Highmore rhetorically.<sup>70</sup> Or, as Lemnius put it in 1557, in a simile that would have resonance in an increasingly commercial society, a woman’s womb is not simply “hired by men, as merchant ships are to be fraited by them.” And even if—as he denied—female semen had no other purpose “but only to excite, move and stir the woman to pleasure,” it would be immensely important because without the “vehement and ardent lust and appetite” for carnal union, neither man nor woman would follow God’s injunction to multiply and be fruitful. Thus the fact that women had gonads like men, that they had sexual desires, that they generally produced fluid during intercourse, and presumably showed signs of “delight and concussion,” all

confirmed the orgasm/conception link that Aristotle, at least in his philosophical persona, had sought to deny.<sup>71</sup>

To be sure, the fluid women produced did not look like the male ejaculate, but that was precisely what was to be expected. In the first place, a thing did not have to look like something else in order to be it, as in the bread and wine at communion. More prosaically, the Galenic model of hierarchically ordered sexes would have predicted differences in the quality of the two. Patriarchy itself was predicated on the fact that when, "by the labour and chafing of the testicles or stones," blood is turned into sperm, the man's would be "hote, white and thicke" while the woman's would be "thinner, colder, and feebler."<sup>72</sup>

The heat (orgasm) conception nexus was also deeply entwined in medical practice and theory generally. As we have seen, the one-flesh-model, and the role of orgasm in it, is represented in the bodily economy of fluids generally and redounds throughout the entire structure of Galenic-Hippocratic medicine. The experience of patients would have supported it, if only out of the universal tendency of people to believe in, even as they ridicule, the efficacy of their healers.

But heat, and orgasm specifically, was integral to the more mundane therapeutics of infertility, amenorrhea, and related conditions, not to speak of sexual dysfunctions whose physiological causes are the same as theirs. A physician, surgeon, midwife, wisewoman or other healer consulted regarding any of these, and especially barrenness, would immediately have suspected some caloric pathology. And since the statistical analysis of conception has evolved only very recently, and since doing nothing therapeutically has a remarkable chance of success in curing infertility, it seems probable that almost any advice Renaissance healers happened to give their patients regarding sexual heat and pleasure must have appeared to work often enough to confirm the model on which it was based.<sup>73</sup>

Even suspected anatomical defects might be regarded as damaging because of their effect on pleasure. If, as was thought, the generative body during coitus "shakes out" the semen, then irregularities in the actual physical contact between bodies would be among the first possibilities investigated by doctors in patients who consulted them for infertility.<sup>74</sup> If the penis fails to rub properly, either or both partners might fail to have an orgasm and hence to produce seed. Fallopius argues that a malformed foreskin needs to be corrected less for cosmetic reasons than because a penis without one is not "naturally lubricated"; "lubricity" is necessary

for sexual pleasure and "when the pleasure is greater, the woman emits seed and suitable material for the formation of the foetus and for the production of membranes."<sup>75</sup> No foreskin, less friction, no female orgasm, sterility. Too short a penis could have the same result for the same reason: inability to satisfy the woman. (Avicenna was the authority on this point.) And so too could an excessively large member by diminishing female pleasure, though one sixteenth-century German doctor is skeptical: "Perhaps you have not heard too many complaints about the penis being too long," he says; "I say unto you, the longer a weed grows, the better."<sup>76</sup>

But genital heat, from the rubbing genitals, was in fact construed as part of the larger caloric economy, just as semen was part of a more general traffic in fungible fluids. Thus the excess heat that was thought to cause nocturnal emissions or premature ejaculation might be assuaged by cutting back on spicy foods, suppressing "images of a desired woman," or not sleeping on one's back too long (because sleeping on one's back led to warmer kidneys, which increased the production of excrement generally and therefore also of semen).<sup>77</sup>

These were serious matters. In a society in which one in five children died before the age of one, and even prosperous families could consider themselves fortunate if they reproduced themselves, any waste of semen was a matter of the most poignant seriousness. A French physician tells of a man who came to see him in March 1694 because "whenever he was inclined to approach his wife, the emission followed the erection so fast, that he had no ability to penetrate. This hindered him from having children; and, as he had but one left, was afraid of being left without any at all." De la Motte prescribed cooling medicines and suggested that his patient abstain from wines, ragouts, and other heating foods. His condition improved, but his wife remained barren "though very young."<sup>78</sup>

