
Genetic Enhancement and Parental Obligation

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ABSTRACT: Among moral philosophers, general disapproval of genetic enhancement has in recent years given way to the view that the permissibility of a eugenic policy depends only on its particular features. Buchanan, Brock, Daniels, and Wikler have extensively defended such a view. However, while these authors go so far as to argue that there are conditions under which parents are not only permitted but also obligated to procure genetic treatments for their intended child, they stop short of arguing that there are conditions under which parents are required to procure enhancements. By contrast, David Heyd argues that parents are required to procure treatments or enhancements for their future child, but only if the intervention would not alter the future child's personal identity. In this paper I take the case for genetic enhancement a step further by arguing that there are conditions under which parents are morally required to procure genetic interventions for their intended child, regardless of whether the intervention is a treatment or an enhancement, and regardless of whether it would alter the child's personal identity.

ATTITUDES TOWARD GENETIC ENHANCEMENT have changed markedly in the philosophical literature over the past several decades.¹ Widespread dismissal of the notion of "improving the race" (e.g., Kelves 1985) based on well-justified revulsion at the practices of Nazi and other past eugenicists, together with attempts to justify pre-conceptive choices to produce sub-normal rather than normal children, or normal rather than "superior" ones (e.g., Heyd 1992, Kavka 1981,

¹ I am deeply indebted to Seana Shiffrin for inspiring me to think carefully about the nonconsensual nature of being created, the autonomy-constricting nature of burdens, and for her comments on a very early draft of this paper. I also wish to thank the referees for *Philosophy in the Contemporary World* for their invaluable criticisms.

Adams 1972), have given way to arguments that some sorts of eugenics are at least permissible, and that in any case prospective parents can no longer avoid making decisions that will affect the innate characteristics of their future children (Kitcher 1996). Such approaches neither support nor reject eugenics as a single program. Rather, they presuppose that a eugenic policy's moral status depends on its particular features. To date, Buchanan, Brock, Daniels and Wikler (2000)—to whom I refer below as Brock *et al.*²—have most extensively defended such a view. But while they argue effectively that prospective parents can be *obligated* to procure genetic *treatments* for an intended child, and sometimes are *permitted* to procure *enhancements* for it, they stop short of arguing that there is ever a moral obligation to procure enhancements.³ Given their goal of remaining focused on issues most relevant to public policy debates, this reticence might follow from an understandable reluctance to venture beyond a pluralistic Rawlsian framework, and into the domain of a more specific and comprehensive moral theory. I am under no such constraints here, however. In this paper, on the basis of deontological principles that can supplement Rawls' theory of justice,⁴ I take the pro-enhancement position a step further by arguing that prospective parents are indeed obligated to procure genetic enhancements for their intended children, at least on three conditions. The conditions are that (1) costs to the parents and to others are negligible, (2) the enhancement would likely mitigate some normal burden of life, and (3) the enhancement would not constrict the intended person's autonomy (or create a person with less autonomy than would otherwise be the case). Call these "the negligible cost condition", "the burden mitigation condition", and "the autonomy respecting condition" respectively. Each requires its own essay to be fully elaborated and defended, but I can here offer a few clarifications.

The costs covered by the negligible cost condition include the diminishment of anyone's welfare and the infringement of anyone's rights. This condition may not be necessary (trade-offs may be permissible), but stipulating it here allows me to focus on issues lying outside the domain of social justice, an area already well

² I refer to this work as "Brock *et al.*" both for brevity's sake, and because Brock and Daniels were the main authors of the chapters of most interest here.

³ While Brock *et al.* allow that some genetic enhancements are permissible, including the one that I argue below is obligatory, they endorse the treatment / enhancement distinction as a "rule of thumb" for policy makers, suggesting that treatments should at least be prioritized over enhancements. They align themselves with Rawls' (1993) endorsement of Daniels' (1985) view that "the central moral importance of treating disease... derives from the way that protecting normal functioning contributes to protecting opportunity." (Brock *et al.* 2000, 122)

⁴ Rawls makes clear in his later work that there are issues arising within the family that might have to be addressed by moral principles capable of filling the gaps left for them in a political theory of justice that respects pluralism, although such principles must be consistent with those of social justice. As he puts it, "political principles do not apply directly to its internal life but do impose essential constraints on the family as an institution..." (Rawls 2001, 164). Just as other institutions (such as universities) require more specific ethical rules than the principles of political justice can supply, so the family can require more specific principles that could permissibly be drawn from a variety of comprehensive moral theories. I would add that the fact that membership in a family is nonconsensual underscores the need for a comprehensive moral theory to cover parent-child relations, beyond the contractual theory that may be sufficient for other forms of association.

