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REICHLIN (Massimo), « Is there a need for moral enhancement? »

RÉSUMÉ – “*L’enhancement* moral est-il une nécessité ?” Cet article suggère que le jugement évoqué par I. Persson and J. Savulescu, fondé sur une relation entre *enhancement* cognitif et *enhancement* moral n’est pas concluant. Il évoque avec septicisme la thèse de Douglas, selon laquelle l’enhancement moral, sans être indispensable du point de vue éthique, n’en est pas moins bénéfique et mérite d’être entrepris. Si l’*enhancement* moral est un obstacle à la construction de notre caractère moral, il y a des raisons de douter qu’il soit seulement permis.

MOTS-CLÉS – améliorisme moral, transhumanisme, dignité humaine, coercition, moralisation.

ABSTRACT – In several contributions, Persson and Savulescu have argued that there is an urgent need for moral enhancement. I suggest that their original argument, based on the connection between cognitive enhancement and moral enhancement, is inconclusive. I further take up a sceptical stance with respect to the more moderate view, defended by Douglas, according to which moral enhancement, though not a moral necessity, is inherently beneficial and worth pursuing. If moral enhancement interferes with the construction of our moral character, and risks endangering the integrity of the moral self, I suggest there may be reasons to doubt that it is morally permissible.

KEYWORDS – Moral enhancement; transhumanism; human dignity; coercion; moralising process.

IS THERE A NEED FOR MORAL ENHANCEMENT?

Ethical perfectionism is a venerable tradition in Western moral philosophy. Broadly speaking, it is the view according to which to live morally is to try to approximate an ideal of moral perfection, which is the task of moral philosophy to depict. The standard view conceives of moral perfection as the possession, in a very high degree, of those stable dispositions to feel and to act that the philosophical tradition calls *virtues*. The moral ideal is the fully virtuous human being, who possesses and practices all the human virtues—a human character that is partly exemplified by some existing individuals, who are a sort of moral “saints” or heroes¹.

This traditional view incorporates the belief that moral perfection is indeed attainable, or at least significantly approachable, by actual human beings, and that such a virtuous life is a pleasurable and satisfying one. Perfectionism is thus a humanistic and moderately optimistic view, which sees human moral progress as a possible and worthwhile goal. Contemporary transhumanism, on the contrary, cultivates a much more depressing attitude towards humanity. It tends to emphasize the limits that afflict human life, insisting on the pervasiveness of pain and illness, on the limitation of human knowledge and well-being, on the shortness of individual existence and the extent of human wickedness. Transhumanism designs to overcome such deficiencies, and to bring about post-human happiness and well-being, through the application

1 Perfectionism in ethics must be distinguished from perfectionism in the theory of value: the two generally go together, but they are logically distinguishable and one can accept one without accepting the other. Both must be distinguished from political perfectionism, which is a view concerning the proper task of the political institutions. On these issues see T. Hurka and S. Wall, “Perfectionism in moral and political philosophy”, in *The Stanford Encyclopedia of Philosophy* (Winter 2012 Edition), E.N. Zalta (ed.), URL = <<http://plato.stanford.edu/archives/win2012/entries/perfectionism-moral/>>.

of a large variety of scientific and technological resources, ranging from genetic modifications to direct brain stimulation, and a significant hybridization of engineering components into our biological makeup.

The transhumanist project is not limited to bettering the biological performance of ordinary human beings, but extends also to their moral dispositions: the claim that moral capacities are insufficiently developed and prone to permanent worsening is one of the most distinguishing features of the transhumanist discontent with humanity – a discontent more generally shared by most supporters of human enhancement. Moral transhumanism extends the traditional perfectionist approach to the point of subverting it radically: in fact, no longer believing in the human capacity of perfecting oneself through habituation and the force of examples, proponents of this approach declare that our present moral capacities are insufficient to produce and maintain a decent human society, and that scientific and technological interventions are needed, if terrible results are to be avoided. In short, humans must be morally enhanced through biomedical interventions, even if this means that they will cease to be biologically human; since there is nothing of special value in being biologically human, “To be more ‘human’ in the normative sense of the term, in terms of those capacities that afford members of our species moral status and value, may require an evolution to posthumanism”¹.

