

T W O

Destiny Is Anatomy

Turn outward the woman's, turn inward, so to speak, and fold double the man's [genital organs], and you will find the same in both in every respect.

GALEN OF PERGAMUM (c. 130–200)

This chapter is about the corporeal theatrics of a world where at least two genders correspond to but one sex, where the boundaries between male and female are of degree and not of kind, and where the reproductive organs are but one sign among many of the body's place in a cosmic and cultural order that transcends biology. My purpose is to give an account, based largely on medical and philosophical literature, of how the one-sex body was imagined; to stake out a claim that the one-sex/one-flesh model dominated thinking about sexual difference from classical antiquity to the end of the seventeenth century; and to suggest why the body should have remained fixed in a field of images hoary already in Galen's time, while the gendered self lived a nuanced history through all the immense social, cultural, and religious changes that separate the world of Hippocrates from the world of Newton.

Organs and the mole's eyes

Nothing could be more obvious, implied the most influential anatomist in the western tradition, than to imagine women as men. For the dullard who could not grasp the point immediately, Galen offers a step-by-step thought experiment:

Think first, please, of the man's [external genitalia] turned in and extending inward between the rectum and the bladder. If this should happen, the scrotum would necessarily take the place of the uterus with the testes lying outside, next to it on either side.

The penis becomes the cervix and vagina, the prepuce becomes the female pudenda, and so forth on through various ducts and blood vessels. A sort of topographical parity would also guarantee the converse, that a man could be squeezed out of a woman:

Think too, please, of . . . the uterus turned outward and projecting. Would not the testes [ovaries] then necessarily be inside it? Would it not contain them like a scrotum? Would not the neck [the cervix and vagina], hitherto concealed inside the perineum but now pendant, be made into the male member?

In fact, Galen argued, “you could not find a single male part left over that had not simply changed its position.” Instead of being divided by their reproductive anatomies, the sexes are linked by a common one. Women, in other words, are inverted, and hence less perfect, men. They have exactly the same organs but in exactly the wrong places. (The wrongness of women, of course, does not follow logically from the “fact” that their organs are the same as men’s, differing only in placement. The arrow of perfection *could* go either or both ways. “The silliest notion has just crossed my mind,” says Mlle. de l’Espinasse in Diderot’s *D’Alembert’s Dream*: “Perhaps men are nothing but a freakish variety of women, or women only a freakish variety of men.” Dr. Bordeu responds approvingly that the notion would have occurred to her earlier if she had known—he proceeds to give a short lecture on the subject—that “women possess all the anatomical parts that a man has.”)¹

The topographical relationships about which Galen writes so persuasively and with such apparent anatomical precision were not themselves to be understood as the basis of sexual hierarchy, but rather as a way of imagining or expressing it. Biology only records a higher truth. Thus although Galen, the professional anatomist, clearly cared about corporeal structures and their relation to the body’s various functions, his interest in the plausibility of particular identifications or in maintaining the manifestly impossible implosion of man into woman and back out again, was largely a matter of rhetorical exigency.

On some occasions he was perfectly willing to argue *for* the genital oppositions he elsewhere denied: “since everything in the male is the opposite [of what it is in the female] the male member has been elongated to be most suitable for coitus and the excretion of semen” (*UP* 2.632). At other times Galen and the medical tradition that followed him were

Galen's simile goes as follows. The eyes of the mole have the same structures as the eyes of other animals except that they do not allow the mole to see. They do not open, "nor do they project but are left there imperfect." So too the female genitalia "do not open" and remain an imperfect version of what they would be were they thrust out. The mole's eyes thus "remain like the eyes of other animals when these are still in the uterus" and so, to follow this logic to its conclusion, the womb, vagina, ovaries, and external pudenda remain forever as if they were still inside the womb. They cascade vertiginously back inside themselves, the vagina an eternally, precariously, unborn penis, the womb a stunted scrotum, and so forth.⁸

The reason for this curious state of affairs is the purported telos of perfection. "Now just as mankind is the most perfect of all animals, so within mankind the man is more perfect than the woman, and the reason for his perfection is his excess of heat, for heat is Nature's primary instrument" (*UP* 2.630). The mole is a more perfect animal than animals with no eyes at all, and women are more perfect than other creatures, but the unexpressed organs of both are signs of the absence of heat and consequently of perfection. The interiority of the female reproductive system could then be interpreted as the material correlative of a higher truth without its mattering a great deal whether any particular spatial transformation could be performed.