covered by Brock *et al.*⁵ Future work should deal with how to balance various sorts of cost against the moral considerations discussed below. The burden mitigation condition, on the other hand, reflects a more essential limitation of my position. It recognizes that my argument below does not support a parental obligation to enhance an intended child if doing so would result in the provision of only a “pure benefit”, i.e., one that would not mitigate a normal burden of life. An enhancement that would relieve the superfluous pains we normally suffer on occasion, for instance, would mitigate a normal burden of life, but one that would make normal sensual pleasures even more pleasurable would not. Finally, the autonomy respecting condition is consistent with Feinberg’s (1980) argument that children have a “right to an open future”, but, for reasons that should become clear below, its appropriateness does not depend on all non-compliances being rights violations. It prohibits any enhancement that would result in the creation of a person with fewer rationally desirable life-options, or with less of a cognitive ability to choose between them, than would otherwise have been the case.⁶ For instance, it prohibits enhancements that would make particular occupations harder for the person with the enhanced trait to choose or pursue, even if it would make other occupations easier. Prohibiting such enhancements is supported by considerations of social justice outside the scope of this paper (including their self-defeating nature in a society with fair equality of opportunity), and the value of autonomy is supported by Rawlsian concerns even absent more specific moral principles.⁷ However, when it is motivated only by Rawlsian considerations, I think that it is easy to miss a more fundamental way in which respect for an intended child’s future autonomy relates to parental decision-making in genetic intervention contexts, one that I will sketch out below.

I assume in what follows that while the *treatment / enhancement* distinction is inherently somewhat vague, it can most usefully be analyzed in terms of potential changes to fitness levels relative to some statistical baseline of normal human

⁵ Brock *et al.* do not consider the position I defend here, but rather discuss two related positions. They reject as implausible the position that “it is morally required of parents or others to seek to produce the best children possible” (2000, 162). I also reject this position, but not merely because it is implausible or unconventional. Rather, I reject it because it conflates the question of whether there is a moral duty to *produce* children with the question of whether there is any such duty to *produce the best children one can, for as long as one intends to produce them*. I would answer the first question negatively and the second affirmatively. Brock *et al.*’s own view is that “in the absence of any...conflicting moral considerations, genuinely beneficial enhancements, even if not morally required, would be morally permissible” (162). I agree with this position as far as it goes, but argue below that it does not go far enough.

⁶ Because I am here concerned with the issue of parental obligation, I focus below on an enhancement that seems uncontroversially autonomy-respecting: a better-than-normal immune system. The healthier one is, the more effectively one can pursue one’s goals. But just which enhancements would be autonomy-respecting is an issue that deserves its own forum. Enhancement of cognitive abilities is a particularly interesting and controversial subject. See Brock *et al.* (168), Goering and Kitcher for a variety of views.

⁷ For Rawls, an autonomous person has the “moral powers” necessary to be a full citizen of a just society, including “the capacity to have, to revise, and rationally to pursue a conception of the good” (Rawls 2001, 18-19).

functioning in a given environment.⁸ Note that the *treatment / enhancement* distinction does not precisely track the *decreasing-suffering / increasing-happiness* distinction. Although many treatments alleviate suffering, so would many enhancements. Indeed, the enhancement for which I argue below would likely result directly in the creation of a less suffering or less burdened person, and only secondarily in a more benefited or happier one. Similarly, we can imagine treatments that would result only in a pure benefit for the treated person, rather than in the mitigation of its burdens or suffering. For instance, consider a condition that would prevent the affected person from ever experiencing the pleasure normally associated with orgasm, but cause the person no suffering. Treating this condition would result in a person that would experience more pleasure—but not less suffering—than would otherwise be the case.

II. The Enhancement Scenario

Call the following scenario “E”:

A couple is in an obstetrician’s office. Before them is a Petri dish containing a single egg of the woman’s and a single sperm cell of the man’s. They intend the union of these gametes to result in a zygote that will develop into their first child. The doctor informs the couple that a genetic intervention is available that would modify the gametes’ DNA in such a way as to make any child that would develop from their union more immune than normal to all sorts of disease. This procedure can be done only at this stage of the reproductive process. The obstetrician also informs them that the procedure is entirely safe and available at negligible cost. The prospective parents must decide whether to have the procedure done or not.