The problem of too much heat in women was also part of any Renaissance differential diagnosis of the causes of infertility. Excessive desire; curly, dark, and plentiful hair (in men hair was a sign of virility, bravery, and of the vital heat that arose in adolescence and distinguished them finally from women); a short or absent menses (the hot body burned off the excess materials that in normal women were eliminated in the monthly courses), and so forth, all indicated a problem of excessive warmth that would burn up the seed. Cooling drugs were called for in these situations.<sup>79</sup>

Insufficient heat, however, loomed far larger in the literature than did its surplus. The absence of sexual desire in men, but with minor adjustments also in women, could be cured by rubbing the loins with calorific drugs or through lascivious talk; other drugs, coquetry, and more talk could cure a "defect of spirit;" the inability to have an erection when desire itself was sufficient. In women, adversity and indisposition "to the pleasures of the lawful sheets," especially when accompanied by a slow pulse, little thirst, thin urine, "no pleasure and delight" during coition, scant pubic hair, and similar signs were diagnostically important indicators of excessive coolness in their testicles and thus of insufficient heat to concoct their seed. As Jacob Rueff put it in discussing the problem of frigidity, "the fruitfulness of man and wife may be hindered very much for want of desire to be acquainted with Venus."<sup>80</sup>

Desire then was a sign of warmth and orgasm a sign of its sufficiency to ensure "generation in the time of copulation." To produce sufficient heat in women, talk and teasing were regarded as a good beginning.<sup>81</sup> They "ought be prepared for sweet embraces with lascivious words mixed with lascivious kisses," because if "the man is quicke and the woman too slow, there is not a concourse of both seeds at the same instant as the rules of conception require."<sup>82</sup> (Men are invariably presumed to be more quickly aroused than women.) Ambroise Paré, the foremost surgeon of his day, opens his widely translated account of generation by emphasizing the importance of flirtation, caressing, and excitement. (The audience for his advice is clearly male.) In his account, men had literally to coax the seed out of women. When a husband comes into his wife's chamber, "he must entertain her with all kinde of dalliance, wanton behaviour, and allurements to venery." If he finds her "to be slow, and more cold, he must cherish, embrace, and tickle her"; he should "creepe" into the "field of nature," intermix "wanton kisses with wanton words and speeches," and caress her "secret parts and dugs [nipples] until she is afire and "enflamed in venery." Rhythm and timing are all-important, he counsels, and if the two seeds are to come together, the man must be aware that his partner is not "all that quick in getting to that point" as he; and he must not leave the woman too soon after her orgasm "lest aire strike the open womb" and cool the seeds so recently sown.<sup>83</sup>

If all this failed, the Renaissance pharmacopoeia, like earlier compilations, was full of drugs that were thought to work either directly or by sympathetic magic. Paré recommended "fomenting her secret parts with

a decoction of hot herbes made with muscadine, or boiled in other good wine," or that civet or musk be rubbed into her vagina. Juniper and camomile, the heart of a male quail around the neck of a man and the heart of a female around the neck of a woman—presumably because of the lecherous character of birds generally and of quails in particular—ale hoof and pease straw, were all available to manipulate the one-sex body's heat.<sup>84</sup> Thus savin (juniper, readily available in gin) might be prescribed to allow an impotent man to have erections, to warm an infertile woman's genitals, and to produce an inhospitably warm womb in a Somerset prostitute who sought to end her pregnancy. The same goes for mugwort (wormwood or artemesia), calamint, spices like ginger or cinnamon, and concoctions made from various animal parts.<sup>85</sup>

A vast body of clinical practice and learning was thus bound up with heat, orgasm, and generation. It was and remains difficult to evaluate the efficacy of particular therapies, and it should not seem strange that the experiences of patients, unchallenged by modern survey techniques and statistical analysis, would confirm the notion that more intensely pleasurable intercourse was also more fecund.

*The fungibility of fluids.* The economy of fluids discussed in Chapter 2 was partly ideology—a way of talking about women as colder, less well-formed, and more protean than man—and partly a way of understanding the body generally as much less bounded and restrained than we would today. But it was also a way of organizing empirical observations, which strengthened it and the vision of sexual difference it formed.

