

Defending the Genetic Selection of Intelligence: A Moral Exploration of Principle

Chase Opperman

## Abstract

This paper assumes a basic understanding of Aristotelian philosophy, but that which I draw from is both explicated and articulated in the paper in a way which makes the philosophy salient. One can look to Book II of The Nicomachean Ethics, the edition to which I referred is listed in the works cited, to further their understanding of the philosophy from which I am drawing, but to do so is not necessary. In what follows, I wrestle with the ethical issues related to the subject of the genetic selection of intelligence, both in its positive and negative forms, and offer a defense of the procedure through developing my argument with the following themes: Science and Virtue, Abortion, and Selection. It is these three themes upon which I establish my argument, hence the paper being organized and divided in such a manner. I begin by appealing to the purpose of selection, assuming that the science behind the procedure is without flaw and accessibility to not be an issue, while drawing from an Aristotelian philosophical understanding of humanness, virtue, and excellence. I follow this by addressing the potential of negative selection to allow for abortion, given certain information, and offer a view which provides a moral justification for abortion. To finish, I discuss selection itself, and utilize what previous argumentation I have articulated in the prior sections to solidify my claim on the matter of the selection of intelligence: We, as humanity, ought to move forward with these procedures on a universal level such that we increase the standard of intelligence and, by direct consequence, increase the general capacity for virtue of the human population as a result, thus progressing humanity towards a higher standard of excellence.

## On Science and Virtue

As modern science progresses, powerful technologies are becoming available to us. One such form of this new technology manifests itself in our ability to genetically modify human embryos. While gene editing may still be in development, we cannot preclude ourselves from discussing the extent to which we can endorse its use, as there still is merit in discussing the principle nature of the philosophy behind the procedure. Assuming the science behind the procedure of the genetic selection of intelligence to be perfect and there being no issues of accessibility, we are still left with a great deal to reason through pertaining to what parameters ought to define the selection process, in addition to the respective defenses for such parameters. For the sake of specific argumentation, I will be focusing my thoughts towards the subject of genetic alteration involving intelligence and nothing else, as a full account of many different traits is not possible within the limits of this paper. My aim is to defend the procedure of genetic selection for intelligence, given the previously articulated stipulations, on the grounds that the procedure is not inherently immoral and, in fact, develops humanity towards a generally more virtuous and excellent standard.

To apply this to the discussion of selecting traits within unborn children, we wish our children to have, at the very least, more ideal (good) characteristics than less ideal ones. To begin, it is crucial to articulate what selection is before delving into whether it is immoral. Selection can be either positive or negative: where they differ is in the desire for inclusion or exclusion of certain characteristics, respectively. In other words, positive selection attempts to identify desirable traits in an effort to work towards realizing them; whereas negative selection attempts to identify undesirable traits in an effort to work towards eliminating the possibility for

them to be realized. As illustrated, both involve very different methodologies as to how we go about selecting for the ideal; but implicit in the attempt to establish such an ideal is the need to know what constitutes human nature and what goods we ought to enhance such that we may develop human nature.

Putting the discussion of selection aside, for the moment: Aristotle believed that human nature is an ideal which the prudent and virtuous human cultivates herself into exemplifying, and the crucial catalyst necessary for this cultivation is found in a habitually prudent character. Human nature exists on a spectrum with the vicious human at its poles and virtuous human carefully placed in the middle. Some humans may lie at varying points along this spectrum, but no one will ever be born as a virtuous human being without first cultivating their disposition towards virtue. To be virtuous is not something which he thought to be an innate characteristic of all people. Virtue is the result of a journey of transforming the incomplete self and realizing the goodness of human nature by acquiring a virtuous disposition. This implies that to be born is not sufficient to be an excellent or fully fulfilled human, and while this understanding of human nature may be an ancient claim, it can be said that the goodness of one's character combined with a certain kind of disposition can constitute a particularly good kind of person; a kind of person who would represent the ideal, even today, of what it means to be a virtuous human being.