In my view, the parents in E are morally obligated to have the procedure done, given that the three conditions outlined above are satisfied. Before arguing for this conclusion, however, I should explain E’s peculiar features. Its *in vitro* aspect is a simplifying assumption. By locating the procedure outside of the prospective mother’s body, I avoid at least some potential conflicts with her rights to privacy and self-ownership, rights which might override any obligation she has to her intended child. The use of a single sperm cell also plays a simplifying role, but epistemic rather than moral. It makes the identity of the intended person as definite as possible, prior to any issue of whether the enhancement would change its identity. Finally, having the procedure performed on gametes, rather than on an already fertilized egg, allows E to inhabit a conceptual space lying between two cases that David Heyd finds morally quite distinct.

Heyd argues that procreators are obligated to enhance (as well as to treat) a developing being’s genotype, but only if it has enough “identity-fixing characteristics” to be able to justifiably claim at some future time that *it* had been

⁸ This assumption has been well argued for by Brock *et al.* (particularly Chapter 4, 149-152). The clause “in a given environment” here recognizes the fact that there may be more than one way to change the fitness of a given trait. One might modify the environment rather than the trait.

wronged by its parents' decision. On his view, a zygote developing on the basis of its own "internal blueprint" would have enough such characteristics to justify a claim of wrongdoing. As Heyd puts it, in such cases "we have a duty to buy our offspring those supplementary elements of genetic equipment which would be best from the point of view of the already existing traits" (Heyd, 171). However, he also argues that *prior* to this stage of an intended person's history, procreators are under no moral constraints whatsoever *in regard to the intended person* when selecting its traits. He writes: "If the [procreators are] building a genetic makeup *from scratch*, then the only limits on the...parent (or engineer) are those of personal taste, price, effect on others, and so forth. The potential person can have no more interest in having a certain identity than in being born" (Heyd, 171). Heyd implicitly assumes here that an *intended* person is morally equivalent to a merely *potential* one, an assumption I do not share. But for now I simply want to stress that E lies somewhere between Heyd's two cases. Given that a person will develop from the gametes' union, its identity is partially determined prior to the parents' choice to procure the enhancement or not: it will be the first child of these parents, based on these (possibly modified) gametes. It is therefore arguably at a more advanced stage of development than a person that engineers contemplate building "from scratch". But while the intended person's history is unfolding exogenously prior to any intervention decision, it is not yet developing according to its own genotype, unlike a zygote. On Heyd's view then, while the parents would be obligated to procure the enhancement for the combined gametes (if this were possible), they are under no such obligation immediately prior to their combining.⁹ While a full critique of Heyd's view here is beyond the scope of this paper, I believe that my pro-intervention argument regarding E applies equally well to both the zygote case and the case of designing a person "from scratch".

Before advancing that argument, it will be helpful to review some vocabulary developed by Derek Parfit. In his terms, the parents in E face either a "same person" or a "same number" (but different person) choice. If their decision would not change the intended child's personal identity, it is a same person choice. Otherwise it is a same number choice. On Heyd's view, the parents have a duty to accept the procedure only if their decision is a same person choice, because merely potential people have no rights, and (according to Heyd) same number choices concern the traits of merely potential people. Of course, different theories of personal identity will yield different conclusions about whether their decision is a same person or same number choice, and if space permitted I would argue for a theory on which it is a same person choice. But there is no need for me to do so

⁹ The problem with Heyd's view here is that it is hard to see why *the moment of combination* should be morally significant, given that the parents have already decided to create a person. It is important not to allow any ambivalent intuitions one might have about enhancement *per se* to obscure the oddness here. Indeed, as long as the interests of all persons already existing are taken into account, Heyd's view implies that there is nothing wrong with the parents choosing to produce a child with, say, a *deficient* immune system, before – but not after – the gametes merge. Note also that the intention to produce such a child surely includes the sub-intention of allowing the gametes to merge. So on Heyd's view, the moral status of the parents' procreative intention would be *reversed* by one of its sub-intentions being *satisfied*. This is odd even if one holds the zygote stage of an intended person's history to be morally significant in other contexts (such as contraception and abortion).

