Received: 6 March 2019 | Revised: 15 January 2020 | Accepted: 22 March 2020

DOI: 10.1111/ejop.12550

ORIGINAL ARTICLE

European Journal of Philosophy WILEY

The gender puzzles

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Abstract

What is gender and how do we know what our gender is? These are the questions I propose to answer here. I review and reject several hypotheses: gender as sex or—a more careful version of the view—as subjective experiences that arise from sexual characteristics; gender as brain configuration; and gender as a historical kind. I express sympathy with an existentialist conception of gender but argue that such a conception, even according to its proponents, cannot help solve the problems of what gender is and how we know what our gender is. I then advance a new view.

1 | INTRODUCTION

I am a natal female. I have known I was female for as long as I can remember (my earliest memories go back to the time before I turned three). How did I know that? I am not sure, but one thing I can say with confidence is that I did not know it by looking at my body. I am certain of this because I simply did not know enough about the anatomical differences between girls and boys at age 3. Nor did I know I was a girl because of what I saw in the mirror. My parents kept my hair short for reasons of convenience, and they did not have my ears pierced, so strangers occasionally mistook me for a boy and sometimes mistook me for my brother. Such mistakes happened rarely, but they happened. Moreover, something else happened not infrequently: strangers would ask me *whether* I was a boy or a girl. This suggests that I, like a lot of small children, must have looked fairly androgynous, and whatever my knowledge of my gender was based on, it was not based on the way I looked.

It is possible that I thought I was a girl because adults around me said I was, but I doubt I acquired my beliefs about my gender by testimony either. I doubt this because adults said various things I rejected when those things did not conform to my experience—for instance, that going out without a hat in the winter would make me feel too cold (it usually did not), or that girls are not as interested in math as I was. When I heard this latter, I did not conclude that I was less of a girl than I thought, but rather that the adults who said such things were wrong about girls. If I believed the adults that I was a girl, it was because in that instance, what they said was borne out by my own experience. By what aspect of experience? *How* did I know my gender? How do any of us know our own gender?

These questions are surprisingly difficult to answer. While almost all of us—with small exceptions such as agender people—think of ourselves as having a gender, and we have had one for all of our conscious lives, it is unclear how we have known this.[1] Gender presents a puzzle.

There are really two problems here. One is ontological. It has to do with the question of what gender *is*. The other is epistemological. It is a problem of how we *know* our gender. I will suggest that these questions are closely related. Gender cannot be a Kantian noumenon, something that we can never know as it is in itself but only as it appears to creatures with our particular cognitive machinery; no: gender, I would like to argue, must be knowable in principle. Not only that, but gender must be in principle knowable through introspection: you cannot be of a particular gender *if it is in principle impossible* for you to tell what your gender is by introspection.[2] This is similar to psychological states such as love, and different from physical facts such as the size of one's brain. It is in principle possible for us to tell by introspection whether we love somebody, while it is not possible, not even in principle, to tell what the volume of our brain is in the same way. Whatever gender is, it must be something that can be known to the person who has it in a particular way, that is, from the first-person point of view.[3]

One may immediately raise the following worry, here: if we assume that gender can be known by introspection, then we prejudge the case against the popular—at least outside academia—view that gender equals sex. Sex is not knowable through introspection, so if gender is sex, then gender is not knowable in that way either. I wish to immediately assuage the worry: I defend the claim about how gender is known rather than assume its truth. Indeed, I will confront the thesis that gender equals sex head-on and discuss it in detail.

In what follows, I will make an attempt to solve the gender puzzles. I will first review a few hypotheses regarding the nature of gender made by others (Sections 2–4), starting with the gender equals sex hypothesis. As we will see, these hypotheses do not offer solutions to the epistemological puzzle at all, which is one of their shortcomings; but I will suggest that they do not offer a satisfactory solution to the ontological puzzle either. Next, I will briefly discuss an alternative strategy that seeks to get around the puzzles (Section 5), before I offer my own solution (Section 6) and make some concluding remarks (Section 7). In developing my view, I will take my cue from the experiences reported by transgender people. Those experiences are extremely suggestive because there, we have "distilled" instances of gender, stripped of sexual characteristics. This can help illuminate the nature of gender and gender identity more generally, or so I shall argue.

2 | GENDER AS SEX

The simplest and most straightforward way to deal with the gender puzzles is to dissolve them. We can say that there simply is no such thing as "gender" as distinct from biological sex. Consequently, there is no question of how we know our gender (since there is nothing there to know). All we have is biological sex, determined by biological criteria. This, I take it, is what at least some transgender skeptics propose to do. "Gender," on this view, is a synonym of "sex" (perhaps, a family-friendly synonym).

There are a few things to point out in response here. First, it is unclear how to draw the boundary between male and female sex so the proposal will leave some people (who may identify as men, women, nonbinary, or agender) in gender limbo. If we take it that the marks of biological sex have to do with the shape of one's genitals, then a man whose penis has been removed due to cancer or injury would cease to be a man in virtue of that. But that is obviously not the case. If, on the other hand, the proposal is that genetic criteria determine gender, then I would point out that there are women with XY chromosomes, as in the case of Swyer syndrome, and men with XX chromosomes, as in XX male syndrome.[4] If, finally, the suggestion is that sex has to do with gamete size and that females are those who have gone some way toward developing large gametes, then I would note that there are people who appear male, including having a penis, but who lack testes. If there is nothing else unusual besides the lack of testes, then the person would typically be unproblematically classified as a boy—even though his body has gone no distance toward making any gametes, whether small or large. In this regard, consider the case of congenital anorchia. (There are a variety of cases, but some of these are boys with normal penises and no testes.) Most people with anorchia are classified as "boys" and "males." They need hormone treatments if they are to go through puberty, but they remain infertile even after hormone injections. Still, they are seen as male so far as sexual characteristics are concerned.

More generally, criteria derived from the gender equals sex view are more applicable to the group level than to the individual. That is, if you have identified two sexes in a given species, you could decide which sex counts as the "male" and which the "female" by looking at such things as gamete size. But if you are trying to decide whether a specific individual belongs to a given sex, this criterion is less decisive due to the existence of intersex conditions.[5]

Second and more importantly, however, the claim that gender can be reduced to biological sex has, as mentioned earlier, the counterintuitive implication that manhood and womanhood have nothing whatsoever to do with a person's subjective experiences. Just what experiences are relevant to the constitution of gender is a question I will address in Section 6, but for now, it suffices to point out that intuitively, some experiences are relevant.

