Better than Men? Sex and the Therapy/Enhancement Distinction

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ABSTRACT. The normative significance of the distinction between therapy and enhancement has come under sustained philosophical attack in recent discussions of the ethics of shaping future persons by means of advanced genetic technologies. Giving up the idea that whether a condition is normal or not should play a crucial role in assessing the ethics of genetic interventions has unrecognized and strongly counterintuitive implications when it comes to selecting what sort of children should be brought into the world. According to standard philosophical accounts of the factors one should take into account when making such decisions, women are "better than men." Given the biological differences between the sexes, then, if the only concern is the capacities of an embryo rather than its capacities relative to some normatively significant baseline, there is compelling reason to choose only female embryos. In order to avoid this radical and counterintuitive conclusion, one must embrace the idea that both sexes are normal. The strength of the *prima facie* reasons to select or reject embryos depends on their sex, which is to say that it depends on the normal capacities of their sex. The therapy/enhancement distinction therefore plays a crucial role in determining the ethics of interventions into the genetics of future generations.

The normative significance of the distinction between therapy and enhancement has come under sustained philosophical attack in recent discussions of the ethics of shaping future persons by means of preimplantation genetic diagnosis and other advanced genetic technologies. In this paper, I argue that giving up the idea that the answer to the question as to whether a condition is "normal" should play a crucial role in assessing the ethics of genetic interventions has unrecognized and strongly counterintuitive implications when it comes to selecting what sort of children should be brought into the world. According to standard philosophical accounts of the factors one should take into account when

Kennedy Institute of Ethics Journal Vol. 20, No. 2, 115–144

making such decisions, women are better than men. Given the biological differences between the sexes, if the only concern is the capacities of an embryo rather than its capacities relative to some normatively significant baseline, there is compelling reason to choose only female embryos. In order to avoid this radical and counterintuitive conclusion, I suggest, one must embrace the idea that both sexes are normal. The strength of the *prima facie* reasons to select or reject embryos depends on their sex, which is to say that it depends on the normal capacities of their sex. *Contra* much contemporary bioethical thinking, then, the therapy/enhancement distinction plays a crucial role in determining the ethics of interventions into the genetics of future generations.

In the first section, I briefly review the reasons why the therapy/enhancement distinction has mostly fallen out of favor as a way of trying to resolve the vexed question of the ethics of shaping future persons. In the second section, I offer two hypothetical scenarios involving selection between embryos after preimplantation genetic diagnosis (PGD), one involving a disease condition and one involving sex selection, and suggest that the difference in intuitive responses to them can only be explained by the belief that both sexes are "normal." In the third section of the paper, I further strengthen the argument by outlining a "person affecting" case involving a hypothetical gene therapy. Considering this case also highlights the relationship between the idea of normal human capacities and the therapy/enhancement distinction. In the fourth section, I consider various alternative arguments for making different choices in the case of sex selection and selection for disease conditions. I argue that, in the absence of a normatively significant account of normal human capacities, the only ways to avoid the conclusion that parents should have a strong preference for female children have equally counterintuitive implications. Finally, in the fifth section, I briefly discuss the possible grounds for insisting that both sexes are normal and that an individual's sex is normatively significant when it comes to attempts to reshape their capacities.

THE THERAPY/ENHANCEMENT DISTINCTION

The distinction between medical therapies designed to cure or prevent sickness and ill-health and those intended to make individuals "better than well" (Elliot 2003) offers an obvious and—at first sight, at least—compelling way to distinguish the moral status of two different sorts of projects when it comes to shaping future persons using genetic technologies, such as PGD or (hypothetical) somatic cell gene therapy. There is widespread

popular support for therapeutic genetic interventions, such as screening for genes related to disease conditions such as cancer, heart disease, and cystic fibrosis. However, hypothetical genetic "enhancements," such as selection for genes related to increased IQ or longevity, are much more controversial. It might appear, then, that whether a proposed intervention is a therapy or an enhancement is a crucial first question to ask before considering the ethics of proceeding with it.

However, this way of approaching debates about the ethics of interventions into the genetics of future generations has recently fallen into disrepute amongst philosophers writing about the topic. A number of influential authors have challenged the validity of the distinction between therapy and enhancement (Bostrom and Roache 2008; President's Council on Bioethics 2003, pp. 14–16; Chan and Harris 2007). A larger number of authors have denied the ethical significance of the distinction (Stock 2003, p. 179; Savulescu 2006; 2001; Silver 1999, pp. 252, 277; Harris 2007, pp. 19–36).

The therapy/enhancement distinction itself has come under attack because of the difficulties involved in delineating it. First, there are vexing questions about what precisely the "normal," beyond which therapy becomes enhancement, consists in: is it the capacities of the "average" human today; species-typical capacities; or merely the absence of disease? There are well-known difficulties with each of these answers.[1] Moreover, when it comes to choosing which children to bring into the world on the basis of knowledge about their genetics, the difference between therapy and enhancement seems to be merely a matter of perspective (Chan and Harris 2007; Silver 1999, pp. 250–53). Selecting "against" genes with unwanted effects is also necessarily selecting "for" genes with desired effects. As a consequence, embryos that have been selected on the basis of the absence of bad genes are effectively "enhanced" relative to embryos that have not been subject to a process of genetic selection. Thus, for instance, using PGD to select an embryo without any of the genes known to contribute to an elevated risk of cancer (therapy) will result in the birth of a person with above average life expectancy (enhancement), insofar as cancer is a cause of early death.

The distinction between therapy and enhancement is therefore extremely difficult to describe and defend. The argument that the distinction has no normative significance is even more compelling. Many existing medical interventions provide individuals with capacities that are beyond those typical of the species. Insofar as one thinks that it is at least permissible

(cosmetic surgery) and arguably obligatory (vaccination, the Pill) to make these technologies available to people, existing practice does not locate the distinction between permissible and impermissible interventions at the therapy/enhancement boundary (Kitcher 1996, p. 124; Buchanan et al. 2000, pp. 153–54; Harris 2007, pp. 8, 14, 19–28). Similarly, when it comes to environmental interventions, which will have the same or larger effects on the phenotypes of individuals as genetic interventions, most people consider it entirely appropriate for parents to try to enhance their children, for instance, by providing a stimulating environment or investing in education for them (Harris 2007, pp. 1–7; Agar 2004, pp. 111–20; Buchanan et al. 2000, pp. 156–61; Savulescu 2008, pp. 51–68). More fundamentally, given that the reason for therapeutic interventions is to secure some good for the individual who will be born, the same reason seems to motivate enhancement. If it is a bad thing have a reduced life expectancy, for instance, it appears that it should also be a good thing to have an increased life expectancy (Harris, 2007, pp. 9, 45–46; Savulescu 2005). Moreover, to the extent that one is inclined toward consequentialism, then failure to convey a benefit may itself be morally blameworthy. If this is true, then the obligation to pursue enhancements will have the same force as the obligation to provide therapy; in both cases one should act so as to promote well-being (Harris 2007, pp. 58, 145).