Aristotle, paradoxically for someone so deeply committed to the existence of two radically different and distinct sexes, offered the western tradition a still more austere version of the one-sex model than did Galen. As a philosopher he insisted upon two sexes, male and female. But he also insisted that the distinguishing characteristic of maleness was immaterial and, as a naturalist, chipped away at organic distinctions between the sexes so that what emerges is an account in which one flesh could be ranked, ordered, and distinguished as particular circumstances required. What we would take to be ideologically charged social constructions of gender—that males are active and females passive, males contribute the form and females the matter to generation—were for Aristotle indubitable facts, "natural" truths. What we would take to be the basic facts of sexual difference, on the other hand—that males have a penis and females a vagina, males have testicles and females ovaries, females have a womb and males do not, males produce one kind of germinal product, females another, that women menstruate and men do not—were for Aristotle

the female always provides the material, the male that which fashions it, for this is the power we say they each possess, and *this is what it is for them to be male and female* . . . While the body is from the female, it is the soul that is from the male. (GA 2.4.738b20–23)

the male and female principles may be put down first and foremost as the origins of generation, the former as containing the efficient cause of generation, the latter the material of it. (GA 2.716a5–7)

This difference in the nature of cause constitutes fully what Aristotle means by sexual opposition: “by a male animal we mean that which generates in another; by a female, that which generates in itself”; or, what comes to the same thing since for Aristotle reproductive biology was essentially a model of filiation, “female is opposed to male, and mother to father.”¹¹

These were momentous distinctions, as powerful and plain as that between life and death. To Aristotle being male *meant* the capacity to supply the sensitive soul without which “it is impossible for face, hand, flesh, or any other part to exist.” Without the sensitive soul the body was no better than a corpse or part of a corpse (GA 2.5.741a8–16). The dead is made quick by the spark, by the incorporeal *sperma* (seed), of the genitor. One sex was able to concoct food to its highest, life-engendering stage, into true sperma; the other was not.

Moreover, when Aristotle discusses the capacity of the respective sexes to carry out the roles that distinguish them, he seems to want to consider bodies, and genitals in particular, as themselves opposites, indeed as making possible the efficient/material chasm itself. Males have the capacity, and females do not, to reduce “the residual secretion to a pure form,” the argument runs, and “every capacity has a certain corresponding organ.” It follows that “the one has the uterus, the other the male organs.” (These distinctions are actually more striking in translation than in the Greek. Aristotle uses *perineos* to refer to the penis and scrotum here. He uses the same word elsewhere to refer to the area “inside the thigh and buttocks” in women. More generally he uses *aidoion* to refer to the penis, but in the plural, *aidoia*, it is the standard word for the “shameful parts,” the Greek equivalent for the Latin *pudenda*, which refers to the genitals of both sexes.¹²)

Nevertheless, despite these linguistic ambiguities, Aristotle does seem committed to the genital opposition of two sexes. An animal is not “male

texts: human males and stallions do indeed have proportionately large penises outside their bodies, but the male elephant's is disproportionately small—he also has no visible testes—while the dolphin has no external penis at all. (The situation is doubly confused with elephants because supposedly the female “organ opens out to a considerable extent” during intercourse (*HA* 2.1.500a33–35 and 2.1.500b6–13). Among insects, Aristotle claims, the female actually pushes her sexual organ from underneath *into* the male (*HA* 5.8.542a2ff). Indeed, the male's having a penis at all seems to depend on nothing more than the placement or indeed existence of the legs: snakes, which have no legs, and birds, whose legs are in the middle of their abdomens where the genitals ought to be, simply lack a penis entirely (*HA* 2.1.500b20–25 and *GA* 1.5.717b14–19).

As for the testes being a “first principle” in the differentiation of the sexes, little is left rhetorically of this claim when faced with specific observations and metaphors (*GA* 1.2.716b4). Aristotle demotes them in one text to the lowly task of bending certain parts of the body's piping (*HA* 3.1.510a13–b5). Like the weights women hang from the warp on their looms—a less than celebratory simile, which suffers from a curious mixing of genders—the testicles keep the spermatic ducts properly inclined (*GA* 1.4.717a8–b10). (Thread that is not properly held down results in a tangle; tangled seminal ducts that go back up into the body convey impotent generative material.)

These “facts” led Aristotle still further away from specific connections between opposing genitals and sex and ever deeper into the thicket of connections that constitute the one-sex model. He, like Galen five centuries later, aligned the reproductive organs with the alimentary system, common to all flesh. Animals with straight intestines are more violent in their desire for food than animals whose intestines are convoluted, Aristotle observed, and likewise those with straight ducts, creatures without testes, are “quicker in accomplishing copulation” than creatures with crooked ducts. Conversely, creatures who “have not straight intestines” are more temperate in their longing for food, just as twisted ducts prevent “desire being too violent and hasty” in animals so blessed. Testes thus end up serving the lowly but useful function of making “the movement of the spermatic secretion steadier,” thus prolonging intercourse and concoction in the interest of hotter, finer sperma.¹⁸ Aristotle makes much less of the female plumbing, but his concern to identify the ovaries as the seat

even the clitoris which like the penis would have been construed as hollow. But whatever *kaulos* means in this text, the part in question is spoken of elsewhere as if it functioned in women like an interior penis, a tube composed, as are both penis and vagina, of “much flesh and gristle” (*HA* 3.1.510b13).

