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THE FIVE SEXES

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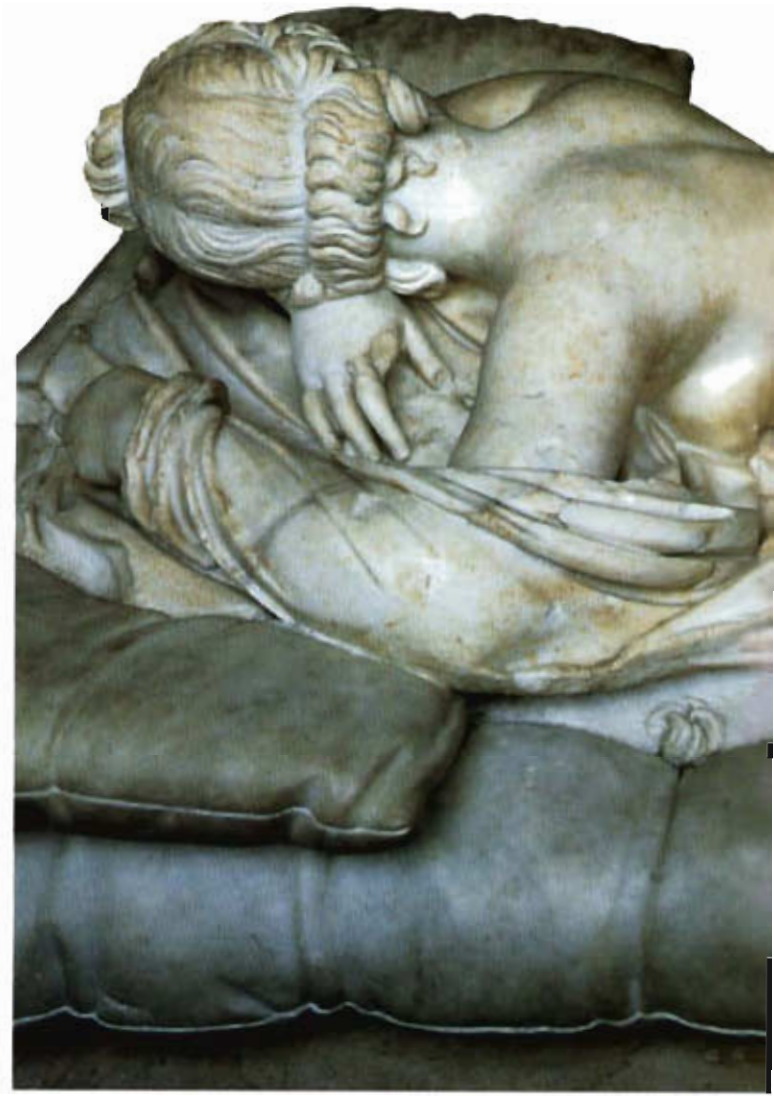
by ANNE FAUSTO-STERLING



IN 1843 LEVI SUYDAM, a twenty-three-year-old resident of Salisbury, Connecticut, asked the town board of selectmen to validate his right to vote as a Whig in a hotly contested local election. The request raised a flurry of objections from the opposition party, for reasons that must be rare in the annals of American democracy: it was said that Suydam was more female than male and thus (some eighty years before suffrage was extended to women) could not be allowed to cast a ballot. To settle the dispute a physician, one William James Barry, was brought in to examine Suydam. And, presumably upon encountering a phallus, the good doctor declared the prospective voter male. With Suydam safely in their column the Whigs won the election by a majority of one.

Barry's diagnosis, however, turned out to be somewhat premature. Within a few days he discovered that, phallus notwithstanding, Suydam menstruated regularly and had a vaginal opening. Both his/her physique and his/her mental predispositions were more complex than was first suspected. S/he had narrow shoulders and broad hips and felt occasional sexual yearnings for women. Suydam's "feminine propensities, such as a fondness for gay colors, for pieces of calico, comparing and placing them together, and an aversion for bodily labor, and an inability to perform the same, were remarked by many," Barry later wrote. It is not clear whether Suydam lost or retained the vote, or whether the election results were reversed.