Aristotle understood the notion of virtue through moral excellence existing as a moderation between two vices and says so in the following excerpt from Book II of The Nicomachean Ethics: "Virtue, then is a state of character concerned with choice, lying in a mean, i.e. the mean relative to us, this being determined by reason, and by that reason by which the man of practical wisdom would determine it."(Page 31, 1107a, lines 1-5). The human being, as

understood according to biology, is imperfect and is needing of some sustenance, some nurturing function to give rise to the fulfillment we all seek in realizing our most excellent human form. Therefore, the humanness we associate with our being an excellent human is manifested through virtue, as the capacity for virtue is the contingent factor in determining the degree to which one can realize their excellent humanness beyond what minimal to average standard can be achieved by our common biology. Virtue is the cornerstone through which dispositional tendencies promote good human qualities that, through practice and habit, temper, harden, and forge humans into the beautiful and morally excellent beings most humans have the potential to become.

To understand the ideal or virtuous human as such necessitates a judgment with regard to what good human qualities are. It is clear that we do not have a universally agreed upon notion as to what the perfect embodiment of human virtue is. However, I would argue that there are some qualities which do well in promoting, exemplifying, or are necessary for virtue across most, if not all, interpretations. One such example is intelligence, which is widely regarded as an instrumental component of virtuous human functioning; functioning which can very easily define the excellent human as such due to their superior reasoning and problem-solving ability. The peak of human excellence is often regarded as one which involves the use of one's intellect and reason to his or her utmost, hence it being virtuous. Note the previous excerpt from Aristotle, who himself states that the "practical wisdom" determines the virtuous; and the beings to whom this principle becomes salient can, therefore, *be no less practical or wise* in order to be truly virtuous. It is for this reason that, for the sake of this essay, I will use intellectual capacity as a good characteristic in terms of which human virtue is defined. This is because an increased capacity for intelligence can lead to an increased capacity for virtue, making it something which

would likely be selected as a trait of value when determining what characteristics our unborn children ought to have.

However, it is not so easy to endorse the practice of selecting for intelligence without first grappling with some of the controversies which surround it. One such example of these controversies is abortion, which will need to be addressed given the potential for one to select against beings who are genetically predisposed to lower levels of intelligence. In what follows, I articulate my standing on the matter.

### On Abortion

First, it is important to note that the ethics of abortion are extensive and cannot be done proper justice within the limits of this paper. Thus, I will briefly offer an argument for a moral justification of abortion. I will be leaving the practical and religious arguments pertaining to abortion aside for the sake of focusing on a strictly secular and moral argument, as doing so addresses a stronger and more principle-based argument for the defense of the practice. In what follows, I will argue that abortion is ethically permissible by articulating that, first, there is a critical difference in the kind of moral beings a mother and her unborn child are; and second, that the mother is entitled to certain activities, given her individual autonomy inherent in her being a moral agent, which overrides the unborn child's differing moral status.

To begin, I think that it is important to note that abortion, and moral arguments which support it, are grounded in the principle that the life of an adult human being is different than the life of an embryo which will eventually assume the form of a human, if born. To illustrate this moral distinction, one could think of a situation where one adult human kills another adult

human. Murder is considered the moral atrocity that it is because it involves the intentional destruction of the life of a moral being, the notion of which will be fleshed out later, by another moral being. And while I understand that the legal realm is not a clear and definitive representation of the moral world, this example does justice for the moral understanding of murder being wrong. On the other hand, if one were to regard the single-cell human zygote to be the same kind of being, with the same kind of life, and with the same moral entitlements as an adult human, then reason follows that abortion is indisputably murder. Thus, the moral appeal to support abortion necessarily involves a diminished notion of life inherent in the zygote relative to that of the adult human; there must be a characteristic difference between the life of the first cell created at conception and the life of an adult human.

Beings who have a capacity for rationality, empathy, and a sense for right and wrong belong to a category of moral responsibility specific to moral agents. These beings are commonly understood as the recipients, enforcers, and stakeholders in the moral realm of responsibility. This means that the moral agent belongs, by obligation, due to the fact that morality is universal in its application of those to whom it is relevant, to a collective normative understanding of right and wrong. Humans, notably, are an example of these moral agents, normally. However, there are some people who assume the form of something else; these are people who do not participate in the normative moral world in the way that most moral agents do. The reason why there are beings who do not participate in the realm of the moral is that they are lacking one or more of the qualities which are necessary to be a moral agent: reason, a sense of right and wrong, and empathy. As is the case with unborn children, they are not themselves moral agents due to their lacking the necessary characteristics inherent in a moral agent. However, considering that if they were to grow up to be adults, who usually yield these three

characteristics necessary for being considered moral agents, then it would make sense that they belong in a distinct category of the moral order, but in a way which is separate from the *normal* moral realm; one specific for morally recipient beings

