

Transgender embodiment: a feminist, situated neuroscience perspective.

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Abstract: The policing of boundaries of acceptable sexual identities and behaviour is a recurring theme in numerous marginalities. Gender (especially womanhood) is often instantiated socially through the harms to which members of that gender are subjected. For transgender people, the assumption that genitals define gender translates the ubiquitous misapprehension that genitals and sex are binary into an assumption that gender must also be binary. This circumscribes the potentiality of cultural intelligibility for trans gender identities, and may interfere with the ability of transgender people to select the most appropriate medical and social means of expressing their authentic identities, even altering what is possible or appropriate, thereby curtailing trans people's authenticity and freedom. We therefore distinguish social from bodily aspects of gender dysphoria, proposing a model of their distinct, intersecting origins. We explore ways in which transgender medicine reflects aspects of other gendered surgeries, proposing a biopsychosocial understanding of embodiment, including influences of culture on the neurological representation of the body in the somatosensory cortex. This framework proposes that cultural cissexism¹, causes trans people to experience (neuro)physiological damage, creating or exacerbating the need for medical transition within a framework of individual autonomy. Our social-constructionist feminist neuroscientific account of gendered embodiment highlights the medical necessity of bodily autonomy for trans people seeking surgery or other biomedical interventions, and the ethical burden therein.

Keywords: Cultural Neuroscience, Somatosensation, Feminism, Neuroplasticity, Surgery.

Introduction

A recurring problem for many marginalised groups is the ubiquitous trend to use sex and sexuality as a site for sensationalism and moralisation (Inckle, 2010). The barriers to equitable societal circumstance for stigmatised sexual expressions – lesbian, gay, bisexual and queer (LGBQ) people and sex workers – centre on a social construction of a norm defining the acceptable nature and context for sexual congress, the boundaries of which are policed by public and private discourses (e.g. Herek, 2009)

A similar and well-documented issue exists for transgender people (e.g. Serano, 2009) for whom a focus on their genitals as the site of gender identification polices their gender. One outcome of this is that, because genitals are socially constructed as binary, (Hird, 2000; 2004; Fausto-Sterling, 1992; 2000; Fausto-Sterling, Coll & Lamarre, 2012) sexual identifications are viewed as binary and trans individuals are expected to tell a story about their 'transness' that is *either* male *or* female (Butler,

¹ Cissexism refers to a system of beliefs and values, dominant in a majority of modern-day cultures, that positions cisgender bodies as more legitimate, particularly as embodied expressions of gender.

2001; Galupo, Henise & Davis, 2014; Vincent, 2016) . This constrains gender and allows a very small box in which to fit one's identity, and may lead to trans patients being indirectly pressured into a more binary gender and transition than best suits their identity (Vincent, 2016; Lykens, LeBlanc & Bockting, 2018; Taylor et al, 2018; Ellis, Bailey & McNeill, 2015).

These assumptions are born of the cornerstone misconceptions of cissexism: (i) that in a state of natural good health the human body is sexed in a dichotomous way that has only two forms (c.f. e.g. Fausto-Sterling, 1992); (ii) that the sex of the body is directly equivalent to the gender of the person (Kessler & McKenna, 2013). According to these assumptions, genital anatomy is sufficient to identify and classify the sex of the person (i), and therefore their gender is also so defined (ii).

Living life as a transgender person in a society working from this framework means your perception of yourself conflicts with the combination of society's dominant narrative about gender, and the body you occupy. This is most saliently expressed when somebody misgenders you, and in the distress that this evokes (McLemore, 2015). An informal distinction is sometimes made between social and bodily dysphoria (Finch, 2015). Social dysphoria is the distress reported in association with being misgendered (McLemore, 2015; 2018) either behaviourally (such as by using an inappropriate pronoun), or (perhaps more frequently for people who have socially transitioned) the inferred or anticipated perception of ones gender held by a third party; in sum, trans people's distress at the incongruity between their gender and the content of other people's perceptions of them as gendered beings. Bodily dysphoria is the distress reported in association with bodily traits and features (Owen-Smith, 2018) that conflict with the individual's perception of what a gender-congruent embodiment would mean in their case. For many trans people, this includes a kind of proprioceptive dissonance, where physical sensations from the body conflict with the neurological body map (Ramachandran and McGeogh 2008).

It is the interaction between social dysphoria, bodily dysphoria, and cultural cissexism that we will examine here, especially in relation to non-binary gender identities, and the political and ethical significance of these processes. This article will therefore discuss ways in which cultural conceptions of gender and sex are constructed and distorted by bioessentialist discourses and the consequences this has for the perception of one's body, and the actions one may permit or undertake to alter it. We will then discuss the significance of this process in the context of nonbinary gender identities, especially in medical settings, and the practical and ethical consequences of this reconceptualization of the processes of gender dysphoria for the treatment of transgender individuals, both medically and politically.

Bioessentialism and Instantiation

An outcome of cissexism is that the practice of transitional medicine becomes engulfed in a focus on sex/gender binarism which then corrupts both research and clinical practice. For example, a majority of standardised diagnostic questionnaires for ascertaining gender identity are built on an assumption that desires for surgical

and endocrinological transition will be central to the experiences that define a person as trans. These questionnaires may therefore fail to highlight other perhaps more important factors in the experience of gender identity such as social dysphoria (concerns with how one is perceived by self or others, in respect of one's gender (Nicholas, 2019, van de Grift et al, 2016)), or the surprisingly prevalent forms of gender variance which do not conform to the dominant narrative of trans genders, and in which gender identification contrary to assigned birth may not present dysphoria of the sort these surveys tend to anticipate (Richards et al, 2016). For example, upwards of 35% of apparently cisgender individuals questioned with a non-dichotomous gender identity questionnaire identify to some extent as the 'other' gender, both or neither (Joel et al., 2013).

