knowledges that the fantasy of acquiring female genitals "often does seem to compete with arousal toward other people." The "partner is almost superfluous, or merely acts as a kind of prop." Just as one prone to alcoholism needs to take special care in life, so does one drawn to fetishism.

Cross-dressers aren't necessarily fetishistic, although some are. Some cross-dressers enjoy a feminine identity part of the time, as a chance to get away from a super-male work environment, to dress with a splash of color, or for other reasons. I believe Lawrence's narrative brings out a valid distinction between transgender expression motivated by gender identity and that motivated by fetishism. Transsexuals can be motivated by either, and cross-dressers can too. On the gender-identity-motivated to fetish-motivated spectrum, transsexuals cluster more toward the former and cross-dressers toward the latter. Each transgendered person probably has his or her own personal mix of these motivations.

Although Lawrence's narrative demonstrates that an autoerotic component can exist in male-to-female transsexualism, I'm not persuaded that many people match this profile. Lawrence herself is certainly unusual. She has long been interested in body morphing, and has posted photos on the web in which she used PhotoShop to place an image of her own face in famous works of art, like the Mona Lisa.

Lawrence claims, though, that she can generalize from her own experience and that she wishes to take the gender out of transgender. She solicited narratives to reveal others identifying with transgender autoeroticism, posting twenty-eight responses on the web.[22] As I understand them, none of the responses states that an autoerotic sexual drive was the primary reason for transitioning and pursuing sex reassignment surgery, although many of them acknowledge some autoerotic sensation as part of their overall experience. Indeed, some of the narratives directly contradict the primacy of autoeroticism. Yet the narratives that Lawrence posted are the ones most likely to be supportive. Lawrence discourages counternarratives: "Please note that I am not interested in statements from persons who have never had such feelings, or who object to the idea that other people might have them. I have plenty of such statements already."

2

Sex versus Gender

To most people, "sex" automatically implies "male" or "female." Not to a biologist. As we saw in the last chapter, sex means mixing genes when reproducing. Sexual reproduction is producing offspring by mixing genes from two parents, whereas asexual reproduction is producing offspring by one parent only, as in cloning. The definition of sexual reproduction makes no mention of "male" and "female." So what do "male" and "female" have to do with sex? The answer, one might suppose, is that when sexual reproduction does occur, one parent is male and the other female. But how do we know which one is the male? What makes a male, male, and a female, female? Indeed, are there only two sexes? Could there be a third sex? How do we define male and female anyway?

"Gender" also automatically implies "male" and "female" to most people. Therefore, if we define male and female biologically, do we wind up defining gender as well? Similarly, for adjectives like "masculine" and "feminine," can we define these biologically? Moreover, among humans, is a "man" automatically male and a "woman" necessarily female? One might think, yes, of course, but on reflection these key words admit lots of wiggle room. This chapter develops some definitions for all these words, definitions that will come in handy later on.

When speaking about humans, I find it's helpful to distinguish between

paired with a copy of itself. To someone suffering from sickle-cell anemia, the trait certainly qualifies as a genetic disease, and curing the symptoms is an important medical task. Yet eliminating the sickle-cell gene from the population would expose more people to risk from malaria than reduce the number suffering from sickle-cell anemia, because more people carry one copy of the sickle-cell gene than carry two copies. Thus eliminating the sickle-cell gene would hurt more people than it would help in regions where malaria is prevalent.

Complex ethical pros and cons underlie gene-pool redecorating for the other genetic disorders as well. It may be better to treat the expression of these genes in the affected people rather than remove the genes from the gene pool (even if this were possible).[5]

HOW COMMON ARE HOMOSEXUALITY AND TRANSSEXUALITY?

Turning to LGBTI traits, could they be genetic defects? The fraction of people who are gay or lesbian is between 1 in 10 and 1 in 100, depending on how the category is defined. Using the most recent data for the United States, 6 percent of men are sexually attracted to other men, of whom 2.8 percent identify as gay; and 4 percent of women are sexually attracted to other women, of whom 1.4 percent identify as lesbian.[6] Let's take 5 percent as a working figure. Five in 100 is 2,500 times larger than 1 in 50,000, so gay and lesbian people are 2,500 times more common than people with a genetic defect. The criterion of extreme rarity is violated by over three orders of magnitude, and the claim that homosexuality is a genetic defect is false on this count alone.

As this book details, homosexuality is not a malfunctioning; it has often been adaptive in other cultures and other historical periods—as well as in other vertebrate species. Moreover, being homosexual is not disabling or painful in itself. Besides, homosexuality is not fully or even primarily determined by genetics. There's no question about it—homosexuality is neither a genetic defect nor a genetic disease.

What about transgendered people? Uncertainty surrounds the number of transgendered people. Until recently, the figures being bandied about were 1 in 10,000 for male-to-female transsexuals and 1 in 30,000 for female-to-male transsexuals, based on data from Holland.[7] These numbers are bigger than the 1 in 50,000 figure asserted by the earliest

males vary in their preferences? What do females want from a male, how many times do females want to mate, how many males do females want to mate with, how does a female find Mr. Right, and how do females decide how many eggs to produce?

