I wish to discuss gender dysphoria without presupposing that there are only two sexes, plus two genders that stem from those sexes. So, I’ll begin by giving a series of tentative definitions that are more inclusive than those typically found in the literature.

[Slide 2] First, let’s define a sex to be the aggregate of a person’s:

- sex chromosomes;
- gonads;
- internal and external genitalia;
- sex hormonal systems;
- secondary sex characteristics; and
- brain structure as influenced by prenatal sex hormones.

This aggregate is intended to contain all the aspects of our biology that are influenced by sex chromosomes and hormones.
Normally, a person’s sex is determined by hir\(^1\) sex chromosomes, resulting in the familiar *male* and *female* sexes. But none of the attributes are binaries, and many less-common combinations of attributes occur, resulting in *intersexuality*. Actually, brain structure isn’t typically included in the definition of intersexuality, perhaps because it has been studied less than the other attributes. In *Sexing the Body*, Fausto-Sterling estimates that approximately 1.7% of the population are intersexual.

During pregnancy, the fetal brain is partly shaped by the relative amounts of estrogen and testosterone that are available to it. In perhaps 10-20% of pregnancies, for reasons that are as yet poorly understood, chromosomally female fetuses are subjected to significantly more testosterone and less estrogen than expected, or chromosomally male fetuses subjected to significantly less testosterone and more estrogen than expected, resulting in brain development at least partly at odds with chromosomal sex. Biologists have identified an external marker that can be used to infer the kind of hormonal washing a person received during fetal development. In the womb, the ring finger grows proportionally to the fetus’s exposure to testosterone, whereas the index finger grows proportionally to estrogen exposure. If we define a hand’s *finger-length ratio* to be the length of the index finger divided by the length of the ring finger, then people labeled male at birth tend to have ratios that are significantly less than those labeled female at birth.\(^2\)

If we view sex as the aggregate described above, there are multiple sexes, and many individuals whose sexes are different from male/female. But in our society, doctors are charged by our legal and social system with assigning each child a binary sex within a short time of birth, backing this choice up with

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1. A gender-neutral pronoun, pronounced “hear”, and replacing him/her.
surgical and hormonal interventions. Consequently, most of us are blind to the sex diversity that exists.

Sometimes gender is used as a synonym for sex, and this is the primary definition given by many dictionaries, including the Merriam-Webster Online Dictionary. But its secondary definition of *gender* is typical of definitions that draw a distinction between sex and gender:

> the behavioral, cultural, or psychological traits typically associated with one sex.

We study gender in the belief that people’s genders shape their social relationships.

[Slide 4] Separating gender from sex, we can say that a *gender* is an aggregate of the behavioral, cultural and psychological traits that shape social relationships, e.g.:

- aggressiveness,
- emotionality,
- tendency to be nurturing,
- risk aversion,
- conversational style,
- body language,
- dress style, etc.

Science is providing evidence that some of these attributes are influenced by a person’s sex, whereas others are purely a matter of nurture. Some of them are pure cultural constructions, and probably all of them are culturally mediated.
And the list of attributes is also culturally determined, with attributes added or deleted by a cultural process. For example, research has shown males to be, on average, somewhat less risk-averse—for certain kinds of risks—than females. On the other hand, biology doesn’t link females with skirts. For most traits, the male and female bell curves overlap greatly. Research is beginning to show that some traits, e.g., aggressiveness, are influenced by prenatal hormonal washing, and thus are correlated with finger-length ratios.³

If the different attributes of a gender aggregate were guaranteed to correlate well with each other, there might only be two genders, or only a gender continuum. But it only take a little observation to see that, e.g., some people are nurturing and aggressive, or non-nurturing and non-aggressive. This shows that gender is a multi-dimensional concept, and that there are many genders.

In contrast to sex, where “male” and “female” are coherent categories, I argue that “male” and “female” are not really genders, but sex-linked labels or brands masquerading as genders. They aren’t genders, because it seems to be possible to find men and women who are identical in terms of their gender aggregates. We are brought up belonging to the gender brand corresponding to our sex, and most people come to find some comfort in this belonging, and to participate in policing the brand boundary. Paradoxically, the branding both makes it easier to work against an entire group of people, as in misogyny, and makes it possible to work together under a common banner to resist discrimination, as in feminism. The extent to which gender branding structures our lives is astounding.

[Slide 4-b] A person’s gender identity is the gender sie⁴ believes hirself to have. I argue that developing a gender identity is a social process, even though a person’s gender aggregate is partly determined by hir sex. Even if we look at gender as an aggregate of traits, we still need role models to understand how we compare with others in terms of these traits. For example, we understand how aggressive we are in relation to the aggressiveness of others. But in the current culture, when people think of gender in terms of brands, even more socialization is needed.

As a thought experiment, imagine a person growing up on a spaceship, living with aliens. It seems impossible to imagine that person developing a gender identity of male or female, as these brands, and the associated language, wouldn’t be used by the aliens. But such a person could develop a gender identity, as in a perception of hir gender aggregate.

Back in our world, it seems that a child develops a branded gender identity by experiencing how sie is branded by others, and associating this brand to hirself, as well as, largely unconsciously, sifting through hir environment, identifying with some people, learning their gender brands, and associating these brands to hirself, and misidentifying with others, learning their gender brands, and disassociating their brands from hirself. There is evidence that a branded gender identity is fixed very early in childhood.

[Slide 5] A recent study found that male-to-female transsexuals who are attracted to women had finger-length ratios similar to a group of straight female controls, and dissimilar to those of straight male controls, suggesting that prenatal hormonal washing may have an impact on transsexualism.⁵ A corresponding effect for female-to-male transsexuals wasn’t found, and the

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⁴A gender-neutral pronoun, pronounced “see”, and replacing he/she.