Morality is a product of human reasoning. It is an order meant to describe the goodness and badness of the things which are done by and constitute moral agents and construct a notion of how to go about our interpersonal, and intrapersonal, relationships. However, it is not sufficient to say that one must be a moral agent to be subject to moral rulings. While it remains true that unborn children are not moral agents, they too are subject to moral regulation; they are something more akin to, what I am going to call, morally recipient beings. Contrary to moral agents, who both receive protection from and are held accountable for moral rulings, moral recipients only receive protection from the moral normative which guides humanity. This is because we commonly recognize unborn children to be beings of great worth and afford them many protections as a result, despite their being of a different moral standing than that of an adult human being. Notably, we do not do this for all kinds of beings: humans do not bat an eye at the loss of bacterial life, nor would they shed a tear for the abortion of a rat zygote. The degree to which our moral sanctions extend themselves is only as far as our own kind, so it would seem, because the same affordances we give to our unborn children seem to be vastly contradictory to those other non-moral agents who will never become human beings.

Such practices of protection are potentially provocative and necessitate reason as to why our unborn children are so heavily protected by moral sanction, especially considering that some individuals have claimed that all unborn children are entitled to life, regardless of the circumstances surrounding their conception. These individuals think that the principle of a being who shall potentially give rise to a moral agent seems to be sufficient to afford certain moral



parameters when dealing with unborn children. However, it seems that because moral agents participate in the moral order in a multilayered way which involves them both being held accountable for and protected by moral normative notions, the moral weight of moral agents is significantly stronger than the moral weight of beings who are but moral recipients. This is because moral recipients only benefit from the protection of the moral order and cannot be held accountable by it due to them not being moral agents. This difference in strength manifests itself as a result of the moral recipient not being a contributor to the moral order, in the sense that they are not yet moral agents, thus making clear the difference between the type of life inherent in the unborn child and the adult human.

Assuming that the mother is a moral agent and abides by moral reason, this difference in moral weight between these two kinds of beings gives the mother the right to choose whether or not to abort the child by virtue of the mother being a moral agent over the zygote's right to potentially assume the form of a moral agent, as they are currently only a moral recipient (this claim does not apply to children who are already born and will be explained later on). The individual autonomy inherent in the mother being a moral agent must be upheld if the moral order humanity subscribes to has any merit, meaning that the mother is morally entitled to choose if her child is going to be born, given moral reasoning. It is on these grounds that I will further articulate my main point of this work in claiming that the mother, given certain information pertaining to her child during the early stages of its development in the womb, is morally justified in aborting that child. Specifically, if she should be given information pertaining to that child's condition which shows that the child is severely mentally impaired/disabled, she is morally justified in choosing to abort the child.

Now, given the previous argumentation pertaining to the difference between moral agents and moral recipients, it is important to wrestle with the fact that children who are born are also not moral agents. For the same reasons that a human zygote possesses the title of moral recipient, so too does the child, as a result of their lack reason, in addition to the lack of other factors necessary to be a moral agent. Therefore, it necessary to articulate the difference between these kinds of beings (zygote and a human child who has been born) as to not promote infanticide. It becomes morally problematic when distinguishing types of life, as those who do not have the potential to participate with, in addition to being protected by, the moral order can fall to the wayside if we are not deliberate and careful. Children who are born are entitled to certain protections, and they ought to be protected by the moral order, even though they are not able to fully participate in the capacity which morality necessitates.

The differences between a child who has been born and one who has not yet been born is not the fact that their agency is different. Rather, it is that the child who has been born exists entirely as its own being, independent of whatever biological support is necessary for the existence of a child who is not yet born. This difference in dependency manifests itself as the following: a human zygote existing inside of the mother, who is entirely dependent on the mother for its existence, gives the mother agency in her deciding whether to realize the pregnancy and give birth to the baby or to abort. In the case of the child being already born, the mother may not terminate the life of the child, as a result of it being something which exists independently of herself. The extent to which the mother can act to remove herself from her parental role, at this point, after the child is born, manifests itself as a voluntary relinquishment of parental rights. This occurs when she decides, of their own free will, that she would like to terminate their parental relationship with her child.

