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Trapped in the Wrong Body? Transgender Identity Claims, Body-Self Dualism, and the False Promise of Gender Reassignment Therapy

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In this article, I explore difficult and sensitive questions regarding the nature of transgender identity claims and the appropriate medical treatment for those suffering from gender dysphoria. I first analyze conceptions of transgender identity, highlighting the prominence of the wrong-body narrative and its dualist presuppositions. I then briefly argue that dualism is false because our bodily identity (including our body's biological organization for sexual reproduction as male or female) is essential and intrinsic to our overall personal identity and explain why a sound, nondualist anthropology implies that gender identity cannot be entirely divorced from sexual identity. Finally, I make the case that arguments in favor of hormonal and surgical treatments for gender dysphoria rest on this mistaken dualist anthropology, and that these treatments therefore give false hope to those suffering from gender dysphoria, while causing irreversible bodily harm and diverting attention from underlying psychological problems that often need to be addressed. I also briefly discuss how these philosophical claims relate to empirical studies on the outcomes of hormonal and surgical treatments for gender dysphoria and to testimonies of transgender individuals who regret having undergone these treatments.

Keywords: *dualism, gender dysphoria, gender identity, gender reassignment, sexual identity, transgender*

I. INTRODUCTION

The idea of being "trapped in the wrong body" is a dominant feature of the self-described experience of many transgender individuals, and this "wrong-body narrative" holds a prominent (though controversial) place in transgender theory. The view that transgender individuals have an inner gender identity that is at odds with their biological sex, and that this incongruence can be the source of severe psychological suffering, even to the point of suicidality, grounds the belief that hormonal and/or surgical gender reassignment is the appropriate medical treatment to alleviate this suffering. Yet, metaphysically speaking, is it really possible to be trapped in the wrong body? The wrong-body account of transgender identity seems to presuppose a dualist anthropology according to which the "I" or "self" is essentially a conscious, thinking, feeling entity that inhabits but is not identical to a particular body. For only by denying that the body is an essential, intrinsic component of personal identity can one claim that there is a mismatch between the body and the self. On the other hand, if one's bodily identity is an essential and intrinsic component of one's overall personal identity, then a true mismatch between body and self is metaphysically impossible, and transgender individuals' self-perception as being in the wrong body must be rooted in a psychological problem. If that be the case, then the appropriate treatment would be one that addresses the underlying psychological issues, rather than one that attempts to alter the body.

In this article, I explore these difficult and sensitive questions regarding the nature of transgender identity claims and the appropriate medical treatment for those suffering from what the American Psychiatric Association's most recent *Diagnostic and Statistical Manual of Mental Disorders* (DSM-5) calls "gender dysphoria."[1] To do so, I first analyze conceptions of transgender identity in the scholarly literature and in personal accounts of transgender individuals, highlighting the prominence of the wrong-body narrative and its dualist presuppositions. I then briefly argue that dualism is false because our bodily identity (including our body's biological organization for sexual reproduction as male or female) is essential and intrinsic to our overall personal identity and explain why a sound, nondualist anthropology implies that gender identity cannot be entirely divorced from sexual identity. Finally, I make the case that arguments in favor of hormonal and surgical treatments for gender dysphoria rest on this mistaken dualist anthropology, and that these treatments therefore give false hope to those suffering from gender dysphoria, while causing irreversible bodily harm and diverting attention from underlying psychological problems that often need to be addressed. I also briefly discuss how these philosophical claims relate to empirical studies on the outcomes of hormonal and surgical treatments for gender dysphoria and to testimonies of transgender individuals who regret having undergone these treatments.

II. TRANSGENDER IDENTITY CLAIMS AND THE WRONG-BODY NARRATIVE

Although many gender theorists find the wrong-body account of transgender identity problematic,[2] it is nonetheless a prominent and pervasive feature of many transgender individuals' self-understanding. Consider, for instance, the following statements summarizing the key concerns highlighted by a focus group of transgender youth when asked to identify the top 10 things they wanted their doctors to know:

> Gender identity is a part of myself that lives in my brain. It is the gender that I consider myself to be. My gender assigned at birth may not match this. For example, I may have been born with male genitalia, but I am very sure that I am female. People like me who have a gender assigned at birth different from their gender identity are sometimes referred to as transgender. (Turban et al., 2017, 275)

> I may be extremely uncomfortable with my current physical body, because it doesn't match who I know myself to be. (Turban et al., 2017, 276)

> Having a body that is different from your identity is really hard, especially in a society where people judge you for being "different." . . . I am uncomfortable with my body and have been living with this discomfort for a while. When I come to a doctor's office, I am hopeful that I will be able to begin this process of crosshormone treatment quickly, to begin the process of making my body on the outside look more like who I am on the inside . . . As I know people are judging me for being different, the quicker that I can feel like I am moving toward the body I am inside, the better and more comfortable I will feel with myself. (Turban et al., 2017, 276)

The idea of being trapped in the wrong body is clearly the dominant way in which these individuals conceptualize their transgender identity. It is also clear that this self-conception implies a dualist understanding of identity, according to which the "I" or true self is identified with "who I am on the inside," with the "part of myself that lives in my brain," by contrast with "my current physical body" or "my body on the outside," the characteristics of which are perceived as incongruent with the true self.[3] Note as well that this dualist view is what underlies the belief that "making my body on the outside look more like who I am on the inside" through cross-sex hormone treatment (and eventually surgery) is the appropriate medical response to a person suffering from gender dysphoria.

More sophisticated transgender narratives and scholarly analyses of those narratives also reveal the prominence of the wrong-body account of transgender identity and the dualist presuppositions of that account. Speaking specifically about the experience of transsexuals, Jay Prosser's work *Second Skins: The Body Narratives of Transsexuality* highlights how "transsexual subjects frequently articulate their bodily alienation as a discomfort with their skin or bodily encasing: being trapped in the wrong body is figured as being in the wrong, or an extra, or a second skin, and transsexuality is expressed

as the desire to shed or to step out of this skin" (1998, 69). Prosser points out how transsexual autobiographies are filled with metaphors that express this sense of alienation from the body. The body is sometimes spoken of as a "divers suit" or piece of clothing that one would like to "unzip . . . from forehead to navel" (Prosser, 1998, 69). According to Prosser, the wrong-body narrative is not just a useful rhetorical tool "[deployed] to obtain access to hormones and surgery"; rather, transsexuals continue to deploy it even after sex reassignment "because being trapped in the wrong body is simply what transsexuality feels like" (1998, 69).