Western culture is deeply committed to the idea that there are only two sexes. Even language refuses other possibilities; thus to write about Levi Suydam I have had to invent conventions—*s/he* and *his/her*—to denote someone who is clearly neither male nor female or who is perhaps both sexes at once. Legally, too, every adult is either man or woman, and the difference, of course, is not trivial. For Suydam it meant the franchise; today it means being available for, or exempt from, draft registration, as well

as being subject, in various ways, to a number of laws governing marriage, the family and human intimacy. In many parts of the United States, for instance, two people legally registered as men cannot have sexual relations without violating anti-sodomy statutes.

But if the state and the legal system have an interest in maintaining a two-party sexual system, they are in defiance of nature. For biologically speaking, there are many gradations running from female to male; and depending on how one calls the shots, one can argue that along that spectrum lie at least five sexes—and perhaps even more.

For some time medical investigators have recognized the concept of the intersexual body. But the standard medical literature uses the term *intersex* as a catch-all for three major subgroups with some mixture of male and female characteristics: the so-called true hermaphrodites, whom I call herms, who possess one testis and one ovary (the sperm- and egg-producing vessels, or gonads); the male pseudohermaphrodites (the "merms"), who have testes and some aspects of the female genitalia but no ovaries; and the female pseudohermaphrodites (the "ferms"), who have ovaries and some aspects of the male genitalia but lack testes. Each of those categories is in itself complex; the percentage of male and female characteristics, for instance, can vary enormously among members of the same subgroup. Moreover, the inner lives of the people in each subgroup—their special needs and their problems, attractions and repulsions—have gone unexplored by science. But on the basis of what is known about them I suggest that the three intersexes, herm, merm and ferm, deserve to be considered additional sexes each in its own right. Indeed, I would argue further that sex is a vast, infinitely malleable continuum that defies the constraints of even five categories.

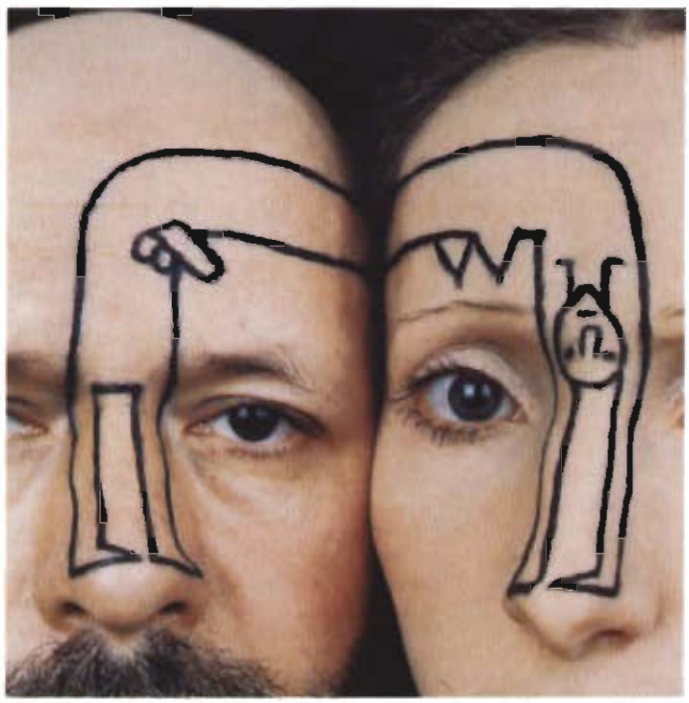
NOT SURPRISINGLY, it is extremely difficult to estimate the frequency of intersexuality, much less the frequency of each of the three additional sexes: it is not the sort of information one volunteers on a job application. The psychologist John Money of Johns Hopkins University, a specialist in the study of congenital sexual-organ defects, suggests intersexuals may constitute as many as 4 percent of births. As I point out to my students at Brown University, in a student body of about 6,000 that fraction, if correct, implies there may be as many as 240 intersexuals on campus—surely enough to form a minority caucus of some kind.