By the time of Soranus, the second-century physician who would become the major source of the gynecological high tradition for the next fifteen centuries, the assimilation of vagina to penis through language had gone much further. “The inner part of the vagina (*ton gynaikeion aidion*, the feminine private part),” Soranus said, “grows around the neck of the uterus (*kaulos*, which I take here to mean cervix) like the prepuce in males around the glans.”²¹ In other words, the vagina and external structures are imagined as one giant foreskin of the female interior penis whose glans is the domelike apex of the “neck of the womb.” By the second century *kaulos* had also become the standard word for penis. The “protruding part” of the *aidion* (private part) “through which flows liquid from the bladder” is called the *kaulos*, says Julius Pollux (134–192) authoritatively in his compilation of medical nomenclature.²² Aristotle—or the pseudo-Aristotle who wrote book 10 of the *Generation of Animals*—must have imagined something like this when he wrote of the womb during orgasm violently emitting (*proiesthai*) through the cervix into the same space as the penis, i.e., into the vagina.²³ If we take this figure seriously, we must come to the extraordinary conclusion that women always have one penis—the cervix or *kaulos*—penetrating the vagina from the inside and another more potent penis, the male’s, penetrating from the outside during intercourse.

There is, as G. E. R. Lloyd said, “an air of shadow boxing” about Greek debates on male and female physiology, and even a certain lunatic confusion if various claims are pushed to their limits.²⁴ Matters were ordinarily much clearer to the ancients, who could undoubtedly tell penis from vagina and possessed the language with which to do so. Latin and Greek, like most other tongues, generated an excess of words about sex and sexual organs as well as a great abundance of poetry and prose praising or making fun of the male or female organs, joking or cursing on the theme of what should be stuck where. I deny none of this.

But when the experts in the field sat down to write about the basis of sexual difference, they saw no need to develop a precise vocabulary of genital anatomy because if the female body was a less hot, less perfect,

nourishment for the fetus, and new mothers, who nursed and thus needed to convert extra blood into milk, did not have a surplus and thus did not menstruate. "After birth," says the omniscient Isidore, passing on one millennium of scholarship to the next, "whatever blood has not yet been spent in the nourishing of the womb flows by natural passage to the breasts, and whitening [hence *lac*, from the Greek *leukos* (white), Isidore says] by their virtue, receives the quality of milk."²⁸ So too obese women (they transformed the normal plethora into fat), dancers (they used up the plethora in exercise), and women "engaged in singing contests" (in their bodies "the material is forced to move around and is utterly consumed") did not menstruate either and were thus generally infertile.²⁹ The case of singers, moreover, illustrates once again the extent to which what we would take to be only metaphoric connections between organs were viewed as having causal consequences in the body as being real. Here the association is one between the throat or neck through which air flows and the neck of the womb through which the menses passes; activity in one detracts from activity in the other. (In fact, metaphorical connections between the throat and the cervix/vagina or buccal cavity and pudenda are legion in antiquity and still into the nineteenth century, as fig. 2 suggests. Put differently, a claim that is made in one case as metaphor—the emissions that both a man and a woman deposit in front of the neck of the womb are drawn up "with the aid of breath, *as with* the mouth or nostrils"—has literal implications in another: singers are less likely to menstruate.³⁰)

Although I have so far only described the economy of fungible fluids with respect to sperm and menstrual blood, seemingly gendered products, it in fact transcended sex and even species boundaries. True, because men were hotter and had less blood left over, they did not generally give milk. But, Aristotle reports, some men after puberty *did* produce a little milk and with consistent milking could be made to produce more (*HA* 3.20.522a19–22). Conversely, women menstruated because they were cooler than men and hence more likely at certain ages to have a surplus of nutriment. But, even so, menstruation in women was thought to have functional, nonreproductive, equivalents, which allowed it to be viewed as part of a physiology held in common with men. Thus, Hippocrates held, the onset of a nosebleed, but also of menstruation, was an indication that a fever was about to break, just as nosebleeding was a prognostic sign that blocked courses, amenorrhea, would soon resolve. Conversely,

residual nature of sperm and menstrual fluid in the observation that fat creatures of *both* sexes are “less spermatic” (*spermatika*) than lean ones. Since “fat also, like semen, is a residue, and is in fact concocted blood,” fat men and women have less left over to be released in orgasm or as catamenia. Lean men, on the other hand, produce more semen than fat men and for the same general reason that humans produce proportionally more semen *and* more menstrual fluid than other animals: lean men do not use up nutriment for fat; humans retain, as a surplus, material that in animals goes into their horns and hair.³⁴

This sort of analysis can be extended indefinitely. Fair-complexioned men and women ejaculate more copiously than darker ones, Aristotle says, without even bothering to make explicit the assumption that this is because the latter are generally more hirsute; those on a watery and pungent diet discharge more than they would on a dry bland diet (*HA* 7.2.583a10–14). Both men and women are tired after ejaculation, not because the quantity of material emitted is so great but because of its quality: it is made from the purest part of the blood, from the essence of life (*GA* 1.18.725b6–7).

If, as I have been arguing, the reproductive fluids in the one-sex model were but the higher stages in the concoction of food—much like the lighter-weight products in the fractional distillation of crude oil—then the male and female seed cannot be imagined as sexually specific, morphologically distinct, entities, which is how they would come to be understood after the discovery of little creatures in the semen and of what was presumed to be the mammalian egg in the late seventeenth century.³⁵ Instead, the substances ejaculated by the “two sexes” in the one-sex body were hierarchically ordered versions of one another according to their supposed power.