here, for I argue below that the parents act wrongly if they refuse the enhancement, regardless of whether their decision is a same person or same number choice. If it is the former, I argue in Section III that such a refusal can properly be described as a violation of their future child's rights, or at least as an objectionable disregard of its interests. But if it is the latter, no such description makes sense. This is because if the refused intervention would have changed the intended child's identity, the child born cannot coherently claim that *its* rights were violated by the refusal, or even that *it* has been harmed by it, since *it* would never have existed had the intervention been accepted. Parfit calls this "the non-identity problem". Of course, the refusal's wrongfulness could easily be described in "impersonal" utilitarian terms (where we should strive to create the *best world* we can by maximizing utility within it). But since utilitarianism—and consequentialism more generally—is prone to many well known objections, I argue in Section IV for a non-rights-based but still deontological and "person-affecting" description of the wrong, one prefigured by Brock *et al.* in a different context.

III. E as involving a same person choice

If the parents' decision in E is a same person choice, we need not appeal to any novel moral principles to describe the wrongfulness of a refusal. But we do need to emphasize a fact that is sometimes downplayed in discussions of procreative morality, namely that parents impose foreseeable burdens (as well as benefits) on those they cause to exist: pains, diseases, emotional sufferings, frustrated desires and the like. Despite the normality of such burdens, there certainly seems to be something *prima facie* wrong about imposing them unnecessarily, *at least when there are no significant costs associated with not imposing (or mitigating) them*. The negligible cost condition effectively preempts a broad class of proposed counterexamples to the intuition of wrongness here. For instance, there may well be nothing *prima facie* wrong with a parent using her savings to take yearly vacations, even if she foresees that as a result her child will have to take out a burdensome loan to get through college. But since forgoing vacations constitutes a non-negligible cost for the parent, such a case falls outside the scope of my present argument.

There may be nothing wrong with imposing a burden on a person who has consented to the imposition, and perhaps parents can permissibly impose a burden on their child if they have good reason to believe that the adult this child will become would retroactively consent (at least if the consent were not manufactured by the parents themselves). But there is no good reason to believe that any rational person would retroactively consent to anyone's *unnecessarily* imposing a burden on them, although a child might *forgive* her parents for doing so. In E, the parents can foresee that by refusing the enhancement, their decision would unnecessarily impose a burden on their intended child. If rights are born of interests, such an act would clearly violate their future child's right not to be so imposed upon, since anyone—including a future person—has (or will have) an interest in not having to deal with unnecessary burdens.

Of course, parents do not *intentionally* impose burdens on an intended child by causing it to exist. Rather, they intentionally cause a child to exist, with the foreseeable consequence that it will have the normal burdens of life to bear. In E, they have the option of mitigating one of those burdens, the unnecessary imposition of which, I argue, is morally objectionable. Two principles, then, support my claim that the parents in E should accept the enhancement, at least given the negligible cost condition-

P1: it is morally objectionable to foreseeably impose unnecessary burdens on a person without their consent.

P2: one is morally obligated to do what one can to avoid or mitigate the foreseeable, morally objectionable consequences of one's actions.

P2 is an intuitively appealing moral principle that finds application in a variety of cases, some of which are quite dissimilar to E. Consider, for example, the case of a bomber pilot whose mission in a just war is to destroy an enemy munitions factory in a densely populated area, foreseeing that this will likely result in the death of innocent persons. If the mission planner foresees that bombing at a slightly later time would result in less "collateral damage" at no cost to the mission, it would surely be morally objectionable for her to choose to bomb at the original time, just as P2 implies. Note also that P2 is neutral between deontological and consequentialist readings of just what is objectionable here, adding to its broad intuitive appeal.

Although P2 is relatively uncontroversial, P1 might seem vulnerable to the objection that while persons must, as a result of having been created, deal with burdens to which they did not consent, parents can reasonably expect their children to be *compensated* for those burdens by the normal benefits of life. Since causing a person to exist is normally net-beneficial (or at least net-neutral) for the person, the parents in E need not procure the *further* compensation expected to result from a genetic enhancement. Putting aside well known difficulties with any assumption that life is normally net-beneficial or net-burdensome, the main problem with this objection is that it misses the point of my argument, which does not depend at all on viewing enhancement as compensation. On the contrary, by accepting the enhancement in E, the parents would make at least a certain amount of compensation *unnecessary*. If they can at negligible cost preventively mitigate a burdensome aspect of their intended child's life, it is better for them to do so than to impose the unmitigated burden with even a well-justified expectation that life's benefits will provide compensation. This way of responding to the objection suggests a third principle, one that gives *prevention* priority over *compensation*:

P3: *ceteris paribus*, it is better to avoid or mitigate a foreseeable, morally objectionable consequence of one's action, than to act with the belief that compensation for the consequence will be forthcoming.