These considerations have led many, perhaps even most, philosophers writing about the ethics of shaping future persons to dismiss the therapy/enhancement distinction as a reliable guide to the ethics of particular interventions. At most, the distinction between therapy and enhancement may serve as a useful rule of thumb when considering the sorts of intervention necessary to make available a fair range of opportunities in a given society (Buchanan et al. 2000, pp. 119–55). If the normal range of opportunities in a society includes opportunities not available to species-typical human beings then the distinction between therapy and enhancement would cease to play even this role.

Despite these influential and apparently compelling grounds for rejecting the therapy/enhancement distinction as a reliable guide to the ethics of genetic interventions, I argue that philosophers can ill afford to abandon it. As I shall demonstrate, the costs of doing so are high indeed.

CHOOSING EMBRYOS

In order to understand the implications of abandoning the distinction between therapy and enhancement for the ethics of shaping future persons

it is useful to make reference to a number of imaginary—but not too far-fetched—scenarios. The first of these scenarios involves a hypothetical diagnosis of a real condition in an embryo via PGD.

Mayer-Rokitansky-Küster-Hauser syndrome is a developmental disorder in female children. Girls born with this syndrome are born without a uterus—or with a severely malformed uterus—although their genitalia and other secondary sexual characteristics are outwardly normal.The syndrome is also associated with disorders of the kidney, skeleton, and heart, although these are by no means present in all cases (Morcel et al. 2007). In many cases, ovaries remain present, which means that it is possible for affected individuals to become genetic parents via IVF—as long as they can find a surrogate mother to bear their child (Beski et al. 2000).

MRKH is believed to have a genetic cause, although the gene or genes involved have yet to be identified (Morcel et al. 2007). However, with rapidly increasing knowledge of human genetics this is unlikely to remain the case for too much longer. It is therefore not too far-fetched to imagine the following hypothetical scenario.

Scenario 1

> A couple have conceived two embryos using in vitro fertilization (IVF) and have used PGD to find out some information about each embryo. Both embryos are female. One of the embryos (Embryo B) has a sequence of genes that is strongly associated with Mayer-Rokitansky-Küster-Hauser syndrome. Children with this gene sequence typically are born without a uterus (or with a severely malformed uterus), although their genitalia and other secondary sexual characteristics are outwardly normal. Because they possess gonads, it is possible for these individuals to become parents, but only if they can find another woman to bear the child. The gene sequence also significantly reduces—by some five years—the life expectancy of those who are born with it.[2] The other embryo (Embryo A) does not have this sequence of genes.
>
> Do the parents have good reason to choose one embryo over the other? Which embryo should they choose?

Wherever I have presented this scenario and the accompanying questions, an overwhelming majority of the audience, in both philosophical and popular contexts, affirms that the parents do indeed have "good reason" to choose Embryo A.[3] A slightly smaller—but nevertheless overwhelming—majority are willing, when prompted, to agree that the parents are indeed "obligated" to make this choice.

Of those who dissent from the first majority opinion, a significant percentage do so out of the self-avowed conviction that the absence of uterus in a woman is not a disease or disorder. Although I have a good deal of sympathy with the feminist concerns about the social pressures on women to become mothers that often motivate this response, the high degree of public support for funding of IVF and other programs for treating infertility suggests that many people *do* believe that the capacity to bear children is part of normal health in a premenopausal woman. In most medical settings, a diagnosis of infertility in a young woman *would* ground a case for the use of medical resources to try to overcome it. Medical information about MRKH advises that many individuals diagnosed with the condition will experience grief and profound psychological distress when they realize that they will not be able to bear children (Morcel et al. 2007). Few parents would think that they did not have strong reasons to avoid or remove an environmental hazard that otherwise would result in a young girl needing to have a hysterectomy. Although the cultural politics of campaigns for funding for infertility treatment programs may sometimes have sexist elements and although such campaigns may impact negatively on social stereotypes pertaining to women, there is no *necessary* connection between the desire to ensure that women are able to have children *if they wish to* and the idea that women who choose not to do so are any "less" women (Warren 1988).

In any case, regardless of one's intuitions about the relationship between infertility and health, the loss of life expectancy involved in MRKH is non-negligible. In other circumstances, if scientists could prevent a person's life being shortened by five years, they would consider it a tremendous achievement. Considerations of life expectancy alone, then, suggest that the parents have good reason to choose Embryo A.

Those who dissent from the claim that the parents would be *obligated* to choose Embryo A, typically do so for one of two reasons. They may hold that despite the shorter life expectancy and reduced reproductive options associated with it, MRKH is not a "serious" condition—perhaps because they also hold that infertility is not a disease condition—and as such the reasons to select against it fall short of establishing an obligation to do so. Alternatively, they may hold that because the person who will develop from Embryo B will still have a "life worth living" this person will not be harmed by a decision to bring her into existence and therefore that it is permissable to make this choice, even if there are good reasons for preferring Embryo A (Feinberg 1987). This latter thought is, of course,

especially prevalent amongst philosophical audiences who have been exposed to Derek Parfit and the "non-identity problem" (Brock 1995; Parfit 1984).

I will have (much) more to say about the "non-identity problem" and its implications for choices of this sort later. At this point, however, I will note the role played by intuitions about "normal human capacities" in underpinning the belief that MRKH is not a "serious" condition. The most natural way to understand the claim that this condition is not serious is by comparing the capacities of a person who has the condition with the capacities of a normal person. If a person with a condition would be seriously impaired relative to a normal person, then the condition is "serious." Any "absolute" conception of a decent minimum of capacities, below which a person may be said to be suffering from a serious condition, risks being open to the accusation of arbitrariness. That is to say, the question will arise as to why this particular set of capacities, of all the capacities that might be possessed by a human being, including those that might be possessed by an "enhanced" human being, should be the ones accepted as a decent minimum. There needs to be some independent standard by which to justify any account of what is acceptable, and it is difficult to know what else but a conception of normal human capacities could play this role. Thus, if one abandons the idea that a conception of the capacities of a normal human body has a key role to play in determining the ethics of decisions about shaping future persons—as the arguments (and authors) previously surveyed suggest—it is hard to see how to justify the position that this particular condition is not "serious."[4]

Of course, we should be extremely cautious about settling important ethical questions through this type of polling, and I am not under any illusions that I have done so here. Instead, I offer these accounts as *prima facie* evidence only that many people do have strong intuitions about the choice one should make in this case.