The difference between so-called two-seed and one-seed theories—Galen versus Aristotle—is therefore not an empirical question that could be resolved by reference to observable facts. Even in Aristotle’s one-seed theory, *sperma* and *catamenia* refer to greater or lesser refinements of an ungendered blood, except when they are used as ciphers for the male and female “principles.”³⁶ What one sees, or could ever see, does not really matter except insofar as the thicker, whiter, frothier quality of the male semen is a hint that it is more powerful, more likely to act as an efficient cause, than the thinner, less pristinely white, and more watery female ejaculate or the still red, even less concocted, menstrua. Like reproductive organs, reproductive fluids turn out to be versions of each other; they are

Male and female “forms” of sperm thus correspond neither to the genital configuration of their source nor to that of the new life they will create, but rather to gradations on a continuum of strong to weak.⁴¹

I think that, if pushed on the point, the Hippocratic writer would have to admit that there was something uniquely powerful about male seed, the fluid that comes from an actual male, because otherwise he would have no answer to the question with which two-seed theorists were plagued for millennia: if the female has such powerful seed, then why can she not engender within herself alone; who needs men? The Hippocratic texts, however, resolutely resist correlating the gender of the seed, its strength or weakness, with the sex of the creature that produced it. Instead, in their version of the one-sex economy of fluids, the more potent seed is by definition the more male, wherever it originated.

For Galen too each parent contributes something that shapes and vivifies matter, but he insists that the female parent’s seed is less powerful, less “informing,” than the male parent’s because of the very nature of the female. To be female *means* to have weaker seed, seed incapable of engendering, not as an empirical but as a logical matter. “Forthwith, *of course*, the female *must* have smaller, less perfect testes, and the semen generated in them must be scantier, colder, and wetter (for these things too follow *of necessity* from the deficient heat)” (UP 2.631). Thus, in contrast to Hippocrates, Galen holds that the quality of the respective seeds themselves follows from the hierarchy of the sexes. Man’s seed is always thicker and hotter than a woman’s for the same reason that the penis is extruded and not, like the uterus and the mole’s eyes, left undeveloped inside the body: humans are the most perfect animal, and man is more perfect than woman because of an “excess of heat.” In opposition, however, to what he took to be Aristotle’s view, Galen insisted that women did produce semen, a true generative seed. If this were not the case, he asks rhetorically, why would they have testicles, which they manifestly do? And if they had no testicles (*orcheis*) they would not have the desire for intercourse, which they manifestly have.⁴² In other words, the female seed, like woman herself, “is not very far short of being perfectly warm” (UP 2.630).

Male and female semen, more and less refined fluids, thus stand in the same relationship to blood that penis and vagina stand to genital anatomy, extruded and still-inside organs. As the medieval Arabic physician Avicenna (ibn-Sina, 980–1037) puts it in his discussion of these Galenic

artisanal, informing principle, can apparently be carried on the breeze alone, as with the Cretan mares who are “wind impregnated.”⁴⁵

All of Aristotle’s metaphors discount a physically present ejaculate; sperma as artisan works in a flash, more like a genie than like a shoemaker who sticks to his last. His images bring us back to the constellation of phlegm/brain/sperm: conception is for the male to have an idea, an artistic or artisanal conception, in the brain-uterus of the female.⁴⁶

But the female, the material, contribution to generation is only slightly more material and thus recognizable by the physical properties of menstrual blood. Aristotle is at pains to point out that catamenia, the menstrual residue itself, is not to be equated with the actual blood that one sees: “the greater part of the menstrual flow is useless, being fluid” (*GA* 2.4.739a9). But he leaves the relationship between the catamenia, wherein the sperma works its magic, and anything visible—the “useless” menstrual discharge or the fluid that moistens the vagina during intercourse—unexplored largely because it does not matter in a world in which claims about the body serve primarily as illustrations of a variety of higher truths.⁴⁷ His dominant image is of a hierarchy of blood: “The secretion of the male and the menses of the female are of a sanguinous nature.”⁴⁸ Semen from men who have coitus too often reverts to its earlier bloody state; semen in boys and often in older men is, like the catamenia, unable to impart movement to matter.⁴⁹ For Aristotle, therefore, and for the long tradition founded in his thought, the generative substances are interconvertible elements in the economy of a single-sex body whose higher form is male. As physiological fluids they are not distinctive and different in kind, but the lighter shades of biological chiaroscuro drawn in blood.⁵⁰

All of this evidence suggests that in the construction of the one-sex body the borders between blood, semen, other residues and food, between the organs of reproduction and other organs, between the heat of passion and the heat of life, were indistinct and, to the modern person, almost unimaginably—indeed terrifyingly—porous. “Anyone who has intercourse around midnight,” warns a text attributed to Constantinius Africanus, “makes a mistake.” Digest (concoct) food first before straining the body to give the final concoction to the seed.⁵¹ Fifteen hundred years after Aristotle and a thousand after Galen, Dante in the *Purgatorio* still plays on the fungibility of the body’s fluids and the affinities of its heats. “Undrunk” blood, perfect like a dish (*alimento*) that is sent from the table, is redistilled by the heat of the heart, sent down to the genitals, from

nine *Venus* rather than of the masculine *amor*. And the story of his “mirror” metamorphosis from man to woman, the result of his striking two copulating serpents, and back to man by striking them again eight years later, further undermines his authority on the sexual differentiation of pleasure. Snakes famously give no outward sign of their sex; they curl around one another in coition and reflect back and forth the most ambiguous and ungendered of images. Though differing perhaps in nuance, orgasm is orgasm in the one-flesh body, Ovid’s story seems to say.⁵⁴