To begin with, certain anatomical discoveries that improved upon Galenic anatomy actually seemed to confirm the basic physiology of the one-sex model, though no one would have thought such testing necessary. Vesalius, for example, correctly noted that, contrary to Galen, what we would call the left ovarian and testicular veins take their origin not from the vena cava but from the left renal vein (fig. 41). From this he concluded that while the right vein may "carry the pure blood to the testis," the left one, coming as it did from nearer the kidney, might specialize in carrying a more watery, serous blood whose "salty and acrid quality may bring about an itching for the emission of the semen." What was thought to be a significant correction of Galen thus fitted nicely with the thoroughly Galenic notion of genital puritus, of sexual feeling being at least in part the result of the corrosive qualities of certain body fluids.<sup>86</sup>

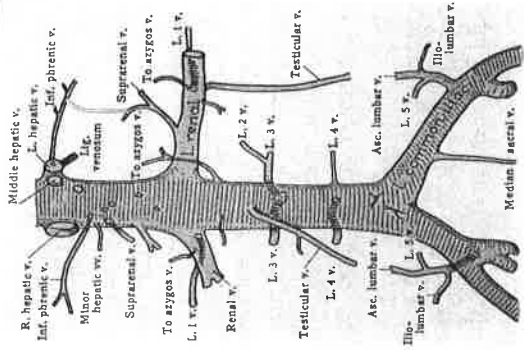


Fig. 41. This shows the left testicular vein, called the ovarian vein in women, coming off the left renal vein and not from the vena cava, the trunk running down the center of the picture.

Conversely, a finding that might have militated against the economy of fluids in the one-sex body—for example, the discovery, known already to Leonardo, that the epigastric vessels going to the breast did not originate from the uterine vessels and that therefore blood from the womb might not be so easily converted to milk and vice versa—was easily ignored. A novel bit of plumbing paled in the face of clinical and folk wisdom stretching back to Hippocrates and of the whole macrocosmic order of which such wisdom was a part.<sup>87</sup> “And is it not the same blood, which, having been in the womb, is now in the breasts, whitened by the vital spirit through its natural warmth?” Laurent Joubert, one of the great medical popularizers of the sixteenth century, asks rhetorically. Of course. It was common knowledge that women who were lactating usually did not menstruate, and, as Joubert said, women who had excessive menstrual flows (evidence for lots of surplus material) were also likely to have a great deal of milk once the flow stopped. (This discussion is in the context of a self-conscious effort to bring observation to bear on questions of natural history so as to get the answers right. Joubert, for example, denies the claim, made by Paré, that excess menstrual blood can produce birthmarks.<sup>88</sup>)

Doctors continued to write as if the actual vascular pathways simply did not matter. New clinical observations seemed to confirm the view that menstruation was simply a way of ridding the body of excess and not something specific to a female organ or single route. So one doctor offered a case-by-case list of all the places and various forms blood went when it could not go out its usual place: in a Saxon woman it came from her eyes; in a nun through her ears; a woman from Stuttgart got rid of stuff by vomiting; a slave through her spittle; a woman from Trent through her bellybutton; in others from the breasts; and finally (even he thinks it “most amazing”) through the index and little fingers of one Monica.<sup>89</sup> Christopher Wirsung, a popular German writer, argued that the menstrual flow took three separate pathways during pregnancy, even if he did not know precisely how the body effected this division: the most refined and tender was reserved for the fetus, the middle grade went “by various veins to the breasts” to be made into milk, and the coarsest remained behind to be discharged when the child is born. The route from womb to breast is clearly less relevant than the poetics of milk and blood. Someone as thoroughly up to date as the English anatomist Helkiah Crooke, who must have known that there were no connections between the vessels of the uterus and those of the chest, nevertheless argued that the breasts were uniquely well situated to “alter and labor” blood into milk because of their proximity to the heart, the “shop of heate.”<sup>90</sup> So even if anatomy did not support the blood/milk nexus, conceptions of the heart as the body’s furnace did.

