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The Ethics of Human Enhancement and Ferrando’s Philosophical Posthumanism

Kevin LaGrandeur¹

Introduction

In her recent book, Francesca Ferrando discusses the various facets of posthumanism, philosophical and speculative (Ferrando, 2019). That is, she looks at it from its philosophical perspective as a mode of post-*humanism*—that is, as a philosophy that rejects humanism and its focus on “man as the measure of all things”—and posthumanism’s descent from poststructuralism and postmodernism of the late twentieth century. And on the other hand, she also discusses the other major vein of posthumanism—the post-*human*: That is, the form that asks what new species might we humans become if we continue to modify ourselves using the latest scientific tools at our disposal? It is this second sense upon which I wish to focus, because Dr. Ferrando raises some very important issues regarding this project in human self-evolution in her chapters on bioethics and human enhancement—chapters 23-25.

In those chapters, Ferrando begins by noting how transhumanists advocate a Lamarckian-influenced stance that we should be able to use technology to exercise a “direct and deliberate control” over our own evolution (127). This transhumanist project, if fulfilled, is what would lead to the eventual rise of a post-human species, perhaps not very similar to the humans we know now. She goes on to examine the bioethical arguments for and against using advances in biotechnology, genetics, and other biomedical discoveries for enhancing humans to attain post-humanity, as opposed to providing healing therapies. She emphasizes throughout that “we need to reflect on these technologies seriously and wisely...envisioning a safe path to bridge” precaution and proactivity—the latter being important to prevent our own extinction in the face of many existential threats we face. Thus, she notes, we will be able to “enable the flourishing of responsible research that may bring important contributions to human and non-human life” (137-38). I couldn’t agree more, and I’d like to expand on this worthy discussion of hers by adding my perspective to it.

In her inquiry, Dr. Ferrando focuses primarily on the example of genetic manipulation of human embryos using a new gene editing tool called CRISPR to maximize cognitive abilities, among other things. She does an excellent job of outlining the ethical dilemmas posed by this, including issues such as genetic discrimination, the cultural specificity of values, and the practical dangers of meddling with genes when we don’t yet know exactly how they interact with each other. Additional to her discussion, I would like to discuss those who wish to modify

¹ Kevin LaGrandeur, Professor, New York Institute of Technology; Fellow, Institute for Ethics and Emerging Technology and Co-Founder, New York Posthuman Research Group. E-mail: klagrand@nyit.edu.



human cognition using digital technology. I will focus on their aims and some ethical questions presented by this technique, which are slightly different from the aims and ethical issues regarding genetic research.

First of all, emerging digital technology is used not only in attempts to enhance human cognition, but also to record, decode, and alter it. There are those who want to enhance human cognition in order to save us from demise, and thus look to enhance humanity by digital means. Elon Musk is one of those. A few years ago, he heard about a prototype Wi-Fi antenna that can be implanted in the brain. It was originally developed by a Harvard team to help epileptic and Parkinson's patients who need what might be called "pacemakers for the brain." These folks have to be wired to external devices that regulate brain activity because their conditions are so extreme. But Musk's vision for this device was far more radical. He bought rights to the patent and helped start a company called Neuralink to research and manufacture this implantable Wi-Fi antenna, which he calls neural lace, for more than therapy for these horrible diseases: He has the ultimate goal of making us superhumanly smart. Musk envisions this implanted Wi-Fi antenna as a way for humans to communicate more efficiently—via a sort of digital telepathy—and he also sees it as a way for humans to compete with AI, which he thinks will surpass us very soon and put us at an existential disadvantage (Markoff, 2019). Among other things, the existential threat of AI exists with jobs, he says. He argues, "as artificial intelligence becomes more sophisticated, it will lead to mass unemployment. 'There will be fewer and fewer jobs that a robot can't do better,' he said at [a recent] World Government Summit" (Solon, 2017). His long-range plan is even grander: "He wants to use BCIs [Brain-Computer Interfaces] in a bi-directional capacity, so that plugging in could make us smarter, improve our memory, help with decision-making and eventually provide an extension of the human mind" (Marsh, 2018).

There are some practical hurdles to Musk's tool becoming reality. But setting practical problems aside and assuming these could be overcome soon, are the ethical implications of this innovation—which he calls "neural lace"—being sufficiently considered by Musk and his supporters?

The key ethical considerations regarding this kind of BCI are safety, especially given the speed of these developments, distributive justice (who will get the benefits? Who will pay for the poor to get them?), privacy, especially of thought (*over*-connectedness between people's brains could be a problem, and those who are wired to the Internet could have their thoughts and feelings exposed), and informed consent (do they adequately know what they're signing up for?). I'm also concerned about coercion: If some people choose to use implantable BCI to make themselves more competitive with machines, they also become better competitors with other humans for jobs and positions of power. As a result, the rest of the population might feel compelled to get the implants too, whether or not they really want them. (In keeping with Dr. Ferrando's focus on medicine, Briggles also discusses this issue of coercion with regard to genetic enhancement of children in the book *Rich Bioethics* (2010, 66)).

Some of the ethical concerns above may seem overblown, especially the idea that thoughts and feelings might become too transparent. Consider, however, that AI has already provided a massive increase in surveillance abilities, and that these abilities are already used in increasingly intrusive ways by governments. There is the repressive use of facial recognition technology by the Chinese government to surveil its Uighur population, for instance, and to curtail their individual freedoms. Moreover, this kind of surveillance has patently racist



purposes. The Chinese company Dahua, for example, has made a product that it boasts will allow its government (and others) to “detect the race of individuals caught on camera and offers to alert police clients when it identifies members of the Turkic ethnic group Uighurs” (Bhuiyan). This kind of racist and repressive technology has also recently become intrusive into people’s internal thoughts and feelings. As I’ve noted elsewhere (LaGrandeur, 2021), several Chinese companies have begun, in the name of efficiency, to force their employees to wear sensor-caps on their heads while they work in order to monitor in real time how they are feeling and how attentive their brainwaves show they are. Then, AI adjusts their workflow in response to this collection of brain patterns. This is certainly the beginning of intrusive dystopian use of emerging digital technology.

Closely connected to issues of the privacy of people’s thoughts and feelings I mentioned above, perhaps the most important ethical issue to consider is the question of human autonomy and agency. There have already been problems with this question regarding the use of today’s hard-wired BCI as psychotherapy. Brain-to-Computer Interfaces are already being used as an element of next-generation Deep Brain Stimulation (or DBS) to treat mood and emotional disorders, such as obsessive-compulsive disorder and depression. If an AI is controlling the brain’s moods and the reactions a person has toward her environment, then, patients and physicians worry, is it the person or the AI being expressed at any given moment? As some neuroscientists working on this type of BCI point out, “If [an AI] controller is added, one has effectively constructed a device that autonomously determines what the patient may or may not feel” (Klein et al., 2016, 141).

Some patients who have been treated for depression started losing their sense of self. One said, “There are parts of this where you just wonder how much is YOU anymore, and you wonder kind of, ‘How much of it is my thought pattern? How would I deal with this if I didn’t have the stimulation system?’ You kind of feel artificial” (Klein et al., 2016, 144).

To conclude, I agree with Dr. Ferrando’s cautionary approach: There is much possible good in our increased merging with smart technology, but we need to be careful to protect the crucial parts of our ordinary humanity. Since it apparent from the examples I’ve given here that nation-states and businesses are unwilling to regulate what they use and produce, respectively, some sort of international regulation will probably be necessary, similar to what the international community already does regarding nuclear and chemical weapons.

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