A common neurology of pleasure in a common anatomy, it was thought, bore witness to this fact. Galen, for example, notes that “the male penis . . . as well as the neck of the uterus and the other parts of the pudendum” are richly endowed with nerves because they need sensation during sexual intercourse and that the testes, scrotum, *and* uterus are poorly endowed because they do not. Animal dissections prove, he says, that the “genital areas,” in common with the liver, spleen, and kidneys, have only small nerves while the pudenda have “more considerable ones.” Even the skin of the relevant organs is more irritated by the “itch” of the flesh than would be the skin of the body’s other parts. Given all these adaptations, “it is no longer to be wondered at that the pleasure inherent in the parts there and the desire that precedes it are more vehement.”⁵⁵

Aristotle too is at pains to point out that “the same part which serves for the evacuation of the fluid residue is also made by nature to serve in sexual congress, and this alike in male and female.”⁵⁶ Both sperma and catamenia generate heat in the genital regions, both put pressure on the sexual organs that are prepared to respond to their stimuli, though in the case of women’s parts the heat seems to serve primarily to draw in semen, like a cupping vessel, and not to spur coition (*GA* 2.4.739b10).

“Semen” in this economy of pleasure is not only a generative substance but also, through its specific action on the genitals, one of the causes of libido. It is a serous, irritating humor that produces a most demanding itch in precisely that part of the body contrived by Nature to be hypersensitive to it.⁵⁷ (Or in parts not contrived for it. The only ancient text to discuss the physical causes of passive homosexuality—the unnatural desire of the male to play the socially inferior role of woman by offering his anus for penetration—attributes it both to an excess of semen and to a congenital defect that shunts this excess to an inappropriate orifice, the anus, instead of allowing it to simply build up in the proper male organ.⁵⁸) Needless to say, great pleasure is to be had from scratching.

stormlike agitation in the throes of producing the seeds of life. The rubbing together of organs, or even their imagined chafing in an erotic dream, causes warmth to diffuse via the blood vessels to the rest of the body. "Friction of the penis and the movement of the whole man cause the fluid in the body to grow warm," the Hippocratic writer reports; "an irritation is set up in the womb which produces pleasure and heat in the rest of the body."⁶² Then, as warmth and pleasure build up and spread, the increasingly violent movement of the body causes its finest part to be concocted into semen—a kind of foam—which bursts out with the uncontrolled power of an epileptic seizure, to use the analogy Galen borrowed from Democritus.⁶³ Sexual heat is an instance of the heat that makes matter live and orgasm, which signals the explosive release of the seed and the heated pneuma, mimics the creative work of Nature itself.

Although specific interpretations of the male and female orgasm might differ, certain facts were generally not in dispute: both sexes experienced a violent pleasure during intercourse that was intimately connected with successful generation; both generally emitted something; pleasure was due both to the qualities of the substance emitted and to its rapid propulsion by "air"; the womb performed double duty in both emitting something and then drawing up and retaining a mixture of the two emissions. Of what deeper truths these facts spoke was much debated.

In the first place, the way orgasm felt was adduced as evidence for particular embryological theories. Pangenesisists could argue as follows: "the intensity of pleasure of coition" proves that seed comes from every part of both partners because pleasure is greater if multiplied and that of orgasm is so great that it must result from something happening everywhere rather than just in a few places or in one sex only. But even if this reasoning was not universally accepted, most writers nevertheless regarded orgasm as a most weighty sign.

Why, asked an ancient text, did someone having sexual intercourse, and also a dying person, cast his or her eyes upward? Because the heat going out in an upward direction makes the eyes turn in the direction in which it itself is traveling.⁶⁴ Conversely, sexual heat is the most intense form of the heat of life and so is the sign of successful generation. The early Christian writer Tertullian, for example, grounded his heterodox theory of the soul—its material origin, its entry into the body at the moment of conception, its departure at death—on the phenomenology of orgasm:

causes. His real interest is not in interpreting orgasm, but in *not* interpreting it.⁶⁷

It follows from this position that Aristotle would make no effort to ground two sexes in radically different passions and pleasures. Though women clearly could, in his view, conceive without feeling anything, he regarded this as a freak occurrence that resulted when “the part chance to be in heat and the uterus to have descended,” that is, when the womb and vagina were warmed by something other than the friction of intercourse and experienced their internal erection without concomitant sexual excitement. “Generally speaking,” he said, “the opposite is the case”; discharge by women is accompanied by pleasure just as it is in men, and “when this is so there is a readier way for the semen of the male to be drawn into the uterus.”⁶⁸