Thus, another assumption that needs to be challenged is that identification *with* a gender (in terms of group identity or perceived traits) is the same as identification *as* a gender (personal identity), and that either of these implies a particular sex-identity, or even a particular neurological body map, a phenomenon we will discuss shortly.

Using feminist principles such as a mixture of approaches which blend reflexive awareness of the *personal* narratives of participants (first person), and the *interpersonal* spaces in which interviews and physiological examinations took place (second person), with the *impersonal*, traditionally "objective" measures of physiological states and changes (third person) Einstein (2008; 2012; see also Jacobson et al, 2018) examined the neuroplastic changes beyond the genitalia that followed FGC in a group of Somali-Canadian women living in Toronto. She called this 'situated neuroscience' and through this mixture of methods she was able to bring the subjective under scientific scrutiny – a platform previously reserved for 'objective' observations – or rather, observations made through the hegemonic and consequently hidden subjectivity of white, cis-het, male privilege (Harding, 2002; Walsh, 2015).

Drawing on the theoretical frame of this work, important conceptual parallels and contrasts may be drawn between trans people who seek or have undergone surgical changes to their bodies that reflect their sex-identity and women with female genital circumcision/mutilation/cutting (FGC), showing that the focus on genitalia as determining gender creates categorical binaries that haunt other groups as well. In fact, on some accounts and cultures, FGC is carried out in order to *instantiate* a gender binary where one was not thought to exist prior; establishing gender by modifying the genitalia is one important reason given by the women Einstein (2008, 2012, Jacobson et al, 2018) interviewed about their experiences of FGC. One woman said, "circumcision is what makes one a woman because by removing the clitoris, there is no way her genitals will look like a man's..." (Einstein, 2008; p.88).

The willingness to take such measures to define and restrict gender demonstrates its perceived importance in these – and indeed in most, if not all – human cultures. It is important to note that these may seem like extreme solutions through a naturalised Global North frame; however, the Global North also enforces gender in violent ways and reconstructs that violence as beauty and identity instantiation. One strikingly similar instance is the mostly-western practice of surgically altering intersex infants' genitals (Holmes, 2002) to make them conform to a binary construction of sex (Roen, 2004; 2008; Doyle & Roen, 2008). The cultural roots and rationales for these treatments are of course profoundly different in important ways, but the

similarities are nonetheless interesting here. Human beings have a strong tendency to categorise (e.g. Hofstadter & Sander, 2012; Rosch et al, 1976), and gender is no exception (Fausto-Sterling, 2000). These interventions are justified by appeals to the framework of gender that we have characterised as the misconceptions underlying cissexism, and concerns about the possibility of a life outside of this framework (as an intersex person or an “uncircumcised” woman) (Ehrenreich & Barr, 2005, p.115). This echoes Judith Butler’s (2001) observation that the viability of one’s identity is contingent upon being culturally intelligible. For some women Einstein (2008, 2012) interviewed, such as the participant quoted above, FGC is about instantiating gender – and perhaps on some level creates a sense of beauty and order – and consequent intelligibility – where they would otherwise perceive that to be absent (Jacobson et al, 2018)

This way of enforcing a gender binary creates hurt and damage in many, and there are many different views on FGC among the women who have it. Mariya Karimjee writes about her personal experience of FGC in her autobiographical essay “Damage” (2015): “I told my grandmother that FGM had ruined my life, and I wanted these women to know it.” In turn, women with FGC face similar issues as trans people vis à vis researchers’ and clinicians’ preoccupation with their genitals – and perhaps a consequently diminished attention to their mental wellbeing (Obermyer, 2005; Einstein, 2008). The parallel between FGC and western surgical practices instantiating an idealised female embodiment is that they intervene upon the genitals not because of the properties of the genitals themselves, but their social significance as signifiers of gender (Green, 2006). This can be seen through the lens of “cultural genitals” – not the anatomical fact of the genitals themselves, but the genitals that culturally “ought” to be present (Kessler & McKenna, 1946). These surgeries are motivated by a desire to align their anatomical genitals with (an idealised version of) their cultural ones. Cosmetic labioplasty and breast augmentation in cisgender women, as well (to some extent) as other forms of cosmetic surgery, are likewise acting on the body-parts in question not because of some direct, intrinsic relevance to the emotional needs of the patient but because of their social significance, and the impact of that signification on the embodiment that the patient desires or needs (Haas, Champion & Secor, 2008; Henderson-King & Brooks, 2009). This understanding of the influence of social signification on the psychology of embodiment is crucial to our conceptualisation of transgender patients seeking medical intervention intended to help instantiate an identity-congruent gendered embodiment.