DEADBEATS NEED NOT APPLY

Is a male's true mettle tested in combat with other males? Does the best male surface as the winner and assume dominance over a hierarchy of wannabes? Shouldn't a female yearn to shack up with a proven winner? Shouldn't a female respect the winner of male-male competition as the best father for her baby, a stud with the best genes? Does mating with him guarantee the best and brightest child?

Let's see what female gobies think about male dominance. Sand gobies *(Pomatoschistus minutus)* are small fish (5 to 6 centimeters) common along European coasts. To see what a female goby wants in a male goby, specimens were collected from a shallow sandy bay near the Klubban Biological Station in Sweden and housed in seawater tanks for observation.[1] After the experiment, they were released back to the sea.

Sand gobies live for one or two years and experience one breeding season. Both males and females reproduce often during the breeding season, which is two months long (May and June). Males build nests under empty mussel shells by covering the shells with sand and excavating a cavity underneath. They attract females with a courtship display that includes showing their colorful fins. During spawning, a female attaches her eggs to the nest in a single layer.

In an experiment, two goby males were allowed to compete for a clay pottery fragment to use as a nest in order to determine the dominant male. The winner was usually slightly larger than the loser, although only by 3 millimeters. They were then placed in chambers at opposite ends of a tank. The tank was divided into thirds using transparent partitions. The middle chamber was left empty. The winner and loser were given new pottery fragments and allowed to build nests by themselves.

Next, a female was introduced into the middle chamber. The female could choose which of the males she preferred, indicated by the side of the chamber where she spent her time. After the female's preference was

She indicates that her own strong reactions to these "bodily transformations" prompted her to take a look at her own attitudes, and she notes how Scandinavian "people seem strongly provoked by . . . transformations Mexican homosexual men are forced by the macho society around them to make," especially the way these men become "effeminate, instead of remaining naturally masculine."[12]

The vestidas don't agree. When Prieur challenged Gata about her femininity, Gata replied that as a teenager she felt very hurt when men turned her away. But "by being more feminine, more like a woman . . . the tables were turned. Men started to beg me for sex, they kissed me, and I liked it." Gata then challenged Prieur by claiming, "My boobs are bigger than yours." Prieur admits, "I defended myself by saying that mine at any rate were natural. Gata retorted, 'That doesn't matter . . . it is an achievement, . . . a thing you have been able to provide yourself. As if you wanted a house.'" Prieur is thus forced to acknowledge that, for vestidas, "their shaped and fashioned bodies are symbols of social standing, obtained through hard work and privation. At the same time, the body is an investment which may ensure their earnings as prostitutes." She summarizes, "The question is not whether the femininity is genuine or false, but whether it works. And indeed it does."[13]

Prieur also doesn't like the way vestidas act, having expected to find "a woman's soul trapped in a male body." Instead, vestidas have "more of a manly than a womanly attitude." Here, Prieur clarifies: "According to my standards of femininity," a real woman "looks like a woman," "resembles a woman emotionally," is "warm," "cares for others," enjoys "helping others," "pleasing them," and overtly "expresses her feelings, both joy and sadness."[14] This stereotype of women is evidently not one the vestidas generally observe. But what if the comparison had been made to tough-girl street gangs or to nontransgendered street sex workers? How many of these people would meet a Scandinavian academic's middle-class standard of femininity?

Throughout her multiyear study, Prieur refers to vestidas only as effeminate homosexual men, suggesting that vestidas are female impostors and denying their identity as the transgendered girls and women some obviously are. Vestidas have little chance to integrate into the life of women (although it would have been interesting to interview the women clients of the vestidas who worked as hairdressers). For this reason, nei-

dogecoin-nascar-520x293.jpeg?resize?520%2C293 cars printed with Dogecoin drawings.
Moon Litecoin / Moon Dash / Moon Dogecoin.
Dogecoin is the second largest virtual currency in the world after Bitcoin.
Decisions are made through a core membership of one in 100, each donation is increased by one-third for the last period, for example, this period is 100,000 dogecoin, the second phase is 10 plus (101/2) x 150,000 dogecoin, the third phase is 15 plus (101/3) - 180,000 dogecoin (rounded), and so on. Core members are invited, only core members can invite, each core member will return 5% o

f the donated token, cap return 30%
Dogecoin, which was born in 2013, is perhaps the best example of "community governance".
Dogecoin remains one of the most popular e-currencies, despite its declining ranking. (Hexun.com)
Btctrade's announcement on the Dogecoin deal.
Dogecoin (DOGE) holders will receive a 10:1 airdrot from DOGET on June 10.
Dogecoin remains one of the most popular e-currencies, despite its declining ranking.
Auto-WEKA, Auto-Sklearn, Auto-Keras, etc.
Cash, Bitcoin SV, Dash, Dogecoin, IOTA, Litecoin, Monero, XRP and Zcash.
Auto-scaling . . . Auto-Scaling and Reserved

And Inconation. Auto-scaling . . . Manual or automatic . . . Automatic . . . Automatic . . . Automatic.
Dogecoin or a TikTok Challenge video price jumps 26%
Samu, DogeCoin's great follower, shares his view on how Dogecoin has a chance to explode with higher numbers if leading news portals try to quell news that Elon Musk is CEO of DogeCoin.
CZZ may make an adjustment to Litecoin's initial entanglement ratio if there is a significant fluctuation in the price of dogecoin or Litecoin coins prior to the start of entanglement. CZZ's initial entanglement ratio to Dogecoin remains the same.