Current philosophical thinking regarding how to make decisions about shaping future lives also strongly supports choosing Embryo A. Two considerations, which are widely held to be crucial in making such decisions, argue in favor of Embryo A. The person who would develop from Embryo A has both a higher expected welfare and a significantly more "open future" (Feinberg 1980) than the person who would develop from Embryo B.

If each extra year of human life includes opportunities to accumulate those things that make a human life "go well"—be they pleasurable ex-

periences, satisfied preferences, objective goods, or some other measure—then Embryo A's greater life expectancy means that the person who will develop from it will have a higher expected welfare. The expectation of five years of extra life also contributes significantly to the person who will develop from Embryo A's having a substantially more "open" future than the person who will develop from Embryo B. The person Embryo A will become will be able to pursue longer-term projects than the person Embryo B will become; she will also be able to pursue more projects over the course of her life. Of course, any plausible account of what an open future consists in will refer to the size of the available range of *meaningful* or *significant* options and not merely to the number of options available to a person (Dworkin 1988, pp. 62–81). However, Embryo A also has a clear advantage over Embryo B in this regard. There is a significant life option—choosing to become pregnant—that is available to the person who will develop from Embryo A, which is not available to the person who will develop from Embryo B. Again, the high level of public support for medical treatments to allow women to become pregnant is compelling evidence that many people do believe that this is a valuable option, which contributes to the openness of futures. Since the person who will develop from Embryo A will have all the options available to the person who will develop from Embryo B plus this further valuable option, she will have a significantly more open future.

If this is all the information available to the parents, then it seems they would have good reason to choose Embryo A over Embryo B. Indeed, it seems that they would need to provide some justification for choosing Embryo B.

It does not yet follow, however, that it would be *impermissible* for the parents in Scenario 1 to choose Embryo B. Whether one draws this further conclusion will depend on how one understands the relationship between reason and obligation in non-person-affecting cases and also (perhaps) on one's assessment of the seriousness of the condition suffered by Embryo B. Note, however, that "folk intuitions" about the ethics of conception suggest that there *are* some obligations in relation to choices between persons, as does much of the literature about the ethics of shaping future persons (Brock 1995, pp. 270–71; Harris 2007, pp. 88–90; Parfit 1984, pp. 358–71; Glover 2001). One need not believe that there is always an obligation to do what there is most reason to do in non-person-affecting cases in order to conclude that one is obligated to bring a healthy child into the world instead of one with a serious disorder in circumstances

where one could easily do so. MRKH arguably *is* sufficiently serious a condition to trigger such an obligation.

I have offered a lengthy explanation and defense of the conclusion that there is good reason to prefer the birth of a normal girl rather than a girl with MRKH because I want to anticipate and avert disputes about this initial intuition that may be prompted by the argument later in the paper. However, at this point I shall re-emphasize how uncontroversial a conclusion this is: when facing a choice between bringing a child suffering from a significant genetic disorder into the world or a child without this condition, parents have a strong moral reason to prefer the child without the condition.

Now I shall establish the central problematic around which this paper is structured by describing *another* hypothetical scenario. This scenario strongly resembles the previous one, except that the name of the syndrome has been altered slightly and that one further subtlety, which will become obvious later, has been introduced.

Scenario 2

> A couple have conceived two embryos using IVF and have used PGD to find out some information about each embryo. One of the embryos (Embryo B) has a sequence of genes that is strongly associated with May*be*-Ro*tik*ansky-K*a*ster-Hau*b*er syndrome. Children with this gene sequence are born without a uterus, although their genitalia and other secondary sexual characteristics are outwardly normal. Because they possess gonads, it is possible for these individuals to become parents, but only if they can find another person to bear the child. The gene sequence also significantly reduces—by some five years—the life expectancy of those who are born with it. The other embryo (Embryo A) does not have this sequence of genes.
>
> Do the couple have good reason to choose one embryo over the other? Which embryo should they choose?

Although audiences are often—rightly—suspicious of what they are committing themselves to in responses to this example, the obvious homologies between Scenario 1 and Scenario 2 do produce the same sorts of responses to this, as to the preceding, scenario. The vast majority of audience members acknowledge that the parents have good reason to choose Embryo A. A smaller, but still large majority, affirm that the parents are *obligated* to choose Embryo A.

The philosophical considerations already surveyed also support at least the first, and arguably the second, of these conclusions. Embryo A has

both a higher expected welfare and a significantly more open future than Embryo B. If this is all the information available to the parents, then it seems as though they have good reason to choose Embryo A over Embryo B. Indeed, it seems that they would need to provide some justification for choosing Embryo B. Furthermore, as far as any *obligation* to select Embryo A is concerned, it appears that the parents are obligated—or not—precisely to the same degree as they were in the previous scenario.

Of course, May*be*-Ro*tik*ansky-K*a*ster-Hau*b*er syndrome is "maleness."[5] If the parents have good reasons to select Embryo A, it seems as though they have good reason to choose a female child. If the parents are obligated to select Embryo A, then they are obligated to have a girl child. It seems that there are reasons to avoid the birth of male children, which are precisely as strong as the reasons to avoid the birth of female children suffering from a serious medical disorder, such as MRKH.

If one is inclined to recoil at this point, it is, I think, because of the strong intuition that maleness *is not a deficit*, but instead part of normal human variation. Scenario 2 involves a choice between two normal embryos, a normal male embryo and a normal female embryo; consequently, there is no reason to prefer one or the other. In Scenario 1, on the other hand, the choice is between a normal embryo and an embryo with a serious genetic disorder and there is good reason to prefer the normal embryo. Thus, intuitions about what is normal, and about the reasons—or rather, lack of reasons—to alter what is normal, are playing a crucial role here. However, the idea that the normal capacities of human beings should be normatively significant in this way is precisely what is threatened in contemporary bioethics.

