

Susan B. Levin. *Posthuman Bliss? The Failed Promise of Transhumanism.* Oxford University Press 2021. 360 pp. \$65.00 USD (Hardcover 9780190051495).

Transhumanism is the philosophy that science and technology will soon transform humans such that they will become posthuman. This means people will enjoy things like radical life extension and cognitive enhancement. The predictions and promises made by transhumanists are gaudy. Do they stand up to critique? In this book, Susan B. Levin argues against transhumanism. She begins by pointing out that transhumanism is not merely a bioethical issue, but has important implications about value, knowledge, and reality. Her critique is therefore comprehensive. Too many critiques, on Levin's view, focus on outcomes—will everyone, for example, have equal access to enhancement? As an alternative to transhumanism, Levin cites virtue ethics as a more attractive, and more humane, approach.

The first three chapters focus on the mind and brain. In chapter 1, Levin interrogates the role that reason plays in transhumanism. For the transhumanist, reason is paramount, and is the faculty that science will enhance. According to Levin, the dedication and valorization of reason originates in the Enlightenment. Levin calls this valorization 'rational essentialism,' and contrasts it sharply with affect, which encompasses emotion and mood. Levin proceeds to illustrate that transhumanism is antagonistic toward the nonrational faculties. In fact, for transhumanists, so-called 'negative' emotions like anger would be ideally deleted from the range of possible experiences. For Levin, this impoverishes what it means to be human. In fact, there are ways in which anger, for example, may not only be appropriate but may even, in some contexts, contribute to our flourishing.

One reason why transhumanists so confidently appeal to cognitive enhancement is that it is already upon us in the case of psychopharmacology. For example, Adderall and Ritalin are prescribed to treat ADHD. On the transhumanist view, nothing should stop us from developing new and exciting drugs to augment our memory and cognitive abilities. Levin indicates several problems with this notion. First, there is such a thing as a cognitive tradeoff. For example, while Ritalin strengthens memory, it also disrupts control. There is also evidence that stimulants only improve cognition for people who register below the average. Similar problems arise for creativity, which is one of the great promises of bioenhancement. Research suggests that those with higher cognitive baselines are actually impeded by stimulants. Transhumanists tend to connect speed and information with creativity, but Levin shows that increased velocity is altogether different than creativity.

In chapter 2, Levin deepens her critique of transhumanism's account of the mind and brain. After rehearsing dated theories like basic-emotion and dual-process theory, she cites appraisal theory as a demonstrably superior account. Unlike its predecessors, appraisal theory rejects the view that emotion and reason occupy distinct spheres in the brain. Instead, emphasis is squarely on the interpretation and even reinterpretation of emotional experience. This reflects the sophisticated flexibility of our mental life. For Levin, Aristotle's rich account of the emotions and how they harmonize with our other faculties is a better explanation than the transhumanist account which sharply distinguishes reason from emotion. Aristotle not only preserves a place for the emotions, but also coalesces with current scientific findings. Like appraisal theory, Aristotle does not seek to 'enhance' people by minimizing or even eliminating their emotions.

Chapter 3 is unique in that it specifically interrogates the work of Persson and Savulescu on the imperative for moral bioenhancement. The justification for this being an imperative is our probable extinction without enhancement (e.g., nuclear arms, climate change) and finds its origin in a basic flaw of human psychology: inadequate prosocial motivation. Moral bioenhancement would

therefore consist of ameliorating this flaw. For these thinkers, the two main prosocial mindsets are altruism and a sense of justice. What biomedical therapies could be used to enhance these attitudes? Consider oxytocin, which increases sociability. Levin notes that what oxytocin really does is strengthen the division between in-groups and out-groups. In principle and practice then, more oxytocin can generate more resentment and distrust aimed at those in the out-group. Persson and Savulescu also cite the benefits of serotonin but the evidence is scant. It's not clear more serotonin improves a person's sense of justice, particularly when we emphasize the impartiality component contained within most concepts of justice. Moreover, too much serotonin is toxic and when it has been raised exogenously, the brain produces less of it naturally. Withdrawal from such medication can produce anger and mood swings. In other words, the very possibility of enhancement is far messier and more complex than transhumanists claim. The last part of the chapter examines the curtailment of freedom. According to Levin, the transhumanist would completely eliminate the possibility of any motivation to act immorally. This is a far cry from the morally virtuous person of the Aristotelian sort. Such a person wants to act morally, and does so, but this is the result of habituation and reflection. Such a person can understand the attraction of acting immorally.