In reality though, few such students would make it as

Sleeping Hermaphrodite, Roman, Second Century B.C.

far as Brown in sexually diverse form. Recent advances in physiology and surgical technology now enable physicians to catch most intersexuals at the moment of birth. Almost at once such infants are entered into a program of hormonal and surgical management so that they can slip quietly into society as "normal" heterosexual males or females. I emphasize that the motive is in no way conspiratorial. The aims of the policy are genuinely humanitarian, reflecting the wish that people be able to "fit in" both physically and psychologically. In the medical community, however, the assumptions behind that wish—that there be only two sexes, that heterosexuality alone is normal, that there is one true model of psychological health—have gone virtually unexamined.

THE WORD *hermaphrodite* comes from the Greek names Hermes, variously known as the messenger of the gods, the patron of music, the controller of dreams or the protector of livestock, and Aphrodite, the goddess of sexual love and beauty. According to Greek mythology, those two gods parented Hermaphroditus, who at age fifteen became half male and half female when his body fused with the body of a nymph he fell in love with. In some true hermaphrodites the testis and the ovary grow separately but bilaterally; in others they grow together within the same organ, forming an ovo-testis. Not infrequently, at least one of the gonads functions quite well, producing either sperm cells or eggs, as well as functional levels of the sex hormones—androgens or estrogens. Although in theory it might be possible for a true hermaphrodite to become both father and mother to a child, in practice the appropriate ducts and tubes are not configured so that egg and sperm can meet.



Rimma Gerlovina and Valeriy Gerlovin, Romulus and Remus, *1989*

In contrast with the true hermaphrodites, the pseudohermaphrodites possess two gonads of the same kind along with the usual male (XY) or female (XX) chromosomal makeup. But their external genitalia and secondary sex characteristics do not match their chromosomes. Thus merms have testes and XY chromosomes, yet they also have a vagina and a clitoris, and at puberty they often develop breasts. They do not menstruate, however. Ferms have ovaries, two X chromosomes and sometimes a uterus, but they also have at least partly masculine external genitalia. Without medical intervention they can develop beards, deep voices and adult-size penises.

No classification scheme could more than suggest the variety of sexual anatomy encountered in clinical practice. In 1969, for example, two French investigators, Paul Guinet of the Endocrine Clinic in Lyons and Jacques Decourt of the Endocrine Clinic in Paris, described ninety-eight cases of true hermaphroditism—again, signifying people with both ovarian and testicular tissue—solely according to the appearance of the external genitalia and the accompanying ducts. In some cases the people exhibited strongly feminine development. They had separate openings for the vagina and the urethra, a cleft vulva defined by both the large and the small labia, or vaginal lips, and at puberty they developed breasts and usually began to menstruate. It was the oversize and sexually alert clitoris, which threatened sometimes at puberty to grow into a penis, that usually impelled them to seek medical attention. Members of another group also had breasts and a feminine body type, and they menstruated. But their labia were at least partly fused, forming an incomplete scrotum. The phallus (here an embryological term for a structure that during usual development goes on to form either a clitoris or a penis) was between 1.5 and 2.8 inches long; nevertheless, they urinated through a urethra that opened into or near the vagina.

By far the most frequent form of true hermaphrodite encountered by Guinet and Decourt—55 percent—appeared to have a more masculine physique. In such people the urethra runs either through or near the phallus, which looks more like a penis than a clitoris. Any menstrual blood exits periodically during urination. But in spite of the relatively male appearance of the genitalia, breasts appear at puberty. It is possible that a sample larger than ninety-eight so-called true hermaphrodites would yield even more contrasts and subtleties. Suffice it to say that the varieties are so diverse that it is possible to know which parts are present and what is attached to what only after exploratory surgery.