Aristotle’s many allusions to sexual pleasure are clearly not directed at distinguishing the orgasms of men and women but in keeping their similarities from being relevant. What he takes to be contingent sensations must not be construed as evidence for what he regards as metaphysical truths about generation. He denies that orgasm signals the production of generative substances even for the male; “the vehemence of pleasure in sexual intercourse,” he maintains, is not at all due to the production of semen but is the result instead of “a strong friction wherefore if this intercourse is often repeated the pleasure is diminished in the persons concerned.”⁶⁹ The rhetorical force of this convoluted sentence is to stress the fading of feeling that comes from repetition. Elsewhere he says that pleasure arises not just from the emission of semen but from the *pneuma*, the breath, with which the generative substances explode. The point is simply that the phenomenological correlative of the generative act signifies nothing about its essence: there need be no seed, no efficient cause itself, for there to be an orgasm—as in young boys and old men who are not potent but nevertheless enjoy emission.⁷⁰ Conversely, both men and women can emit their respective generative products and feel nothing, as in nocturnal wet dreams.⁷¹

Whatever else orgasm might be or not be, mean or not mean, in various philosophical or theological contexts, it was at the very least understood as the *summa voluptas* that normally accompanied the final blast of a body heated so hot that it expelled its generative essences or, in any case, was in a state to conceive. As such, it dwelled at the intersection of nature and civilization. On the one hand, orgasm was associated with

she will not become pregnant. In exemplary reproductive heterosexual intercourse, then, both partners reached orgasm at the same time. Like a flame that flares when wine is sprinkled on it, the woman's heat blazes most brilliantly when the male sperm is sprayed on it, Hippocrates rhapsodized. She shivers. The womb seals itself. And the combined elements for a new life are safely contained within.⁷³

Orgasm in this account is thus common to both sexes but, like anatomy and the seeds themselves, it is hierarchically ordered. The man determines the nature of woman's pleasure, which is more sustained but also, because of her lesser heat, less intense; the man feels a greater pang at the secretion of bodily fluids because a greater violence accompanies their being wrenched from his blood and flesh. Feelings mirror the cosmic order and at the same time suggest the sparkling of a candle in a mist of resinated wine.

Clinically, therefore, the problem is how to manipulate the pace of passion and the heat of the body so as to produce the desired results, conception or nonconception. Aristotle (or the pseudo-Aristotelian author of book 10) gives elaborate directions for determining in cases of barrenness which partner's coital rhythms or corporeal environment was at fault. During intercourse the woman's womb should become moist but "not often or excessively too moist," lubricated as the mouth is with saliva when we are about to eat (once again a neck-of-the-womb/throat connection).⁷⁴ More natural history: if a man ejaculates quickly and "a woman with difficulty as is often the case," this prevents conception since women do contribute "something to the semen and to generation." The observation that women and men who are barren with each other are "fertile when they meet with partners who keep pace with them during intercourse" provides this further evidence for the importance of suitable coital rhythms.⁷⁵ Fifteen hundred years later, and in the very different context of prescriptions for birth control and abortion, the tenth-century Arabic writer Rhazes suggested that "if the man discharges sooner than the woman [discharges] she will not become pregnant."⁷⁶

Anything that might diminish coital heat could also cause infertility. Insufficient friction during intercourse, for example, could keep either partner from "seminating." Thus Avicenna argues—again this is a commonplace notion—that the smallness of a man's penis might cause a woman not to be "pleased by it . . . whereupon she does not emit sperm (*sperma*), and when she does not emit sperm a child is not made." As if to



raise male anxiety still further, he warns that unsatisfied women will remain in the thrall of desire and "have recourse to rubbing, with other women (*ad fricationem cum mulieribus*), in order to achieve amongst themselves the fullness of their pleasures" and to rid themselves of the pressures of seminal residue.⁷⁷

But even if the actual pang of a woman's orgasm was regarded as a sign without the specific physiological referent of semination, sexual pleasure or at the very least desire was still regarded as part of the general care of the body that made reproduction, and hence the immortal body of the race, possible. Control of the sexual body was, as Foucault points out in his *History of Sexuality*, an aspect of more general dietary and other corporeal disciplines. Nowhere is this aspect of the domestication of sexual heat clearer than in Soranus' *Gynecology*, which was written in the second century but which in various fragments and translations was one of the most widely cited texts until the late seventeenth century.

Soranus was not much interested in female ejaculation because he remained in doubt as to whether women actually contributed an active principle, a true seed. "It seems not to be drawn upon in generation since it is excreted externally," he concluded cautiously. He nowhere denied the everyday existence of the sharp crisis of orgasm in women, but it was not of primary clinical concern. What mattered in women as in men, Soranus thought, was "the urge and appetite for intercourse." Making the body ready for generation was like making it ready to put food to best use. The physiological affinity between generation and nutrition, eating and procreation, and in later Christian formulations between gluttony and lust, are nowhere clearer: "as it is impossible for the seed to be discharged by the male, in the same manner, without appetite it can not be conceived by the female." A woman ingesting and a woman conceiving are engaged in analogous functions; food eaten when one has no appetite is not properly digested, and seed received by a woman when she has no sexual urge is not retained.⁷⁸