Prosser's account might seem nondualist insofar as it theorizes transsexual identity as rooted in an "inner body" that needs to be released—through hormones and surgery—from the "extraneous 'other' skin" in which it is trapped (1998, 83). Prosser thus in some sense sees embodiment as crucial to identity. However, for Prosser, "embodiment is as much about feeling one inhabits material flesh as the flesh itself" (1998, 7). In other words, in Prosser's view, the self is identified not with an objective, material body, but with the individual's "inner body image" (1998, 70).[4] Thus, while more complex than nonscholarly accounts of transgender identity, it still presupposes the dualist identification of the self with certain psychological states, understanding the "outer" body as extrinsic to—and therefore capable of being at odds with—one's true identity. This view is also inextricably linked with the claim that hormonal and surgical sex reassignment is the way to shed the false outer self, to "reestablish the 'not-me' body as me" and "[restore] the 'proper' body," "[fleshing] out in the visual the transsexual's already felt body image" (Prosser, 1998, 83).[5]

It may be objected that when transgender individuals say that they feel trapped in the wrong body, they are not making a metaphysical claim, but are rather simply attempting somehow to articulate their distress, as when a depressed patient says, "I am worthless." Yet this does not seem to be a plausible interpretation of transgender identity claims. Rather, claims of being trapped in the wrong body are clearly at least in some cases meant to be taken in a metaphysically literal way, insofar as they are meant to imply that the solution to the transgender person's distress is to change some of the body's characteristics so that they better match the person's inner sense of gender identity. Thus, the identification of the true self with certain psychological states housed in the higher brain, and the denial that one's body apart from the higher brain is intrinsic to one's overall personal identity, underlies the belief that one's self-perception as male or female, rather than one's biological organization for reproduction as male or female, is what defines one's identity as male or female. This identification of the true self with one's psychological states is what, in turn, grounds the claim that the appropriate response to a mismatch between gender self-perception and biological sex is to attempt to change one's body, rather than to attempt to change one's self-perception.[6]

It might also be objected that the wrong-body account of transgender identity is not dualist. After all, if one is not one's body, how can one coherently claim to have the wrong body? If one's identity is determined by one's psychological states, why would the characteristics of one's body matter? Yet, dualism does not imply that the body and its characteristics are unimportant. Even though dualism entails that the body is not an essential and intrinsic aspect of one's personal identity, the dualist can still recognize that the body is a uniquely crucial and intimate *extrinsic* instrument of the self, for it is through one's body and its capacities that one exercises one's agency in the world and manifests oneself to others. Because of the body's powerful and unavoidable role in self-expression and self-manifestation, not just to others but also to oneself, it is not incoherent for a dualist to claim to be trapped in the wrong body. Indeed, as I have argued, such a claim *presupposes* dualism. According to a nondualist view, one's bodily identity is an intrinsic and essential aspect of one's personal identity—in other words, we are not *in* bodies; rather, we *are* bodies, and whatever body we are is thus necessarily the "right" body. To claim that one is "in" the wrong body therefore makes no sense at all on a nondualist view. One's bodily characteristics cannot be alien to one's identity, for they (at least partially) define it.[7]

III. A CRITIQUE OF BODY-SELF DUALISM

In the previous section, I highlighted how the wrong-body account of transgender identity presupposes body-self dualism and is closely connected to the claim that hormonal and surgical gender reassignment is, for those transgender individuals who desire it, a crucial means for alleviating gender dysphoria. In this section, I briefly make the case that body-self dualism is false. In the following section, I then argue that a sound understanding of personal identity, in which one's biological identity is essential and intrinsic to one's overall personal identity, implies the metaphysical impossibility of being trapped in the wrong body and therefore undermines the claim that gender reassignment is an appropriate and effective treatment for gender dysphoria.

What is the problem with body-self dualism? Because a thorough engagement with the varied and complex philosophical accounts of personal identity is beyond the scope of this article, here I limit myself to a summary of a few key arguments. Note, as a preliminary matter, that while there are many types of dualism,[8] the critique I present applies to any view[9] that denies that each of us *is* a human organism in the strict sense. In other words, my critique applies to any view denying what is often referred to as "animalism" or the "biological view" of personal identity.[10]

Perhaps the most obvious difficulty with dualist accounts of personal identity is that they are at odds with our common experience of ourselves as

bodily beings. As I sit at my desk writing this article, the same *I* who is thinking about how to articulate the flaws with body-self dualism is pressing my fingers down on the keyboard to put my thoughts in writing, seeing and reading the words as they appear on the screen, looking through the corner of my eye at the trees outside my window, desiring to take a sip of tea, and feeling the nagging pain in my upper back. It is *I*, mind *and* body, who am clearly the subject of all of these actions, perceptions, and feelings. Furthermore, when I see my colleague walk by, it is *him* that I see, not just a human organism that "houses" him or is intimately associated with him or constitutes him, but *him*. Now if that colleague were (counterfactually, of course) to walk into my office and punch me in the face, he will have assaulted *me*, harming me in a way that is worse in *kind*, not just degree, than he would by punching a dent into my car.

Furthermore, denying that I *am* my body leads to a host of serious metaphysical problems. Eric Olson, for instance, writes about what he calls the "fetus problem."[11] If I am not my body, but rather am identified with a set of psychological states or even with a cerebrum capable of supporting consciousness, then I was never a 4-month-old fetus. That sonogram picture was not really a picture of *me*, but of some human organism that is somehow mysteriously related to me. What happened to that fetus once "I" appeared? Did it die and give rise to a new entity? That seems completely implausible. Does the adult human animal that the fetus developed into continue to exist in the same space as "me"? If that is the case, would it not then have all of the same properties and psychological states that I have? Would it not then *also* be me? As Olson writes, "It [the animal with whom you share your matter] is not a person, for it was once a fetus . . . [I]t could survive without psychological continuity, as no person could. Nevertheless that organism is conscious and intelligent if you are; at any rate its behavior and the states of its brain are no different from yours. You think you are a person. That animal thinks so too, and with the same justification; yet it is mistaken. In that case, how do you know you aren't making the same mistake?" (1997b, 102)

We can avoid such absurd conclusions and account for our commonsense experience by rejecting dualism and embracing animalism, or the biological view of personal identity. It is important to note that this view does not imply that our personal identity is *exhausted* by our biological identity. Animalism is compatible with, for instance, an Aristotelian view of human beings as essentially *rational* animals whose rational capacity transcends the limitations of materiality. What is important for the purposes of this article is simply that, regardless of whether or not there are aspects of our identity that go beyond our biological identity, our biological identity is essential and intrinsic to our personal identity. In other words, I *am* my body, even if there are aspects of me that transcend the bodily dimension of my being.