The embryological origins of human hermaphrodites clearly fit what is known about male and female sexual development. The embryonic gonad generally chooses early in development to follow either a male or a female sexual pathway; for the ovo-testis, however, that choice is fudged. Similarly, the embryonic phallus most often ends up as a clitoris or a penis, but the existence of intermediate states comes as no surprise to the embryologist. There are also uro-genital swellings in the embryo that usually either stay open and become the vaginal labia or fuse and become a scrotum. In some hermaphrodites, though, the choice of opening or closing is ambivalent. Finally, all mammalian embryos have structures that can become the female uterus and the fallopian tubes, as well as structures that

can become part of the male sperm-transport system. Typically either the male or the female set of those primordial genital organs degenerates, and the remaining structures achieve their sex-appropriate future. In hermaphrodites both sets of organs develop to varying degrees.

INTERSEXUALITY ITSELF is old news. Hermaphrodites, for instance, are often featured in stories about human origins. Early biblical scholars believed Adam began life as a hermaphrodite and later divided into two people—a male and a female—after falling from grace. According to Plato there once were three sexes—male, female and hermaphrodite—but the third sex was lost with time.

Both the Talmud and the Tosefta, the Jewish books of law, list extensive regulations for people of mixed sex. The Tosefta expressly forbids hermaphrodites to inherit their fathers' estates (like daughters), to seclude themselves with women (like sons) or to shave (like men). When hermaphrodites menstruate they must be isolated from men (like women); they are disqualified from serving as witnesses or as priests (like women), but the laws of pederasty apply to them.

In Europe a pattern emerged by the end of the Middle Ages that, in a sense, has lasted to the present day: hermaphrodites were compelled to choose an established gender role and stick with it. The penalty for transgression was often death. Thus in the 1600s a Scottish hermaphrodite living as a woman was buried alive after impregnating his/her master's daughter.

For questions of inheritance, legitimacy, paternity, succession to title and eligibility for certain professions to be determined, modern Anglo-Saxon legal systems require that newborns be registered as either male or female. In the U.S. today sex determination is governed by state laws. Illinois permits adults to change the sex recorded on their birth certificates should a physician attest to having performed the appropriate surgery. The New York Academy of Medicine, on the other hand, has taken an opposite view. In spite of surgical alterations of the external genitalia, the academy argued in 1966, the chromosomal sex remains the same. By that measure, a person's wish to conceal his or her original sex cannot outweigh the public interest in protection against fraud.

During this century the medical community has completed what the legal world began—the complete erasure of any form of embodied sex that does not conform to a male–female, heterosexual pattern. Ironically, a more sophisticated knowledge of the complexity of sexual systems has led to the repression of such intricacy.

In 1937 the urologist Hugh H. Young of Johns Hopkins University published a volume titled *Genital Abnormalities, Hermaphroditism and Related Adrenal Diseases.* The book is remarkable for its erudition, scientific insight and open-mindedness. In it Young drew together a wealth of carefully documented case histories to demonstrate and study the medical treatment of such "accidents of birth." Young did not pass judgment on the people he studied, nor did he attempt to coerce into treatment those intersexuals who rejected that option. And he showed unusual even-handedness in referring to those people who had had sexual experiences as both men and women as "practicing hermaphrodites."

One of Young's more interesting cases was a hermaphrodite named Emma who had grown up as a female. Emma had both a penis-size clitoris and a vagina, which made it possible for him/her to have "normal" heterosexual sex with both men and women. As a teenager Emma had had sex with a number of girls to whom s/he was deeply attracted; but at the age of nineteen s/he had married a man. Unfortunately, he had given Emma little sexual pleasure (though *he* had had no complaints), and so throughout that marriage and subsequent ones Emma had kept girlfriends on the side. With some frequency s/he had pleasurable sex with them. Young describes his subject as appearing "to be quite content and even happy." In conversation Emma occasionally told him of his/her wish to be a man, a circumstance Young said would be relatively easy to bring about. But Emma's reply strikes a heroic blow for self-interest:

> Would you have to remove that vagina? I don't know about that because that's my meal ticket. If you did that, I would have to quit my husband and go to work, so I think I'll keep it and stay as I am. My husband supports me well, and even though I don't have any sexual pleasure with him, I do have lots with my girlfriends.