Observations on the periphery of western civilization and under pathological conditions did seem to provide direct new evidence for the interconvertibility of fluids and the underlying identity, between and among men and women, of various forms of bleeding. Brazilian Indian women “never have their flowers,” writes a seventeenth-century English compiler of ethnographic curiosities, because “maids of twelve years old have their sides cut by their mothers, from the armpit down unto the knee [and] some conjecture that they prevent their monthly flux in this manner.” Joubert likewise thought that Brazilian women “never menstruate, no more than do female animals,” while Nicholas Culpepper, the indefatigable seventeenth-century English writer and publisher, uses the fact that at least some “never have any flowers” but nevertheless are fertile as evidence for the general claim that hot women can conceive even if they do not menstruate.<sup>91</sup>

Conversely, in the one-sex fluid economy, strange or feminine men might lactate. Hieronymus Cardanus, court physician to the king of Denmark, says on the basis of travelers' accounts that in some places "almost all the men have great quantity of milk in their breasts."<sup>92</sup> (An Italian commentator cites one of Cardanus' nearer-to-home cases: "Antonio Benzo, age 34, pale, fat and scarcely bearded, had so much milk in his breasts that he could feed a baby."<sup>93</sup>) Men, if they were "of a cold, moist, and feminine complexion," were quite likely to have milk in their breasts thought an English doctor, a view shared by Joubert, who adds that such men are to be found primarily in the east. He gives, in addition to the evidence in Aristotle, the example of a Syrian count who nourished his child for more than six months.<sup>94</sup>

This is not to say that a metaphorically lactating Christ, whose blood nourishes his church as Mary's milk had nourished him, or an infant Jesus depicted with female breasts ready to spurt milk, are to be interpreted as more ethnographic examples of the sort just cited. But they do suggest that, in the world of one sex, the body was far less fixed and far less constrained by categories of biological difference than it came to be after the eighteenth century. The boundary between a more motherly, more feminine Christ lactating in religious imagery and men with milk in pro-saic ethnography and clinical reports is by no means clear.<sup>95</sup>

Obviously the cases of amenorrhea among Indians or the more bizarre reports of lactating men need not be interpreted as confirmation of the economy of fungible fluids. The absence of the menses during lactation would today be attributed to hormonal changes and not to the conversion of surplus blood to milk. It will therefore take a certain leap of the imagination to understand how Renaissance doctors and midwives interpreted a large body of clinical material as confirmation of a very different theoretical understanding of the body. But they did; what we would imagine as distinct, sexually specific, fluids were metaphorically conflated in the one-sex model. The "irregularity" (*Gebrechen*) that "women call white stuff and doctors *menstrua alba*" was understood by a sixteenth-century German physician, for example, not as an abnormal vaginal discharge but as a fluid that "has much in common with the flow of male semen" and that arose when disordered heat, excess warmth or cold, turned the menses into something like "the male semen."<sup>96</sup> (The German word for regularity or law, *Regel*, which is being broken in this case is also the word for menses.)

Similarly, discharges of blood by men, occurring naturally or through phlebotomy, were interpreted not as simple instances of bleeding but as a male substitute menses in what was merely a contingently gendered economy of fluids. Men were routinely bled, usually in the spring—more often for those who exercised little—to get rid of a plethora that in women would be lost every month. Well into the eighteenth century, certain pathological bleeding in men was still likened to menstruation. Albrecht von Haller thought nosebleeds got rid of extra blood in some pubescent boys which in girls found "a more easy vent downward," and Hermann Boerhaave reported the case of a "certain merchant here at Leyden, a Man of Probity, who discharges a larger Quantity of Blood every month by the hemorrhoidal arteries than is discharged from the Uterus of the most healthy woman."<sup>97</sup> (This association goes back at least to Aristotle.)

Indeed, the whole matrix of medical practice connected the physiology of fluids, orgasm, conception, and heat. Cold men, less desirous, less potent, and less fecund, were more likely to suffer menstrual-like bleeding and a whole host of mental and physical ails as well; cold women were thought more likely to suffer retention of the seed or of surplus blood, amenorrhea, which in turn might have a variety of clinical sequels: depression, heaviness of limb, barrenness, green sickness, hysteria. Caloric drugs, a midwife rubbing the genitals (in the case of women), or the ardors of coition itself could warm up the cool and clammy body to normality and restore its fluid balance. The issue was warmth.