This case for the need and urgency of moral enhancement (ME) has been developed at length by Ingmar Persson and Julian Savulescu: in what follows I will discuss their arguments, suggesting that their conclusion is unjustified. I will then discuss a different argument, proposed by Thomas Douglas, which aims to defend not the necessity of ME, but its desirability or at least its permissibility. I will suggest that, even on this more moderate construal, the case for ME is far from conclusive.

The basic strategy employed by Persson and Savulescu to demonstrate the moral necessity of ME is to depict a rather gloomy picture of humanity and its probable future, and then to suggest that ME may be the only way out. Specifically, they propose a sort of doomsday argument according to which cognitive enhancement (CE) – that is, the

1 I. Persson and J. Savulescu, “Moral transhumanism”, *Journal of medicine and philosophy*, vol. 35, n. 6, 2010, p. 656-669, at 668.

biomedical manipulation of our mental capacities intended to make us better in attaining our ends— is already a concrete possibility, and the future improvement of such techniques will jeopardize very seriously our common future. In fact, the expansion of scientific knowledge and cognitive ability will make it ever easier for morally corrupt people to provide themselves with weapons of mass destruction: and “if an increasing percentage of us acquires the power to destroy a large number of us, it is enough if very few of us are malevolent or vicious enough to use this power for all of us to run an unacceptable increase of the risk of death and disaster”¹. Their conclusion is that CE is likely to be for the worst all things considered, unless it is accompanied by ME: therefore, we have a moral obligation to subject all of us to the manipulation of the biological or genetic bases of our sympathy and altruism and of our sense of justice, in order to minimize the risk of irreversible harm for the human species.

One possible reaction to this argument is to shrug one’s shoulders, denouncing the scenario as unjustifiably depressing and unrealistic. As noted by one commentator, it seems fair to say that Persson and Savulescu are “pessimistic, to the point of paranoia”² in insisting that “small groups of people, or even single individuals, [may all too easily] cause great harms to millions of people, e.g. by means of nuclear or biological weapons of mass destruction”³. However, let’s take the challenge seriously and see what arguments can be brought against their view. I will concentrate on five main arguments, although more objections have been raised in the literature.

The first thing to note is that Persson and Savulescu’s scenario takes CE all too seriously. It is true that some interventions affecting our mental capacities are already available, and some more may be in the offing. However, it is highly unlikely that the capacities of human beings will be so radically altered by such interventions as to create a serious problem for humanity’s survival. CE will probably be effective

1 I. Persson and J. Savulescu, “The perils of cognitive enhancement and the urgent imperative to enhance the moral character of humanity”, *Journal of applied philosophy*, vol. 25, n. 3, 2008, p. 162-177, at 166.

2 J. Harris, “Moral enhancement and freedom”, *Bioethics*, vol. 25, n. 2, 2011, p. 102-111, at 106.

3 I. Persson and J. Savulescu, “The perils of cognitive enhancement and the urgent imperative to enhance the moral character of humanity”, p. 174.

in enhancing our memory and our capacity for concentration, and will probably enable us to strengthen our working capacities. However, it is highly unlikely that it will make all of us nuclear engineers, or proficient creators of nuclear weapons of mass destruction. The possibility that arms of mass destruction be easily available to many of us definitely does not depend on CE, but on a possible (though unlikely) pervasive diffusion of very complex scientific and technological knowledge. This being so, then, in as much as the urgent need of ME depends on the development of CE, I would suggest that there is no reason to worry that much, nor to spend the large amount of money presumably needed to achieve any sort of success in the project of ME. In other words, if we have a realistic view of the promises of CE, and we also take into account the enhancement of moral capacities that can be brought about as a side effect of CE, we should deny that pursuing CE without ME is likely to prove very perilous¹.

This deflationary reading of CE suggests an even more straightforward debunking argument, starting off with the logical form of Persson and Savulescu's argument. This is the following: if CE is to be pursued in a peaceful and non-risky way, than it is obligatory that ME is pursued as well. To this, it can be most naturally objected that, contrary to what the argument presupposes, CE and ME cannot be clearly distinguished, for CE is one of the causes of ME and ME cannot be accomplished without CE². However, I wish to point out a much more radical argument, according to which we might simply say that we don't need CE, or that we don't want CE, for we have much more reason to devote our money and scientific efforts towards other ends. Persson and Savulescu presuppose that CE is already under way, and that we already are a good way ahead in pursuing it, so that it must be stopped, unless we develop ME. But in fact there is reason to doubt the great achievements of CE, and to acknowledge that this kind of enhancement has very modest results and is probably unable to determine significant changes for better or worse in the human condition. Therefore, we might even give up the project of CE, and decide to devote our resources to other, more promising forms of enhancement –such as

1 J. Harris, "Moral enhancement and freedom", p. 110.

2 This critical line is pursued by J. A. Carter and E. C. Gordon, "On cognitive and moral enhancement: a reply to Savulescu and Persson", *Bioethics*, 29, n. 3, 2015, p. 153-161.

increasing the life-span, for example. If the antecedent does not hold, the consequent is not even on the agenda and Persson and Savulescu's argument for the "urgent imperative" of ME is a non-starter.