⁵Bernd Kraemer, et al., “Finger Length Ratio (2D:4D) in Adults with Gender Identity Disorder”, Arch. Sex. Behav., 2007
effect for male-to-female transsexuals who are attracted to men was weaker, and so more work on the biological origins of transsexualism is needed. But it’s just aspects of our gender aggregates that may be influenced by prenatal hormonal washing. The development of a gender identity must, in my view, be a social process.

_Gender attribution_ is the process by which we experience someone and reach an opinion of what hir gender is. With our current system, this seems to be mostly a matter of guessing hir binary sex, and mapping this sex to its gender brand. But it could be a more open-ended process of paying attention to someone, more fully understanding who they are, what their traits are.

A _gender role_ is the behaviors and attitudes expected by a society of someone with a given gender. Rigid gender roles only seem possible in a society, such as ours, with a small number of branded genders. If we acknowledged the complexity of people’s genders, it would be much harder to assign them fixed gender roles. A person’s actual _gender expression_—the way sie expresses hir gender—may be inconsistent with the gender role assigned to them. This is especially true of our two gender brands, which admit an amazing range of actual gender expression.

[Slide 6] Finally, we can give the following, more inclusive, definitions:

- _gender dysphoria_: discomfort stemming from an actual or perceived conflict between a person’s gender identity, attributed gender and attributed/assigned sex.

- _transsexualism_: gender dysphoria, coupled with a desire/plan to make physical and/or social changes to ameliorate that dysphoria.

Even with a non-branded view of gender, it’s possible for us to see ourselves differently from how others see us, and for this to cause us discomfort. One possibility is that others can see us more clearly than we see ourselves.
For example, a person could view himself as more nurturing than she was seen by others as being. This kind of gender dysphoria may be ameliorated by changing our internal sense of who we are, or by taking steps to change certain attributes of our gender aggregate, e.g., by learning to be more nurturing. Another possibility is that people are not seeing us clearly, which could be rectified by better communication.

With a branded system like our own, though, people may attribute gender brands to us that neglect or ignore our actual gender aggregates. This typically happens because gender attribution is mostly sex attribution, where the inferred binary sex is then used to infer a gender brand. And even the sex attribution process neglects most of the attributes of sex, focusing on visible and audible factors.

We can also be uncomfortable with our own bodies, for two reasons. First, we can reason or intuit that others will only see and relate to us as we wish if our bodies conform to their brand-based expectations, in which sexes and genders must go together. The hope is that by changing our bodies, partly changing our sexes, we can change how they think about us. We may hope to pass as members of our target gender, or we may think others won’t be able to desire and join with us sexually unless our bodies are appropriately sexed. But, in human sexuality, there is more scope for transcending bodies than is commonly believed. Many transsexuals and their partners find that bodies, including genitals and secondary sex characteristics, are far less relevant than how we use and think about them, and than our gender aggregates.

More troubling is the way we can, largely in early childhood, internalize the culture’s stereotype that certain types of bodies must go with certain gender brands, feel alienation because our bodies don’t match our gender identities, and end up hating our bodies as a result. This is akin to other body image problems, can cause intense emotional pain, and has a purely
social cause. Imagine again the thought experiment of a baby brought up by aliens. It seems impossible that the baby could develop the idea of having the wrong genitals, with no access to human role models. Like other body image problems, psychotherapy may help us come to terms with our bodies, but most transsexuals feel the need to make at least some bodily changes, simply in order to feel good about their bodies. This seems likely to continue as long as strict gender branding continues. If, instead, we could view gender as an aggregate, it would be much harder to associate certain types of bodies with certain genders.

It seems that there would be little gender dysphoria if we were able to move to a non-branded view of gender. Because people see sex as the foundation of gender, moving society to a non-binary view of sex would seem a good first step. Imagine what would happen if perhaps 10-20% of the population were known to have sexes other than male/female, if we knew that a person’s sex couldn’t reliably be determined by a cursory look at hir body. We would have to look deeper to understand a person’s gender.

But given the current binary sex/gender system, in which brands masquerade as genders, what hope is there for people with gender dysphoria? The classical answer is that such people can attempt to effect radical physical and behavioral transformations, using hormones, genital surgery, facial surgery, voice work, etc., with the goal of passing as their target genders, assimilating completely. Some are able to succeed in this, but others find such transformation impossible or impractical.

It may also be possible to add more gender brands, e.g., “intergender”, which might be a home for people who see themselves as in the middle in terms of psychological/behavioral attributes. Today, a number of people, especially young people who were labeled female at birth, are struggling to maintain this identity. But succeeding in this is currently very difficult.
Part of the problem is linguistic: every time a person is called a “man” or “woman” or referred to as “he” or “she”, that person is put back in the box sie is trying to escape from. But people, even academics and activists, find gender-neutral language (especially pronouns) difficult. Public restrooms are another problem: going through a door marked “men” or “women” categorizes one, and there are typically no other options. And, in the absence of a clearly understood gender role for intergenders, how are we to recognize intergenders?

Finally, as people become more comfortable with and knowledgeable about transsexualism, it seems possible that they will learn to treat gender attribution as a process not of guessing someone’s sex, but of intuiting the gender brand that someone is trying to express, understanding that this brand indicates the person’s gender identity and desired gender role, and attempting to view and relate to the person according to that role. This opens up the possibility that transsexuals won’t have to make radical changes in order to be viewed and treated in a way that gives them comfort. How far this can stretch is debatable—for instance, if someone with a large frame, a “masculine” face, and a deep voice, but with many so-called feminine attributes is using gender expression to express a female gender identity, will people be able to relate to her appropriately? But there already is evidence that transsexuals who can’t or don’t want to pass are finding more acceptance in society by expressing their allegiance to a gender brand.