Last but not least, none of these options helps answer the epistemological question: as little boys and girls we do *not* acquire knowledge of our gender because we first learn something about our chromosomes or gamete size.[6]

There is, however, a slightly different and less implausible version of this view that one can adopt. One could say that gender exists—and that perhaps, it has a lot to do with one's subjective experiences—but that one's true gender always corresponds to one's biological sex. If your conception of your gender does not correspond to your biological sex, then you are just wrong about your gender. Your true gender, on this view, can only be constituted by subjective experiences grounded in your sexual characteristics.[7]

The most common argument for this view in public discourse is the following: an act of identification does not suffice to constitute identity. If Peter identifies as Napoleon, this makes him delusional, not Napoleon.[8] This is true no matter how sincerely Peter *believes* he is Napoleon. Similarly, an anorexic person who sees himself as fat is not, on account of that, fat. Proponents of this theory do not necessarily think that transgender people are actually delusional, but they do think that transgender people are similarly mistaken. Why might someone make a mistake of this sort? For various reasons, in their view, for instance, people may wrongly interpret their homosexual orientation or nonconforming gender expression as a new gender identity.

But the argument based on an analogy to radically erroneous conceptions of identity is question- begging. The problem is that in the case of Napoleon, we have independent criteria we can appeal to in order to say that a person who claims to be Napoleon is really not Napoleon. The same goes for a person who is underweight. But what are the independent criteria we can appeal to in order to ascertain a person's gender? The proponents of the "gender equals the subjective experiences that correspond to one's sex" view imply that those criteria have to do with the marks of biological sex. This argument assumes just what needs to be proven: namely, that the experiences truly constitutive of one's gender must be rooted in one's biological sex.

In addition, this view is in danger of collapsing into the simpler "gender equals sex" account discussed previously. For consider the transgender case. If gender is constituted by those experiences that are associated with one's biological sex, and if transgender people do not have the requisite experiences, then what is their gender based on? The answer *here* could not be "subjective experiences associated with one's biological sex" since transgender people do not have the experiences in question. The only remaining option is to go back to equating gender with biological sex. As mentioned, though, this path forward has the implausible implication that subjective experiences have nothing to do with manhood or womanhood. In addition, it offers no solution of any kind to the epistemological problem.

Still, my opponents may argue that transgender people *have* the subjective experiences that correspond to their sex but, for one reason or another, are pretending otherwise. Some have questioned the motive behind avowals of gender-identity that do not align with one's sex at birth: for instance, some claim that there are male prisoners who identify as female so they can be housed in female prisons (which are less violent and afford heterosexual men more opportunities for sexual intercourse), or that male athletes want to compete in the women's category.[9] There may well be such cases, but it would be implausible to suggest that *all* such avowals on the part of transgender people are insincere, that even transgender children are trying to get some sort of advantage.[10] Moreover, given widespread transphobia, people have a strong incentive not to falsely pretend to be gender dysphoric. But if there are sincere avowals of gender such that one's gender differs from one's biological sex, then we need an argument to the effect that all sincere avowals are mistaken, and that transgender people really have subjective experiences that correspond to their biological sex, but that for some reason, they do not believe so.

For the most part, my opponents offer no argument for this conclusion distinct from the question-beginning one mentioned above. But sometimes, they appeal to various empirical phenomena to support their case, above all, the phenomena of desistance, detransitioning, and postoperative regret. Let us consider desistance first: psychiatrists talk about "desistance" when gender dysphoria resolves without transitioning, for instance, when a child who claims to have a gender opposite to one's biological sex eventually grows up to identify with the sex assigned at birth.[11] There is also some evidence that in a small percent of cases, people who undergo gender reassignment surgery experience regret and some seek to detransition (Herzog, 2017). My opponents argue that these phenomena should make us question avowals of gender identity that do not correspond to one's biological sex.

However, this type of evidence is insufficient to establish the gender equals sex hypothesis in either its simple or its more sophisticated version. First, people may detransition for reasons that have nothing to do with gender, for instance, due to concerns with the side-effects of the medical treatments involved in (biological) transitioning. Second, it could be that our introspective knowledge of gender, as of just about anything else, is fallible. Indeed, it would be surprising if that is not the case, if introspection is fallible in every other case but not here. The fallibility of our knowledge of our own gender may explain desistance. (On the flip side, it can also provide part of the explanation of why many transgender people come out as transgender only in middle age, after struggling for years to build a gender identity that corresponds to their biological sex.) It does not follow from this that one's gender invariably corresponds to one's biological sex at birth or that the only subjective experiences relevant to gender are those that align with one's sexual characteristics.

I have three more points to make with regard to any version of the gender equals sex view. First, I invite you, reader, to reflect on the question of *when* you knew your gender. The answer is likely to be that, like me, you knew your gender long before you had any very definite or accurate idea of the biological differences between men and women (most certainly before you heard about gamete size or about X and Y chromosomes). If you knew your gender before you knew enough about biology, then your knowledge must have been based on something other than biological characteristics. As mentioned earlier, one can argue here that one's biological characteristics give rise to other aspects of subjective experience that *then* shape one's conception of one's own gender. The problem with this option is that, as evidenced by the transgender case, whatever those aspects may be, *they may or may not correspond to one's sexual characteristics*. If they do not so correspond, what is the argument that we should ignore the subjective experiences, pronounce them erroneous, and so on, and equate a person's gender with that person's biological sex?

Second, consider intersex children. It is now widely recognized that it is unwise to try to push a particular gender on an intersex child, and that we would do better to wait and see what gender a child born intersex identifies with.[12] What this implies, however, is that the gender of an intersex person cannot be simply read off the person's biological sex. For instance, we do not expect all intersex people to be "intergender." But it is implausible to think that while the gender of intersex people does not invariably correspond to biological sex, everyone else's gender does.

Finally, I would conjecture that proponents of the view I have been discussing misunderstand their own motivation. They may think they intuit that gender corresponds to biological sex, but really, they are often driven by an understandable yet in this case misguided tendency to identify things by the way things look. What evidence do I have for this claim? The response is that when people refuse to address a transwoman as "Ma'am" or a transman as "Sir," this is generally not because they know anything about the transperson's biology (how could they?). Rather, a transwoman may not *look* to them sufficiently like a woman and a transman may not look to them like a man. When, by contrast, transgender people undergo a series of successful gender reassignment surgeries and have appearance that matches their gender, they typically have no difficulty being addressed with the pronoun that corresponds to their gender identity. I would conjecture that this is not because people assume a person who looks to them like a man is male and *that is* what matters; rather, what a person looks like is *just* what people typically care about. If they learned that someone who looks to them 100% like a woman was born with a Y chromosome (think again of Swyer syndrome), they would, in all likelihood, continue to address that person as "Ma'am". I conclude that the gender as sex hypothesis—in both its simpler and its more sophisticated version—fails.

3 | GENDER AS BRAIN CONFIGURATION

A second suggestion is the following: sexual differentiation of the genitals and of the dimorphic areas of the brain start at different times—the first 2 months of pregnancy for the genitals, the second half of pregnancy for the brain. Therefore, the two could diverge. Hence, transgender people. If this hypothesis is right, it can be used to explain not only the gender of transgender people but everyone's gender. Everyone's gender would be determined by their brain's characteristics. In most but not all of us those characteristics would go hand in hand with various bodily attributes.