Renaissance audiences would have taken as physiologically unremarkable the case of one girl, in Robert Burton's *Anatomy of Melancholy*, who was supposedly deranged by reason of a delayed menses and who, by some stroke of good fortune—from Burton's perspective—landed in a brothel where she lay with fifteen men in a single night. The experience cured her amenorrhea and restored her sanity. On the other hand, normal or even vicarious menstruation in women was interpreted as a sign of normal body heat and sexual receptivity. The knight in George Gascoigne's *Adventures of Master F. J.* has a terrible time wooing a lady until one day she gets a torrential nose bleed. When with his help her epistaxis resolves, he finally makes it into the lady's bed.

An entire clinical tradition thus embraced the testable parts of the one-flesh model. Specific discoveries and observations—that orgasm did not always accompany conception, that there were no direct routes between

uterus and breast, that the vaginal secretion of women did not look anything like the semen of men—could not, even taken together, shake ancient beliefs so deeply embedded in how men and women regarded and ministered to their bodies. And a variety of observations or putative observations, when interpreted within the constraints of the model, only confirmed its tenets.

### Bodies and metaphors

Although my next chapter will consider explicitly the extraordinarily fraught relationship between the social world of two genders and the one-sex body, I do not want to end this one without briefly exploring an alternative rhetoric of difference to the anatomy of isomorphisms and the physiology of fungible fluids I have been emphasizing, one that proclaims the *unique* qualities of a woman's body and the supposed role of these corporeal attributes in determining women's health and social standing. Dr. Rondibilis in chapter 32 of Rabelais' *Tiers livre de Pantagruel*, for example, says that nature has "placed in a secret and interior place" of women's bodies "an animal, an organ, that is not in men." The seventeenth-century midwife Louise Bourgeois leaves the problem of male infertility to male doctors but argues that specifically in women it is most frequently caused by wetness of the womb, that women would be as healthy in both body and spirit as men were it not for this organ, and more generally that God created its uniquely pathogenic qualities—its tendency to wander and cause hysteria, for example—so as to prevent envy between the sexes and to lead man to pity and love woman.<sup>28</sup> Moreover, there is an enormous literature that relates the cold, wet humors said to dominate women's bodies to their social qualities—deceptiveness, changeability, instability—while the hot, dry humors in men supposedly account for their honor, bravery, muscle tone, and general hardness of body and spirit.

Both ways of talking, of course, unambiguously proclaim difference. Both array sexual difference on a vertical axis of hierarchy. Both acknowledge the obvious: women have a womb and men do not. Both ways of talking, to paraphrase Ian Maclean on the Aristotelian logic of sexual opposition, refer at times to an opposition "of privation," at other times to an opposition of contraries that may or may not admit intermediaries,

and sometimes—I would say always—to other parts of a cognitive system, other "correlative opposites."<sup>29</sup>

But these ways of talking also differ in two important respects. The first is rhetorical. The anatomists, physicians, and even midwives I have cited were writing to make their readers understand the body and its fluids in a particular way. They were articulating a set of representational or semiotic claims: that the womb must be *understood* as an interior penis, that menstruation must be *understood* as women ridding themselves of a plethora which the warmer, more active bodies of men consumed in the course of everyday life. These understandings were fraught with cultural significance, but they were not expounded primarily to make points about the corporeal foundations of the social order. On the other hand, certain midwifery and medical books, by authors who wished to emphasize their specialist knowledge, as well as a vast array of books about women, for and against, treated the body as if it contained the necessary and sufficient reasons for the medical problems and behavioral characteristics with which they were specifically concerned.

The second difference (but at the same time affinity) has to do with how these two Renaissance discourses construed the body in relation to its cultural meanings. In neither is the ranking of the sexes on the great chain of being just metaphorical—nothing in this cultural system is *just* metaphor—but it is not just corporeal either. The one-flesh discourse I have been explicating seems to regard organs and the qualities of bodies generally as ways of expressing hierarchy, as elements in a network of meaning. On the other hand, the discourse on female uniqueness seems to be postulating an almost modern reductionist theory of corporeal causation, even if it does not carry the notion of incommensurable corporeal opposition as far as would post-Enlightenment writers. Yet, and this is the critical point, the metaphorical and the corporeal are so bound up with one another that the difference between the two is really one of emphasis rather than kind.