Some trans individuals identify an aspect of their brain (somewhat or sometimes in its relation to their society) that requires them to modify their bodies, thus involving the brain and nervous systems in these performances of gender (e.g. Darke & Cope, 2002; Lester, 2017; Serano, 2009). Phantom genitals are an extension of the concept of “phantom limb syndrome” in which amputees experience the presence of, and often pain or itching in, the amputated limb long after its removal, often for many years or even the rest of their lives. Therefore we will use the term “phantom genitals” to refer to the subjective experience (in the bodymap, see below) of possessing genital anatomy that one nonetheless is consciously, cognitively aware is not present. Phantom genitals in pre- and post-surgery trans persons as compared to cisgender persons with similar modifications to their body for other medical reasons

(e.g. penectomy for the treatment of cancer), has shown that the presence of such a phantom is positively correlated with the extent to which the individual identifies with those genitals and their functions as social signifiers of gender (Ramachandran and McGeogh 2007). In these cases, surgery (or other interventions) are used to instantiate in the body (or its social signifiers) a gender that is subjectively known already be present in the self. The anatomical reality is made to better resemble the cultural genitals (Kessler & McKenna, 1946; Lester 2017). There are also those who feel that they needn't alter their bodies to be embodied as their identified gender, seeing the issue as the misconceptions others have about bodies such as theirs (Carroll, Gilroy & Ryan, 2002). While empirical data on this is relatively lacking, clinicians and community members recognise that this is the case (Lopez, 2018) and indeed, it is reported by those who feel that they were pressured by gender clinicians to undergo treatments they neither needed nor wanted, to satisfy the clinician's desire that their body fulfil social expectations about gendered embodiment (Vincent, 2016; Dhejne et al, 2014).

These two groups may in some ways be seen as parallel to FGC survivors who regard the practice as either a necessary instantiation of gender, or a cruel violence (respectively)². In the context of FGC and intersex infant surgeries, these positions cannot be easily reconciled in terms of policymaking. Policies that seek to curtail the use of FGC may be supported by survivors who experienced the practice, and its subsequent effects, as a violence, but those for whom it was an affirmation of social, religious or gender –identity/ies will be likely to object, understandably viewing such interventions as at best, hypocritical, and at worst, imperialist. Meanwhile policies which permit FGC, or perhaps enable the medicalization of FGC, will produce justified anger in adult survivors of FGC who see the violence they suffered as children perpetrated on another generation. This stands in contrast to the equivalent points of view in the context of transitional gender medicine. We will argue that for transitional medicine, it is possible, and indeed necessary, to view many or most instances of gender-affirming surgical interventions on trans bodies as *both* a product of a culture that perpetrates violence on the basis of gender and its signifiers, *and* a necessary treatment enabling the individual to control the ways in which their embodiment genders them, alleviating serious harms that would arise in the absence of that treatment. These harms are secondary to the initial injury, which is the conditioning of a cissexist society. We will argue that the root of this difference is in the ethical context of the two practices. Neither Karimjee, who told her grandmother how deeply she resents it (Karimjee 2015; see above), nor those who do not, were in a position to consent or dissent to the FGC they experienced, and likewise intersex infants cannot consent to the surgeries that are often inflicted upon them. Trans people, whose surgical desires are often constructed in the popular imaginary as running contrary to “normal” gender expression, are all too often made to fight against unsympathetic legal and healthcare systems in order to gain access to our treatments

2 FGC is a deeply personal as well as profoundly political phenomenon. Readers interested in the topic are referred to Nimco Ali's excellent book, “What we're told not to talk about – but we're going to anyway” (2019) which draws on first person accounts to bring nuance and dimension to this difficult and important topic, and many interconnected issues.

(Pearce, 2018) – not so much “enthusiastic consent” as desperate, determined and insistent consent.

Cultural Intelligibility and Trans and Non-Binary Genders

“Sex” is, thus, not simply what one has, or a static description of what one is: it will be one of the norms by which the “one” becomes viable at all, that which qualifies a body for life within the domain of cultural intelligibility. (Butler 1999: p2)

The ubiquity of cultural cissexism (Gilbert, 2009; Nicholas, 2019) creates a discursive limit on the range of intelligible gender identities that are possible, with binary identities (man and woman) as the frames of reference for all remaining identities. Even the title of this special issue, and the self-definitions of many of its contributors, uses the term “non-binary,” a term which initially communicates identity primarily in relation to what one is not, linguistically centering a negation. This suggests that the extant cultural conceptions in this area are limited and perhaps somewhat unstable. Consequently, a culturally unintelligible gender identity may pose a very real clinical challenge because how can one routinely be perceived as a gender that most people have never before imagined (Nicholas, 2019)? By definition, one cannot, and so instead the task becomes to find a comfortable state that meets the dual needs to be authentic and to be comprehensible. This runs against the trans community’s dominant perception of utopian transition process(es) as a kind of coming out, or self-disclosure and self-determination – a social-first approach – with very few assumptions about bodies attached (e.g. Hines, 2006; Pearce, 2018).

The uphill struggle to access gender-affirming (and perhaps instantiating) medical care is further exacerbated among those transgender patients whose treatment needs are – to a greater or lesser extent – incompatible with the binarist model of gender that pervades our society in general and institutional medicine in particular (Fausto-Sterling, 1992; Hird & Germon, 2001; Hird, 2004). We may even find ourselves unintelligible to gender-specialist clinicians, conditioned as they (too) are by cissexism (Vincent, 2016; Pearce, 2018). One need only attend a clinician-oriented transgender health conference, such as WPATH (World Professional Association for Transgender Health) to realise that a vast majority of clinicians working in the transgender field are cisgender. A majority of gender identity consultations may therefore be described as a cisgender person whose education or clinical experience *may* have forced them to re-evaluate some of the assumptions cissexism conditioned them with, making a determination with or (in gatekeeping contexts) about a transgender person, on whether their gender identity is valid, and how best to instantiate it (e.g. Coleman et al, 2012). This compounds the power imbalance of clinician-patient interaction with the socio-political power of cisgender privilege, and through this power, whatever cissexism the clinician may retain despite (or possibly from) their medical education becomes part of the landscape of the consultation and may have a deleterious influence on decisions and insights obtained though such a consultation at least in part due to this issue of intelligibility (see, e.g. Vincent, 2016; Pearce, 2018). In countries where such medical provision is even available, clini-