It will be objected that such arguments are dictated by excessive scepticism on future scientific and technological discoveries. However, there is reason –I believe– for additional scepticism. In fact, it can be noted that to say that there are biologic and genetic roots of moral behaviour is not to say anything about the precise influence of such roots. What is the precise influence of these roots? And what is the likely influence that can be exerted on human behaviour by manipulating such roots through biomedical devices? Unless we assume an implicit determinism, according to which influencing the biological bases of human behaviour is sufficient to produce significant consequences on human morality, it is far from clear that the influence that may be exerted on actual choices is such that it may effectively contrast any substantial human tendency to violent, criminal or otherwise immoral conduct. Human action is complex, and the factors influencing our decisions are numerous: acknowledging the role played by biologically hardwired dispositions to sympathy and altruism should not lead us to downplay the role of cultural, ideological, political, religious factors. If the biological factors play only a modest part in determining our actual behaviour, and if the scientific efforts devoted to altering them will only partly achieve their goal, than the project of ME will pay only a very modest reward and is perhaps unjustifiable at a cost-benefit analysis.

This suggests one more reason of scepticism, based on the actual poverty of the evidence concerning the feasibility of ME. Perssons and Savulescu themselves acknowledge that biomedical and genetic treatment of the human dispositions to altruism and a sense of justice is possible in practice "only to a very small extent"¹, and even that "A moral enhancement of the magnitude required to ensure that this [*i.e.*, humanity's destruction] will not happen is not scientifically possible at present and is not likely to be possible in the near future"². Their hopes focus on the role of oxytocin in promoting trust and social relationships, on the use of SSRIs to increase cooperation, and on the alleged effect of

1 I. Persson and J. Savulescu, "The perils of cognitive enhancement and the urgent imperative to enhance the moral character of humanity", p. 172.

2 *Ibid.*, p. 174.

Ritalin in reducing violent aggression. Oxytocin, in particular, is often cited as the love or cuddle hormone. However, it is difficult to think of it as a panacea for all evils: in fact, while it seems to have some effects in promoting the development of relationships of trust and affection, it is definitely not proven that this effect is general and not specific. On the one hand, as pointed out by Persson and Savulescu themselves, it has been found to reinforce pro-social attitudes towards in-group members, but to reduce trust and cooperation with out-group individuals¹. Moreover, the strengthening of the bonds of trust and cooperation effected by the hormone might help evildoers to reinforce their criminal ties and fulfil their plans more confidently and efficiently. In other words, there is reason to doubt that drugs and other manipulative interventions may ever be precisely targeted to cause specific motives or actions that are considered morally desirable. Finally, it must be remembered that empathy is not in itself a moral virtue or sentiment: it is rather the capacity to feel others' sentiments, to be attuned to their situation. Therefore, if the biomedical techniques should effectively promote this capacity, without being able to promote benevolent sentiments as well, the result would be the enhancement of a wicked man's sensibility and capacity to inflict pain on others.

A final observation draws on Persson and Savulescu's explicit declaration that, should ME be possible and safe, it ought to be compulsory: in fact, since our future depends on making ourselves "more moral", "there are strong reasons to believe that their [*i.e.* moral enhancements'] use should be obligatory, like education or fluoride in the water"². This remark casts much doubt on how "moral" would humans be, once they were compulsorily subjected to a hypothetical "moralising process". In fact, it might be objected that they would not be moral at all, since authentic morality depends on freely deciding to do good rather than evil. Perhaps Persson and Savulescu would reply, in a consequentialist vein, that it is not the fact that one freely decides to behave morally that counts, but rather the good effects brought about in terms of human lives saved, human sufferings alleviated, or preferences satisfied; so

1 C. de Dreu et al., "Neuropeptide oxytocin regulates parochial altruism in intergroup conflicts among humans", *Science*, vol. 328, n. 5984, 2010, p. 1408-1411.