IV. AN ALTERNATIVE ACCOUNT OF TRANSGENDER IDENTIFICATION

If the biological view of personal identity is true, then it is metaphysically impossible to be trapped in the wrong body. For if I am my body, then the characteristics of my body, including the complex and pervasive ways in which my body is organized to play a female role in reproduction, are characteristics of *me*. In other words, if my body is female, *I* am female. And—leaving aside the rare cases in which individuals suffer from severe disorders of sexual development—it is no more difficult to know objectively whether I am female or male than to know whether my cat is female or male. Human beings, like other mammals, reproduce sexually, and sexual identity is determined by the body's overall organization for reproduction as male or female. An overview of any basic biological account of sexual differentiation in mammals indicates that the male reproductive system is organized to be able to inseminate a female with its genetic material, whereas the female reproductive system is organized to receive that genetic material from the male and gestate any offspring that are produced.[12] This organization for reproduction is rooted primarily in the presence or absence of the Y chromosome and directs embryonic and fetal development in distinct, sex-specific ways beginning at just 7 weeks after fertilization (Midgeon and Wisniewski, 2003; Sizonenko, 2017).[13]

Although some gender theorists argue that biological sex is itself a cultural construct,[14] transgender individuals (or at least those who conceive of themselves as trapped in the wrong body) generally do not contest the objective reality of their biological sex. Indeed, for those who embrace the wrong-body account of transgender identity, it is precisely the mismatch between biological sex and their inner sense of gender identity that is the source of their suffering. To understand transgender identity claims, then, we need to consider the nature of gender identity, and how it relates to sexual identity. Clearly, as a phenomenological matter, it is possible for a person to identify with a gender that is different from his or her biological sex, for this is what transgender persons experience. Yet with what, precisely, is a transgender person identifying? What, in other words, is gender?

There is no such thing as a universal feeling of "maleness" or "femaleness." There are probably as many ways of "feeling" female or male—whatever that means—as there are women and men. If "feeling female" or "feeling male" is to signify anything, there must be some objective, extra-mental reality to which it refers. That objective reality cannot be biological sexual identity itself, or it would be completely nonsensical for a biological male to say "I feel female." If gender is to have any objective meaning apart from biological sex, it must refer to the cultural norms and stereotypes that one takes to be associated with a particular biological sex. Therefore, when a biological male says, "I feel female," the only thing that this could plausibly mean—if it is to have any real meaning at all—is that he has personality traits

or inclinations that, in his view, are more strongly associated with females than males. He may, for instance, be sensitive and emotional, dislike sports, enjoy ballet, be good at taking care of babies, etc., and associate these traits with femininity. The opposite could be said of a biological female who "feels male."[15]

These norms and stereotypes may vary culturally and historically, but they are ultimately rooted in biological sex differences and would make no sense if entirely disconnected from them. Many gender norms and stereotypes reflect statistical differences in the tendencies and characteristics of men and women that relate to their distinct reproductive roles and their corresponding genetic and hormonal make-up. Indeed, the effect of sex hormones on brain development in utero seems to account for many of the stereotypical differences between men and women, differences that have been observed even prior to any cultural influences. A study of 1-day-old infants, for example, revealed that the girls preferred to look at faces, and the boys preferred to look at mechanical objects (Connelan et al., 2000). Interestingly, girls exposed to high testosterone levels in the womb (due to a disorder of sexual development known as congenital adrenal hyperplasia) tend to have more male-typical personality traits and toy preferences (Nordenstrom et al., 2002; Matthews et al., 2009). Furthermore, contrary to the predictions of those who view sex differences as socially constructed, cross-cultural studies have found that "sex differences are *magnified* in more gender egalitarian countries," perhaps because in egalitarian countries individuals are freer to express their biologically based tendencies (Kaiser, Del Giudice, and Booth, 2019, 12). There do, therefore, appear to be typical differences between male and female brains related to hormonal influences, as well as genetics and environment (Bao and Schwab, 2011).

Could it be the case, then, that transgender identification is caused by a mismatch between one's "brain sex" and one's reproductive organs? Although this explanation would make sense of the wrong-body narrative of transgender identity, and be particularly attractive for brain-body dualists, it is actually not supported by the empirical studies that have been done thus far. A review of the literature concludes:

> The current studies on associations between brain structure and transgender identity are small, methodologically limited, inconclusive, and sometimes contradictory. Even if they were more methodologically reliable, they would be insufficient to demonstrate that brain structure is a cause, rather than an effect, of the gender-identity behavior. They would likewise lack predictive power, the real challenge for any theory in science. (Mayer and McHugh 2016, 104)[16]

More fundamentally, even if it were true that transgender identification is often caused by the possession of a sex-atypical brain, this would not mean that a biological male who identifies as female is truly a woman, or vice versa. The brain, as such, is neither male nor female, and the notion of a

sex-atypical brain is not grounded on an essential definition of biological sex, but is rather a construct based on statistical averages. Unless one espouses dualism, it is the body's overall organization to reproduce as male or female that makes one a man or a woman, regardless of the extent to which one conforms to gender norms and stereotypes, and regardless of whether or not that nonconformity is the result of a brain structure which is, statistically speaking, sex-atypical.

In fact, though studies find that there are robust sex differences in personality, they also find that these differences exist along overlapping distribution curves, such that males at one end of the curve will have more stereotypically feminine traits than most men *and* many women, and vice versa for females (Kaiser, Del Giudice, and Booth, 2019, 6). There are, therefore, many biological men whose personality and inclinations conform more closely to female stereotypes than male stereotypes—and perhaps whose brain structure is more similar to a typical female brain than to a typical male brain—but who neither identify as transgender nor suffer from gender dysphoria. The same is true of biological women whose personality and inclinations conform more closely to male stereotypes. Many—perhaps most—of these individuals do not feel trapped in the wrong body, but it seems that they would have no less warrant for feeling that way than those who identify as transgender and/or suffer from gender dysphoria.[17]

Thus, although gender nonconformity (or perceived gender nonconformity) is typically a key aspect of transgender identification or gender dysphoria, gender nonconformity in itself does not make a person transgender or lead to gender dysphoria. This is important to note because, in the current cultural context, it seems plausible that increased public exposure to the concept of transgender identity and to transgender narratives has led many gender nonconforming individuals—perhaps particularly those who have experienced some form of trauma or abuse, or who have suffered social difficulties due to their gender nonconformity—to identify as transgender; whereas in the absence of such exposure, many of these gender nonconforming individuals might never have come to conceive of themselves as transgender. While of course this explanation does not account for all cases, research indicates that the sharp rise in transgender identification in recent years, particularly among those who had no apparent confusion about their gender identity prior to coming into contact with transgender individuals in their peer groups or on the Internet, may be due at least in part to social contagion (Littman, 2018; see also Shrier, 2020; Kenny, 2019).[18]

Societal factors also seem to have an impact on childhood gender dysphoria. Research indicates that in the vast majority of cases (up to almost 90%, according to some studies), childhood gender dysphoria naturally desists, especially after the child goes through puberty (Singh, 2012; Ristori and Steensma, 2016).[19] The research remains unclear as to why some cases persist while others do not. While there is mixed evidence about whether or

not higher intensity of gender dysphoria is associated with higher likelihood of persistence (Singh, 2012; Steensma, 2013), some studies indicate that the likelihood of persistence depends in part on how parents, teachers, medical professionals, peers, etc., respond to the child's transgender identification. One study, for instance, found that gender dysphoria was more likely to persist in children who transitioned socially to their preferred gender, than in those who did not (Steensma, 2013).[20] Furthermore, another study found that *all* of the gender dysphoric children given hormones to prevent the onset of puberty persisted in their transgender identification and began cross-sex hormone treatment for gender reassignment (de Vries et al., 2011).