A crude version of this hypothesis, in the event it is successful, can, at best, help solve the ontological puzzle, not the epistemological one. Even if gender is a matter of brain characteristics, it is not the case that we know our gender by knowing the features of our brains. However, we can supplement the initial hypothesis with a secondary one: the brain encodes gender identity. Certain brain characteristics give rise to certain experiences, and *those experiences* constitute gender. Right now, there are no hypotheses as to how the brain might encode gender, so I set the epistemological issue aside. If the gender-in-the-brain hypothesis succeeds in solving the ontological puzzle, then that would already be a significant achievement. Does the hypothesis succeed?

3.1 | The evidence

There is some interesting evidence in favor of it. I will mention a few of the findings. First, it has been found that in transgender people, sexually dimorphic areas in the brain[13] such as the Bed Nucleus of the Stria Terminalis (BST) and the Hypothalamic Uncinate Nucleus are more similar to those of people with the same gender-identification than they are to those of people with the same biological sex (Garcia-Falgueras & Swaab, 2008; Zhou, Hofman, Gooren, & Swaab, 1995).

Second, there is evidence suggesting that while FtM (female-to-male) transgender people and control female participants do not differ in neural response to hand sensation, when it comes to breast sensation, FtM participants show: (a) reduced response in the somatosensory cortex, involved in conscious perception of sensation, body ownership, and attribution of sensation to the self; and (b) heightened response in the medial temporal lobe related to the amygdala, involved in disgust and anxiety (Case, Brang, Landazuri, Viswanathan, & Ramachandran, 2017). These findings lead researchers to conclude that FtM transgender people do not recognize their breasts as their own—when their breasts are stimulated, they experience less brain activity related to self-recognition and more activity related to disgust.[14]

Third, transgender women who have undergone Sex Reassignment Surgery experience phantom penis sensations at half the rate of cisgender men after penile amputation (30% vs. 58%). An even larger gap exists for phantom breast sensations between transgender men and cisgender women (9% vs. 35%–50%). Finally, many transgender men report phantom penis sensations before surgery (62%).[15]

3.2 | Limitations of the brain research

These are intriguing findings, which may, incidentally, help convince transgender skeptics. However, when it comes to solving the gender puzzles, it is important not to overstate their significance.[16] The first thing I would note is that sexually dimorphic areas of the brain continue to develop during puberty, but children have a gender identity from at least the first few years of life.

This argument can be countered by saying that sexually dimorphic areas of the brain have both childhood forms and adult forms. Suppose we accept this possibility. There are more serious problems. Above all, differences are statistical: for example, some transgender women do experience phantom penis sensations; some women and some transgender women have bigger BSTc than some men. The situation here resembles that of height: on average, men are taller than women, but not every man is taller than every woman.

In addition, phantom penis sensations in transgender people may be due merely to wishful thinking. Wishful thinking may not be an indicator of gender. A person who firmly identifies as female may nonetheless wish to have a penis for one reason or another, for instance, because she wishes to enroll in the army and lives in a society in which having a penis is a prerequisite to enrolling in the army.[17]

Finally, there are independent reasons to think that bodily and brain anatomy and function are logically independent of gender. Think again about how we know our gender. Whatever the answer is, it does not essentially involve knowledge of brain characteristics. Of course, it could be that those characteristics give rise to various subjective experiences involved in the constitution of gender. But then, we would face the same problem that we faced in the case of the gender-as-sex hypothesis: what if the experiences relevant to female gender can arise from "male" brain characteristics and vice versa? What is the argument for prioritizing the brain characteristics over the subjective experiences? More generally, it is quite possible (and at the moment seems likely) that we can discover no *determinative* neural or other bio-correlates of gender.

4 | HISTORICAL ESSENTIALISM

In an interesting and provocative paper, Theodore Bach defends a view on which gender is a "historical" kind (Bach, 2012). On Bach's reckoning, to be a man or a woman is to have, "[T]he right sort of origin and replicative history in relation to a more fundamental historical kind—a replicating gender system" (Bach, 2012, p. 246). The idea here is that gender is a culturally reproduced historical kind. Men are men and women are women, on this view, in virtue of sharing a common replicative history. The situation is similar (my analogy) to that with sports teams: team X playing in 2018 can be said to be the same as team X playing in 1960 in virtue of having descended from the latter (rather than *resembling* the latter; team Y in 1960 may resemble 1960 X much more than 2018 X does).

It follows that a given woman may not exemplify many of the traits stereotypically exemplified by women and be nonetheless a woman for that. The same considerations apply to men. Writes Bach:

> To be a woman (…) is to be a reproduction of a historical lineage, in which case one is only supposed to exemplify the features of the historical gender role. If a particular female has undergone the ontogenetic process through which one exemplifies a participatory relation to a lineage of women, then even if she fails to exemplify any of the properties of women's historical gender role, she is still a woman because she has the right history. The converse of this point is that an individual who exemplifies all of the properties of women's historical role but who does not descend from women is not, in fact, a woman. This is true of "swamp-woman," a gender variant on the familiar thought experiment. If a lightning storm were to strike a swamp and create a being that perfectly exemplified the properties that define women's historical gender role, swamp-woman would not be a member of the historical kind woman because swamp-woman does not have the correct history. (Bach, 2012, p. 261)

I wish to note here that there is some looseness to Bach's language. It suggests that girls descend from women and boys from men. But this could not be the case. Even if gender is a historical kind, boys as well as girls would be a product of a replicative machinery in which both men and women participate. For present purposes, though, I set this point aside.

Bach argues that this account has an advantage over those social constructionist views that build normative constraints into the very definition of gender, for instance, by making female subordination part of what it means to be a woman. Such views, he argues, whatever their merits, have the counterintuitive implication that there are no men and women in a society with gender equality (hence, there is really no *gender equality* either), much less in a matriarchal society (Bach, 2012, p. 259).

On this point, Bach takes issue with Haslanger's view specifically (though he is sympathetic to other aspects of her account), but I wish to note here that I do not think this objection against Haslanger succeeds. In her paper "Future Genders, Future Races," Haslanger suggests that there could be nonhierarchical genders. On Haslanger's view, then, hierarchically defined genders would, indeed, disappear in a society with gender equality, but that does not mean that gender will disappear, since genders can be non-hierarchically defined.[18] She writes, "Instead of attempting to eliminate gender, we should try to envision new, non-oppressive ways of being gendered, without being a man or a woman" (Haslanger, 2004, p. 6).

Whether or not Bach's objection against Haslanger succeeds, however, the historical essentialism he advocates faces serious problems of its own. I will mention three.