cians need only omit to raise the issue of a non-binary presentation and identity for the dominant narrative of both gender and trans as intrinsically binary to lead to less informed patients being indirectly pressured into a more binary gender presentation and transition than may best suit their identity (Ehrensaft et al, 2018; Dhejne et al, 2011; Vincent, 2016). In a more extreme example, in many countries not only does legal gender recognition require one to (for legal purposes) identify with a binary gender, but recognition is conditional upon surgical and/or hormonal interventions that are therefore (implicitly) perceived as instantiating the gender (WHO, 2014a). Further, in some jurisdictions a specific requirement of infertility/sterilisation is imposed (HRW, 2019), with other jurisdictions, including EU and USA member states, implementing the requirement indirectly (TGEU, 2017; EHRC, 2017; MAP, 2019). This could be viewed as an attempt to erase the perceived gender instantiation of the inborn mode of reproductive capacity, related to a reification of gender (especially womanhood) in terms of reproductive roles, and the eugenic undertone of such a policy seems politically dependent upon the stigmatisation of trans communities.

There therefore remains a focus on gender-related surgery, particularly genital surgery, as the basis of gender transitions, rather than the act of self-identification as a particular gender, binary or not. This in turn reinforces transphobia in society's gender discourses, as well as our own internalised transphobia, that trans people are fundamentally an inauthentic facsimile to the gender with which we identify (Serano, 2009). This contributes to social dysphoria (McLemore, 2015; 2018), and focusses that dysphoria on the genitals until they become the focus; on a socio-emotional level, reasoning that "if only my body matched what people expect from a (man/woman), then I will feel real, then I will be able to have a normal life". Thus for at least some trans people, it is possible that the need for medical intervention on the gendered appearance of their embodiment is a result of cissexist discourse; a discourse to which trans people are unlikely to subscribe. That is to say, the social gender dysphoria as created by a cissexist society may be a sufficient (but not necessary) condition for bodily gender dysphoria to emerge.

The ways in which sex-related biology (e.g. sex-related growth hormones such as testosterone and estrogen, but also subtler factors that may be more closely related to gendered and sexed identities; Kruijver et al, 2000; Swaab, 2004) influence the biology of the brain (sex-related neurological differences) may well have significant influences on the brain's representation of body-shape (i.e. bodymaps, and in particular genital or otherwise gendered parts of the bodymaps; Fausto-Sterling, 2011; Ramachandran and McGeogh 2008). It is possible therefore that trans people's bodymaps are either less similar to those of cisgender members of their assigned gender, have more neuroplasticity (the ability of the brain to change in response to environmental influences) for longer, or both. It is therefore not only the biological basis of gender identity, but also the social processes of cissexism (via neuroplastic processes) that have the capacity to influence these maps to create embodied dysphoria. It should be mentioned however that these bodymaps have been studied barely at all outside of cisgender, adult men.

Consequently there could be many trans people who might otherwise be entirely happy presenting their authentic gender with little or no medical intervention who are coerced into undergoing major surgery. Not by any one person, but by the social

environment, as Einstein (2012) has said, “writing on” the body through the brain until the genitals themselves, despite having no physical changes at the peripheral level (but rather at the level of the brain), become pathologically misshapen even while their shape is unchanged. For a majority, this writing-on must happen during windows of plasticity, and thus by the time the majority of surgery-seeking trans people come out, their need for genital surgery has been present for some time – albeit hidden, possibly even from themselves. Only after all this indirect coercion do trans people begin to seek the very thing into which some of them may have been coerced, and so it is probably impossible (and certainly trivial) to distinguish on the individual level between those people who have been coerced into wanting something and those who would have desired it equally in a society more adapted to support, accept and understand the realities of trans identities and bodies.

Cissexism can therefore be understood as including the production of a collection of microaggressions that enact a violence against the mind, and thereby, the body. By recognising this, we can reconstruct transition as a social process of ‘coming out’ as one’s gender, and a radical act of personal and political autonomy, but one which is often distorted by the social processes of cissexism creating or exacerbating dysphorias which call for biomedical intervention. Furthermore, cissexism participates as part of the wider systems of gender-policing. The need to survive gender-policing may motivate and in many cases even necessitate cosmetic surgeries sought by cisgender people (especially women), and provides the socio-political context in which non-consensual FGC and intersex infant genital surgeries may be perceived by family members and medical or religious practitioners as “in the patient’s (or child’s) best interest” when there is ample evidence that it frequently causes distress, resentment and medical harm (WHO, 2014b; HRW, 2017).

Ethical consequences

This way of understanding the influence of society upon the individual has profound effects for considerations of the ethical issues surrounding the treatment of transgender patients, because it highlights how society’s cissexism can generate or exacerbate all the forms of dysphoria that have been discussed here. If human bodies are being changed within and through the nervous system by a society to need morphological adjustments to make our sex and gender more visible, then the bodily autonomy trans people are often denied when seeking treatment is a further violation following the social processes that have enhanced or even at times created the necessity for that treatment. We must begin to regard cissexism (and indeed all prejudices) as an endemic violence, and the injury it causes – trans people’s distress at the incongruity between their gender and other people’s expectations about gendered embodiment – although a state of disease, can be understood as a rational response to an irrational world. Given this, hate speech comes to constitute in the speech-act itself, visceral, physical violence (Bourdieu, 1979; 1989; McCall, 1992; Link & Phelan 2001, Zizek, 2008). More significantly, though, policies which reinforce cissexism – such as the use of gender as a medicolegal category nonconsensually assigned at birth,

or the refusal to include non-binary identities in contexts where gender-definition is necessary and useful, perhaps especially in healthcare, are areas where institutions reinforce and further perpetuate these violences, often against those for whom they have a duty of care.