YET EVEN AS YOUNG was illuminating intersexuality with the light of scientific reason, he was beginning its suppression. For his book is also an extended treatise on the most modern surgical and hormonal methods of changing intersexuals into either males or females. Young may have differed from his successors in being less judgmental and controlling of the patients and their families, but he nonetheless supplied the foundation on which current intervention practices were built.

By 1969, when the English physicians Christopher J. Dewhurst and Ronald R. Gordon wrote *The Intersexual Disorders*, medical and surgical approaches to intersexuality had neared a state of rigid uniformity. It is hardly surprising that such a hardening of opinion took place in the era of the feminine mystique—of the post–Second World War flight to the suburbs and the strict division of family roles according to sex. That the medical consensus was not quite universal (or perhaps that it seemed poised to break apart again) can be gleaned from the near-hysterical tone of Dewhurst and Gordon's book, which contrasts markedly with the calm reason of Young's founding work. Consider their opening description of an intersexual newborn:

> One can only attempt to imagine the anguish of the parents. That a newborn should have a deformity . . . [affecting] so fundamental an issue as the very sex of the child . . . is a tragic event which immediately conjures up visions of a hopeless psychological misfit doomed to live always as a sexual freak in loneliness and frustration.

Dewhurst and Gordon warned that such a miserable fate would, indeed, be a baby's lot should the case be improperly managed; "but fortunately," they wrote, "with correct management the outlook is infinitely better than the poor parents—emotionally stunned by the event—or indeed anyone without special knowledge could ever imagine."

Scientific dogma has held fast to the assumption that without medical care hermaphrodites are doomed to a life of misery. Yet there are few empirical studies to back up that assumption, and some of the same research gathered to build a case for medical treatment contradicts it. Francies Benton, another of Young's practicing hermaphrodites, "had not worried over his condition, did not wish

to be changed, and was enjoying life." The same could be said of Emma, the opportunistic hausfrau. Even Dewhurst and Gordon, adamant about the psychological importance of treating intersexuals at the infant stage, acknowledged great success in "changing the sex" of older patients. They reported on twenty cases of children reclassified into a different sex after the supposedly critical age of eighteen months. They asserted that all the reclassifications were "successful," and they wondered then whether reregistration could be "recommended more readily than [had] been suggested so far."

The treatment of intersexuality in this century provides a clear example of what the French historian Michel Foucault has called biopower. The knowledge developed in biochemistry, embryology, endocrinology, psychology and surgery has enabled physicians to control the very sex of the human body. The multiple contradictions in that kind of power call for some scrutiny. On the one hand, the medical "management" of intersexuality certainly developed as part of an attempt to free people from perceived psychological pain (though whether the pain was the patient's, the parents' or the physician's is unclear). And if one accepts the assumption that in a sex-divided culture people can realize their greatest potential for happiness and productivity only if they are sure they belong to one of only two acknowledged sexes, modern medicine has been extremely successful.

On the other hand, the same medical accomplishments can be read not as progress but as a mode of discipline. Hermaphrodites have unruly bodies. They do not fall naturally into a binary classification; only a surgical shoehorn can put them there. But why should we care if a "woman," defined as one who has breasts, a vagina, a uterus and ovaries and who menstruates, also has a clitoris large enough to penetrate the vagina of another woman? Why should we care if there are people whose biological equipment enables them to have sex "naturally" with both men and women? The answers seem to lie in a cultural need to maintain clear distinctions between the sexes. Society mandates the control of intersexual bodies because they blur and bridge the great divide. Inasmuch as hermaphrodites literally embody both sexes, they challenge traditional beliefs about sexual difference: they possess the irritating ability to live sometimes as one sex and sometimes the other, and they raise the specter of homosexuality.