Regardless of the extent to which a person's transgender identification or gender dysphoria results from or is reinforced by sociocultural factors or medical interventions, if it is indeed metaphysically impossible to be trapped in the wrong body, then transgender identification must involve a fundamental misperception of oneself. It may be the case that the possession of sex-atypical traits, combined with a variety of sociocultural factors, leads some to conclude that they are trapped in the wrong body. Yet this conclusion must be false, because one's identity as male or female is not fundamentally determined by the possession of personality traits and inclinations typical of one's sex, but by one's biological organization to reproduce as male or female.[21] In other cases, it may be that the feeling of being trapped in the wrong body has little or nothing to do with the possession of sex-atypical traits, but instead has an independent psychological cause, such as the presence of a dissociative disorder that may in turn be the result of childhood trauma. One recent study, for instance, found that 30% of those with gender dysphoria had symptoms of a dissociative disorder and 46% had experienced childhood trauma (Colizzi, Costa, and Todarello, 2015). Numerous studies have also found that those with gender dysphoria have significantly higher rates of psychiatric comorbidity, substance abuse problems, and/or suicidality than the general population (Gijs, Van Der Putten-Bierman, and De Cuypere, 2014; Colizzi, Costa and Todarello, 2015; Mayer and McHugh, 2016, 8, 67; Reisner et al., 2016; Peterson et al., 2017).[22]

Whatever the underlying causes of transgender identification, such identification involves a fundamental misperception of reality and is therefore psychologically disordered—that is, not rightly ordered to accurate perception, which is the end (or at least a primary end) of our perceptual capacities. (To say this is not to stigmatize those who identify as transgender, just as characterizing the obsessive desire to lose weight by not eating as psychologically disordered is not to stigmatize those with anorexia.[23]) For if rightly ordered perceptions are perceptions that conform with objective reality, then in principle any persistent, fundamental misperception of one's identity is itself a psychological disorder or a symptom of one. Although here I use the term "psychological disorder" not in the clinical sense, but in the more basic philosophical sense to contrast it with the rightly ordered function of

one's mental capacities, it is worth noting that what is now called gender dysphoria was, until less than a decade ago, classified as a psychiatric disorder or a symptom of a psychiatric disorder.[24] The most recent change in classification reflects the view that transgender identification is not in itself a disorder of any sort, which in turn presumes the judgment that transgender identity claims are *true*—that is, that a person who identifies as transgender truly is a man trapped in a woman's body or a woman trapped in a man's body. If that judgment is false—as I have argued it must be—then affirming transgender identity claims, and performing medical and surgical interventions on the basis of such claims is not a truly responsible or compassionate response to those suffering from gender dysphoria, but rather is likely to result in profound harm, at least in the long run.

This view of transgender identification as a psychological problem—and of the harms that can result when therapists and medical providers do not treat it as such—is further supported by the testimonies of many "detransitioners"—that is, individuals who previously identified as transgender and underwent hormonal and/or surgical gender reassignment, but who now identify with their biological sex and have attempted to reverse their gender reassignment to the extent possible.[25]

Consider, for example, the story of Walt Heyer. Heyer is a man who transitioned to female at age 42 and detransitioned at age 50 after coming to realize that the gender dysphoria he had experienced throughout his life was rooted in childhood trauma. Heyer writes:

> I started my transgender journey as a 4-year-old boy when my grandmother repeatedly, over several years, cross-dressed me in a full-length purple dress she made especially for me and told me how pretty I was as a girl. This planted the seed of gender confusion and led to my transitioning at age 42 to transgender female. (Heyer, 2019)

Heyer's parents discovered what his grandmother was doing and put an end to it, but when his uncle learned what had happened, he began to sexually abuse Heyer. Heyer explains:

> That abuse caused me to not want to be male any longer. Cross-dressing gave me an escape. I lay awake at night, secretly begging God to change me into a girl. In my childlike thinking, if I could only be a girl, then I would be accepted and affirmed by the adults in my life. I would be safe. (Heyer, 2019)

Heyer eventually married and had two children, but continued to engage in cross-dressing. He says that he "felt torn apart, wanting to be a good husband and father, but in severe torment about needing to be a woman" (Heyer, 2019). Heyer sought help from a leading gender specialist, who diagnosed him with gender identity disorder and recommended hormonal and surgical gender reassignment, telling him "that the childhood events were not related to my current gender distress, and that sex change was the only solution"

(Heyer, 2019). After beginning to take hormones and undergoing several surgeries to reconfigure his genitalia and feminize his appearance, Heyer, who had also divorced his wife prior to the surgeries, felt "giddy with excitement" at this chance for a "fresh start" (Heyer, 2019). Heyer describes how, after becoming Laura Jensen, "the gender conflict seemed to fade away, and I was generally happy for a while" (Heyer, 2015). This newfound peace and happiness did not last, however:

> The reprieve provided by surgery and life as a woman was only temporary. Hidden deep underneath the make-up and female clothing was the little boy carrying the hurts from traumatic childhood events, and he was making himself known. Being a female turned out to be only a cover-up, not healing.
>
> I knew I wasn't a real woman, no matter what my identification documents said. I had taken extreme steps to resolve my gender conflict, but changing genders hadn't worked. It was obviously a masquerade. I felt I had been lied to. How in the world had I reached this point? How did I become a fake woman? I went to another gender psychologist, and she assured me that I would be fine; I just needed to give my new identity as Laura more time. I had a past, a battered and broken life that living as Laura did nothing to dismiss or resolve. Feeling lost and depressed, I drank heavily and considered suicide. (Heyer, 2015)

Eventually, Heyer (as Laura Jensen) entered a university program to study counseling, and during an internship a medical doctor with whom he was working told Heyer that he had signs of a dissociative disorder. Heyer sought psychological help and began working through his childhood emotional trauma (Heyer, 2015). It took several years, but eventually, at age 55, Heyer was "finally free from the desire to live as a woman," though he still suffers the physical consequences of his surgeries and of the cross-sex hormones that permanently altered his system (Heyer, 2019).