2 I. Persson and J. Savulescu, "The perils of cognitive enhancement and the urgent imperative to enhance the moral character of humanity", p. 174.

that the morality of the outcome is enough to establish the morality of the process. However, it can be retorted that the “moralising process” would suffer from a sort of self-contradiction. In fact, why do we decide to engage in moral enhancement? Because we want to promote human happiness or well-being, we want to better people’s lives and to preserve them from the risks of a minority of evildoers. However, should we compulsorily subject them to the moralising process, we would in fact deprive them of much of what makes their lives worthwhile: for much of the value and beauty of human life depends on its being guided by autonomously chosen values and projects. If the values and projects of our lives are substantially decided by others, who paternalistically exclude, for “our good”, the option of being evil, then a very substantial part of the value and meaning of human life is taken away. The importance of autonomously choosing is part of the admittedly elusive meaning of “human dignity”: coercing someone into acting morally is trampling on her dignity. Therefore, even if we admit Persson and Savulescu’s doomsday argument, we can still claim that to buy the preservation of humanity at the cost of “undignifying” its life is highly objectionable and probably undesirable.

Replying to a similar objection put forward by John Harris, Persson and Savulescu have recalled a famous argument by Harry Frankfurt, to the effect that “people can be responsible for how they act and react in situations, even though someone else has determined how they will act and react in those situations. This is true even when the determination takes the form of coercion which restricts the subject’s freedom”¹. To this, I would reply that the responsibility that remains here is only of a consequentialist kind: that is, it is not the case that I would be responsible because the actions I took are mine, in that I have exerted my control on them and decided to perform them, instead of doing otherwise. It would still make sense to ascribe responsibility to me only because I could be responsive to threats of punishment or promises of reward and could therefore “decide” to adjust my behaviour to avoid the former and pursue the latter. To determine how people act and react is in fact to alienate them from their actions, to rob them of the property of their actions. And this, I submit, is to rob them of their dignity as moral

1 I. Persson and J. Savulescu, *Unfit for the future: the need for moral enhancement*, Oxford, Oxford University Press, 2012, p. 114.

agents. To say, with Frankfurt, that moral responsibility does not entail the possibility to do otherwise because an agent *A* is responsible even if we know that some person *B*, or a mechanism in her brain, would intervene if *A* decided to do the wrong thing, fails to capture the central point: we do not say that *A* is responsible because we know she could *perform* a different action, but because we know that she could *choose to perform* a different action, even though –“in the Frankfurt-style case”– she would be prevented from performing the wrong action, should she choose to do so. In other words, moral responsibility entails freedom to choose: if the mechanism controlled the process from its start, we would not ascribe any moral responsibility to the agent.

In their 2012 book *Unfit for the Future*, Persson and Savulescu seem to suggest a slightly different argument to the same conclusion. Perhaps having realised the weakness of their main argument in the 2008 paper, they do not centre on the perils of CE in particular, but simply on the potentially massive risks posed by technological developments as such. They make very much of the simple possibility that, independently of any CE, terrorist groups come into possession of weapons of mass destruction, by producing or stealing nuclear bombs or fabricating biological weapons –for example, through the genetic engineering of smallpox or of the Ebola virus. The growth and easy availability of technology is such that the possibility of these disastrous events is not negligible, and this should bring us to make our best efforts to tackle the problem adequately. Moreover, they also depict with considerable precision and concern the likely effects of climatic and environmental changes that will take place in the near future due to anthropogenic reasons. They show that the environmental problem is a paradigmatic example of the “tragedy of the commons”, in which no one has strong reasons for doing what is in the best interest of all, and particularly of the future generations; more specifically, they argue that politicians of Western liberal democracies have no incentive to implement policies imposing the curtailment of the present rate of consumption –policies “that appear suicidal from the point of view of their career”¹. They also suggest that human psychological dispositions are ill adapted to the present human predicament, since our bias towards the near future, our

1 *Ibid.*, p. 80.

parochial altruism and our causally-based notion of responsibility do not equip us to properly handle our ever increasing powers of action and destruction¹. Once again, the conclusion is that, in order to tackle these potentially lethal perils impending on humanity, the development of effective ME through biomedical means may be the only option.