Of course, any belief that compensation will be forthcoming is uncertain, and this uncertainty may contribute to P3's plausibility. By preventing (or preventively mitigating) the objectionable consequence, one avoids this uncertainty. But the more important source of P3's plausibility is that compensation is dependent for its positive moral value on the prior committing of a wrong, while prevention is not.

A parental refusal in E can further be characterized as an act of *negligence*. Here an analogy may be helpful. Suppose that your job includes the burden of having to drive many miles a day on streets known by your company to be hazardous. It is well known that those in your position will probably be in at least one job-related traffic accident over the course of an average employment period. Your company has always supplied to employees doing this job a "normal" vehicle that is fairly safe. One day, however, it comes to possess a significantly safer vehicle. At negligible cost to the company, and no unfairness to others, it could supply you with it, but decides not to do so. If you were to suffer harm as a result of this decision, it seems to me that the company would be guilty of at least moral negligence. In E, the parents are in the same position as the company in regard to risk assessment, since it is virtually certain that a person with a normal immune system will suffer from diseases during its lifetime, and the enhancement would likely reduce this risk. Arguably, the negligence of a parental refusal in E would be even worse than the company's, since presumably you consented to join the company, and are free to leave it without terminating your life.

IV. E as involving a same number choice

If E is a same number choice, my argument that a parental refusal is nevertheless wrong builds on Brock *et al.*'s analysis of a "wrongful disability" case (Brock *et al.*, 244-255). In that case (D), a woman – call her Dora – has a condition that will render any child she bears mildly retarded. The risk would be eliminated were she to delay her pregnancy while taking medication, but because this would have a negligible cost, she intentionally becomes pregnant before taking the medication, foreseeing that she will bear a retarded child as a result. A common intuition here is that Dora's pre-conceptive refusal to delay her pregnancy is wrong, perhaps morally no different than if post-conception she were to refuse to take medication foreseeing the same result, or even if after giving birth she were to refuse to give her infant medication that would cure its retardation. This intuition grounds what Parfit calls "the no difference view" about such cases. On the other hand, the view that Dora does no wrong is supported by Parfit's non-identity problem. That is, as long as her retarded child has a worthwhile life, it would not have been better *for it* had Dora delayed her pregnancy to bear a normal child, since in that case *it*, being the product of a different set of gametes combining at a different time, would never have existed. Against both this view and the no-difference view, Brock *et al.* argue that Dora acts wrongly, but not by citing any "impersonal" utilitarian grounds. Instead, they provide a novel "person-affecting" principle (N) that prohibits Dora's action.

N: Individuals are morally required not to let any child or other dependent person for whose welfare they are responsible experience serious suffering or limited opportunity or serious loss of happiness or good, if they can act so that, without affecting the number of persons who will exist and without imposing substantial burdens or costs or loss of benefits on themselves or others, no child or other dependent person for whose welfare they are responsible will experience serious suffering or limited opportunity or serious loss of happiness or good (Brock *et al.*, 249).

Brock *et al.*'s insight here is that a person-affecting view need not be a *same-person-affecting* view. That is, it is not the case that if an act is wrong because it causes harm, the person(s) who would suffer harm if the act occurs must be the same as the person(s) who *would not* suffer harm if it did not occur. While the notion of harm remains comparative, the relevant comparison can involve different individuals. N therefore prohibits Dora's action on person-affecting grounds without dubiously implying that Dora *harms her retarded child* by causing it to be born with a worthwhile life.¹⁰

N is applicable both to procreative and non-procreative cases. In the latter sorts of case, it protects actual, present dependents. In procreative cases, on the other hand, it may seem to protect only future persons that actually will exist. However, we need to be careful here. It clearly does not protect *merely potential* persons, the logically proper subjects of what Parfit calls "different number choices", choices that concern *how many* people will exist. Merely potential persons cannot be protected, and have no need to be, given that they cannot be harmed or benefited. And while N can protect the present and future persons that are the subjects of same person choices, it is needlessly complex for that purpose. So in procreative contexts, N most appropriately regulates same number choices. But while same number choices certainly concern future persons in the sense that their "intentional objects" represent persons with certain characteristics as existing in the future, the moral status of the choice does not depend on the intended birth's actually occurring. Given that its probability does not depend on which choice she makes, the possibility that Dora might suffer a miscarriage is irrelevant to a moral evaluation of her decision in D. Similarly, the possible failure of the procreative process is irrelevant to a moral evaluation of the parents' choice in E. So the