Based on his own experience, his knowledge of psychology, and the stories of many other transgender (or previously transgender) individuals who have contacted him, Heyer (2019) believes that hormonal and surgical treatments for gender dysphoria are ultimately harmful:

> Had I not been misled by media stories of sex change "success" and by medical practitioners who said transitioning was the answer to my problems, I wouldn't have suffered as I have. Genetics can't be changed. Feelings, however, can and do change. Underlying issues often drive the desire to escape one's life into another, and they need to be addressed before taking the radical step of transition.
>
> You will hear the media say, "Regret is rare." But they are not reading my inbox, which is full of messages from transgender individuals who want the life and body back that was taken from them by cross-sex hormones, surgery and living under a new identity.
>
> After de-transitioning, I know the truth: Hormones and surgery may alter appearances, but nothing changes the immutable fact of your sex.

Heyer advocates a different approach for those suffering from gender dysphoria. He believes that "instead of encouraging them to undergo unnecessary and destructive surgery," we should "affirm and love our young people just the way they are" (Heyer 2015).

V. THE FALSE PROMISE OF GENDER REASSIGNMENT THERAPY

Up to this point, I have argued that transgender identification and the gender dysphoria that sometimes results from it are not the result of being trapped in the wrong body, because such a thing is metaphysically impossible, nor even the direct result of nonconformity to gender norms and stereotypes—because there are many individuals who do not conform to gender stereotypes but who nonetheless do not consider themselves transgender. Rather, at least for those who feel that they are trapped in the wrong body, transgender identification and the dysphoria that sometimes accompanies it seems to be a psychological disorder or the result of other psychological disorders.

If my argument is correct, then—as the accounts by Heyer and other detransitioners suggest—hormonal and surgical gender reassignment therapies are unlikely to provide lasting relief,[26] because they do not get to the root of the problem, and because their perceived efficacy is premised on two illusions. The first illusion is that transgender individuals have an immutable gender identity at odds with their biological sex—that is, that transgender individuals are trapped in the wrong body, and thus that changing the body can resolve the problem. The second illusion is that it is possible to change one's body to make it match one's perceived gender identity. This is an illusion because, given that sexual differentiation begins in the early weeks of gestation and has profound effects on one's overall bodily organization, it is physically impossible to change one's biological sex.[27] While hormones and plastic surgery can change a person's external appearance to some degree, it is biologically impossible to turn a male reproductive system into a female one, or vice versa.[28] Any psychological relief that may come from hormonal and surgical gender reassignment is therefore based on the illusion that one now has a body that matches one's inner sense of gender identity and is unlikely to endure.[29]

It is therefore not surprising that, for instance, hormones and surgery initially brought Heyer some relief from his dysphoria, but that many of his psychological problems persisted, and that he continued to feel significant discomfort with his body.[30] A similar phenomenon might occur if doctors began to treat anorexia with liposuction, on the grounds that having a thinner body will alleviate the anorexic person's psychological distress. The anorexic might initially be pleased with the results of the surgery, but the relief would not last because, of course, being overweight was not the root cause of the anorexia. Thankfully, because the medical community knows that anorexia is a psychiatric disorder and refuses to accept the anorexic's

self-perceptions as true, providing liposuction for an anorexic would rightfully be considered unethical, even if it provided short-term relief. While the complexities of gender identity make the case of gender dysphoria less straightforward than the case of anorexia, it seems that, if the wrong-body account is false (as I believe it must be, metaphysically), then offering hormonal and surgical gender reassignment treatments for gender dysphoria is analogous to offering liposuction for anorexia.

It might be objected that, however cogent my philosophical claims might be in the abstract, they are irrelevant insofar as empirical studies have already proven the effectiveness of hormonal and surgical gender reassignment for treating gender dysphoria. I have two responses to this objection. First, even if it were the case that gender reassignment consistently relieved gender dysphoria, it is still not clear that it would be an ethically appropriate treatment. Would liposuction or pills that prevent the absorption of calories be ethically appropriate treatments for anorexia if it were discovered that they reliably reduced anorexics' distress? Or, to take a real case, is amputation of a healthy limb ethically appropriate for those suffering from bodily integrity identity disorder (BIID)—that is, those who believe that a particular limb does not truly belong to them, and who suffer significant distress due to the presence of the "alien" limb? Although there is evidence that amputation does sometimes alleviate the distress of those with BIID at least temporarily, the practice is extremely controversial, because it is only a symptomatic treatment and it involves permanent mutilation and loss of function, as well as long-term health risks (Muller, 2009). Similarly, the irreparable damage caused by gender reassignment, combined with the fact that it is only a symptomatic treatment, provides reasons to question its ethical appropriateness, even if it does alleviate distress.

Second, a closer look at the evidence indicates that the research purporting to support the effectiveness of hormonal and surgical gender reassignment is of low quality. Consider, for instance, the assessment of over 100 follow-up studies of postoperative transsexuals published in 2004 by Birmingham University's Aggressive Research Intelligence Facility. The conclusion, summarized in *The Guardian*, was that "none of the studies provides conclusive evidence that gender reassignment is beneficial for patients . . . Most research was poorly designed, which skewed the results in favour of physically changing sex" (Batty, 2004). The lack of evidence for the effectiveness of gender reassignment surgery also led the Centers for Medicare and Medicaid Services in 2016 (under President Obama) to decide not to require insurance coverage for such treatments. They explained the reasons for their decision as follows: "Based on an extensive assessment of the clinical evidence . . . there is not enough high quality evidence to determine whether gender reassignment surgery improves health outcomes for Medicare beneficiaries with gender dysphoria and whether patients most likely to benefit from these types of surgical intervention can be identified prospectively" (Centers

for Medicare and Medicaid Services, 2016). The decision memorandum explains, further, that "the quality and strength of evidence were low due to mostly observational study designs with no comparison groups, subjective endpoints, potential confounding (a situation where the association between the intervention and outcome is influenced by another factor such as a co-intervention), small sample sizes, lack of validated assessment tools, and considerable lost to follow-up" (Centers for Medicare and Medicaid Services, 2016).[31]

Furthermore, the findings of one of the most well-designed studies that has been done thus far on outcomes of sex-reassignment surgeries are quite troubling. The study, conducted by researchers at the Karolinska Institute and Gothenburg University in Sweden and published in 2011, compared 324 transsexuals who had received sex-reassignment surgery between 1973 and 2003 to controls of the same age (Dhejne, 2011). The researchers found that transsexuals had three times higher risk of psychiatric hospitalization, even after adjusting for prior psychiatric treatment; three times higher risk of all-cause mortality; and increased risk of crime conviction. Furthermore, transsexuals were five times more likely to attempt suicide and 19 times more likely to die by suicide—again, even after adjusting for prior psychiatric treatment. Although it is true that the study design does not enable us to draw conclusions about the efficacy of sex-reassignment surgery, because it is possible that the outcomes would have been even worse if the individuals had not received surgery; nonetheless, the results certainly fail to give any indication that sex-reassignment surgery provides long-term relief for gender dysphoria.