In chapter 4, the sociopolitical implications of transhumanism for liberal democracy are explored. Levin notes that transhumanism's commitment to utilitarianism is often unacknowledged. Nevertheless, this commitment is extrapolated in the context of a public health initiative. Persson and Savulescu, for example, allude to education and fluoride in water. Perhaps the best example is vaccination wherein individuals can still abstain on religious or philosophical grounds. In this way, the balance is set between preserving individual liberties and ensuring public health. But Persson and Savulescu insist that bioenhancement will be compulsory since a person who has not been enhanced can cause too much harm. For Levin, the high standards required for something to be compulsory are not met. Moreover, Persson and Savulescu support restrictions on the right to privacy and freedom of the media, justified on utilitarian grounds. Levin notes that legitimate critique and debate can be quashed once something is accepted to be a matter of public health, although I think this needs to be reevaluated considering the current pandemic. Arguably, Levin's strongest point is that transhumanism fails on utilitarian grounds when the probability of success is entertained.

Chapter 5 discusses the connections between transhumanism and the eugenics movement. In both cases, for example, there is the notion of supplanting or transcending Darwinian evolution and directing evolution ourselves. Both movements celebrate rationality devoid of emotion and mood. Both cast their programme as one of public health. In other words, although transhumanists explicitly distinguish themselves from the earlier eugenics movements, there are worrying parallels that, for Levin, need to be more honestly addressed.

Chapter 6 looks back to the mid-twentieth century, and how the rise of computing and cybernetics influenced transhumanist thought. The thesis is that these technological developments introduced a series of poor metaphors that connected what is knowable with information. Of course, science uses metaphors all the time in hypotheses, theories, and explanations. However, sometimes the metaphors can be poor if, as in this case, they are taken too literally. The brain is conceptualized not *like* a machine, but as a machine.

In the final chapter, Levin presents her alternative to transhumanism, which is anchored in ancient Greek virtue ethics. Both Plato and Aristotle, together with modern virtue ethicists like MacIntyre, are explored. For Levin, virtue ethics has many advantages. For one, it has a wide scope, encompassing all aspects of human life. Second, it is developmental in that it is something humans work and reflect on as they live. Education is paramount. In the final part of the chapter, she highlights virtue exemplars like Martin Luther King Jr. who simultaneously embraced the ideals of

American democracy while at the same time fighting injustice.

In her discussion of virtues, Levin references the practices and communities that give content to the virtues. A lot of this comes from the influential work of MacIntyre. There is no discussion of MacIntyre's *Dependent Rational Animals* where he seeks to answer the criticism that his account of the virtues must, in part, be grounded in some theory of human nature. The first part of *Posthuman Bliss* spends a lot of time refuting the account of human nature latent in transhumanism and it would have been valuable to see Levin strike an explicit contrast in the final chapter.

The book is heavily sourced, and while the scientific details can be challenging, they are necessary to fully explicate the book's argument. Transhumanism is not a unified movement and so some criticisms apply to some individual thinkers and not others. For the most part, Levin ably moves back and forth between individual transhumanists and their arguments, and the movement's convictions more generally. One might be surprised to read such a trenchant critique of transhumanism only to have the final chapter reach all the way back to the Greeks, but Levin makes a compelling case. I certainly recommend the book for its detailed arguments against the claims of transhumanism and for its willingness to offer an alternative.

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