First, the account cannot give a satisfactory explanation of the transgender case. A transgender girl may be a girl despite the fact that the forces of cultural replication put pressure on her to appear and see herself as a boy. Bach addresses this point briefly, but his answer is unsatisfactory: what he suggests is that individuals may be able to initiate the replicative ontogenetic processes, for instance, by presenting the right appearance, "to trigger the reproductive processes that confer membership to the desired gender lineage" (Bach, 2012, p. 269). While Bach is not committed to the claim that it is necessarily appearance that directs the replicative machinery in one way rather than another, he is committed to the claim that *something* is, so that one cannot be said to be a man or a woman without the right replicative history. Bach's proposal sacrifices the subjective experiences of transgender people. These people transition precisely because they know themselves not to have the gender outputted for them by the replicative machinery.[19] We should only accept this sacrifice if there is no better account of gender available. As I will argue in Section 6, there is a better account.

Second, historical essentialism implies that men and women in different societies have different genders.[20] This seems implausible. Bach is aware of the problem and seeks to address it, but once again, his answer is unsatisfactory. He says:

> On the other hand, there is no significant historical unity between the American gender system and the Japanese gender system. American women and Japanese women do not descend from the same ancestral population of women and are therefore not members of the same historical gender kind. Yet, the Japanese gender system and the American gender system exemplify roughly the same structure of interdependencies. That is, the systems are the same type of replicating gender system… (Bach, 2012, p. 262)

Bach suggests here that the genders in different cultural systems are like analogous (homoplastic) traits in biology in that they resemble each other in virtue of parallel evolution despite lacking common ancestry. For instance, human hearts and eagle hearts are analogous in this sense: they are four-chambered hearts that have developed as a result of parallel processes. By contrast, human hearts and chimpanzee hearts are homologous—not merely analogous—because humans and chimpanzees have descended from the same ancestors.

However, the idea that Japanese and American women have different genders, genders that are merely analogous—not homologous—is revisionary without a sufficient theoretical benefit. It is revisionary because we do not think of men and women in different cultural traditions as having different genders. When the UN compiles data on gender equality—the so called "Gender Inequality Index," or GII—they are not compiling data on different, though analogous, genders; when we compare the plight of women in one country to that of women in another country, we are not comparing the plight of Women* to that of Women**. And we can speak intelligibly of the first woman in the world to become a professor, or a programmer, or to be sent into space, something which would be impossible if Bach is right.

Sometimes, revisionism is well-advised, but it is not well-advised here, because Bach's view does not have explanatory benefits that we cannot get otherwise. The chief advantage of the account is that it explains why different cultural traditions may have different stereotypes of masculinity and femininity. But a more parsimonious account can easily accommodate this point by simply chalking up such differences to cultural variation.

Third, and relatedly, the view faces one of the limitations we discussed earlier in relation to the "gender in the brain" hypothesis: it does not provide a satisfactory answer to the question of how we know our gender. Bach bites the bullet here and rejects the idea that gender can be known by introspection. He writes:

> Because one's status as a man or woman is conditional upon historical relata, individuals cannot simply stipulate their gender status as "woman" or "man." Indeed, individuals do not have privileged access to historical processes, and it follows that they can be mistaken about their own gender status (it is less likely that they are mistaken about their gender identity. (Bach, 2012, p. 269)

Bach is certainly right that individuals can be mistaken about their own gender. However, people are in a privileged epistemic position with regard to knowing their gender.[21] Consider intersex children again. Normalizing surgeries have, historically, been performed on intersex children. For instance, Dana Zzyym was born intersex, and received several "normalizing" surgeries, meant to turn Dana into a boy (Webster, 2018). Zyymm was also socialized as a boy. There is an ethical issue concerning such surgeries as they are typically performed without medical necessity and without a child's consent. Multiple international organizations have expressed support for banning such procedures.[22] There are, however, in addition, metaphysical and epistemological problems. I think it would be clear to anyone paying attention to the first-person account of intersex people such as Zzyym that neither surgeries nor raising a child as a boy or a girl (i.e., ensuring the child has a particular "replicative history") would make a child a boy or a girl. Dana Zzyym came to identify as "non-binary queer," and this label seems to match best Zzyym's experiences. But the historical essentialist view cannot explain why this should be the label that applies to Dana Zzyym. Perhaps Bach can argue that Zzyym became nonbinary queer after presenting as queer and thereby "triggering" the "reproductive processes" that confer membership in the desired class. This explanation puts the cart before the horse. There must be a reason why having been raised as a boy did not make Dana Zzyym a boy. If the reason is not that replicative processes do not suffice to confer gender, then what is it?

5 | THE EXISTENTIAL CONCEPTION OF GENDER

In the face of all the difficulties that arise when we attempt to solve the ontological and epistemological puzzles about gender, some authors have suggested focusing not on metaphysical and epistemological questions but on ethical and political ones. For instance, Talia Bettcher proposes that we see gender as an aspect of identity over which we have first-person authority (Bettcher, 2009). I am very sympathetic to the goal of developing an ethical conception, but I am interested in the metaphysical and epistemological questions. The question of how we ought to treat people with regard to avowed gender identity is largely independent of the question of what gender is.[23] On ethical grounds, we must by and large accept people's conception of their own gender as authoritative.[24] Consider an analogy: I tell a flight attendant that I want the peanuts, not the pretzels. He has to give me the peanuts, even if he has a reason to believe I *really* want the pretzels. Nonetheless, there is a question about what I really want. There is also a question about how I can know what I really want. These questions are of independent interest, not necessarily for practical reasons but for theoretical ones. Those are the sorts of questions I am interested in with regard to gender.

6 | A TWO-TIERED CONCEPTION OF GENDER

6.1 | Metaphysics of gender

So what is gender? I would like to propose a two-tiered account. At a high level of generality, there is one necessary and sufficient condition of having a given gender, namely, *under suitably idealized conditions*, the person who has that

gender will identify with said gender. Conditions may not always be suitable: for instance, a non-binary person such as Zyymm from my earlier example may not identify as nonbinary before the option has been presented. But if the label were presented (and other relevant conditions were met), Zyymm would identify with it. Similarly, a transgender girl raised as a boy may not develop (or not fully) female gender identity well into her teens or later due to outside pressure to identify as a boy. But such a child would be a girl because she would—if conditions were more favorable (epistemically)—identify as a girl.

Call this the "procedural" portion of my account. This portion is parallel to ideal observer-type theories. According to ideal observer theory, the right thing to do is what an ideal observer would want us to do. This gives us a necessary and sufficient condition for moral rightness. Similarly, on the view I advance, a person's gender is the gender the person would identify with under epistemically ideal conditions.

But ideal observer theory does not tell us whether any particular course of action is right or wrong, and we still need to discuss the reasons an ideal observer may have to make one judgment rather than another. Similarly, while a person on my account is a woman if that person would identify as a woman under favorable epistemic circumstances, there is a further question of the grounds on which she would make that judgment. Here, we come to the substantive portion of my account, or the second tier.