Such results, though tragic, are unsurprising if I am correct in claiming that the wrong-body account of gender dysphoria is false, and that any relief provided by gender reassignment would at any rate be premised on the illusion that it is actually possible to change one's biological sex. For, if a person with gender dysphoria places his hope in hormones and surgery to alleviate his distress, but then, after some initial improvement, finds that the distress persists and that his body *still* fails to match his inner sense of gender identity, it is not difficult to imagine how such a person may despair of ever feeling better and see suicide as the only way out. Such despair may be exacerbated as the person must live with now-unwanted but largely irreversible changes in physical appearance, combined in many cases with the loss of healthy sexual and reproductive function and other physical health problems caused by cross-sex hormones and/or surgery.[32] In the stories of Heyer and other detransitioners, ongoing distress and dissatisfaction with their bodies led them to discover and seek healing (through support networks, formal therapy, or self-help methods like meditation) for the underlying psychological problems that were at the root of their gender dysphoria. They ultimately found a path to healing by questioning the wrong-body narrative and finding other, more accurate explanations for their distress.[33] On the

other hand, those who remain convinced of the wrong-body narrative, yet are ultimately dissatisfied with their bodies even after gender reassignment surgery (and predictably so, given that it is physically impossible to change one's biological sex), are likely to find themselves eventually in even greater psychological distress than before, because their hope of gaining a sense of wholeness through surgery proved false.

VI. CONCLUSION

In summary, I have argued that the wrong-body account of transgender identity rests on a metaphysically flawed dualist understanding of the self and is therefore false. I have argued, further, that hormonal and surgical gender reassignment would be an appropriate treatment for gender dysphoria only if the wrong-body narrative were true, and only if it were actually possible to change one's biological sex. However, because the wrong-body narrative is false, and because it is at any rate impossible to change one's biological sex, hormonal and surgical gender reassignment therapies are arguably no more medically or ethically appropriate than providing liposuction to an anorexic. True concern for the welfare of those with gender dysphoria requires addressing the root cause of the problem through psychiatric or psychological treatment, rather than fostering the false hope that changing the body is the path to wholeness and healing.

NOTES

1. The DSM-5 defines gender dysphoria as involving "a difference between one's experienced/expressed gender and assigned gender, and significant distress or problems functioning" (https://www.psychiatry.org/patients-families/gender-dysphoria/what-is-gender-dysphoria).

2. Bettcher, for instance, worries about the tensions between the wrong-body account and feminist resistance to the idea of an innate, nonculturally constructed gender identity: "In order to resist a reduction to mere pretense, some trans people affirm a reality that's based on an appeal to an innate gender identity. While the affirmation is responsive to trans oppression, it undercuts trans women by naturalizing sexist gender differences" (2014, 398). Others worry that the wrong-body model reinforces "an appearance-reality distinction which threatens the transsexual community" or runs the risk of "potentially silencing a subset of the trans-community who do not identify with such a feeling" (Ashbrook, 2017, 2).

3. Although the brain is itself part of the body, the view that the true self resides in the brain is nonetheless dualistic insofar as one's overall bodily identity apart from the brain (more precisely, the higher brain as the seat of consciousness and self-awareness) is *not* taken to be an essential and intrinsic component of one's personal identity. This version of dualism, in which the self is identified with the functioning higher brain, is defended by Jeffrey McMahan (2002).

4. Commenting on one transsexual's autobiographical account, Prosser (1998, 70) highlights the fact that "the autobiographical 'I' in the above passage (as in the entire narrative) is located in the internal body image not in the alien outer body."

5. Even theorists who are critical of the wrong-body narrative recognize its importance for articulating the experience of some transgender individuals. Ashbrook, for instance, suggests that "the location of identity should start with phenomenology—a transperson's feeling . . . The fact stands that there are many individuals who report a certain phenomenology—that of severe disassociation with their own bodies—in the transsexual case, this is of a misalignment of the body with a felt sexed identity. We

ought to strive to respect and lend credence to such feelings," even if it may not account for the experience of all transgender individuals (2017, 6). Note that, on Ashbrook's view as in the other accounts of transgender identity already presented, identity is rooted in a person's *feelings*, in a conscious self-image that has no necessary relationship to one's physical body. Once again, a dualist view of identity is presupposed.

6. It could also be argued that altering the body may be considered the appropriate solution not because of a belief that one's true self is identified with one's psychological states, but rather because in practice this turns out to be the only or best way to alleviate the distress of many transgender individuals. Yet, the claims made by Prosser and the transgender youth quoted above are not empirical claims about which therapeutic approaches are most effective—and indeed the quality of the empirical evidence about the effectiveness of medical and surgical gender reassignment is quite poor, as noted below. Rather, their claims are that the *source* of the transgender individuals' distress is being trapped in the wrong body, and *therefore* that the way to resolve their distress is to eliminate its source by changing the body.

7. It is sometimes claimed that transgender identification is the result of a sex-atypical brain structure, and thus that one part of the person's body (the brain) is of a different sex than the rest of the person's body. As I argue below, however, this view is not supported by the empirical evidence and also rests on a confusion about the definition of biological sex—which depends not on the characteristics of one's brain, but on the body's overall organization for reproduction—and the connection between sex and gender.

8. For instance, some dualists (following Plato or Descartes) identify the self with an immaterial soul or mind, others (following Locke) identify the self with certain psychological states, and others (like Jeff McMahan, 2002) identify the self with a functional cerebrum.

9. This includes Lynne Rudder Baker's (2000) constitutionalist view of identity.

10. For a defense of the animalist or biological view of identity, see, for instance, Lee and George (2008), Olson (1997a), and Liao (2006).

11. Note that, like Olson, I raise this issue only to highlight some of the metaphysical problems with dualist accounts of identity, not to take a stand on controversial questions regarding the fetus's *moral* status or the moral permissibility of abortion.

12. "The essential purpose of sexual differentiation, the development of any male- or female-specific physical or behavioral characteristic, is to equip organisms with the necessary anatomy and physiology to allow sexual reproduction to occur" (Wilhelm, Palmer, and Koopman, 2007, 1).

13. "Arguably the most defining moment in our lives is fertilization, the point at which we inherit either an X or a Y chromosome from our father. The profoundly different journeys of male and female life are thus decided by a genetic coin toss. These differences begin to unfold during fetal development, when the Y-chromosomal Sry ('sex-determining region Y') gene is activated in males and acts as a switch that diverts the fate of the undifferentiated gonadal primordia, the genital ridges, towards testis development. This sex-determining event sets in train a cascade of morphological changes, gene regulation, and molecular interactions that directs the differentiation of male characteristics. If this does not occur, alternative molecular cascades and cellular events drive the genital ridges toward ovary development. Once testis or ovary differentiation has occurred, our sexual fate is further sealed through the action of sex-specific gonadal hormones" (Wilhelm, Palmer, and Koopman, 2007, 1).