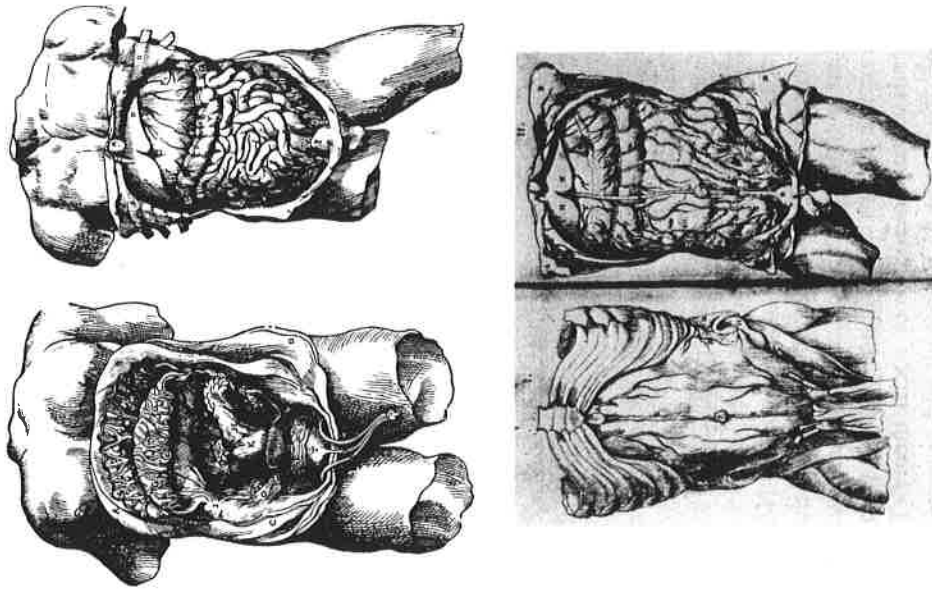
Even an apparently straightforward claim about the body like the one that Rabelais puts in the mouth of Dr. Rondibilis turns in on itself and becomes about something else as well: the womb comes once again to sound like a penis. Only women have a womb, Rondibilis says, with no hint of literary shiftiness. But the womb is "an animal," he continues, a move to metaphor and an allusion to *Timaeus* (91b-d), where Plato refers



to both the male and female genital organs as animals prone to wander unless they are satisfied.<sup>100</sup> And then, in the usual Renaissance manner of piling on similes, this organ, the womb, which is said not to exist in man, becomes “un membre,” a term that can of course mean simply an organ but that referred more specifically in the sixteenth century to an appendage—an arm or leg—or when used alone, as in “his member,” to the penis. There was no sense in which *membre* ever referred to “her member.”<sup>101</sup> The point here is not that Rondibilis is making a controversial claim in saying that only women have a womb; no one denied this. It is rather that once again a female organ is attracted into the metaphorical orbit of the male, not in order to make a claim about likeness but to assert that all difference is figured on the vertical scale of man.

It is also precisely in those contexts in which the womb seems most solidly the organic source of disease, as in the argument that hysteria is caused by a wandering womb, that it becomes most profoundly bound up with extracorporeal meaning. Even in classical writings it is difficult to comprehend the purchase of the claim that the womb wanders and *causes* hysteria. Herophilus in the third century B.C. discovered the uterine ligaments, and Galen merely repeated old arguments when he said that “those who are experienced in anatomy” would recognize the absurdity of a moving womb: “totally preposterous.”<sup>102</sup> Someone must have believed literally in a rampant uterus—a folk belief perhaps—or the doctors would not have felt it necessary to keep attacking the view, and the prevalent fumigation therapies suggest that their adherents subscribed to this literal interpretation. But by the sixteenth century there was manifestly no place in the body for the womb to move to.