¹⁰ N contains a restriction that requires some explanation. The phrase 'without affecting the number of persons who will exist' prevents N from applying to rare cases in which parents could only choose to have more than one normal child instead of a disabled child. This restriction may seem *ad hoc*, but Brock *et al.* nevertheless find it indispensable, for given that N allows interpersonal comparisons of happiness, it seems to imply that to the extent we are responsible for future generations, we have a duty to promote their happiness even if no *unique* person's happiness would be increased from what it otherwise would have been. Hence, if N lacked the restriction, it would seem to imply Parfit's "repugnant conclusion" that we should adopt policies resulting in the creation of massive populations of persons, even with lives barely worth living, as long as happiness is maximized.¹⁰ In other words, it would have the same worrisome implication as an impersonal utilitarian principle. I agree that this is an important topic for future consideration. It should be noted, however, that there has recently been much work done on how the repugnant conclusion can be resisted or at least tolerated. See Ryberg and Tännsjö.

morally relevant metaphysical category in such cases is neither *potential* nor *future*, but rather *intended*, and N's wording can be modified to make this clear. But N otherwise requires little modification to be applicable to enhancement cases. It already permits responsible agents to weigh "serious loss of happiness or good" against "serious suffering or limited opportunity", on the condition that they do not impose any burdens or "loss of benefits on themselves or others". If it is not already implied by these clauses, we need only add that the agents also must not let intended dependents "forgo benefits that mitigate the normal burdens of life" to insure that N prescribes intervention in cases such as E.

N [modified]: Individuals are morally required not to let any [actual or intended] child or other dependent person for whose welfare they are responsible experience serious suffering or limited opportunity or serious loss of happiness or good [or forgo benefits that mitigate the normal burdens of life], if they can act so that, without affecting the number of persons who will exist and without imposing substantial burdens or costs or loss of benefits on themselves or others, no [actual or intended] child or other dependent person for whose welfare they are responsible will experience serious suffering or limited opportunity or serious loss of happiness or good [or forgo benefits that mitigate the normal burdens of life].

But even if N *can* be applied to enhancement cases, it was inspired by the intuition that Dora acts wrongly in D, a disability case. Given a person-affecting framework, and assuming that her wrong cannot be described as a rights violation, this intuition by itself provides some preliminary justification of N, and it is surely more common than the intuition that the parents act wrongly in E by refusing the enhancement. However, some intuitive support for extending N to enhancement cases can be gained by noting that a principled moral distinction between D and E would most likely follow from the presupposition that while prospective parents might have a duty to provide their intended child with a *normal* life, they are under no obligation to provide it with the *best* life they can, even absent cost considerations. On this presupposition, *normalcy is good enough* in such cases. Call this the *satisficing* presupposition.¹¹ I think that its fundamental irrationality can be illustrated by the following cases, the first involving a decision analogous to a same person choice, the second involving one analogous to a same number choice.

Suppose first that there are two gifts (X and Y) I can buy Jill for her birthday. X is more valuable than Y, and I have good reason to believe that Jill would prefer to receive X, a better than normal gift, even though she would also enjoy receiving Y, a normal gift. Now, due to a sale on X-type items, X and Y differ only negligibly in cost. Yet, despite my being fully aware of all the facts, I buy Jill Y instead of X. Either I simply desire to buy Jill a gift she will only moderately enjoy, or, if I am acting on principle, I most likely am supposing that normalcy is good enough. But while either of these antecedents might explain my behavior, surely they do not justify it. After all, both desires and principles are open to rational criticism. Given

¹¹ Such a presupposition might be held by a "satisficing consequentialist" like Michael Slote.

that I have no reason to think that Jill *deserves* only Y, and no reason to believe that her receiving X would harm anyone, these antecedents seem groundless. If I fail to take Jill's preference into account, I have ignored the salient factor that rationally should guide my decision. After all, the recipient's pleasure (or, more specifically, benefit) is reason enough to give her a gift, and, *ceteris paribus*, the more benefit derived, the more justified the gift giving. This seems true even *absent* any desire to give a gift.