THE "PERSON AFFECTING" CASE

Thus far, I have discussed examples that involve choosing between embryos. It might be argued that no obligations arise from the interests of the future child, as long as the child will have a life worth living, because the "non-identity problem" means that children cannot be harmed by a decision that brings them into existence (Brock 1995; Parfit 1984, Ch. 16; Glover 2006, p. 50; Savulescu 2002). Since no harm is done whichever choice one makes, it is permissible to choose either embryo.

However, it is possible to illustrate the perverse consequences of a making choices about future human beings in the absence of an account of normal human capacities in a context that is "person affecting" and consequently does not raise the non-identity problem. Imagine . . .

Scenario 3

> A couple are told that they have produced only one viable embryo and that this embryo has the gene sequence associated with "MRKH." Fortunately—they are informed by the attending clinicians—a safe and low-cost intervention involving recombinant DNA technology has recently been developed, which can entirely mitigate the effects of this condition. If they choose to employ it, this procedure will significantly extend the life of their child and also ensure that their child will be capable of bearing children.
>
> What should the parents do?

If "MRKH" is Mayer-Rokitansky-Küster-Hauser syndrome, then the parents arguably are *obligated* to provide the treatment for their embryo, as a failure to do so will leave their child with a significantly lowered expected welfare and a less open future (Harris 1993, pp. 182–84). Certainly one would harshly judge parents who fail to treat a disease condition in their daughter, acquired after birth, that would result in an expected loss of five years of her life and would require her womb to be removed.

What if "MRKH" is May*be*-Ro*tik*ansky-K*a*ster-Hau*b*er syndrome? As described, the impact of the condition on the life prospects of the future child is precisely the same. Unless one is willing to hold that whether a set of capacities is normal is relevant to the reasons one has to alter them, I do not see how it is possible to avoid the conclusion that the parents are still obligated to proceed with the treatment; that is to say, they are obligated to ensure that their child is born with the capacities of a normal woman.[6] In this scenario, there can be no recourse to the non-identity problem to avoid this provocative conclusion.[7]

Of course, for the moment, any conclusions reached about this person-affecting case are, for the most part, of theoretical interest only because the technology involved is hypothetical. Nevertheless, the conclusion that there is an obligation to treat male embryos for their reproductive and longevity deficits is of significant theoretical interest insofar as I think that most readers will find this an unpalatable conclusion. Once more, ideas about the normal capacities of sexed human bodies play a crucial role in determining one's intuitions about the example. If the "genetic condition" in Scenario 3 is Mayer-Rokitansky-Küster-Hauser syndrome, then the procedure is a treatment for a disorder and one is obligated to provide it. If the genetic condition is maleness, on the other hand, then the "treatment" is clearly an enhancement; moreover, most people will deny that the parents are obligated to intervene in this case. The strength of the reasons to proceed with the intervention depend on the sex of the

embryo, which is to say they depend on the normal capacities of its sex.

In this person-affecting case it is easy to see the relationship between the idea of normal human capacities and the therapy/enhancement distinction. However, intuitions about the relative strengths of the reasons to pursue therapy or enhancement also play a role in determining one's responses to Scenarios 1 and 2, although the non-person-affecting nature of the choices involved obscures it in those cases. The strong intuition that the parents should select against (the real) MRKH in Scenario 1 is determined by the logic of therapy. In Scenario 2, the argument that there is good reason to prefer female embryos over male embryos participates in the logic of enhancement and consequently is much less compelling. Again, an account of the normal capacities of each sex underpins a distinction between therapy and enhancement.

Before leaving this example, it is worth noting that, in the context of debates about resource allocation in healthcare and medical research, the implication that there would be an obligation to provide the capacities of female children to male children if it became possible to do so *does* have some practical import because it suggests that there is some obligation to *develop* the technology. In the absence of the distinction between therapy and enhancement, it would appear that medical science should respond to men's lack of wombs in the same way as it responds to the causes of infertility in women (Sparrow 2008). Similarly, medical science should respond to men's lower life expectancy, relative to women, with the same urgency as it would to a condition that shortened the lives of women by five years. There is a strong case, then, for investing significant amounts of resources into medical research directed toward the amelioration of these disadvantages. Depending on what one thinks about people's right to healthcare, society may even be obligated to do so.

However, even if there is an obligation to pursue it, a technology to transform the reproductive capacities of men in this way is obviously a long way off, whereas the technology involved in the two-embryo case—PGD—is readily available now. For the remainder of the paper, I therefore concentrate on the non-person-affecting case.

PROBLEMATIC EXPLANATIONS

In this section, I address a number of possible objections to the idea that there are compelling reasons to select girl children and argue that, in the absence of the notion of a normal human body, the only ways to avoid that conclusion have equally counterintuitive implications—i.e., that

there is good reason to prefer male children or, alternatively, no reason to avoid the birth of children with the genetic predisposition to MRKH described in Scenario 1.

There Are Other Sex-Related Biological Differences

The three foregoing scenarios involve choices described "all other things being equal." However, it might be objected that there are good reasons to think that all other things are *not* equal in the case of choosing between a male and a female embryo and that other differences between the sexes should be included in the description of Scenario 2. Men are not just short-lived women without wombs and there are arguably reasons to think that Embryo B in Scenario 2 will have genes for capacities that Embryo B in Scenario 1 lacks. These capacities might be enough to explain why intuitions differ in Scenarios 1 and 2 and to prevent it being the case that parents have reason to select girl children.

The history of claims about differences in the capacities of the sexes is not a happy one. All too often in the past biomedical science has "discovered" that women are unable—or unsuited—to do what men would prefer they did not. One would be well advised, therefore, to be cautious about claims that there are some things—other than a narrow range activities around reproduction and the sex act—that men can do that women cannot. Of course, it is possible, perhaps even likely, that there are further biological differences between the sexes beyond the difference in reproductive capacities and life expectancy I have specified in Scenario 2. What is much less obvious, though, is that these differences mean that there is a significant range of meaningful life options that are available to men as a result of their biology that are not available to women as a result of theirs.

The "advantage" associated with being male that is most often mentioned in this context is "greater physical strength." Those born male may well be better able to realize life plans involving lifting heavy objects—and perhaps also other athletic achievements—than women. Yet such life plans are not unavailable to women unless described with reference to particular—and suspiciously arbitrary—goals (dead lifting 455 kg) rather than the goods internal to the practice of attempting to realize these sorts of goals (striving, grunting, and heaving). Moreover, it is difficult to believe that having a better chance of success in pursuing such essentially aesthetic projects could plausibly outweigh the benefits of five years of extra expected life plus the capacity to bear a child, which women have. If physical strength is the only sex difference other than those already

acknowledged in the foregoing scenarios then, on any plausible account of the relative merits of different option sets, the opportunities available to women will be superior.