But appetite alone is clearly not enough, since lecherous women feel desire all the time but are not always fertile. The body—Soranus is writing for midwives who ministered to ladies of the Roman governing class—must be properly cultivated to prepare for the civic task of procreation. They ought to be well rested, appropriately nourished, relaxed, in good order, and hot. Just as a Roman magistrate should eat only such foods as would maintain his sound judgment, so a woman should eat

their genitals on the outside and “cast their seed and made children, not in one another but on the ground, like cicadas.” In the new cut-up state they did nothing but longingly embrace their missing halves and thus died from hunger and idleness. Zeus hit upon the idea of relocating the genitals of one half of the new creatures, “and in doing so he invented interior reproduction, *by men in women*.” This had the great advantage that when the new male embraced the new female, he could cast his seed into her and produce children and that when male embraced male, “they would at least have the satisfaction of intercourse, after which they could stop embracing, return to their jobs, and look after their other needs in life.” Genitals are very hard to picture in the first part of this account and subsist only to make the best of a bad situation. “Love is born into every human being,” the story concludes; “it tries to make one out of two and heal the wound in human nature.” But what we would call the sex of that human being seems of only secondary importance.⁸²

But where honor and status are at stake, desire for the same sex is regarded as perverse, diseased, and wholly disgusting. A great deal more was written about same-sex love between men than between women because the immediate social and political consequences of sex between men was potentially so much greater. Relatively little was directly at stake in sex between women. Yet whether between men or between women, the issue is not the identity of sex but the difference in status between partners and precisely what was done to whom. The active male, the one who penetrates in anal intercourse, or the passive female, the one who is rubbed against, did not threaten the social order. It was the weak, womanly male partner who was deeply flawed, medically and morally. His very countenance proclaimed his nature: *pathicus*, the one being penetrated; *cinaedus*, the one who engages in unnatural lust; *mollis*, the passive, effeminate one.⁸³ Conversely it was the *tribade*, the woman playing the role of the man, who was condemned and who, like the *mollis*, was said to be the victim of a wicked imagination as well as an excess and misdirection of semen.⁸⁴ The actions of the *mollis* and the *tribade* were thus unnatural not because they violated natural heterosexuality but because they played out—literally embodied—radical, culturally unacceptable reversals of power and prestige.

Similarly, when power did not matter or when a utopian sharing of political responsibility between men and women is being imagined, their respective sexual and reproductive behavior is stripped of meaning as

of his superior rational power, and of his right to govern. Sperma, in other words, is like the essence of citizen. Conversely, Aristotle used the adjective *akuros* to describe both a lack of political authority, or legitimacy, and a lack of a biological capacity, an incapacity that for him defined woman. She is politically, just as she is biologically, like a boy, an impotent version of the man, an *arren agonos*. Even grander differences are inscribed on the body; the insensible differences between the sexual heat of men and women turns out to represent no less a difference than between heaven and earth. The very last stage in the heating sperma comes from the friction of the penis during intercourse (*GA* 1.5.717b24). But this is not like the heat of a blacksmith's fire, which one might feel, nor is the pneuma produced like ordinary breath.⁸⁷ It is a heat "analogous to the elements of the stars," which are "carried on a moving sphere" and are themselves not fired but create warmth in things below them.⁸⁸ Suddenly the male organ in coition is a terrestrial instance of heavenly movement, and the sexed body, whose fluids, organs, and pleasures are nuanced versions of one another, comes to illustrate the major political and cosmic ruptures of a civilization.⁸⁹

The most culturally pervasive of these ruptures is that between father and mother, which in turn contains a host of historically specific distinctions. I want to illustrate the extent to which biology in the one-sex model was understood to be an idiom for claims about fatherhood by examining three different accounts of the nature of seed put forward by Isidore of Seville, who in the sixth and seventh centuries produced the first major medieval summary of ancient scientific learning. Although the social context of a Christian encyclopedist was of course very different from that of an Athenian philosopher or an imperial Roman doctor, the structure of Isidore's arguments is paradigmatic for what is a very long-lived tradition of understanding sexual difference.

Isidore simultaneously holds three propositions to be true: that only men have sperma, that only women have sperma, and that both have sperma. It takes no great genius to see that these would be mutually contradictory claims if they are understood as literal truths about the body. But they would be perfectly compatible if they are seen as corporeal illustrations of cultural truths purer and more fundamental than biological fact. Indeed, Isidore's entire work is predicated on the belief that the origin of words informs one about the pristine, uncorrupted, essential nature of their referants, about a reality beyond the corrupt senses.⁹⁰

have seeds that engage in repeated combat for domination every time, and in each generation a child is conceived.)

These three distinct arguments about what we might take to be the same biological material are a dramatic illustration that much of the debate about the nature of the seed and of the bodies that produce it—about the boundaries of sex in the one-sex model—are in fact not about bodies at all. They are about power, legitimacy, and fatherhood, in principle not resolvable by recourse to the senses.

Freud suggests why this should be so. Until the mid-nineteenth century, when it was discovered that the union of two different germ cells, egg and sperm, constituted conception, it was perfectly possible to hold that fathers mattered very little at all. Paternity, as in Roman law, could remain a matter of opinion and of will. Spermatozoa could be construed as parasitic stirring rods whose function, in a laboratory dish, might be fulfilled by a glass rod.⁹⁴ And while the role of fathers generally in conception was settled more than a century ago, until very recently it was impossible to prove that any particular man was father to any particular child. In these circumstances, believing in fathers is like, to use Freud's analogy, believing in the Hebrew God.