Suppose next that I can give X only to Jack, and Y only to Jill, and I can give a gift only to one of them. I also know that if I give X to Jack, I will make him moderately happy, and if I give Y to Jill, I will make her extremely happy. Again, all else being equal, and for the very same reasons as those just stated, it would be irrational of me to give X to Jack, since I have a better reason to give Y to Jill. Similarly, the parents in E would be irrational were they to refuse the enhancement. A desire to have a child with only normal traits—rather than one with better than normal traits—might explain their refusal, but could not by itself justify it.¹² And absent further justification for the satisficing presupposition, the same is true of it.

Strictly speaking, this thought experiment shows more than what might be necessary to cast doubt on applying the satisficing presupposition to cases like E, for it shows the irrationality of that presupposition in a case that may involve only the provision of pure benefits, rather than benefits that directly mitigate burdens. But, on the other hand, I have not shown that the satisficing presupposition cannot be rationally justified (although I doubt that it can). And, perhaps more importantly, the *irrationality* of the satisficing presupposition does not show that acting on it is *immoral*. Certainly not all instances of irrationality imply immorality.

In any case, such an indirect argument is unlikely to convince anyone who does not already share the pro-enhancement intuition. For one might still ask: *why* is it morally wrong to violate N (as we modified it) in cases like E? For that matter, a skeptic might press, why is it wrong to violate the principle in D? Certainly, Dora foresees that if she does not delay her pregnancy, a more burdened person will exist than would otherwise be the case. But if one rejects impersonal views of morality, N seems merely to be *describing the actions it prohibits*, rather than justifying that prohibition. In other words, it might seem as groundless on the pro-enhancement side as the satisficing presupposition seems on the anti-enhancement side. Again, the skeptic demands an informative, *person-affecting* ground on which it is wrong to create a normally healthy person rather than a healthier one (in a case like E), or a burdened person rather than a less burdened one (in a case like either D or E), given that all would have lives worth living. Should we simply reiterate our intuitions, citing some moral bedrock?

Fortunately, there is a bit more to be said. At the very least, we can move towards the achievement of a "wide reflective equilibrium" that includes the pro-

¹² Contrary intuitions might arise from an assumption that an enhanced child would feel alienated from "normals." But since I am assuming throughout this paper that costs are not an issue, and hence that social justice issues are being addressed politically, this should not be an overriding concern. If the procedure is being offered equitably, and most parents accept it, the enhanced children might establish a new baseline of normality. Of course, if parents are concerned about the possible alienation of their future children from *them*, that might affect the moral calculations here. But such a cost seems unlikely to be a factor in E.

enhancement intuition by focusing on the *incoherence* of a parental refusal in E (and Dora's action in D) with their own procreative intentions. We need only make two further assumptions. The first is the widely shared conceptual intuition that autonomy is a necessary constituent of personhood. A being that has no autonomy is, for moral purposes, not a person, and since autonomy is a matter of degree, it is reasonable to assume that so is personhood. The second assumption is that a burden is bad for a person at least partly because of the way in which it constricts the person's autonomy.¹³ Consider, for instance, pain and disease. These burdens might intrinsically be bad for those who suffer them. But even if they are not, they are certainly bad for their effects on the sufferer's attention. Autonomy begins with the ability to focus one's attention where one chooses, and such burdens detract from this ability by drawing attention to themselves. Similarly, whether death is intrinsically bad or not, its prospect is burdensome for those who recognize their own mortality, insofar as it represents to them a limit on the time they have to autonomously pursue their projects. Finally, health is beneficial for persons partly because it expands their autonomy by mitigating a normal burden of life, allowing them to better pursue the projects that help to individuate them as persons.

Now, the relationships between burdensomeness and autonomy-constriction on the one hand, and beneficiality and autonomy-expansion on the other, are subtle and deserve much more attention than I can give them here. But if these relationships hold, and autonomy is indeed a constituent of personhood, it is clear how intuitions of wrongdoing in D and E are supported by basic norms of rationality. For it follows from these considerations that Dora's refusal to delay her pregnancy is rationally at odds with her intention to create a person, since she foresees that her choice will result in the creation of a more burdened, and hence less autonomous being than would otherwise be the case. Broadly speaking, she "wills inconsistently": her choice partially defeats her procreative intention. The same is true of a parental refusal in E. They intend to create a person, but also make a decision they foresee will result in the creation of a less healthy child than would otherwise be the case, one whose autonomy and hence personhood will likely be less realized. Kant famously argued that such inconsistent willing is at least a sure sign of immoral action.¹⁴ But even if we do not accept Kant's view of morality *per se*, the coherence of the pro-enhancement *moral* intuition with the *conceptual* intuition that autonomy is a necessary constituent of personhood, and hence with *rational* norms against inconsistent willing, is a step towards a wide reflective equilibrium.