BUT WHAT IF things were altogether different? Imagine a world in which the same knowledge that has enabled medicine to intervene in the management of intersexual patients has been placed at the service of multiple sexualities. Imagine that the sexes have multiplied beyond currently imaginable limits. It would have to be a world of shared powers. Patient and physician, parent and child, male and female, heterosexual and homosexual—all those oppositions and others would have to be dissolved as sources of division. A new ethic of medical treatment would arise, one that would permit ambiguity in a culture that had overcome sexual division. The central mission of medical treatment would be to preserve life. Thus hermaphrodites would be concerned primarily not about whether they can conform to society but about whether they might develop potentially life-threatening conditions—hernias, gonadal tumors, salt imbalance caused by adrenal malfunction—that sometimes accompany hermaphroditic development. In my ideal world medical intervention for intersexuals would take place only rarely before the age of reason; subsequent treatment would be a cooperative venture between physician, patient and other advisers trained in issues of gender multiplicity.

I do not pretend that the transition to my utopia would be smooth. Sex, even the supposedly "normal," heterosexual kind, continues to cause untold anxieties in Western society. And certainly a culture that has yet to come to grips—religiously and, in some states, legally—with the ancient and relatively uncomplicated reality of homosexual love will not readily embrace intersexuality. No doubt the most troublesome arena by far would be the rearing of children. Parents, at least since the Victorian era, have fretted, sometimes to the point of outright denial, over the fact that their children are sexual beings.

All that and more amply explains why intersexual children are generally squeezed into one of the two prevailing sexual categories. But what would be the psychological consequences of taking the alternative road—raising children as unabashed intersexuals? On the surface that tack seems fraught with peril. What, for example, would happen to the intersexual child amid the unrelenting cruelty of the school yard? When the time came to shower in gym class, what horrors and humiliations would await the intersexual as his/her anatomy was displayed in all its nontraditional glory? In whose gym class would s/he register to begin with? What bathroom would s/he use? And how on earth would Mom and Dad help shepherd him/her through the mine field of puberty?

IN THE PAST THIRTY YEARS those questions have been ignored, as the scientific community has, with remarkable unanimity, avoided contemplating the alternative route of unimpeded intersexuality. But modern investigators tend to overlook a substantial body of case histories, most of them compiled between 1930 and 1960, before surgical intervention became rampant. Almost without exception, those reports describe children who grew up knowing they were intersexual (though they did not advertise it) and adjusted to their unusual status. Some of the studies are richly detailed—described at the level of gym-class showering (which most intersexuals avoided without incident); in any event, there is not a psychotic or a suicide in the lot.

Still, the nuances of socialization among intersexuals cry out for more sophisticated analysis. Clearly, before my vision of sexual multiplicity can be realized, the first openly intersexual children and their parents will have to be brave pioneers who will bear the brunt of society's growing pains. But in the long view—though it could take generations to achieve—the prize might be a society in which sexuality is something to be celebrated for its subtleties and not something to be feared or ridiculed. ●

ANNE FAUSTO-STERLING is a developmental geneticist and professor of medical science at Brown University in Providence. The second edition of her book MYTHS OF GENDER: BIOLOGICAL THEORIES ABOUT WOMEN AND MEN, *published by Basic Books, appeared last fall. She is working on a book titled* THE SEX WHICH PREVAILS: BIOLOGY AND THE SOCIAL/SCIENTIFIC CONSTRUCTION OF SEXUALITY.

Robert Gober, Untitled, *1990*

PEER REVIEW

Letters from Readers

INTERSEXUAL RIGHTS

As an intersexual I found Anne Fausto-Sterling's article "The Five Sexes" [March/April] of intense personal interest. Her willingness to question medical dogma on intersexuality is unique and refreshing. I understand that she has not had the chance to meet with any "corrected" intersexuals; I think I can provide some perspective on the experience.

Surgical and hormonal treatment allows parents and physicians to imagine that they have eliminated the child's intersexuality. Unfortunately, the surgery is immensely destructive of sexual sensation as well as one's sense of bodily integrity. Because the cosmetic result may be good, parents and physicians complacently ignore the child's emotional pain in being forced into a socially acceptable gender. The child's body, once violated by the surgery, is again and again subjected to frequent genital examinations. Many "graduates" of medical intersex corrective programs are chronically depressed, wishing vainly for the return of body parts. Suicides are not uncommon. Some former intersexuals become transsexual, rejecting their imposed sex. Follow-up studies of adults to ascertain the long-term outcome of intervention are conspicuously absent.