This new strategy, of course, rules out the first two objections, based on the connection between CE and ME. However, it leaves the other criticisms untouched, and perhaps invites a more general objection. In fact, if the problem is the threat posed to liberal societies by the existence of terrorist groups, it is difficult to see how ME could be the most rational solution to it. By definition, people adhering to such groups will be a small percentage of the population (even though this is enough “for all of us to run a significantly greater risk of death and injury”²); in order to guard ourselves from the risk of a terroristic attack analogous to the one that took place on 9/11, we should ensure that all the citizens of the world have been subjected to the proposed ME. But, of course, it is impossible to bring about any such result; by definition, terroristic groups act in secrecy and it is highly likely that they cannot be reached by any coercive “moralising” political programme, unless Persson and Savulescu have in mind a “brave new world” scenario in which all individuals –perhaps by using ART technologies combined with the proposed genetic moralising interventions– are coercively programmed in order to avoid the undesired characteristics. In any case, this science fiction hypothesis would take several decades in order to be accomplished, without considering the time to develop effective systems for moralising human conduct; if the risks are as impending as they denounce, any such solution will inevitably come too late. As noted by John Harris, it is much more reasonable to expect more effective results, in reducing the risk that human hate and despair resort to political use of weapons of mass destruction, from the adoption, by governments and international entities, of effective policies on “global poverty, climate change, education, population control, disease prevention, clean water and the like”³. In other words, if the reason for ME is the one

1 See also I. Persson and J. Savulescu, “Unfit for the future? Human nature, scientific progress, and the need for moral enhancement”, in J. Savulescu, R. ter Meulen and G. Kahane (eds.), *Enhancing human capacities*, Chichester, Wiley-Blackwell, 2011, p. 486-500.

2 I. Persson and J. Savulescu, *Unfit for the future*, p. 47.

3 J. Harris, “Moral progress and moral enhancement”, *Bioethics*, vol. 27, n. 5, 2013, p. 285-290, at 290.

offered by Persson and Savulescu, then it seems that it is no reason, for it is an ineffective means for the proposed end, or at least a much less effective means than other strategies that can be imagined.

If what I said so far holds, then the arguments for the moral necessity of ME are not conclusive. However, nothing in what I said excludes the possibility that ME –while unable to save humanity from the risk of “ultimate harm”– would be a accessible and welcome result. In other words, even though it will not solve any of the worst problems now faced by humanity by itself, ME is nonetheless something worth pursuing. This much more modest conclusion was defended by Thomas Douglas, who argued that “there are some emotions [...] whose attenuation would sometimes count as a moral enhancement regardless of which plausible moral and psychological theories one accepted”¹: reducing such emotions, like strong aversion to members of certain racial groups and the impulse towards violent aggression, would constitute a moral enhancement and must be welcome. In fact, such emotions are the source of bad motives for action, that is, of motives leading to morally questionable actions: the ME process would intervene by directly modulating the emotions, in order to bring about better motives and “more moral” actions. Therefore, there are no reasons to deny that ME, if effective and safe, is morally permissible and desirable.

There is no doubt that Douglas’ contention is much more promising than Persson and Savulescu’s: however, I believe that it is still far from convincing. I will raise three main concerns. Firstly, once we acknowledge that to improve oneself and one’s character is a worthwhile goal, we cannot conclude that pursuing this goal is morally unobjectionable, before we consider a) the process through which the improvement comes and b) the consequences that it may have. Douglas sees no problem in engaging in biomedical enhancement as compared with the standard process of moral training and self-education; there is no intrinsic difference in the value of the two processes and the two may well be complementary. However, this is doubtful. The standard process of moral improvement and self-education is inherently valuable, for it implies the process of actively deliberating on one’s motives, inclinations and reasons. Engaging

1 T. Douglas, “Moral enhancement”, *Journal of applied philosophy*, vol. 25, 2008, p. 228-245; I am quoting from the reprint in *Enhancing Human Capacities*, p. 467-485, at 470.

in deliberation and learning to put aside certain motivations helps the agent develop her ability to cope with all kinds of situations –an ability that may be of use in several different circumstances. The direct modification of the patterns of neural activations accomplished by the proposed ME interventions is not a valuable process in itself, and may not enable the establishment of a stable disposition in the subjects' character. In replying to Harris' critical observations¹, Douglas writes that his approach supports direct modification of the emotions, which means bypassing the subject's process of deliberation²: if we accept the standard conception of morality as a process of judgment and action proceeding from our evaluation of the different reasons and options in the light of our ideal of a good life, this is not an unobjectionable result.