It might be objected that both Dora in D and the parents in E can evade the charge of inconsistent willing simply by modifying their intentions. Dora can simply intend to create a retarded child (previously just a foreseeable but unintended consequence of her choice), and the parents, when faced with the options, can insist that their specific intention is to create a child with *only* a normal immune system. Consistency of the relevant sort is then achieved. However, these evasions can

¹³ This point does not rule out the possibility that autonomy itself might be burdensome in some cases, particularly those in which *too much choice* paralyzes the agent. In such cases, autonomy constricts itself.

¹⁴ See Kant (1993, 1785), particularly Sections I & II.

work only on the assumption that intentions are not themselves rationally evaluable, and I see no reason to accept that. Certain ends are more reasonable to intend than others, and in practice we evaluate both desires and intentions on that basis. Ends are reasonable or unreasonable relative to all available options, in the light of what is taken to be best for all involved (as determined by a cost/benefit analysis). The *impartiality* of reason requires that the interests of all involved be taken into account. That all available options be considered is also crucial to the cases at hand. For there might be nothing irrational about our agents' modified intentions if no other options are available to them. But given that the agents are aware that other options *are* available at no significant cost, *reasons*—and not mere preferences—are required to rationally justify their intentions. On the pro-enhancement side, the conceptual connections between burdensomeness, autonomy, and personhood do the justificatory work, given that autonomy objectively has practical value. What, on the other side of the debate, can rationally justify the intention to create a retarded—or otherwise sub-normally functioning, more burdened—person *rather than* a normal one, or the intention to create a person with normal traits rather than one with better than normal traits (at least on our three conditions)? The objective value of *normal functioning* can certainly justify a proactive choice when the alternative is sub-normal functioning, but only if the value of super-normal functioning can justify such a choice relative to normal functioning. For, unlike autonomy, there is nothing objectively valuable about normality *per se*. *Functioning normally*, unlike *being autonomous*, is not partially constitutive of personhood. One may well become “more of a person” as one becomes more autonomous, but one does not become more of a person as one approaches the statistical baseline of normal human functioning (unless doing so makes one less burdened, and so more autonomous).

In closing, I want to briefly compare the argument given above with the more traditional one offered in Section III. If E involves a same person choice, P1 describes the wrongfulness of a parental refusal. It is morally objectionable to foreseeably impose unnecessary burdens on persons without their consent. In doing so, one violates their right not to be so imposed upon, a right based upon their objective interests as autonomous beings. Given that the proactive act foreseeably imposes burdens that could be avoided by the enhancement, P2 prohibits a refusal, for it states that one is morally obligated to do what one can to avoid or mitigate the foreseeable, morally objectionable consequences of one's actions. By contrast, if E involves a same number choice, P1 cannot describe the wrongfulness of a refusal, in part because the future child would not have been born had its parents accepted the enhancement, and so *its* rights would not have been violated. Rather, in same number choices, N—suitably modified and buttressed by the arguments above—describes the wrongfulness of a parental refusal in E (as well as of Dora's choice in D), and prohibits such decisions. In effect, it plays in Section IV the role played by both P1 and P2 in Section III. But while the two arguments are distinct, the value of autonomy underlies both. It supports P1, because unnecessarily imposing burdens on persons *without their consent* is wrong at least in part because it *directly* violates their autonomy, above and beyond any connection between burdensomeness and autonomy-constriction. And we have just seen how the conceptual connections

between burdensomeness, autonomy and personhood supports extending N to enhancement cases. Both of the arguments given above thus cohere well with the autonomy respecting condition mentioned at the start of this paper.

Just *which* enhancements are autonomy-respecting is, to my mind, a very important topic for future work. Another important advance for the pro-enhancement position would involve dropping the negligible cost condition. Genetic enhancements that are both burden-relieving and autonomy-respecting may well involve costs, and the moral significance of those costs should be discussed and debated. But this is just the beginning of a long list of further tasks to be done before the pro-enhancement view is fully plausible. I have offered above only the barest outline of a positive argument, and perhaps shifted some of the burden to skeptics. At the very least, I hope that I have been provocative enough to stimulate further conversation on a subject that has yet to receive the full attention it deserves.

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