A more promising—but also much more controversial—argument for the existence of a distinctive set of life options for men might be made on the basis of a claim about "brain sex" (Hoag 2008). If men and women have subtly different cognitive capacities and psychological dispositions, these might establish that they have different prospects of success when pursuing various life options. However, again, these differences—if they exist—seem likely to consist in matters of degree rather than in the existence of options that are unique to men. Again, it is debatable whether they are worth as much as a longer life expectancy and the opportunity to give birth. Finally, the empirical premise required here—"brain sex"—is extremely controversial, and its introduction in this context seems more than a little *post hoc*. There are few, if any, other contexts in which serious intellectuals would argue that innate sex differences mean that men are capable of succeeding in meaningful projects where women are not.

Let me concede though, for argument's sake, that there might be valuable options available to men that are not available to women, which compensate for or outweigh the greater extent of women's lives and the valuable choice (pregnancy and birth) that is open to them and not to men. Even if this is true, it is highly unlikely to establish that there is no reason to prefer male or female embryos. Once one starts down the path of evaluating the relative merits of different capacities and sets of options, a finding that those available to men and women are of precisely equal worth is extremely improbable. The strong intuition that the capacities of men and women are "equally good" is in reality a conviction that they are both "good enough" and itself relies on the idea that both sexes are normal.

It is, indeed, implausible to think that things as complex as "futures," consisting in paired sets of options and chances of succeeding in each, can always be compared to one another and ranked according to how "open" they are. Although such comparisons may be possible in many cases, it seems that in other cases neither of two sets of options may be said to be larger than the other—instead they simply may be different and incommensurable. In such cases, one may conclude that neither of the two option sets is better or worse than the other. It is this thought that explains the intuition that women do not have more open futures than men. Col-

loquially, this could be expressed by saying that the options available to men and women are "equally good."

However, importantly, it is *not* plausible to hold that *all* sets of options are "equally good" in this sense, as this would void arguments from the openness of futures altogether. Instead, option sets must meet some ill-defined threshold before they are "good enough" to be judged "equally good." As I already suggested, it seems that this threshold should be determined with reference to a conception of normal human capacities.

There is a further, more profound, difficulty with insisting that the capacities of men are equally good as those of women because they are "good enough," namely, it then seems necessary to revise the intuitions evoked in Scenario 1. Why should it be the case that only sex difference establishes incommensurable differences in life options that prevent there being reason to choose one embryo or another? Other genetic variations will also subtly alter the life options available to individuals. For instance, young women growing up with MRKH are likely to have a distinctive set of experiences, around their diagnosis and subsequent responses to it, which in turn may subtly shape them so as to render them better able to realize some life plans and less able to realize others. If the options available to men are good enough to refrain from comparing them to those of women then surely so too should be the options available to women with MRKH?

It is tempting, here, to respond that the futures available to men include options unavailable to women whereas those available to individuals with MRKH do not include options unavailable to women without MRKH. This (empirical) claim might itself be contested on the grounds that MRKH should not be understood as producing only deficits in relation to normal female capacities—perhaps the fact that pregnancy is not an option for women with MRKH means that they are better able make use of other female traits to pursue some projects than are "normal" women. Moreover, there are relevant cases, such as deafness or Aspberger's syndrome, where it is plausible to hold that genomic variations *do* generate valuable life options that are not available to other individuals, since the existence of the condition typically correlates with the development of capacities *not* possessed by species-typical individuals (Rettenbach, Diller, and Sireteanu 1999; Baron-Cohen 2000). However, the real problem with this rejoinder is that it renders the case for incommensurability contingent on a comparison with normal human capacities. That is, it measures the capacities of individuals against the capacities of normal women and then,

after assessing that these individuals have access to valuable options that normal women do not, declares their option sets to be incommensurable in comparison with those of normal women and therefore equally as good. It is far from clear that one can individuate capacities without comparing the options they make available, as is required here in order for it to be possible that option sets could be incommensurable while capacities are commensurable. Consequently, it is hard to avoid the impression that the claim about incommensurability is being made on an *ad hoc* basis to make room for the selection of male embryos. Regardless, without an account of the capacities of a normal woman, it is not be possible to distinguish between cases where futures should be said to be incommensurable with those of a normal woman and cases where they should not. This way of trying to rescue the equality of the options available to the sexes therefore surreptitiously makes use of the distinction between therapy and enhancement.

Postulating further biological differences between women and men may invalidate the analogy between Scenarios 1 and 2 as I have presented them here. It also will complicate the process of determining which of men or women have higher expected welfare or a more open future at birth. It may even lead to the conclusion that parents should choose male children in preference to female children. However, without drawing on an account of normal human (female) capacities, it will *not* establish that there is no reason to prefer children of one sex or the other when it comes to the question of what sort of people parents should bring into the world.

Sexism Means That it is Better to Be Male

If one cannot explain why there is no reason to prefer one or the other of the sexes on the basis of the biological capacities of men and women, perhaps social factors are relevant? The existence of pervasive and profound institutional sexism in all societies around the world means that male children are likely to have a significantly more open future and higher expected welfare than female children as a result of these social factors.

It is important to observe that, if this strategy of argument works, it works too well. Given the prevalence and impact of sexism, it would seem that parents "have good reason to," or perhaps "are obligated to," choose male children, if one holds that they should take social factors into account when making decisions about what sort of children to bring into the world. It seems highly unlikely that the social advantages of being a man should exactly equal the biological disadvantages. Thus, this

strategy will not succeed in denying that parents have reasons to choose one sex or the other—although it may alter the conclusion about which sex they should choose.

However, the idea that injustice can provide good reason to bring certain sorts of people into the world is extremely controversial, as illustrated by the following scenario.

Scenario 4

> A couple have conceived two embryos using IVF and have used PGD to find out some information about each embryo. One of the embryos (Embryo B) has a sequence of genes associated with being born with dark skin. The other embryo (Embryo A) has a sequence of genes associated with being born with white skin. In the racist society in which the couple live, children born with white skin have 110 percent of the life expectancy of children born with dark skin. The couple want to implant one embryo into the woman's womb in order to have a child
>
> Do the parents have good reason to choose one embryo over the other? Which embryo should they choose?