14. See, for instance, the work of Judith Butler (1990).

15. Of course, as noted above, when individuals who identify as transgender make such claims, they typically take themselves to be expressing a deep truth about their identity, not merely noting that they possess certain gender nonconforming traits. Here I am simply trying to make sense of what it could possibly mean to say "I feel female" or "I feel male," if one is not referring to biological sex. For the claim to have any actual meaning, the terms male and female must have some objective extramental referent. And to the extent that those with gender dysphoria give an account of the reasons for their transgender identification, they do often point to traits and inclinations typical of the gender with which they identify.

16. While the work of Mayer and McHugh has been criticized due to its politically unpopular conclusions, I cite it because it presents a nuanced and broadly accessible analysis of the relevant studies which is worthy of the reader's consideration. The soundness of my own argument does not, however, depend on the accuracy of these empirical claims.

17. Here I do not mean to suggest that gender dysphoria is always rooted in gender nonconformity. In many cases, however, gender nonconformity does appear to be a major contributing cause of gender

dysphoria, and one of the criteria for gender dysphoria in the DSM-5 is "a strong conviction that one has the typical feelings and reactions of the other gender."

18. In some of the cases Littman discusses, the person did not seem to possess sex-atypical traits at all prior to identifying as transgender. Nonetheless, it seems that those who *do* possess sex-atypical traits would be more susceptible to social contagion, insofar as they would be more likely to identify with the transgender narratives that they encounter. The Internet is full of testimonies of gender nonconforming individuals who talk about the social problems they faced due to their gender nonconformity, and about how they began to identify as transgender only after being exposed to transgender narratives or to the concept of gender dysphoria. Many of these individuals no longer identify as transgender, in part as a result of coming to recognize that their gender nonconformity does not fundamentally alter their identity as male or female. Consider, for example, the following testimonies: "In elementary school I always felt bigger, more muscular, louder, and more active than other girls, which made me feel like I was a different species than they were, and very much 'not like other girls'. I also had a lot of oppressive male influences in my life that messed with my self-esteem . . . When I learned more about dysphoria more recently, finally had a name for it and was seeking relief through possible transition, the discomfort with the 'wrong' parts of me became so great I was losing sleep and truly suffering from it, mentally and physically. I experimented with social transitioning, going by they/them and then he/him pronouns and choosing a 'male' name for several months, wearing men's clothing and a binder when going out. I grew out all my body and facial hair . . . I was probably a week away from making an appointment to seek out testosterone when I decided there had to be another way of living and accepting my body as what it was. The pressure of trying to live as something other than myself (my whole self, my body included) was taking too much of a toll on my entire life. The single most important fact that has helped me with dysphoria was learning that I am a valid woman on the basis of my XX chromosomes alone and don't need to look or act or feel any differently than I always have." (ThisSoftSpace, 2016, 39) Another gender nonconforming woman who identified as transgender for several years after being exposed to the concept in a college course concludes her testimony by saying: "Now though, I realize while I may not relate easily to the majority of females I meet, this does not make me any less female. I realize there are females out there to whom I can relate. I will find them some day. It makes me so, so sad to think that the females to whom I might be able to relate are likely transitioning and calling themselves male. It worries me that I may never have a female friend to whom I can relate on the same level that I relate to many of my male friends. This is something I want very, very much. This is why I am telling my story" (Dirt, 2012). See also Wright (2019).

19. Of course, not all children who identify as or desire to be the opposite gender will actually have or be diagnosed with gender dysphoria, because the diagnosis also requires that the child experience significant distress or problems in functioning.

20. Kenneth Zucker (2018) an internationally renowned specialist in gender dysphoria, with over 30 years of experience working with gender dysphoric children, likewise predicts that encouraging social transition will increase the odds of long-term persistence.

21. Coming to understand that one's identity as male or female is fundamentally based on biological sex—rather than on the possession of the personality traits or inclinations typical of that sex—has led some gender nonconforming individuals who previously identified as transgender to cease doing so. See the testimonies cited in note 18, as well as the testimony of Cari Stella (2016) a detransitioned woman: "I detransitioned because I knew I couldn't keep running from myself, dissociating from myself, because acknowledging my reality as a woman was vital to my mental health . . . The truth is that a lot of women don't feel like they have options. There isn't a whole lot of place in society for women who look like this, women who don't fit, women who don't comply. When you go to a therapist and tell them you have those kinds of feelings, they don't tell you that it's okay to be butch, to be gender nonconforming, to not like men, to not like the way men treat you. They don't tell you there are other women who feel like they don't belong, that they don't feel like they know how to be women. They don't tell you any of that. They tell you about testosterone. That's about it." See also Bawer (2019) and Anonymous (2019).

22. While it is plausible that the higher rates of mental health problems among transgender individuals are due at least in part to lack of societal acceptance, the evidence for this hypothesis remains weak (Mayer and McHugh, 2016, 75–85). According to Mayer and McHugh, "the social stress model probably accounts for some of the poor mental health outcomes experienced by sexual minorities," but stigmatization and discrimination probably do not "account for all of the disparities between the heterosexual and nonheterosexual populations." They note, for instance, that the high rate of sexual abuse victimization

among the LGBT population is also likely to be an important contributing factor (Mayer and McHugh, 2016, 85). Regarding the use of Mayer and McHugh's work, see note 16.

23. Instead, as argued below, recognizing such thought patterns as psychologically disordered is the first step in providing appropriate care for those who suffer as a result of them.

24. Before 1980, transsexualism was viewed and treated as a symptom of other psychiatric disorders such as schizophrenia. Beginning with the DSM-III in 1980, it was classified as a separate psychiatric disorder (Gijs, Van Der Putten-Bierman, and De Cuypere, 2014). The DSM-IV changed the name of the disorder to Gender Identity Disorder. However, in the DSM-5 (released in 2013), transgender identification was no longer considered in itself to constitute a psychiatric disorder or a symptom of a psychiatric disorder. The name was changed to "gender dysphoria," which is not itself a disorder, but is considered problematic only if transgender identification is coupled with significant psychological distress and/or impairment in functioning.

25. Here I limit myself to presenting just one such account, though I reference a number of others in the footnotes. For additional examples, see Anderson (2018).