I am forced to wonder whether our culture's concept of sexual normalcy, which defines the sex organs of as many as 4 percent of newborn infants as "defective," is not itself defective. Intersex specialists are busily snipping and trimming infant genitals to fit the procrustean bed that is our cultural definition of gender. But Ms. Fausto-Sterling has been wrongly informed that few intersexuals escape medical intervention. The ones I have located have told me they feel lucky to have escaped with their bodies intact. How did their parents shepherd them through the mine field of puberty? Generally, in the culturally sanctioned way: with embarrassed silence.

Medical dogma on sex assignment of intersexuals centers on the "adequacy" of the penis. Because a large penis cannot be constructed from a small one, female assignment is preferred. Because a large clitoris is considered "disfiguring," extensive surgery is employed to remove, trim or relocate it. Whereas a male with an "inadequate" penis (small, but with normal erotic sensation) is considered tragic, the same person transformed into a female with reduced or absent genital sensation and an artificial vagina is considered normal. The capacity to inflict such monstrous "treatment" on children, who cannot consent, is ultimately a clear expression of the hatred and fear of sexuality that predominate in our culture.

I must take issue, though, with the terms *true hermaphrodite, female pseudohermaphrodite* and *male pseudohermaphrodite.* They are a heritage of Victorian medicine—and without prognosticative value. They reflect the Victorian belief that human sexual nature rests entirely in the gonads, a concept of gonadal determinism belied by the relative success of intersex medicine in sex reassignment.

I encourage intersexuals and people close to them to write to us at the Intersex Society of North America, Post Office Box 31791, San Francisco, California 94131, where we are assembling a support group and documenting our lives.

CHERYL CHASE

San Francisco, California

¶The logic of Ms. Fausto-Sterling's arguments is specious, even deranged. She reports that some people suffering from congenital genital abnormalities have led happy lives. But to assume that such cases justify withholding corrective surgery because they are exemplars of some imagined extra sexes is truly bizarre. By the same argument, we should withhold corrective surgery from people who suffer congenital spinal deformities, heart conditions or even harelips; their claims to special status (and thus preservation) are just as solid are as the ones of people with genital deformities.

R. P. BIRD

Wichita, Kansas

¶Ms. Fausto-Sterling contends that the medical community has been unreflective about surgery as a solution to intersexuality. My own research on the management of intersexuality supports her observation that physicians formulate their enterprise of converting ambiguous genitals into "female" or "male" genitals as an effort to "free [intersexed] people from perceived psychological pain," when in fact it is an effort to free the culture from having to deal with the implications of gender ambiguity. Evidence (as yet unpublished) from adults whose intersexual states were corrected in childhood suggests they are not as grateful to their physicians or as satisfied with the genital reconstruction as the physicians would have us believe. It appears, then, that the current management of intersexuality is bad not only for reconstructing gender in theory but also for anyone who has a more practical interest in the issue.

In Ms. Fausto-Sterling's utopia the scientific community would refrain from surgically correcting intersexuality, thereby giving rise to a world in which gender oppositions would "be dissolved as sources of division." I share her desire to see gender dissolve, and I am sympathetic to her argument that one answer lies in halting unnecessary genital surgeries and in validating alternative genitals and thus alternative sexes. I think, however, that her proposal still gives "natural" genitals (albeit in more than two forms) a primary status and ignores the fact that in the everyday world gender attributions are made without access to genital inspection.

Instead, what has primacy in everyday life is the gender that is *performed*, regardless of the configuration of the flesh under the clothes. One cannot expect that surgeons will lay down their knives in the service of the gender revolution. But there are people who might function as transformers of gender categories. The "transgender" community, described by the anthropologist Anne Bolin, is made up of people who are challenging the obligatory two-gender system by blending public features of maleness and femaleness, or by accepting bits and pieces of the surgical options without "going all the way," or by doing both. People who are transgender disrupt gender in two ways: They refuse to provide the cues that would permit them to be regarded as either male or female. And they treat biological signs of gender (including genitals) as bodily ornaments—neither more nor less elective than a face-lift.