In order to optimise the outcomes for trans people's healthcare, in addition to tackling transphobic hate speech we must ensure that the surgeries are chosen by the individual in a flexible way that centres on their own perceptions of their body, rather than others' perceptions; this is not to say that others' perceptions are not a valid reason for someone to choose a particular surgery, but those choices must be contextualised by, and ultimately secondary to, the needs of the individual that persist in the absence of what we may term 'the cisgender gaze'. There may well be reasonable clinical arguments in favour of a certain degree of pro-binarism in consulting and advising transgender patients (to cultivate or preserve cultural intelligibility; to alleviate the distress that defines gender dysphoria, it is often necessary to 'pass' as the gender that you are, not necessarily as a cis member of that gender, but as a member of that gender nonetheless). At present, however, the medical model of gender dysphoria typically places an emphasis on a binary transition (Pearce, 2018; Vincent, 2016, 2018) that is incompatible with the intrinsically personal and poly-spectral nature of gender, especially gender as experienced from outside the cisgender privilege-bias: removing this emphasis on 'passing' and binary transition may be the best way to minimise the likelihood of poor clinical outcomes of a particular decision to undergo or decline to undergo a particular surgical intervention, rather than the current approach which is to delay and avoid treatments where the patient's goal violates the binary expectation.

Transgender patients need space to explore gender identity independently from the pressure of cissexism. Methods such as gender-literacy then facilitate a process whereby the identity can be deliberately negotiated in relation to embodiment and the need (or indeed the refusal) to be intelligible within the present culture (Walsh & Krabbendam, 2017). For this process to be possible, freedom of choice and independence from gatekeeping are indispensable. It must be the responsibility of healthcare providers to ensure patients are making sincere choices, as freely as possible (the delimiting effects of cissexism on that freedom are impossible for clinicians to remove of course, but they can refuse to perpetuate or produce such constraints by their own actions). These choices need to account for all needs, including those created by cissexist social discourse, and endogenous needs (e.g. sexual and reproductive function, the desire to retain sex characteristics usually associated with their assigned gender) that may oppose those. Trans people need to make a free choice about this with gender clinicians' duties being to create space for, and to prompt consideration of the roots of desires and which desires they wish to prioritise. However, this is not about gender clinicians holding the responsibility to direct or veto trans patients' decisions. If a patient is certain after having been prompted to consider these factors, then it is a violation of medical consent to withhold care.

Furthermore, the resources must (primarily) come from the society whose cissexism is making these needs urgent and inescapable, even after in some cases, creating the medical requirements. Therefore in countries with nationalised healthcare, this should cover trans healthcare. In countries using an insurance system, insurers

should be required to cover the full expense of trans healthcare on every policy, and uninsured persons should be able to access care via medicare or an equivalent. There are also practical, harm-prevention reasons for this; trans people may become desperate, and turn to untenable methods of resourcing their treatment, including unsafe sex work practices or criminal activity (e.g. Sausa, Keatly & Opario, 2007; Gehi & Arkles, 2007). This also has consequences for the (il)legitimacy of gatekeeping. In nationalised healthcare systems, gatekeeping is often ‘justified’ by the cost of transitional care, and the cost of retransition in those (2.2%, including many whose retransition is motivated by a desire to escape transphobia (Dhejne et al, 2014; Serano, 2016; Hertzog, 2017)) who may later choose to return to their birth-assigned gender. A defendant in a civil suit, ordered to pay damages to the wronged party has no right to dispute the appropriate allocation of those funds. It is worth saying that in this context, other medical needs may, under some systems of funding, suffer cuts as a consequence. This also cannot be considered ethically acceptable under any framework viewing healthcare as a moral right. (However the allocation of funds to a healthcare system over alternative priorities is a matter for governments and not the subject of the present paper). Therefore, to pit transgender-specific health needs against health needs that cis and trans people alike require is not an adequate political excuse for inadequate allocation of funds. This can lead to (for example) unreasonable waiting-times for care as is currently a common issue in many countries (Torjesen, 2018).

Conclusion

In the present paper we have presented an argument that blends feminist philosophy with neuroscientific principles and observations to enable a reconceptualisation of the experience of bodily gender dysphoria in trans persons as (at least potentially, and therefore for ethical purposes, principally) a manifestation of the harm that a cissexist society does to the neural representation of the embodied self. Consequently, we have argued that transition is best understood as a process of “coming out” as ones gender, and that medical aspects of transition are necessary because the social construction of gender in general, and cissexism in particular, impinge on the subjective reality of embodiment and its relation to ones subjectively known (identified) gender, and medical intervention is required to reduce or halt and, in effect, reverse this harm. We have explored the ways in which this collides with issues of cultural intelligibility in differing, but in many respects equivalent, ways in both binary and nonbinary –identified trans people, and how this influences the negotiation of identity and decision-making about embodiment. Finally, we have argued that this synthesis of bodily gender dysphoria as a consequence of, at least in part, cissexism, places an ethical burden on wider society to facilitate decision-making by trans individuals within their own bodily autonomy during medical transition that is as free as possible both in the process of clinical assessment and in the allocation of cost, in consideration for the harm the patient has already suffered at the hands of a cissexist society.