I wish to suggest that gender arises out of a few different facets of experience. The components of gender are: (a) comfort or discomfort with the sexual characteristics of one's body; (b) identification with and affinity for people of either your own sex (cisgender case: if you are cisgender, you probably have more friends of your own sex, and you have a sort of intuitive grasp of the motivations and behavior of those you see as sharing your gender) or the opposite sex (many transgender people)[25]; (c) a substantial number of either same-sex or opposite-sex preferences about clothing and appearance; (d) a strong and persisting preference for being recognized and treated as a man or a woman (e.g., being called "Sir" rather than "Ma'am" or vice versa; in the case of children, being called "girl" or "boy").[26]

These are introspectively accessible aspects of experience that are constitutive of gender and simultaneously underwrite our knowledge of our own gender.[27] Let me say a bit more about each. The importance of condition (a), having to do with dysphoria or the absence thereof, becomes evident when we focus on the way in which transgender people develop their gender identity. It is precisely the experience of dysphoria that often (though by no means always) alerts transgender people to the fact that their gender does not correspond to their biological sex. But dysphoria or the absence thereof does not simply provide *evidence* of gender, it is partly *constitutive* of it.

Note here that the absence of dysphoria is typically not experienced consciously at all. I suspect that this is part of the explanation of gender skepticism: for most people, gender corresponds to their biological sex, so in most people, there is no dysphoria. For this reason, most of us never become aware of how crucial both dysphoria *and the absence of dysphoria* are to one's gender. It seems to many that they are men and women because they have the bodies that they have. This supposition rests on a mistake: it is not simply the possession of a body with particular sexual characteristics but also *one's own reaction* to those characteristics that matters.

Let us now look at condition (b), identification with and affinity for people of either one's own sex or the opposite sex. I confess that my initial motivation for including this condition had to do with my own memories: I recall that I myself have felt this sort of identification and affinity since childhood, and I assumed my experiences are not atypical. When I was a very small child, other girls were intuitively easier for me to understand. I knew what they wanted to accomplish by what they did in a direct, intuitive way. I knew these things because I was one of them. When it came to boys, I had to rely much more on inference.[28] The situation here is somewhat analogous to the relative comprehensibility of one's own species as compared to another. If you observe a human in action, you can probably understand what he or she is trying to do. If, by contrast, you want to know why a bee appears to be dancing, you have to study bees.[29] Naturally, the similarities between men and women are very much greater than those between bees and people, but the analogy is nonetheless suggestive.

I can observe something of the effect in question (though in a weakened form) in myself today as well. However, I am not simply relying on my own first-person experience here. Rather, I wish to appeal to a now substantial body

of research suggesting that children self-segregate by gender, starting in early childhood.[30] Kristin Shutts reports that self-segregation was observed even:

> [I]n institutionalized children who had spent their infant and preschool years with limited exposure to gender distinctions. Boys and girls living in the institution were given identical haircuts, wore the same clothing, had minimal access to toys and play activities, and interacted (minimally) with adult females only. Despite this, both boys and girls in our sample showed significant preferences for unfamiliar children of their own gender.[31]

Drawing on multiple studies, Shutts reports also that gender in-group favoritism is a lot more robust than racial in-group favoritism, suggesting a much stronger cultural component in the race case compared to the gender case. She writes:

> [B]oth boys and girls from different racial groups and communities in Africa, Europe, North America, and South America show robust in-group favoritism on tasks designed to measure gender attitudes … In-group favoritism based on race, however, is noticeably absent in some groups of children. For example, white children in Europe, North America, Oceania, and South Africa tend to prefer members of their own racial group over other groups; but, children from other racial and ethnic groups (e.g., Black children in the U.S. and South Africa) do not tend to exhibit racial in-group favoritism (Shutts, Kinzler, et al., 2011). In-group preferences based on gender seem to emerge across varied contexts, while racial preferences seem more sensitive to cultural factors (Shutts, 2013, p. 298).

While there may be different reasons for self-segregation (for instance, an emerging sense of one's own sexuality and anxiety about mixing up with children who have different sexual characteristics), it is difficult to imagine that a sense of identification and affinity are not key among those reasons.

Of course, as I noted in the beginning, the question of the nature of gender is difficult, so children—and most adults—can be expected to use sex as a sort of proxy for gender, drawing no clear boundary between the two. Once again, the experiences of transgender people are suggestive since there, we may expect to find identification and affinity disconnected from the sexual characteristics of one's body. In this relation, consider the first-person account of transwoman Paige Abendroth:

> I remember looking at girls and not just being attracted to them, but thinking that I was supposed to be them and *wishing that I could kind of go over to the girl group and be accepted* because that's where I felt I should be.[32] (my italics)

Abendroth here both observes a girls' group and reports a feeling of belonging to that group.

In children, we observe another phenomenon: little girls tend to see grown-up females but not grown-up males as an aspirational ideal: they are looking forward to the time when they will be like the women but not like the men. The same is true of little boys with regard to men. Again, transgender children's experiences are instructive: transgender children's ideals tend to be based on their gender, not their sex. For instance, a transgender girl can be expected not to want to get a beard.

Conditions (c) and (d), having to do with preferences regarding clothing, appearance, modes of address, and so on, likely stem from a natural desire to align one's gender identity with one's gender as perceived by others. As with other aspects of identity, recognition on the part of others provides a kind of validation of core aspects of identity.

One question that arises here is whether those preferences are *de dicto* or *de re*. On the first hypothesis, one prefers to have the appearance of males, *whatever those might be*. Insofar as one has this preference, it is built into

the content of one's preference that one's appearance be correlated with a certain sex. For instance, suppose someone thinks that a certain appearance A is correlated with being male but then discovers that actually A* is correlated with being male. A person with a *de dicto* preference would immediately shift from preferring A to preferring A*.[33]

My conjecture is that by and large, the preference has to do with knowledge of a correlation between maleness and a certain appearance. This explains why in different societies, different kinds of appearance may be correlated with maleness and femaleness, for instance, skirts and long hair may or may not be seen as appropriate for women only, and where they are not so seen, men may be perfectly comfortable wearing them. It may also be, however, that once we learn to associate a certain appearance with maleness or femaleness, the preference becomes disconnected from the correlation. Suppose I go to a society in which women wear pants and men wear dresses. I may continue to wear dresses even though now, I am in a place where that is correlated with maleness, and I am a firmly identified woman.

Another point to note is that our ideas of what appearance and clothing are expressive of or at least compatible with maleness and femaleness are constantly evolving, and certain conceptions—for instance, that women are not supposed to wear pants—are shown to be mere (often harmful) stereotypes. In addition, at any given point in time, there may be considerable individual variation so that what seems a too feminine or too masculine outfit to one person may not seem so to another person, for example, some but not all men avoid wearing a man purse or the color pink even if they can benefit from wearing a purse or prefer a rose-gold phone to a grey one on aesthetic grounds, because they consider these things too feminine.