Ms. Fausto-Sterling suggests gender disruption can begin with the genitals and work outward to the social categories. Given the need for revolutionary disruptions to be public events, the transgender movement suggests a more powerful alternative.

SUZANNE J. KESSLER

State University of New York
Purchase, New York

¶Ms. Fausto-Sterling's article left me with two questions about true hermaphrodites: What is the chromosomal make up of their cells? And if a true hermaphrodite could donate both the sperm and the egg for an

embryo, would the offspring be a true clone, which in turn would be able to regenerate in the same fashion?

JOSEPH L. LAKSHMANAN
Washington, D.C.

¶To the best of my knowledge there is no publication attributable to me in which I suggest, as Ms. Fausto-Sterling puts it, "intersexuals may constitute as many as 4 percent of births." Moreover, it is epidemiologically reckless to conjecture that on the campus of Brown University there are 240 students with a birth defect of the sex organs that would justify their being diagnosed as intersexuals, that is, hermaphrodites.

JOHN MONEY
Johns Hopkins University
Baltimore, Maryland

Anne Fausto-Sterling replies: The letters responding to my article include some small factual corrections (for which I will check my sources further); one question about chromosomes (answer: true hermaphrodites are often chromosomal mosaics with both *XX* and *XY* tissue—I don't think clones are possible); some critical engagement from people generally sympathetic to my point of view; and some choleric responses that lure the reader with words such as *reckless*, *specious* and *deranged*. I will respond briefly to the latter two categories.

Since the article was published, I have had the pleasure of corresponding directly with Cheryl Chase, whose views and insights into the issues have raised my consciousness and focused my attention more clearly on such clinical aspects of early surgery as loss of sexual function, genital scarring and negative psychological side effects. I can only concur with her comments about clitoral surgery; I would add that such surgery is sometimes done even on unambiguously female infants simply because the neonatologist thinks the baby girl's clitoris is "too long." Ms. Chase's point about terminology is also well-taken, though I chose to use the medically accepted words to facilitate communication with the medical community.

I refer the outraged Mr. Bird to Ms. Chase's letter. Far from raising a silly issue, I am, with considerable justification, suggesting that certain entrenched medical practices be reconsidered, both for the benefit of the patient and for the welfare of our culture as a whole.

Suzanne Kessler's work on the management of intersexuality has also informed my own. I find her points about not giving primacy to genitalia worthy of further thought. As for the number five, I emphasize that I chose it for its rhetorical value and not because I think a discrete number can accurately be imposed on a set of physical and physiological attributes that actually form a continuum.

One feature of the academic community is the inability of many of its members to deal with the ironic. John Money's failure to see my quip about intersexuals on the Brown University campus as anything other than "reckless" places him among the irony-blind. If the figure 4 percent is incorrectly attributed to him, I can only apologize, and I will be sure not to make such an attribution in the future. Nevertheless, I did not pick the number out of thin air. I took it from a paper by Julia Epstein titled "Either/Or—Neither/Both: Sexual Ambiguity and the Ideology of Gender," published in *Genders* (1990), Volume 7, pages 100–142. Her footnote 6 on page 131 reads as follows: "Robert Edgerton cites a statistic of 2 to 3 percent in . . . *American Anthropologist* 66 (1964): 1289. Dr. Iraj Rezvani of St. Christopher's Hospital for Children in Philadelphia believes this estimate to be too high, while John Money asserts that the incidence of gender disorders approaches 4 percent."

I had hoped my tentative language about that number would emphasize that there are really no accurate figures about the total frequency (from all causes) of intersexuality—and that compiling any may be impossible. My point, however, is that intersexuals are not as rare as people may think *and* that the principles of treatment, established especially by Mr. Money and his many coworkers, are part of a system of defining and reinforcing our cultural ideas about what counts as normal in the world of sex and gender. It is both those cultural norms and their enforcement that I challenge.