The Judaic insistence that God cannot be seen—the graven-image proscription—“means that a sensory perception was given second place to what may be called an abstract idea.” This God represents “a triumph of intellectuality over sensuality (*Triumph der Geistigkeit über die Sinnlichkeit*), or strictly speaking, an instinctual renunciation.” Freud briefs precisely the same case for fathers as for God in the analysis of Aeschylus' *Oresteia* that immediately follows his discussion of the second commandment. Orestes denies that he has killed his mother by questioning whether he is related to her at all. “Am I then involved with my mother by blood-bond?” he asks. “Murderer, yes,” replies the chorus, pointing out quite rightly that she bore and nursed him. But Apollo saves the day for the defense by pointing out that, appearances notwithstanding, “the mother is no parent of that which is called her child, but only nurse of the new-planted seed that grows,” “a stranger.” The only true parent is “he who mounts.”⁹⁵

Here in the *Oresteia* is the founding myth of the Father. “Fatherdom (*Vaterschaft*), Freud concludes, “is a supposition” and like belief in the Jewish God is “based on an inference, a premiss.” Motherhood (*Mutterschaft*), like the old gods, is evident from the lowly senses alone. Father-

such a mutilation,” hides the more pressing but unaskable question of whether there needs to be a male. After all, the work of generation available to the senses is wholly the work of the female.⁹⁸

But being male and being a father, having what it takes to produce the more powerful seed, is the ascendancy of mind over the senses, of order over disorder, legitimacy over illegitimacy. Thus the inability of women to conceive within themselves becomes an instance—among many other things—of the relative weakness of her mind. Since normal conception is, in a sense, the male having an idea in the woman’s body, then abnormal conception, the *mola*, is a conceit for her having an ill-gotten and inadequate idea of her own. Seeds of life and seeds of wisdom might well come to the same thing. Plutarch cautioned that

great care must be taken that this sort of thing does not take place in women’s minds. For if they do not receive the seed[s] (*spermata*) of good doctrines and share with their husbands in intellectual advances, they, left to themselves, conceive many untoward ideas and low designs and emotions.

Her mind and her uterus are construed as equivalent arenas for the male active principle; her person is under the rational governance and instruction of her husband for the same reason that her womb is under the sway of his sperm. Similarly, he should be able to control his own passions and manage hers while being able at the same time to “delight and gratify” her sufficiently to produce children. A man who is “going to harmonize State, Forum, and Friends” should be able to have his “household well harmonized.”⁹⁹

Christianity made the possibility of such harmony between good social order and good sexual order far more problematic than it had been in Roman antiquity. It radically restructured the meanings of sexual heat; in its campaigns against infanticide, it diminished the power of fathers; in its reorganization of religious life, it altered dramatically what it was to be male and female; in its advocacy of virginity, it proclaimed the possibility of a relationship to society and the body that most ancient doctors—Soranus was the exception—would have found injurious to the health.¹⁰⁰

It is also true that Augustine, as Peter Brown has argued, discovered “the equivalent of a universal law of sexuality,” which represents a shift in the whole relation of human beings to society. It might stand as a metaphor for the end of the classical age and for the remaking of community

the flame and not feel the heat." Intercourse, argued Pope Innocent III in a diatribe against the body, is never performed without "the itch of the flesh, the heat of passion, the stench of the flesh."¹⁰⁴

Thus, after Augustine as before, the body was thought to work much as pagan medical writers had described it. Augustine's new understanding of sexuality as an inner, and ever present, sign of the will's estrangement by the fall did create an alternative arena for the generative body. As Brown says, it "opened the Christian bedchamber to the priest."¹⁰⁵ At the same time, it kept the door open for the doctor, the midwife, and other technicians of the old flesh.

Christian and pagan notions of the body coexisted, as did the various incompatible doctrines of the seed, of generation, and of corporeal homologues, because different communities asked different things of the flesh. Monks and knights, laity and clergy, infertile couples and prostitutes seeking abortion, confessors and theologians in myriad contexts, could continue to interpret the one-sex body as they needed to understand and manipulate it, as the facts of gender changed. It is a sign of modernity to ask for a single, consistent biology as the source and foundation of masculinity and femininity.

My purpose in this chapter has been to explain what I mean by the world of one sex: mind and body are so intimately bound that conception can be understood as having an idea, and the body is like an actor on stage, ready to take on the roles assigned it by culture. In my account sex too, and not only gender, is understood to be staged.

Since I have been unwilling to tie the one-sex model to any particular level of scientific understanding of the body, and since it seems to have persisted over millennia during which social, political, and cultural life changed dramatically, the question I raised at the beginning of this chapter should perhaps be rephrased: why did the attractions of this model fade at all? I suggested two strong explanations for its longevity. The first concerns how the body was understood in relation to culture. It was not the biological bedrock upon which a host of other characteristics were supposedly based. Indeed, the paradox of the one-sex model is that pairs of ordered contraries played off a single flesh in which they did not themselves inhere. Fatherhood/motherhood, male/female, man/woman, culture/nature, masculine/feminine, honorable/dishonorable, legitimate/illegitimate, hot/cold, right/left, and many other such pairs were read into