A caveat is in order here: extrapolating from the past, we can probably predict that the boundaries between the clothing and appearance of men and women will only become more porous with time, so that one day, all colors, hairstyle, or items such as purses—perhaps even garments such as bras—will be largely seen as compatible with any gender. If and when that happens, the aspects constitutive of gender may shrink down to something like one's reaction to the sexual characteristics of one's body and perhaps, to the visible aspects of those sexual characteristics (e.g., even in a world where there are no systematic differences between clothing and hair styles for men and women, cisgender men with gynecomastia—the swelling of male breast tissue caused by hormonal imbalance and leading to the appearance of female-like breasts—may seek treatment).

All this is connected with (d), the preference for being recognized as a man or a woman; a person who appears female is unlikely to be seen and addressed as male. The importance of social recognition and modes of address comes in focus again when we consider the experience of transgender people: a transgender woman would typically feel deflated if either "dead named" or not addressed as a woman.

I wish to emphasize that given the first tier of my account, I am committed to allowing that conditions (a)–(d) are neither individually necessary nor jointly sufficient.[34] I think also that both a priori considerations and our evidence suggests that the conditions I list are not individually necessary, so the substantive portion of my account is a *family-resemblance hypothesis*.

Why think so? Slightly different aspects of experience may give rise to gender in different people. For instance, we know that a transwoman may or may not have gender dysphoria, and a person may care more or less (or not at all) about appearance, modes of address, or even dysphoria. Gender is, in this way, similar to a kind such as schizophrenia: schizophrenia may manifest itself differently in different patients. There are five core symptoms of it, and a person needs only 2 (that persist over time) in order to be diagnosed. Different patients may thus have different symptoms, but it is nonetheless reasonable to diagnose them with the same condition.[35] This is why I wish to call this the "family-resemblance" view: gender may be differently instantiated in different people, and knowledge of one's gender may not have the same basis in every person.

One may accept that none of the conditions is necessary but ask *how many* of the features I list are necessary? In the case of schizophrenia, a person does not need any particular feature but needs a minimum of two out of five. What about gender? I wish to suggest that this is an empirical question. We have to investigate how many of the feature I list can give rise gender identity that meets the procedural constraint. This may vary from person to person because two people who exhibit the same feature may attach different importance to it. For instance, gender

dysphoria may be so central to one person's experience and sense of identity as to give rise to gender identity opposite that of a person's biological sex all on its own. Another person may be a longtime meditation practitioner who has gender dysphoria but is not "attached" to the experience of dysphoria and can observe it in a sort of self-less, impersonal way. For the meditator, gender dysphoria by itself may not give rise to gender, and additional features may be necessary.

But what about sufficiency? One may accept the claim that the conditions I list are none individually necessary but insist that they are jointly sufficient. I agree that someone who "checks all the boxes," much as in the case of schizophrenia, will tend to have the corresponding gender, but given the procedural portion of my account, I am committed to the possibility that a person may have all the facets I list and yet, not have the corresponding gender if the person forms a different gender identity under epistemically favorable conditions.

My account offers a solution to a problem various authors have noted. The problem is that it seems difficult or impossible to find a set of characteristics that all females share. Haslanger calls this the "commonality problem" (Haslanger, 2000). My answer is that there is something all women have in common: *all would identify as women under certain conditions*.

Not everyone may find a procedural solution to the commonality problem satisfactory, and some may think that it is a weakness of my view that it does not offer a set of *substantive* necessary and sufficient conditions of manhood or womanhood. But I think this is a strength that, incidentally, helps deal with another problem raised by Haslanger. I have in mind what Haslanger calls "the normativity problem." The normativity problem, she says, "raises the concern that any definition of 'what a woman is' is value-laden and will marginalize certain females, privilege others, and reinforce current gender norms."[36] My account neither privileges nor marginalizes some women. Womanhood, on my view, can manifest itself differently in different people, and any realization has as much a claim on being a true one as any other. Everyone who would identify as a woman under the right circumstances is a woman just as much as anyone else.

6.2 | Epistemology of gender

On the view developed here, the features that constitute gender are all introspectively accessible (and that is the justification for the procedural portion of my account). If this view is accepted, then gender itself is introspectively accessible absent epistemic impediments. But how are we to know whether epistemic impediments are absent? And how reliable are our gender attributions when epistemic impediments are present? Is Anne who says she experiences gender dysphoria really experiencing gender dysphoria, or does she merely believe so because she has grown to hate her female body due to internalized misogyny?

I cannot discuss the issue of epistemically favorable conditions in detail here, but I will note that in general, those conditions include a sufficient level of safety and security in exploring one's gender without external pressure, a level of gender equality, and certain subjective conditions, such as having good mental faculties.

However, I wish to suggest also that we ought not worry too much about gender self-misattributions in general. Misattributions of this sort are always possible, and there is no litmus test that we can perform to ensure we have *knowledge*, here or elsewhere. However, our default assumption should be that our beliefs about our own experiences are true. Any claim to the effect that a person does not have the experiences she believes she has must be supported by additional evidence. I base this claim on the following plausible a priori principle: it is unlikely that we have evolved to be systematically mistaken about what we feel, and regularly tend to confuse, say, a desire to scratch our backs for a desire to get water, or some sleep, or to take a walk.

There will sometimes be additional evidence of errors in various cases, for instance, self-attribution of virtuous motives may be due not to the possession of virtuous motives but to the desire to maintain a flattering self-conception, and there may be a reason to be skeptical with regard to our beliefs about our own motives. There may be parallel reasons to expect errors with regard to gender, for instance, transgender people in very transphobic cultures

may tend to form mistaken beliefs about their own gender, and the experiences constitutive of it, because they do not want to be subject to transphobic treatment. But there is no good reason to expect that epistemic conditions are so bad as to cause most people to be systematically wrong about the experiences constitutive of gender and from here, about gender identity.

In addition, some have suggested that gender understood as something introspectively accessible does not exist, and that when we introspect, we are not aware of any such thing as gender (Reilly-Cooper, 2016). There are a few things to say in response. First, think again of Paige Abendroth, a person I mentioned earlier, who would know, by introspection, that her gender has switched. Direct awareness of gender is possible. Second, it may be difficult for a cisgender person to identify the relevant features of subjective experience. It is easier to identify them when sex and gender have come apart. Transgender people may thus be in a better epistemic position with regard to the question of what gender is. For a cisgender person, the bulk of the experience of gender may have to be defined negatively: as absence of discomfort with the sexual characteristics of your body or with the way other people view you and treat you. Finally, a person may, of course, be agender, and it would not follow from the existence of agender people that no one has gender.[37]

7 | CONCLUSION

I began this paper with two puzzles about gender: what it is, and how we know our gender. After discussing several views and arguing that neither gives us satisfactory solutions (and in the case of the epistemological puzzle specifically, some of the proposals offer no solutions at all, whether satisfactory or not), I proposed an alternative, two-tiered account. The first tier is procedural: people have the gender that they would ascribe to themselves under epistemically ideal conditions. The second tier is substantive. I argued that the best way to see that level is in "family-resemblance" terms. The hypothesis spells out several conditions, none of which are individually necessary, and the question is left open of whether they are jointly sufficient (my account allows for the possibility that they are not, though I consider this possibility highly unlikely).