The new anatomy, and more specifically the widespread distribution of anatomical illustrations (such as figs. 42–44) well beyond the bounds of the learned community to midwives, barber surgeons, and laypeople, showed that not only was the uterus kept more or less in place by very broad ligaments but that the space between it and the throat was full of other organs and divided by thick membranes. Galen had already pointed out that the peritoneum covered the bladder and the uterus, but now this fact was there for anyone to see, splendidly displayed in the usual, slightly ruined classical torso.<sup>103</sup> The new anatomy thus made literal interpretation of a wandering womb impossible; but it did not produce a modern rhetoric of disease. Like Paracelsian iatro-chemistry, which seems to be



Figs. 42–44. Fig. 42, top left, shows the female torso from which the vagina in fig. 20 was removed. Vesalius tells us that the attachments of the uterus are in place but that he has removed the abdominal wall and intestines to present this view. Fig. 43 shows a male torso, a few pages before this one, opened to show the intestines still in place. Clearly this figure was meant to be applicable to women. Two still earlier plates from the *Fabrice* (fig. 44, bottom row) showing the abdominal wall of a male torso still in place were combined and used as the opening and illustration of a leading sixteenth- and seventeenth-century midwifery manual by Raynald, *The Myrth of Manikind* (1545).

but is not a version of modern medical chemistry, the new anatomy lures us into thinking that Renaissance writers must have spoken of organs as we do, which they did not. Whatever they were debating when they pondered whether the womb wandered, it was not a discussion about the actual travels of an organ from its ligamentary anchor below, up through a foot and a half of densely packed body parts.

By the eighteenth century, this was perfectly evident. When Tobias Smollett, author of *Humphrey Clinker* as well as a surgeon and ghost-writer of Smellie's famous treatise on midwifery, ridiculed the English midwife Elizabeth Nihell for citing Plato's wandering womb, Mrs. Nihell countered that *of course* she had meant it only figuratively. Smollett, she said, had quoted her out of context to make her look bad.<sup>104</sup>

Though less intractable, difficulties of translation also arise when interpreting the humors. Doctors as well as laypeople in the Renaissance believed that the humoral balances of the sexes differed along the axis of hot and cold, wet and dry, that such differences had implications for anatomy as well as for behavior, and that humoral imbalance caused disease. They spoke as if there were warm or cold qualities somewhere in the body whose presence was made known by observable features; skin color, hair, temperament. On the other hand, no one believed that a quantifiable amount of some humor caused someone to be male or female. There were thought to be hot, hirsute viragos and effeminate, cold and hairless men, colder than exceptionally hot women. The claim was rather that men as a species were hotter and drier than women as a species. Nor was it claimed that one could actually feel the wetness or the coldness that distinguished women from men or that, on occasion, caused female complaints.<sup>105</sup> The humors were not like organs and did not play the parts organs would play in eighteenth-century nosology or social theory. Though humors were "more real" than a wandering womb and were certainly not "just metaphors" or ways of talking, they were not just corporeal attributes either.

Perhaps the most telling feature of both ways of talking about sex in the Renaissance, however, is the extent to which all talk about sex is determined contextually. In the same texts from which women are excluded and denied both separate existence and subjectivity, they enter as subjects. There they are, where most egregiously absent. Consider again Columbus' discovery of the clitoris, this time with the Latin text:

Hanc eadem uteri partem dum venerem appetunt mulieres et tanquam oestro percitae, virum appetunt, ad libidinem concitae: si attinges, duriusculam et oblongam comperies . . .

If you touch that part of the uterus while women are eager for sex and very excited as if in a frenzy, and aroused to lust they are eager for a man, you will find it rendered a little harder and oblong . . .

If "you" (man) touch a certain part of a woman, "you" will find it harder. Women, in one of the few instances in which they are made the grammatical subject, are literally surrounded in the temporal clause by desire, *her* desire. *Appetunt*, "are eager for," is repeated, to flank *mulieres*, women; *percitae* and *concitae*, redundant predicate adjectives, attest further to *her* sexual arousal. But then the sentence takes an unexpected turn, and the scientifically objective, presumptively male reader is told that the part of the female anatomy in question will become hard and oblong if touched . . . making her semen flow "swifter than air."<sup>106</sup> Thus woman has entered as a separate, desiring being in what seems to be an all-male world.

This tension is everywhere, not only in the anatomy theater but at the Globe Theater, not only in medical texts but in the essays of Montaigne. The cultural politics of at least two genders is never in equilibrium with the "biology," or alternative cultural politics, of one sex. We shall see that context determines sex in the world of two sexes as well.