The physical individuality resulting from child's being born endows it with the rights and privileges which we associate with all biological humans. Our endowment of moral protection onto this type of being gives the same moral sanctions which apply to all moral agents (and recipients) such that children are given the same rights as everyone else, despite being but moral recipients. Notably, their autonomy is not solidified as a result of their not being a fully-fledged moral agent. Thus, a guardian is appointed to them (usually the parent) to protect their right to have their best interests taken into consideration, and to have decisions made on their behalf to realize these best interests. Thus, one cannot terminate the life of the child, once it is born, because such termination is not in the child's best self-interest. If the mother does not want the baby, and she has already given birth to it, she is not obligated to keep it but there are moral responsibilities which are tied to the care of that child, as a result of its lack of agency, until it is able to do so for itself. Thus, she is morally obligated, once it is born, to act as this guardian for the child's best interests or turn the custody of the child over to an agent who will act as this guardian. Yet, until that child is born, and while it exists as an extension of the mother, the mother is morally justified to determine if the child is to be born or not, due to a combination of their differing moral statuses and the direct dependency the child has on her.

### On selection

In what follows, I return to the discussion of selection (both in its positive and its negative forms) given the previously stated arguments: to reiterate, positive selection, in the case of unborn children, requires knowing what a desirable trait would be and then working towards finding ways to implant that trait in the child, as demonstrated with gene editing. And, assuming the science of genetic alteration within unborn children, or even fully-grown adults if such a

thing were possible and effective, to be without flaw and accessibility to not be an issue, my claim is that positive selection for intelligence is morally acceptable, and even good, because it propagates more potentially virtuous and excellent people.

There are many arguments which have been offered in opposition to the use of positive selection. One of the more common arguments used by those who refute positive selection of intelligence manifests itself in the following manner: the presence of so many intelligent people, as a result of gene editing, would detract from the normative notion of human intellectual excellence. This is to say that the universal enhancement of our children's intelligence would compromise the achievements of authentic human intellect as a consequence. Reason follows that, because so few possess this heightened level of intelligence as a result of the natural genetic lottery which takes place at conception, the majesty of excellent achievement derived from such intelligence is dramatically increased. One may argue that we should preserve the authentic human so that we maintain these few people who are so especially gifted, but who are still subject to the random and natural genetic lottery, as it makes their achievement more special. Their merit would be derived from the fact that they are revered, in part, due to their especially rare gift which produces equally rare and incredible achievement.

While I understand the sentiments of those who support maintaining authentic human intelligence, this argument of authenticity is one which I believe to be unfounded. If we knew the science to be perfect and accessibility were not an issue, there seems to be no reason why we should not select genes which increase our children's capacity for intelligence. All can benefit from being more intelligent with this enhancement. It seems illogical to not wish for the gap between those excellent few and the rest of the population to be lessened. If more people had higher capacities for intelligence, more people would be potentially virtuous. There is nothing

inherently good about the natural condition of the human. Thus, if we were to make ourselves better by increasing our capacity to live good lives, by being more potentially virtuous, then there is no reason not to positively select for intelligence. The notion of authenticity is one which is heavily outweighed by the egalitarian good which can result from this procedure, which would result in a general increase the of standard of what it means to be a good human being.

With respect to negative selection, we struggle with a more difficult framework, morally speaking. Negative selection works off of a standard of normalcy whereby we recognize a trait which may be considered debilitating or in some way negative; then, after this is established, we work towards the removal of such a trait, as demonstrated with preimplantation genetic diagnosis in unborn children. Use of this technology manifests itself in determining if a fetus has a certain negative condition, like severe learning disabilities or incredibly low capacities for intelligence, and then using this knowledge to make decisions about whether or not to abort the unborn child. There are many who would argue against this treatment due to it being one which establishes a notion of who is worthy of life and who is not, a notion which is seemingly unjust; our knee-jerk reaction to the very idea is to stand up and cry out in moral protest. It is clear that such screenings for negative qualities is rather ambiguous, with respect to the extent to which one may be dissatisfied with certain traits, and many would regard such practices to be a slippery slope down into the morally dark pit of eugenics. There is, however, another side to this argument.