I suggested also that all experiences that give rise to gender are in principle accessible through introspection. It follows that we can know what our gender is by introspection.

One could ask what my account has to do with ordinary language use. It is my hope that the account I offer can withstand the critical reflection of ordinary speakers, but I am not engaged in explicating our "ordinary concept." There are multiple reasons for that but above all: gender presents a puzzle (or puzzles) that we can solve only by paying close attention to the relevant aspects of experience. We cannot hope to solve the puzzles merely by looking at the ways gender terms are used. I have argued, for instance, that those who use "gender" to mean something like "the subjective side of biological sex" are mistaken about the intension of the term although for the most part, they may get the extension right, since for the most part, gender does correspond to sex.

One can ask also what follows from my account with regard to such practical problems as who is a good candidate for Sex Reassignment Surgery and at what age. Discussion of these important issues is beyond the scope of this paper.

The list of characteristics I offered may not be exhaustive. Future work may show that some items on my list should be taken off, others added, and still others regrouped. Thus, suppose, for instance, that due to a genetic fluke, the overwhelming majority of children with a male reproductive system—penis and testicles, which produce semen and sperm—start developing female bodily characteristics: breasts, round hips, no facial hair, no Adam's apple, higher voice pitch, etc. Would we then say that men now look the way women tended to look in the past, or would we say, rather, that the women of today have penises? And what would gender dysphoria look like in this hypothetical society? Would the majority of people have dysphoria or would the people with dysphoria be those in the minority who resemble cis-gender men and women of today, that is, people whose appearance and genitals align on a traditional conception of "manhood" and "womanhood," but who are now outliers?

It is difficult to predict. I suspect visual characteristics will turn out to be more important to our intuitions than genitals. In addition, much would depend on the details. For instance, suppose that only half of the people are affected by the catastrophic event while the other half remain unaffected. It is possible that those who are affected will not get classified as either men or women but rather, that new categories will emerge such as "male woman" and "female man" to refer to people who look like women but have penises or people who look like men but have vaginas, respectively.

In addition, there is no way to predict who in my hypothetical scenario will experience gender dysphoria and why. My guess is that if there is one catastrophic event that happens overnight, resulting in its being the case that all those who look like women have male genitalia and vice versa for those who look like men, then probably people who remember having been women all their lives but who have suddenly acquired a penis would experience gender dysphoria. But children born and raised after the event may not have dysphoria since everyone else in the group they identify with would have the same reproductive organs. Or it may be that the children who look female but have penises will have dysphoria on account of their appearance, not on account of the genitalia. Either way, my criterion (a) may need to be adjusted. Talking about "comfort or discomfort with the sexual characteristics of one' body" will no longer do. We would have to say *which* sexual characteristics lead to dysphoria and when. A woman with a penis may experience no dysphoria if she grows up in a society in which the vast majority of women have penises and a penis is part of a statistically typical female body. But we will cross that bridge if and when we come to it.

ACKNOWLEDGMENTS

I presented an earlier version of this paper at the "Self, Memory, and the Unconscious Mind" Interdisciplinary Workshop at Ruhr University Bochum in February 2018. I would like to thank the audience at the conference, especially Luke Roelofs. I owe thanks also to Linda Brakel, Michael Huemer, and Jonathan Tresan, all of whom helped think the ideas through. Special thanks to two anonymous referees for *European Journal of Philosophy*, who were extremely generous with their time and provided very helpful written feedback. I understand the issues I discuss here much better thanks to the effort and insight of all these people.

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ENDNOTES

[1] Bi-gender people and nonbinary gender queer people may only discover their gender later in life because the correct gender label is typically not presented to them as an option early on. However, much like transgender people, they tend to know they are not of the gender they are told they are from a very young age. See the story of Dana Zzyym I reference in Section 5.

[2] I say "in principle" because one can imagine special cases in which a person's introspection fails to deliver the correct result with regard to gender, perhaps repeatedly. Maybe, a person has been brainwashed to believe he or she has a gender other than the one he or she has, or something to that effect.

[3] Note that when I say we must know our gender by "introspection," I do not mean to imply that we must be directly aware of our gender. While there may be experiences that make us feel our femininity or masculinity more or less directly, we are not, in general, directly aware of our gender in the way we may be aware of being cold or thirsty. What exactly is involved in knowing our gender is a question I postpone for now and will return to in Section 6.

[4] In the case of Persistent Mullerian Duct Syndrome, a genetical male may even have a functioning uterus. One such male only discovered he has a uterus at age 37. See Sawer (2015).

[5] An anonymous referee asks on what basis we might identify two sexes in a population to begin with. I cannot do full justice to this question here, but for present purposes, I will note that when the members of a species have similarly sized and shaped gametes, biologists do not classify the individual members of the species as "male" and "female." The process of reproduction of a species whose members have gametes with identical morphology is known as "isogamy." See Beukeboom and Perrin (2014). Why we should think of members of a species whose gametes systematically differ in size and shape from those of other members as having a different sex is a question that goes beyond the scope of this paper.

[6] And indeed, most of us *never* learn anything about our own gametes and chromosomes.

[7] Just what experiences should be seen as relevant here is an issue we can bracket for present purposes.

[8] This argument was made, for instance, by Michelle Cretella (2017), president of the American College of Pediatricians in a panel discussion titled "Gender Dysphoria in Children: Science and Medicine Today" hosted by The Heritage Foundation, available at: https://www.youtube.com/watch?v=GOniPhuyXeY, segment starts at 5:12.

[9] Note: not everyone who draws attention to these possibilities is a transgender skeptic. One can perfectly well believe that some people are truly transgender and also believe that others only claim they are in order to game the system.

[10] The gaming-the-system worry can be made with a practical rather than a theoretical conclusion in mind: the point can be simply that where people have an incentive to make insincere gender avowals, we ought to proceed with caution and refrain from accepting their claims at face value. All of this is perfectly compatible with the existence of gender, in much the way the existence of illness is compatible with acknowledging the danger of false claims about symptoms of illness.

[11] The American Psychiatric Association estimates that "in natal males, persistence has ranged from 2.2% to 30%. In natal females, persistence has ranged from 12% to 50%," *DSM-5*, Gender Dysphoria (American Psychiatric Association. DSM-5 Task Force, 2013).

[12] For instance, the Council of Europe, a leading human rights organization in Europe, has proclaimed nonconsensual genital modification surgeries a human rights violation. See the Parliamentary Assembly's (2013) Resolution 1952: "Children's right to physical integrity," available at: http://assembly.coe.int/nw/xml/XRef/Xref-XML2HTML-en.asp?fileid=20174. Similarly, several UN-related organizations, including the World Health Organization and UNICEF, released a joint statement condemning anti-LGBTI discrimination and violence. The statement specifically mentions "unnecessary surgery and treatment on intersex children without their consent." See OHCHR (2015) "Ending Violence and Discrimination against Lesbian, Gay, Bisexual, Transgender, and Intersex People," available at: https://www.ohchr.org/Documents/Issues/Discrimination/Joint_LGBTI_Statement_ENG.PDF.