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References

- Ali, N. (2019). *What We're Told Not to Talk About (But We're Going to Anyway) Women's Voices from East London to Ethiopia*. Penguin Viking. https://www.penguin.co.uk/books/301612/what-we_re-told-not-to-talk-about--but-were-going-to-anyway-/9780241292624.html
- Bourdieu, P., 1979. Symbolic Power. *Critique of Anthropology*, 4, pp.77–85.
- Bourdieu, P., 1989. Social Space and Symbolic Power. *Sociological Theory*, 7(1), p.14.
- Butler, J., 1999. *Gender trouble : feminism and the subversion of identity* 2nd ed., Routledge.
- Butler, J., 2001. Giving An Account of Oneself. *Diacritics*, 31(4), pp.22–40.
- Coleman, E. et al., 2012. Standards of Care for the Health of Transsexual, Transgender, and Gender-Nonconforming People, Version 7. <https://doi.org/10.1080/15532739.2011.700873>.
- Darke, J. & Cope, A., 2002. *Trans Inclusion Policy Manual For Women's Organizations*, Available at: <http://www.transalliancesociety.org>
- Dhejne, C., Öberg, K., Arver, S., & Landén, M. 2014. An Analysis of All Applications for Sex Reassignment Surgery in Sweden, 1960–2010: Prevalence, Incidence, and Regrets. *Archives of Sexual Behavior*, 43(8), 1535–1545. doi.org/10.1007/s10508-014-0300-8
- Doyle, J. & Roen, K., 2008. Surgery and Embodiment: Carving Out Subjects. *Body & Society*, 14(1), pp.1–7.
- Ehrenreich, N., & Barr, M. (2005). Intersex Surgery, Female Genital Cutting, and the Selective Condemnation of Cultural Practices. *Harvard Civil Rights-Civil Liberties Law Review*, 40. Retrieved from <https://heinonline.org/HOL/Page?handle=hein.journals/hcrcl40&id=77&div=7&collection=journals>
- Ehrensaft, D. et al., 2018. Prepubertal social gender transitions: What we know; what we can learn—A view from a gender affirmative lens. *International Journal of Transgenderism*, 19(2), pp.251–268.

- Einstein, G., 2008. From Body to Brain : Considering the Neurobiological Effects of Female Genital Cutting From Body to Brain. , 51(1), pp.84–97.
- Einstein G. 2012. Situated neuroscience: Exploring a biology of diversity. In: Bluhm R, Maibom H, Jacobson AJ, editors. *Neurofeminism: Issues at the intersection of Feminist Theory and Cognitive Science*. London. England: Palgrave MacMillan; pp. 145–74.
- Ellis, S.J., Bailey, L. & McNeil, J., 2015. Trans People's Experiences of Mental Health and Gender Identity Services: A UK Study. *Journal of Gay & Lesbian Mental Health*, 19(1), pp.4–20. Available at: <http://www.tandfonline.com/doi/abs/10.1080/19359705.2014.960990>
- European Court of Human Rights (EHRC) (2017) *A.P., GARÇON ET NICOT c. FRANCE*. Available at: [https://hudoc.echr.coe.int/eng#%7B%22itemid%22:\[%22001-172556%22\]%7D](https://hudoc.echr.coe.int/eng#%7B%22itemid%22:[%22001-172556%22]%7D)
- Fausto-Sterling, A., 1992. *Myths of gender : biological theories about women and men*, Basic Books.
- Fausto-Sterling, A., 2000. *Sexing the body : gender politics and the construction of sexuality*, Basic Books.
- Fausto-Sterling, A., Coll, C.G. & Lamarre, M., 2012. Sexing the baby: Part 2 applying dynamic systems theory to the emergences of sex-related differences in infants and toddlers. *Social Science & Medicine*, 74(11), pp.1693–1702.
- Finch, S 2015. These Five Myths About Body Dysphoria In Trans Folks Are Super Common But Also Super Wrong. *Everyday Feminism*. Retrieved from www.everydayfeminism.com/2015/06/these-5-myths-about-body-dysphoria-in-trans-folks-are-super-common-but-also-super-wrong/
- Gehi, P.S. & Arkles, G., 2007. Unraveling injustice: Race and class impact of medication exclusions of transition-related health care for transgender people. *Sexuality Research and Social Policy*, 4(4), pp.7–35.
- Gilbert, M.A., 2009. Defeating Bigenderism: Changing Gender Assumptions in the Twenty-first Century. *Hypatia*, 24(3), pp.93–112. Available at: <https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1527-2001.2009.01047.x> [Accessed March 27, 2019].
- Grift, T.C. Van De et al., 2016. A network analysis of body satisfaction of people with gender dysphoria. *Body Image*, 17, pp.184–190. Available at: <http://dx.doi.org/10.1016/j.bodyim.2016.04.002>.
- Galupo, M.P., Henise, S.B. & Davis, K.S., 2014. Transgender Microaggressions in the Context of Friendship : Patterns of Experience Across Friends' Sexual Orientation and Gender Identity. , 1(4), pp.461–470.
- Green, F.J., 2005. From clitoridectomies to 'designer vaginas': The medical construction of heteronormative female bodies and sexuality through female genital cutting. *Sexualities, Evolution & Gender*, 7(2), pp.153–187.
- Haas, C.F., Champion, A. & Secor, D., 2008. Motivating Factors for Seeking Cosmetic Surgery. *Plastic Surgical Nursing*, 28(4), pp.177–182.
- Harding, S., 2002. Rethinking Standpoint Epistemology: What is "Strong Objectivity"? In K. B. Wray, ed. Broadview Press, pp. 352–384. Available at: <http://books.google.co.uk/books?id=Gp9Umi2VEh8C>.