26. It is sometimes argued that the effectiveness of hormonal and surgical gender reassignment for alleviating psychological distress is irrelevant to whether or not they ought to be provided. On this view, as articulated in a provocative essay by Andrea Long Chu (2018) the only prerequisite for access to such "treatment" is "a simple demonstration of want. Beyond this, no amount of pain, anticipated or continuing, justifies its withholding." Chu (2018) is candid about the fact that being on hormones has led to feeling worse, not better, and that the upcoming vaginoplasty will not alleviate suffering, either—indeed, that Chu's "body will regard the vagina as a wound," and that "it will acquire regular, painful attention to maintain" (Chu, 2018). Responding to such views is beyond the scope of this article, as my concern here is to question the *therapeutic* value of hormonal and surgical gender reassignment. Whether it should be available on a purely elective basis, like cosmetic plastic surgery, is a separate question.

27. Chu (2018) candidly recognizes this fact.

28. Even if technological advances were to make it possible for a male to gestate a fetus or for a female to inseminate another female, a male will never have ovaries with eggs that carry his own genetic material, and a female will never have testes with sperm that carry her own genetic material. The development of primordial germ cells and sex organs begins just weeks after fertilization. Turning a female into a male or a male into a female would require not just surgical reconstruction that enables successful mimicry of some functions of the opposite sex, but a reconfiguration of the entire reproductive system, which cannot be done without returning to the embryonic stage of development. As Tollefsen (2015) explains,

> A genuine sex change would make it possible for a male to engage in the kind of sex act characteristic of the female sex, or vice versa. Now a "sexual act" is identified by reference to the sex organs involved. So attempts to change sex (as opposed to gender, about which I have more to say tomorrow) are most plausibly pursued by attempts to change one's sex organs.
>
> But what those organs are—a penis or a vagina—can only be identified by reference to the role those organs typically play in the overall biological economy of a sexed human being. The penis typically penetrates the vagina but then also deposits sperm, which is in turn capable of procession toward and penetration of the female oocyte; the vagina is typically a receptacle and conduit of sperm to the oocyte, and so on. And both organs' identities are linked not only forward in these ways to the functions they might eventually perform, but are also linked backward to previous events and functions. For example, the origin of male gametes is to be found in the production of primordial germ cells that occurs many years before sexual intercourse is even possible, but this production occurs in order that sperm will eventually be produced which the penis will eventually deposit. An organ lacking this historical role in the biological economy is not a penis.
>
> One cannot therefore make a vagina, say, simply by creating an orifice in a particular place. Absent some relationship to a vagina's larger biological functionality in the organism, no orifice is a vagina. Nor can one create a penis by creating something that will become enlarged on stimulation. One could only genuinely make a penis or vagina by recreating the entire biological context within which those realities are what they are.
>
> But those larger biological contexts are themselves not freestanding in the organism: the organism is primordially sexed from its very first moment, and its biological development involves the working out through time of capacities that were present at the beginning for the development of those organs in their appropriate contexts.

29. This claim is supported by the testimonies of many detransitioners. For instance, Cari Stella, a detransitioned woman whose story I referred to in note 20, says the following: "When I was transitioning, every step of transitioning really felt like this huge high of relief from dysphoria, but sooner or later it would come back in another form. So, you know, once I was on testosterone, I wanted to change my name, I wanted a mastectomy; once I had a mastectomy I wanted a hysterectomy, bottom surgery, and so on and so forth. This is a really common topic in trans circles, you know, shifting dysphoria, and at some point I realized that wasn't going to stop. You know, I could keep going and changing my body in search of this, you know, finishing point, but I don't think I ever would have arrived. Transition didn't really make my dysphoria better, it just kind of kept moving the goal post, so I felt like I was making progress, but I never really got any closer to where I wanted to be or where I thought I wanted to be" (Stella, 2017).

Consider also the account of this detransitioned woman who anonymously published her experience in *The Guardian*:

It wasn't until I was 15 that I found out about transitioning. Everything fell into place: this was who I was. I realised I could have the body I wanted . . . After months of waiting and appointments, none of which included counselling, I finally started on testosterone gel, later switching to injections. It was a huge thing when, at university, my voice broke, and my figure started changing: my hips narrowed, my shoulders broadened. It felt right. Passing as a man, I felt safer in public places, I was taken more seriously when I spoke, and I felt more confident.

Then I had chest surgery. It was botched and I was left with terrible scarring; I was traumatised. For the first time, I asked myself, "What am I doing?" I delayed the next steps of hysterectomy and lower surgery, after looking into phalloplasty and realising that I was going to need an operation every 10 years to replace the erectile device. Trans issues were starting to be written about in the media, and I understood that people would always be able to recognise me as having transitioned. I just wanted to be male, but I was always going to be trans.

At the same time, there was a significant change in how I felt about my gender. Reflecting on the difference in how I was treated when people saw me as a man, I realised other women were also held back by this. I had assumed the problem was in my body. Now I saw that it wasn't being female that was stopping me from being myself; it was society's perpetual oppression of women. Once I realised this, I gradually came to the conclusion that I had to detransition (Anonymous, 2017).

30. This pattern of short-term relief followed by the eventual return of psychological distress and discomfort with one's body is found in the stories of many detransitioners. And the fact that in some cases (like that of TWT, discussed in Anderson, 2018) it can take decades for the person to realize that hormones and surgery were actually harmful rather than helpful, indicates that studies which claim to show the effectiveness of these treatments on the basis of relatively short-term follow-up are far from conclusive.

31. Regarding the "considerable lost to follow-up" category, it is interesting to note the testimony of a detransitioned woman named Crash, who emphasizes that those who were unhappy with their transition are unlikely to return to their medical providers to tell them about it: "I wrote 'Lost to Follow-Up' to describe how anxiety, fear and other intense feelings could get in the way of a detransitioned person contacting their old medical providers and informing them of their detransition. People often overlook how many detransitioned people don't trust their old providers, feel shame about transitioning or otherwise experience strong emotions that could prevent them from coming forth and how this could lead providers into thinking that detransition is much less common than it is. How can you accurately gauge how many people detransition if many of us don't want to talk about it for one reason or another?" (Crash ChaosCats, 2018; see Crash ChaosCats, 2017a, 2017b).

32. For instance, one large study of about 5,000 transgender patients receiving cross-sex hormones found that transgender women receiving estrogen therapy were 80 to 90 per cent more likely than cisgender women (not receiving estrogen) to suffer a stroke or heart attack, and that the risks increased over time (Getahun et al., 2018).

33. Crash, for instance, writes: "My providers didn't help me. Taking testosterone didn't get to the root of my suffering, it only relieved it temporarily. I came out of my transition with many of the same problems I had before and then some. Being supported in my trans identity didn't help me, letting go of it and accepting myself as a woman did. Changing my body didn't help me find lasting peace. I helped myself by tracing back my trans identity and dysphoria to trauma and working through how I'd been hurt" (Crash ChaosCats, 2017b).

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