A second observation, following directly from the first, looks at the consequences of a hypothetical ME process. According to the standard view of moral experience, the work of the formation of one's character is a process ever in progress; to know oneself and one's limits, to acknowledge and control one's emotive reactions is a vital element in the ongoing process of self-education and training. Now, if –thanks to an effective process of ME– the emotions are not controlled and disciplined, but simply erased, the process of the free construal of one's moral character and identity is hampered, and the individual's morality is endangered. Anticipating the objection, Douglas writes that the emotions in questions –which he calls the “counter-moral emotions”– are merely “brute mechanisms”³ dealing with one's “brute self”; as a consequence, he concludes that ME allows greater freedom to the “true self”. However, the distinction between the brute and the true self is far from being clear and easily traceable: since the self is constructed out of largely interconnected patterns of emotional and moral responses, along with a complex set of beliefs and ways of thinking, which are themselves not unrelated to one's emotions and sentiments, to draw any precise line between the two kinds of selves is an abstract and arbitrary procedure. Therefore, it can at least be speculated that an ME process such as the one envisaged by Douglas, would be an attempt to the integrity of the moral self.

1 J. Harris, “Moral enhancement and freedom”, p. 104-105.

2 T. Douglas, “Moral enhancement via direct modulation: a reply to John Harris”, *Bioethics*, vol. 27, n. 3, 2013, p. 160-168.

3 T. Douglas, “Moral enhancement”, p. 480.

Lastly, it cannot be excluded that also counter-moral emotions such as the aversion to members of groups different from ours and even the impulse towards aggression may sometimes play a positive role in individual moral life; Douglas himself acknowledges that, if I witness an attack on another person on the street, “impulsive aggression may be exactly what is required of me”¹. But how can we be sure that we will develop ME techniques as precise and targeted as to exclude the impulse to aggression in cases where it would be morally deplorable, and not to exclude it in cases where it is morally required? As noted by Harris, and accepted by Douglas, “what is necessary for moral enhancement is the *fine* tuning of certain emotions in a person-specific way that is sensitive to prevailing circumstances, not the wholesale elimination of emotions at a population level”². Therefore, there is a serious risk that attempts at ME will in fact lead to moral decline. Douglas says that this risk is no reason to declare ME impermissible; however, if appropriate fine-tuning of emotions through biochemical modulation is not available and effective, the odds are rather high that ME interventions would flatten emotive reactions and sentiments in a much general way: this would enable the avoiding of excessive reactions that may cause morally undesirable behaviour, but would also cause possible indolence and sloth, which would alter for the worse the moral character of the individual.

Any means x is morally necessary if a) there is some goal y that unconditionally ought to be pursued, b) x is an effective means to achieve y , c) there is no alternative means that could perform better than x with a view to y , and d) the use of x has no negative side effects in relation with y . According to Person and Savulescu, “moral enhancement is necessary if human civilization is to have a reasonable chance of surviving not merely the present century but also following centuries”³. However, I have tried to show that, granting that the goal of humanity’s survival for the present and the following centuries is unconditionally to be pursued, moral bioenhancement is almost certainly a scarcely effective means to achieve it, that alternative means may be more effective in promoting such a goal and that ME is likely to cause negative side

1 *Ibid.*, p. 470.

2 T. Douglas, “Moral enhancement via direct modulation: a reply to John Harris”, p. 166.

3 I. Persson and J. Savulescu, *Unfit for the future*, p. 133.

effects or the kind of human life that is thereby preserved. This being so, I conclude that the argument for the moral imperativeness is far from being conclusive: there is no need of moral enhancement.

This leaves open the possibility that, while not being a moral necessity, ME is however beneficial and worth pursuing, perhaps along with other measures contributing to the goal of bettering humanity's future condition. According to Douglas, there is every reason to believe that ME is a useful and worthwhile project, and no reason to consider it morally impermissible. However, I have listed some reasons that can make us sceptical also of this more moderate conclusion: the process of ME is not unobjectionable in itself, and it is likely to produce undesirable consequences, as far as our ordinary capacities for moral thinking and moral feeling are concerned. These considerations may justify an overall sceptical conclusion, according to which ME, far from being mandatory, is not even permissible.

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