- Henderson-King, D. & Brooks, K.D., 2009. Materialism, Sociocultural Appearance Messages, and Paternal Attitudes Predict College Women's Attitudes About Cosmetic Surgery. , 33, pp.133–142.
- Herek, G.M., 2009. Sexual Stigma and Sexual Prejudice in the United States: A Conceptual Framework. In *Nebraska Symposium on Motivation: Vol. 54. Contemporary perspectives on lesbian, gay, and bisexual identities*. New York: Springer, pp. 65–111. Available at: http://link.springer.com/10.1007/978-0-387-09556-1_4
- Hertzog, K. 2017. The Detransitioners: They Were Transgender, Until They Weren't – Features – The Stranger. Retrieved October 10, 2018, from <https://www.thestranger.com/features/2017/06/28/25252342/the-detransitioners-they-were-transgender-until-they-werent>
- Hines, S. 2006. Intimate Transitions: Transgender Practices of Partnering and Parenting. *Sociology*, 40(2), 353–371. doi.org/10.1177/0038038506062037
- Hird, M.J., 2000. Gender's nature: Intersexuality, transsexualism and the “sex”/’gender” binary. *Feminist Theory*, 1(3), pp.347–364. Available at: <http://journals.sagepub.com/doi/10.1177/146470010000100305>
- Hird, M.J., 2004. *Sex, gender, and science*, Palgrave Macmillan.
- Hird, M.J. & Germon, J., 2001. The Intersexual Body and the Medical Regulation of Gender. In *Constructing Gendered Bodies*. London: Palgrave Macmillan UK, pp. 162–178.
- Hofstadter, D.R. & Sander, E., 2012. *Surfaces and essences : Analogy as the fuel and fire of thinking*, Basic Books.
- Holmes, M., 2002. Rethinking the Meaning and Management of Intersexuality. *Sexualities*, 5(2), pp.159–180.
- Human Rights Watch (HRW) (2019) *A really high hurdle: Japan's abusive transgender legal recognition process*. Available at: <https://www.hrw.org/report/2019/03/19/really-high-hurdle/japans-abusive-transgender-legal-recognition-process>
- Human Rights Watch (HRW) and Interact. 2017. *I want to be as nature made me: medically unnecessary surgeries on intersex children in the US*. Retrieved from: www.hrw.org/report/2017/07/25/i-want-be-nature-made-me/medically-unnecessary-surgeries-intersex-children-us
- Inckle, K., 2010. Bent: Non-Normative Embodiment as Lived Intersectionality. In *Theorizing Intersectionality and Sexuality*. London: Palgrave Macmillan UK, pp. 255–273. Available at: http://link.springer.com/10.1057/9780230304093_13
- Jacobson, D. et al., 2018. The lived experience of female genital cutting (FGC) in Somali-Canadian women's daily lives. *PLOS ONE*, 13(11), p.e0206886.
- Joel, D. et al., 2014 Queering gender: studying gender identity in “normative” individuals, *Psychology & Sexuality*. 5(4), pp. 291–321. <https://doi.org/10.1080/19419899.2013.830640>.
- Karimjee, M. 2015. *Damage*. Retrieved from <http://www.thebigroundtable.com/stories/damage/>
- Kessler, S.J., McKenna, W. & McKenna, W., 2013. Toward a Theory of Gender. In S. Stryker & S. Whittle, eds. *The Transgender Studies Reader*. Routledge, pp. 181–198. Available at: <https://www.taylorfrancis.com/books/e/9781135398842/chapters/10.4324/9780203955055-22>