I have presented this scenario to the same audiences to which I have presented the three previous scenarios. In this case, however, their responses differ dramatically. The vast majority of the audience typically deny that the parents have good reason in this case to select one embryo over the other. A larger—indeed now overwhelmingly large—majority denies that the parents are obligated to choose Embryo A. Most people are reluctant to allow that the existence of bigotry and discrimination provides a reason to prefer children who will benefit from these injustices.

Of course, the same caveat, noted previously, about the philosophical significance of such "folk intuitions" also applies here. Yet philosophers are typically equally reluctant to acknowledge that the existence of oppressive social circumstances can establish moral reasons for parents to select children of a particular sort. There are at least two reasons for this reluctance.

First, as with laypersons, many philosophers worry that acknowledging that unjust social institutions can give parents morally compelling reasons to choose certain sorts of children would concede too much to bigotry and those who promulgate it. Contemporary debates around PGD and gene therapy are taking place in the shadow of the evils committed by the Nazis in the name of improving human beings. Participants in these debates are understandably nervous about endorsing the pursuit of ide-

als of perfection based on nothing more than the prejudices of the times (Wikler 1999).

Moreover, when it comes to the welfare of future persons, the argumentative gap between acknowledging the existence of morally compelling reasons and the justification of law is small. Insofar as the welfare of children is a proper concern of the community, the community has some grounds to legislate to encourage—or even to require—parents to act in certain ways to protect or enhance the welfare of their children. The fact that decisions about what sorts of people to bring into the world will not harm or violate the rights of those selected is some comfort here. It might be argued that non-person-affecting reasons are never sufficient to justify restrictions on individual liberty (Savulescu 2002; Harris 2007, pp. 72–85, 94–95). Yet it is far from obvious why that should be the case; morally compelling reasons related to the welfare of others look like the sort of reasons that might justify the use of state power.[8] Furthermore, although the birth of children who have reduced welfare as result of social conditions does not involve harm to these children themselves, it does impose costs on other members of the community, insofar as they are required to support taxation to improve the welfare of the worst off and because social inequality impacts on the welfare of all members of the unequal societies. The fact that parents' failure to act in ways that would improve the welfare of their offspring would impose such costs on other members of the community may well justify legislation to ensure that parents act as they should (Sparrow 2007). Thus, if one *does* allow that parents should take the likely impact of the social environment on the welfare of their children into account in choosing what sort of children to have, then the fact that their choices are "non-person affecting" is *not* sufficient to establish that society would not be justified in *requiring* them to do so. The second reason why (some) philosophers are reluctant to endorse the conclusion that parents have good reason to select children favored by the prevailing social conditions is, therefore, the recognition that doing so may have further (repugnant) eugenic implications.

The idea that parents should ignore social determinants of the life prospects of individuals when making decisions about which people to bring into the world does, however, call into question one of the lines of reasoning set out previously as to why female children should be preferentially chosen.

The fact that life expectancies of both men and women have changed greatly during the last 150 years as a result of changes in public health,

lifestyle, and medical care is convincing evidence that at least some of the differences in the life expectancy of men and women are the result of social factors. It is arguable that some of the reduction in the life expectancy of men is attributable to factors that are themselves a product of (sexist) social relationships between the sexes. For instance, if men receive preferential treatment when it comes to access to high social status jobs and there are significant negative health impacts associated with these jobs, then this will tend to reduce the life expectancy of men (Cameron and Bernardes 1998). Similarly, where it exists, the male violence that enforces patriarchy also exacts a toll on men (Stanistreet, Bambra, and Scott-Samuel 2005). The intuition explored here, that one should discount reasons arising from injustice, suggests that considerations of reduced male life expectancy in these circumstances should not determine parental choices in relation to sex selection.

However, although some of the difference in life expectancy between men and women is undoubtedly the result of injustice, it also seems likely that some of it results from biological differences between the sexes that will lead to women having a higher life expectancy than men across a range of environments (Institute of Medicine Committee on Understanding the Biology of Sex and Gender Differences 2001). Thus, it seems that the argument that women have a higher expected welfare and more open future by virtue of having a longer life expectancy retains some—albeit difficult to quantify—force. If it turns out that the difference in life expectancy between male and female embryos is solely a result of social factors, then any argument for selecting female over male embryos will have to rely only upon the more open future available to women due to their superior reproductive capacities.

How to factor considerations relating to the impact of social institutions and environments on the life prospects of future individuals into decision making about what sort of people to bring into the world is, I think, the most difficult question surrounding the ethics of such decisions. Insofar as parents should be guided by a concern for the well-being of those they bring into the world and given that the social environment into which children are born has a large impact on their well-being, then it seems one should take social factors into account. Yet concerns about the eugenic implications of doing so seem equally pressing. I cannot hope to resolve this issue here. If one thinks parents should take unjust social relations into account when deciding what sort of people to bring into the world, then one must conclude that they have compelling reason to choose only

male children. For the purposes of the current argument, this observation serves to show that recourse to the social impact of sexism at best replaces one problematic conclusion with another—equally problematic—one.

Aggregate Impacts?

Another set of objections to the idea that there are good reasons to choose female children refer to the aggregate impact of people acting on the basis of the considerations discussed above. If everyone selected girl children, then the circumstances in which these children would grow up would be very different to the world today. A world consisting only of women might be a world with reduced levels of important goods associated with sexual diversity. A large reduction in the number of men might also impact the life prospects of individual women, in particular by rendering it impossible for heterosexual women to find a mate. Finally, one might worry about the reproduction of the species in such a world. It therefore might be argued that one or more of these aggregate effects establish countervailing reasons sufficient to deny that parents have reason to select one sex or the other in making decisions about sex selection.

I am inclined to agree that these aggregate impacts are significant and go a good way toward explaining what would be wrong with pursuing a *policy* of selecting only female children. However, I also think that the willingness to rethink the reasons bearing on parents on these grounds surreptitiously draws on the idea that maleness is normal.

There are three reasons to doubt that these concerns will succeed in establishing that the dilemma I have highlighted here does not exist without making reference to the distinction between therapy and enhancement.