[13] Sexual dimorphism has to do with differences between males and females of the same species (setting aside differences in sexual organs). Differences may include behavior, appearance, and so on. Humans are generally "low" on sexual dimorphism, meaning, there are fewer differences between male and female humans compared to other animals, but there are certain differences. Some of those have to do with the brain, for instance, the Sexually Dimorphic Nucleus (SDN) is larger in males than it is in females (note: it is also larger in heterosexual males compared to homosexual males).

[14] Of course, men have breasts, merely smaller ones, and they recognize their breasts as their own. What generates anxiety in transgender men appears to be not the possession of breasts in general but the possession of *female* breasts.

[15] Ramachandran and McGeoch (2007).

[16] V.S. Ramachandran, for instance, overstates the importance of his own findings, suggesting that he "strode in" and "solved" the problem of transgender identity. He says, "Those who study transsexuality tend to be territorial because they themselves have made so little progress. There is no literature that illuminates the underlying mechanisms, other than psychological mumbo jumbo. And then someone comes striding in and spends 2 weeks solving the riddle. It must be infuriating," (qtd. in Blakeslee, 2008). While Ramachandran's findings are very interesting, to say that he has "solved the riddle" is an overstatement at best.

[17] Indeed, Freud postulated, albeit implausibly, that girls go through a "penis envy" stage upon discovering they have no penis. See Freud (2014).

[18] I thank an anonymous referee for pressing me to clarify this point.

[19] Parallel considerations apply to the case of an intersex child brought up as one gender but who later comes to identify as another, and who reports that the externally imposed gender-identity never quite fit. It is this possibility of a lack of fit that Bach's view cannot explain.

[20] A similar objection is raised by Marion Godman in "Gender as a Historical Kind: A Tale of Two Genders," (Godman, 2018, p. 21).

[21] Again, this is similar to other types of introspective knowledge, for instance, whether you love someone or whether you really want to be a lawyer. You may be mistaken about these things, and sometimes, another person may know better than you what your preferences and inclinations are, but you are in a privileged epistemic position because only you have introspective access to your love or desire to pursue this profession rather than that. Other people can merely make inferences from what you say and do (something that you, yourself, can do as well, but you can, *in addition*, introspect).

[22] See footnote 11 above.

[23] On this point, see also Dembroff (Forthcoming) and Laskowski (2020). Dembroff argues that facts about gender kinds in contexts of oppression should not settle gender classification practices; Laskowski criticizes attempts to make the semantics of gender terms line up with moral facts about how we ought to treat each other. Note that my claim is stronger than Dembroff's. I think that facts about gender kinds cannot settle gender classification even if there is no oppression. One can think of my claim as a particular application of the "is-ought" distinction.

[24] Barring cases in which people act with an ulterior motive and want to somehow game the system, like the male prisoners wishing to be housed in a women's prison mentioned earlier.

[25] A transgender person may neither identify with one's own sex nor cross-identify with the opposite.

[26] Each of these characteristics is a matter of degree, which gives rise to the question of whether gender itself, and not just the underlying dimensions, is a matter of degree. I think that *gender expression* is clearly a matter of degree. I am disinclined to say that gender is a matter of degree. First, many of us—though not all—do not see our own gender as a matter of degree, and to the extent we do, we may be confusing gender with stereotypes about gender, confusion that may lead us to conclude that a person who is not very *stereotypically* female is *less* of a female, etc. Second, it seems to me that a person who scores relatively low on the underlying dimensions yet high enough to get above the threshold may see him or herself as just as much of a man or a woman as someone who scores much higher. Would it make sense to say that such a person is correct in claiming that he or she is a man or a woman, respectively, but wrong about the degree to which the gender terms apply? I am skeptical, but I am not going to pursue this issue here.

[27] My view has resonances with the dispositional account of gender offered by Jennifer McKitrick. The main differences between McKitrick's account and mine are: (a) that I emphasize inner states independently of dispositions, for instance, the presence or absence of dysphoria (which are related to dispositions but are also important in and of themselves); (b) I try to give a more detailed than McKitrick's account of the sort of inner states and dispositions involved. Plausible dispositional accounts of a great number of facets of human psychology can be given, for instance, of what it means to be honest, or an intellectual (even of what it means to believe something). The question would be just what the dispositions in question are in the case of gender.

[28] Note that identification may not suffice to ground an ability to intuitively grasp the motivations of another. Thus, an autistic man may identify with neurotypical men without being able to grasp their motivations intuitively. I thank Michael Huemer for this point. There are two things to note here. First, identification is more important than intuitive understanding. Second, I would conjecture that the autistic man is still in a better position to understand the motivation and behavior of men compared to women, it is just that he is not in a very good position to understand those.

[29] For the record, the dance of the honey bee is a way of sharing information about the location and distance of bodies of water or flower patches that can supply nectar. So the "dance" of the bee, while it may look beautiful, is meant to communicate, not to be appreciated aesthetically or to provide the dancer with an outlet for self-expression.

[30] Consider, for instance, Maccoby and Jacklin (1987); Martin and Fabes (2001); Shutts (2013). For evidence that self-segregation continues in adulthood, see Mehta and Strough (2009).

[31] Shutts, Spelke, and Nelson, unpublished data, reported in Shutts (2013, p. 298).

[32] See Spiegel (2015). Note that when the episode was aired, Abendroth identified as man about 20% of the time and as woman about 80% of the time. She has, since, come to identify firmly as a woman.

[33] I thank Jonathan Tresan for raising this point.

[34] I am largely friendly to the account offered by Natalie Stoljar (1995) who defends a "property cluster" view of gender. Stoljar, however, suggests that individual women are members of the class "woman" in virtue of resembling paradigm instances of womanhood sufficiently closely. I reject this idea: membership in the classes "men" and "women" does not require resembling paradigm cases. Once again, the analogy to schizophrenia may be helpful: a person is diagnosed with schizophrenia on the basis of having a sufficient number of symptoms, not of resembling a paradigm case. Schizophrenia can manifest itself differently in different people, and different manifestations may have an equal claim on being "paradigm." As with schizophrenia, so with gender.

[35] I would describe both gender and psychiatric disorders as soft natural kinds, but for considerations of space, I will not discuss this issue here.

[36] Ibid. Haslanger attributes this point to Judith Butler. See Butler (1990, pp. 1-34).

[37] Indeed, Alzheimer's patients who are known to forget even such things as their loved ones and their own age are not known to forget their gender, which suggests that gender identity is a core aspect of identity.

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How to cite this article: Fileva I. The gender puzzles. *Eur J Philos*. 2020;1–17. https://doi.org/10.1111/ejop.12550