I am of the belief that this technology, while it is dangerous if allowed to go beyond the immediate examination of the fetus' intellectual capacities, is morally permissible in this specific circumstance. Given the previous argumentation about the differing moral statuses between the mother and the unborn child, in addition to the mother being the sole contributor to the existence of the child, it is the right of the mother to make an informed decision as to whether or not she

wishes to birth a child given certain information pertaining to a severe lack of intellectual ability. People who are born with intellectually debilitating conditions are challenging to rear and will often live incredibly difficult and dependent lives. Consider a fetus who has been screened to have a severe intellectual disability and who will most likely require constant aid for their whole life as a result. If there is a defect in the ability for the fetus to experience a fully human existence, due to a severely decreased capacity for intelligence as in the case of certain genetic diseases such as fragile X syndrome, I claim that the mother would be justified in her choosing to abort the child. This is because of the fact that the quality of life which would be available to this child would be limited and crippled by their lack of virtuous advantage.

During a consensual decision, on the part of prospective parents, to have a child, they do not have in mind a child who is severely intellectually disabled, as such a condition is contrary to their notion of humanness. Very few parents wish to bear a child with such a condition, by virtue of such conditions being something which obstructs that child from having the most means and potential to realize virtuous fulfillment. Furthermore, the quality of life inherent in such a debilitated existence is limiting for the child. There are many children with such impairing intellectual disabilities which necessitate that they be institutionalized as a result of their being so difficult to care for. Most parents wish their children to have best possible life, to do more good things than less, and to have good things happen to them as a result. But, the severely intellectually disabled struggle to attain even average successes. It is by this logic that a mother is justified to negatively select against intellectually debilitating conditions.

In articulating both positive and negative selection, it becomes evident that to participate in selective methodology is more moral than leaving unborn children to fate's random genetic lottery. The notion of chance is something which people, in seemingly ironic fashion, act in favor

of, especially with respect to the topic of genetic enhancement. I say ironic because of the fact that advancements in science are entirely devoted to establishing control, and are geared towards eliminating the randomness of life, as to reduce the negative consequences associated with these random occurrences (like genetic diseases). Considering that scientific advancements are instrumental in increasing the baseline of human capacities on a universal level, it seems counterintuitive to oppose science, in this case, for the sake of maintaining genetic randomness. For example: one cannot rightly on the one hand, be in support of the vaccines for the sake of reducing the odds (random chance) of one suffering from a serious disease; and on the other hand, reject the validity of genetic selection by virtue of believing that more randomness is good. The justification for maintaining randomness is not sufficient to invalidate genetic selection because the process of selection is for promoting human goodness and excellence.

I agree that the preservation of genetic randomness is important, to an extent. However, it is very clear that the less fortunate outcomes which result from these genetic “throws of the dice” produce conditions which are debilitating; so debilitating that it seems morally appropriate to select against them. It makes one morally obligated to work towards the selection for higher intellectual capacities in their children, by virtue of their potential for excellence to increase as a result. Those who refute these selection-based enhancements put their children at a disadvantage and dispose their unborn children to the risk of a life of lesser quality for the weak argument of authenticity; there is no principle-based downside to the selection of intelligence other than the fact that we would be distancing ourselves from the notion of the authentic human by endorsing its use. After all, we have been distancing ourselves from our most authentic state for years with the use of countless technological advancements. It seems foolish to stop now considering we are, in fact, *progressing*, as is evidenced by our general increase in intellectual capacity.

I am not going to pretend that this argument is one which is easy to make. There are life-altering choices which are involved. However, for the sake of bettering the generation of tomorrow, it makes sense to utilize selective methodology to increase the likelihood of a more meaningful human existence and to prevent certain types of obstacles, such as severe intellectual disability, which hamper such development from occurring. We have the right to be angry with the loss of life just as much as we have the right to be angry if a child were to be born with a severe intellectual disability out of random circumstance, which would assuredly impede them in their realizing their human potential to the same degree as one who did not suffer from a similar condition. Yet, implicit in that anger are questions: Why not work to eliminate those random unfortunate cases through negative genetic selection? Why not ensure, through positive selection, that all are equally predisposed to higher intellectual capacities so that they can have the potential for more excellent lives? Why not? Selection itself is not immoral. To willingly discredit the universal genetic enhancement of intelligence to maintain the random genetic lottery is immoral.



Works Cited:

Aristotle, W. D. Ross, and Lesley Brown. 2009. *The Nicomachean ethics*. Oxford: Oxford University Press