First, the force of such arguments from aggregate effect depends on the costs to individuals of acting so as to avoid bringing them about. Requiring individuals to take on burdens for the sake of some social or collective good, such as diversity or the prospects of the species, is precisely the sort of "eugenic" argument that bioethicists have been at pains to avoid endorsing elsewhere in debates about genetic interventions.[9] The existence of women with Mayer-Rokitansky-Küster-Hauser syndrome undoubtedly contributes to "diversity"—and arguably contributes to other substantial goods, such as the availability of opportunities for learning, sympathy, and compassion—yet one would be reluctant to conclude that parents should not select against MRKH for the sake of maintaining these social goods. If one remains fully conscious of the reduction in life expectancy and openness of future associated with being born male rather than female, then

one should be equally reluctant to conclude that parents should not select against maleness. It is the intuition that—because maleness is a normal part of human variation—no burden is imposed on those born male (or their parents) in pursuing a policy that results in male children being born that explains the willingness to countenance arguments from aggregate effects as relevant to the reasons bearing on parents in this case.

Second, to the extent that one thinks the aggregate effects of obligations bearing on parents are important, one must negotiate a collective action problem. Although it is true that bringing about the hypothesized aggregate effects will impact negatively on future persons, it is not true that (individual) parents' choices will bring about these effects. Thus even if one thinks that parents have good reason to prefer to avoid an aggregate effect, it does not follow that they should not make the choice that—if universalised—would bring the effect about. Although policymakers may have good reason to prohibit sex selection on the basis of its aggregate effects, couples still will have good reason to choose children of the sex that allows them the highest expected welfare and most open future.[10] Again, it is one thing to discount these reasons when the "suboptimal" choice involves the choice of a normal child; it is arguably quite another if one is unwilling to acknowledge any distinction between therapy and enhancement.

Finally, these sorts of objections are vulnerable to the response that there are alternative ways of avoiding the negative consequences associated with the aggregate impact, which do not require some individuals to be born with lower welfare and fewer life options than others. The survival of the species in an all-female world could be ensured by developing stem cell technologies to produce sperm from somatic cells, thereby allowing women to "father" as well as bear children (Aldhous 2008). The negative implications of altered sex ratios for the ability of heterosexual women to find partners could be avoided by selecting for—or engineering, or otherwise shaping—girl children to be same-sex attracted. If sexual diversity *per se* is a good, then "social engineers" might try to produce a number of distinct variations—e.g., preference for redheads, preference for forceful women, preference for shorter women, and so on—in the sexual preferences of same-sex attracted women. If these suggestions seem *outré*, it is worth remembering that the literature around human enhancement, which has challenged the therapy/enhancement distinction, regularly considers more outlandish and less feasible interventions into human nature than these.[11]

The aggregate effects of acknowledging that there are good reasons to select female children are indeed confronting. However, both the sense of the losses involved in bringing about a world without men and the willingness to discount the reasons parents have for preferring female children on the basis of aggregate impacts ultimately rest on the conviction that maleness is normal and that selection against maleness is not therapy.

DEFENDING DIMORPHISM

My survey of these various objections has shown that it is possible to resist the conclusion that if one abandons the therapy/enhancement distinction there is good reason to select female children, but only at the price of concluding that there is good reason to select male children instead or that there is no reason to select against MRKH in Scenario 1. The conclusion that good reason exists to select male children in preference to female children is no less counterintuitive than the conclusion that good reason exists to select female children in preference to male children. Moreover, the most plausible argument against selection in favor of girl children, which proceeds via the impact of sexism, has further morally repugnant implications. The conclusion that no reason exists to select against MRKH is superficially attractive if one thinks of it as reflecting an acceptance of diversity, but it comes at an unfeasibly high cost to intuitions about the reasons to select against disease conditions that will lower the welfare and restrict the opportunity of those born with them. Thus, it seems bioethicists are confronted with the horns of a dilemma. Either they admit that there are strong reasons to bring only children of one sex—most plausibly, female children—into the world or they admit that both sexes are normal and acknowledge a distinction between therapy and enhancement.

My aim in this paper has been to demonstrate the force and currency of this dilemma. No doubt some philosophers will be willing to seize the less familiar horn and embrace the conclusion that strong reasons exist to prefer one sex or the other. Perhaps the most challenging implication of my analysis is that it reveals just how profound the tension is between the maximizing rationality characteristic of most contemporary—especially utilitarian—bioethics and the fact of sexual difference. The logic of trying to improve human beings without limit points toward a single sex species (Sparrow 2010).

I think that one instead should defend dimorphism. In order to avoid the paradoxical and unappealing conclusions I have outlined, philosophers need to reconsider the current trend to abandon the therapy/enhancement

distinction. That is, they should reaffirm the folk intuitions I surveyed at the outset of this paper and insist on a distinction between selecting against (the real) MRKH and selecting against maleness. MRKH is a disorder, maleness is not, and the reasons to prevent disease and disorder are significantly stronger than the reasons to enhance normal capacities. The relevant standard against which to measure proposed interventions is a conception of normal human capacities that is bifurcated and consists in the capacities of a normal man *and* the capacities of a normal woman. Intuitions about the medical treatment appropriate to different people are therefore deeply infused with ideas about (biological) sex.[12] As a consequence, some interventions that would constitute enhancement of one sex are therapies in the other. This way of thinking about the ethics of shaping future persons, then, allows that the distinction between therapy and enhancement properly plays a crucial role in thinking about this issue.

There is insufficient space here for me to defend or motivate this choice at length; for the purposes of the current paper its plausibility must rest, to a large degree, on the unattractiveness of the alternatives. However, I believe that this choice also may be defended by referring to certain natural facts about the human species and to the way in which these facts establish a background context against which human actions have their meaning. *Homo sapiens* is a dimorphic species, which reproduces sexually, and these facts in turn condition and give sense to many of our experiences and our projects, including what are for many people their most intimate and engaging projects. Abandoning dimorphism therefore would involve a tremendous transformation of the human life-world. This is not to deny that a different set of experiences and projects would become available and would take on significance in a world in which human beings were no longer divided into men and women. Furthermore, there may be no independent, "God's eye" perspective that would permit evaluation of the relative merits of these two very different worlds. Thus, it might well be true that, if humans were to become fully accustomed to a single-sex world, individuals would not regret the loss of dimorphism. Yet, insofar as existing humans do not identify with and value the choices that might become available in a world without sex, and we *do* identify with and value our existing choice set, we have reason to defend dimorphism (Glover 2006, p. 97).

Obviously, more needs to be said to establish that the desire to defend the meanings of those human choices that are conditioned by the fact of dimorphism justifies abandoning the pursuit of enhancements, especially

insofar as this is likely to require restricting the liberty of those individuals who would like to pursue enhancements, or programs of research, which, in the long term, would contribute to the erosion of sexual dimorphism. This is a larger task than I can attempt in this paper (but see, Sandel 2007; McKibben 2003; Parens 1995; Habermas 2003). However, I have sketched the general direction of the argument here in order to show that there are, plausibly, independent grounds upon which to motivate the defense of dimorphism.