Dogecoin has been successfully used on the Reddit platform, and dogetipbot will launch its beta version on Twitch this weekend. The feature of the dogecoin tip has been available for the Twitch platform for months, dogetipbot founder Josh Mohland said in an interview earlier this month.
Auto Atlas vs Texture Packer vs. Auto Atlas.
Dogecoin (DOGE) will be launched on the OceanEX exchange on July 26.
Dogecoin is among the miners' rewards programs, surpassing Bitcoin SVs and even Bitcoin cash.
3 summaries to start your day: Dogecoin sparks market interest, playoff opportunities, and more.


Bella's

to be lifted, parts of the brain shrink and expand with use, especially early in life. People's biceps start at different sizes, before any weight-lifting. Likewise, brains differ at birth, reflecting an inherent disposition to different behaviors. How, then, are our brains involved in our sex lives, in the disposition we have to express gender and sexuality?

The brain listens to sights and sounds from outside, as well as to the music of the hormones within the body. The brain secretes hormones too, playing in the hormonal orchestra—it does its listening as a performer in the orchestra pit, not as a spectator in the audience. The brain "hears" the body's hormones using receptors located in the preoptic area of the hypothalamus, running from the back of the brain, near the spinal cord, along its bottom, to the front near the eyes. The brain also listens directly to genes, such as gender genes like SRY in the male, without going through hormones as intermediaries.[30]

BIRD BRAIN ANATOMY

Biologists who study brain anatomy are used to looking for fine details, differences between a few cells here and there. In 1976 brain anatomists were amazed by what they found. It was known that while male canaries and zebra finches sing, female canaries sing only a little, and female zebra finches don't sing at all. It was also known that in both species males learn their song from listening to other males.[31] The surprise was that the brains of the males and the females in these species are so different that they can be told apart with the naked eye.[32] Place the brains from a male and a female zebra finch next to one another, and with practice, you can tell their sex just by looking. In the upper part of his brain, a male bird has extra nerve cells, which occur in clusters containing extra hormone receptors as well—hormone receptors in addition to those along the base of the brain.[33] These upper-brain nerve cells enable the male bird's singing.

Although the neurobiology of avian brains isn't directly comparable to that of mammalian brains, avian brains set valuable biological precedents.[34] Here's a list:

1. The brains of males and females can differ, and differ substantially, as in canaries and zebra finches.

alone have sexual coloration and/or grow larger than the males are thought to be sex-role reversed as well.

On the other hand, seahorses and certain other pipefish species are not sex-role reversed; they follow the model of Darwin's peacocks. Male seahorses can raise their young and get ready for the next embryos faster than female seahorses can produce egg batches. The result is a net surplus of males wanting eggs compared to females offering eggs. Males aggressively tail-wrestle and snout-snap one another for access to females, whereas females don't have any specific aggressive behaviors among themselves. Male seahorses tend to be larger, more colorful, and more distinctly patterned than females.[7]

Thus sex-role reversal definitely occurs in nature. Many feel that the concept of an operational sex ratio effectively extends Darwin's theory of sexual selection to cover sex-role reversed species—after all, the logic is the same for the mating strategies in both sex-role-typical species and sex-role-reversed species, with the identities of the excess sex and rate-limiting sex simply flipped. But no theory has been proposed to explain why sex-role reversal occurs in the first place.

Sex-role reversal is found in birds, especially aquatic and sea birds. When sex-role reversal occurs, the double standard can reverse too. Wattled jacanas from the Chagres River in Panama are large, squat black birds with white wing tips, a red face, and a long, yellow probing bill used to feed among shallow freshwater plants like hyacinths. The raucous, beefy females spend their days jousting with one another at the borders of their territories. Within these territories, harems of smaller males tend the eggs and chicks.

DNA fingerprinting has shown that males raise eggs laid by the female who controls their harem, even when the eggs were fathered by males outside the harem. The females clearly went outside their harem to obtain matings and yet burdened the males within their harem with the job of raising the young. The investigators, themselves male, were outraged, asserting that male jacanas were being "cuckolded" in spite of contributing so much parental care. One investigator stated, "It's about as bad as it can be for these guys."[8]

The converse probably wouldn't have provoked such outrage. A female in a harem controlled by a male might raise a chick fathered by that