- Kruijver, F.P.M. et al., 2000. Male-to-Female Transsexuals Have Female Neuron Numbers in a Limbic Nucleus. *The Journal of Clinical Endocrinology & Metabolism*, 85(5), pp.2034–2041
- Lester, C.N., 2017. *Trans like me : a journey for all of us*, London, UK: Virago.
- Lykens, J.E., LeBlanc, A.J. & Bockting, W.O., 2018. Healthcare Experiences Among Young Adults Who Identify as Genderqueer or Nonbinary. *LGBT health*, 5(3), pp.191–196. Available at: <http://www.ncbi.nlm.nih.gov/pubmed/29641314>
- McCall, L., 1992. Does genderfit? Bourdieu, feminism, and conceptions of social order. *Theory and Society*, 21(6), pp.837–867. Available at: <http://link.springer.com/10.1007/BF00992814>
- McLemore, K.A., 2015. Experiences with Misgendering: Identity Misclassification of Transgender Spectrum Individuals. *Self and Identity*, 14(1), pp.51–74. Available at: <http://www.tandfonline.com/doi/abs/10.1080/15298868.2014.950691> [Accessed October 10, 2018].
- McLemore, K.A., 2018. A minority stress perspective on transgender individuals' experiences with misgendering. *Stigma and Health*, 3(1), pp.53–64. Available at: <http://doi.apa.org/getdoi.cfm?doi=10.1037/sah0000070>.
- Movement Advancement Project (MAP) *Identity Document Laws and Policies*. Available at: http://www.lgbtmap.org/equality-maps/identity_document_laws
- Nicholas, L., 2019. Queer ethics and fostering positive mindsets toward non-binary gender, genderqueer, and gender ambiguity. *International Journal of Transgenderism*, 20(2–3), pp.169–180. Available at: <https://doi.org/10.1080/15532739.2018.1505576>.
- Obermeyer, C M., 2005. The consequences of female circumcision for health and sexuality: An update on the evidence. *Culture, Health & Sexuality*, 7(5), pp.443–461. Available at: <http://www.ncbi.nlm.nih.gov/pubmed/16864215>
- Owen-Smith, A. A., Gerth, J., Sineath, R. C., Barzilay, J., Becerra-Culqui, T. A., Getahun, D., ... Goodman, M. (2018). Association Between Gender Confirmation Treatments and Perceived Gender Congruence, Body Image Satisfaction, and Mental Health in a Cohort of Transgender Individuals. *The Journal of Sexual Medicine*, 15(4), 591–600. <https://doi.org/10.1016/j.jsxm.2018.01.017>
- Pearce, R. 2018 *Understanding Trans Health: Discourse, Power and Possibility*. Bristol: Policy Press.
- Ramachandran, V. S., & McGeoch, P. D. 2007. Occurrence of Phantom Genitalia After Gender Reassignment Surgery. *Medical Hypotheses*, 69, 1001–1003.
- Ramachandran, V. S., & McGeoch, P. D. 2008. Phantom penises in transsexuals. *Journal of Consciousness Studies*. 15(1), 5–16
- Richards, C. et al., 2016. International Review of Psychiatry Non-binary or gender-queer genders. , 0261(December).
- Roen, K. 2004. 'Queerly Sexed Bodies in Clinical Contexts: Problematising Conceptual Foundations of Genital Surgery with Intersex', in A. Potts, N. Gavey and A. Weatherall (eds) *Sex and the Body*. New Zealand: Dunmore Press.
- Roen, K., 2008. 'But We Have to Do Something': Surgical 'Correction' of Atypical Genitalia. *Body & Society*, 14(1), pp.47–66.
- Rosch, E., Mervis, C. B., Gray, W. D., Johnson, D. M., & Boyes-Braem, P. 1976. Basic objects in natural categories. *Cognitive Psychology*, 8(3), 382–439. doi. [org/10.1016/0010-0285\(76\)90013-X](https://doi.org/10.1016/0010-0285(76)90013-X)

- Sausa, L.A., Keatley, J. & Operario, D., 2007. Perceived Risks and Benefits of Sex Work among Transgender Women of Color in San Francisco. *Archives of Sexual Behavior*, 36(6), pp.768–777. Available at: <http://link.springer.com/10.1007/s10508-007-9210-3> [Accessed April 3, 2019].
- Serano, J., 2009. Psychology, Sexualization and Trans-Invalidations by Julia Serano. In *8th Annual Philadelphia Trans-Health Conference*. Available at: <http://www.juliaserano.com>
- Serano, J. 2016. Detransition, Desistance, and Disinformation: A Guide for Understanding Transgender Children.... Retrieved October 10, 2018, from www.medium.com/@juliaserano/detransition-desistance-and-disinformation-a-guide-for-understanding-transgender-children-993b7342946e
- Swaab, D.F., 2004. Sexual differentiation of the human brain: Relevance for gender identity, transsexualism and sexual orientation. *Gynecological Endocrinology*, 19(6), pp.301–312.
- Taylor, J. et al., 2018. An exploration of the lived experiences of non-binary individuals who have presented at a gender identity clinic in the United Kingdom. *International Journal of Transgenderism*, pp.1–10. Available at: <https://www.tandfonline.com/doi/full/10.1080/15532739.2018.1445056>
- Torjesen, I. 2018. Trans health needs more and better services: increasing capacity, expertise, and integration. *BMJ (Clinical Research Ed.)*, 362, k3371. doi.org/10.1136/BMJ.K3371
- Transgender Europe (TGEU) (2017) *Transgender Europe Statement on Forced Sterilization ECHR Ruling*. Available at: https://tgeu.org/echr_end-sterilisation/
- Vincent BW. Non-binary gender identity negotiations: interactions with queer communities and medical practice. 2016, PhD thesis, University of Leeds, www.etheses.whiterose.ac.uk/15956/
- Vincent, Benjamin. 2018 *Transgender Health: A Practitioner's Guide to Binary and Non-Binary Trans Patient Care* London: Jessica Kingsley Publishers
- Walsh, R.J., 2015. 'Objectivity' and intersectionality: How intersectional feminism could utilise identity and experience as a dialectical weapon of liberation within academia. *Feminism & Psychology*, 25(1), pp.61–66. Available at: <http://fap.sagepub.com/content/25/1/61>
- Walsh, R., & Krabbendam, L. 2017. How Social Norms Affect Psychiatric Approaches to Gender Incongruence. *The Lancet Psychiatry*, 4(2), 98. doi.org/10.1016/S2215-0366(17)30003-2
- WHO, OHCHR, UN Women, UNAIDS, UNDP, UNFPA, UNICEF 2014a *Eliminating forced, coercive and otherwise involuntary sterilization: An interagency statement* Retrieved from: www.who.int/reproductivehealth/publications/gender_rights/eliminating-forced-sterilization/en/
- World Health Organization, Department of Gender, Women and Health. 2014b. *Health complications of female genital mutilation including sequelae in childbirth*. WHO. World Health Organization. Retrieved from www.who.int/reproductivehealth/publications/fgm/who_fch_wmh_00.2/en/
- Žižek, S., 2008. *Violence: Six Sideways Reflections*, Picador.