Establishing that the costs of giving up the therapy/enhancement distinction are too high, as I have argued here, does not in itself do anything to meet the challenges involved in setting out that distinction that I surveyed at the outset of my discussion. Delineating the distinction between therapy and enhancement will require a plausible account of normal human capacities that is appropriately sensitive to the range of natural variation among human beings, the impact of these variations on welfare, the biology of the species, and the extent to which intuitions about the normal are shaped by technology and culture. Beyond insisting that ideas about "the normal" should allow for sexual dimorphism, I have said nothing here to offer such an account. This urgent philosophical task also remains to be addressed in further research. Until such an account exists there is no way to explain why there is no good reason to use sex selection technologies to make the next generation "better than men" by making sure that they are female.

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NOTES

1. The problem of giving an account of "normal" human capacities has been most thoroughly investigated in the literature about the definition of disease. For a useful introduction to this literature, see Rachel Cooper (2002). (See also, Bostrom and Roache 2008; Harris 2007, pp. 19–32, 44–45, 91–93; Agar 2004, pp. 78–81; Glover 2006, pp. 6–14.)
2. Given the range of skeletal and other abnormalities that may occur in MRKH, it is plausible to assume a lowered—although not radically so—life expectancy on the basis of a diagnosis of a gene sequence associated with the disorder. Regardless, this aspect of the scenario is stipulated for reasons

that will become obvious later in the discussion.

3. I have presented versions of this paper to: the 2008 Australasian Association of Philosophy Conference; the Centre for Applied Philosophy and Public Ethics, University of Melbourne; the Centre for Applied Philosophy and Public Ethics, Australian National University; the James Martin Advanced Research Seminar, University of Oxford; the Philosophy Programme, Latrobe University; the University of Tokyo Center for Biomedical Ethics and Law; and the Centre for Social Ethics and Policy, University of Manchester. My analysis of typical intuitions in response to the various examples in the paper—and the motivations for these responses—is based on the extensive discussions that took place during and after these seminars.
4. John Harris (1993, p. 180; 2007, pp. 92–93) has argued that disabling conditions—and I take it that what I here intend by "serious" conditions are a subset of this larger category—should be identified as those that it would be negligent not to treat. He explicitly contrasts his account with a concern for normal human capacities (Harris 1993, p. 181), arguing that there will be times when it would be negligent not to treat a normal person (Harris 2001). The obvious difficulty with Harris's account arises when it comes to providing an account of when physician's are obligated to intervene—or, when it would be negligent not to treat a condition—that is genuinely independent of intuitions about normal human capacities. A consequence of the argument of my paper is that this difficulty is more profound than Harris acknowledges, as will become clear in what follows. For the moment, it will serve to note that MRKH is clearly a serious condition according to Harris's criterion: it would be negligent not to treat a woman who presented to an emergency department with an abdominal wound that would result in her not being able to bear children if left untreated.
5. In Australia, in 2008, life expectancy at birth for males was 78.7 years, for females, 83.5 years (Australian Bureau of Statistics 2008).
6. This example helps to elucidate the difficulty posed for John Harris's account by the fact of sexual dimorphism. As I previously noted, Harris arguably is committed to the claim that MRKH is a disabling condition. What, then, should one say on his account about May*be*-Ro*tik*ansky-K*a*ster-Hau*b*er syndrome? Presumably, it would *not* be negligent to fail to treat a man who presented to a hospital emergency department complaining about his lack of a womb. Indeed, Harris (2007, p. 147) explicitly states that gender is a neutral trait and that it is not rational to prefer to be male or female. Yet the only difference between the two different versions of Scenario 3 is whether

the capacities of the embryo are normal or not. Thus, *contra* Harris, it appears that intuitions about normal human capacities do play a crucial role in determining what sorts of conditions it would be negligent not to treat.

7. It might be objected that a genetic modification that changed the sex of an embryo would *not* be person-affecting because such a change would alter who would be born rather than change the properties of the same person. Yet the intervention at issue in this scenario need not involve a chromosomal sex change for male embryos: it might only involve switching on genes involved in the development of a womb and in extending life expectancy. It is, of course, possible to insist that *any* genetic modification is non-person-affecting by advancing a genetic theory of personal identity, in which case Scenario 3 collapses into Scenario 1 or Scenario 2, depending on whether "MRKH" is (the real) MRKH or "maleness." However, the intuition that there are much stronger reasons to proceed with genetic modification in the former case than in the latter remains.
8. Thus, for instance, states routinely restrict the liberty of individuals to pollute the environment on the grounds that such pollution will harm future generations, even though, as Parfit (1984, pp. 361–64) points out, the pollution also will change who will be born and therefore will not result in person-affecting harms.
9. Of course, describing the burdens and those affected by them is difficult because of the non-person-affecting nature of policy in this area. However, at the very least, parents who are required to have children with reduced well-being are burdened by doing so insofar as their own welfare is linked to that of their children.
10. Note that this argument also may be used to contest the intuition that parents should discount the reasons they may have for selecting children who will benefit as a result of widespread racism, sexism, or homophobia. However, insofar as the (in)justice of a policy is partially determined by its historical resonances and its continuity with existing power relations (see Sparrow 2000), the selection of males embryos with the intention that they should benefit from sexism may have a different ethical character than the selection of male embryos for the sake of equal sex ratios.
11. See, for instance, Gregory Stock's (2003) speculations about the possibility of introducing artificial chromosomes into the human genome in order to allow future individuals to choose whether and when to turn on and off particular genes, Lee Silver's (1999, pp. 278–80) advocacy of the pursuit of "radiotelepathy," and the writing of Ingmar Persson and Julian Savulescu (2008).

12. I am not unaware of the powerful and important "intersex" critique of the idea of sexual dimorphism (Fausto-Sterling 2000; Intersex Society of North America 2008; Kessler 1998); an earlier version of this paper considered it at length in a discussion that I now hope to develop further in another context. In this context, I merely wish to observe that nothing follows (yet) from my argument here in relation to the treatment of children who are born intersex. The question of the appropriate course of action to take when children are born intersex needs to be addressed with proper attention to the ethical dilemmas involved in carrying out elective—and often experimental—surgery on infants for the sake (allegedly) of their psychological well-being, the empirical facts about the success of such surgery, and the details of particular cases—a task that is beyond the scope of this paper.

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