Philosophy at the Pub
Rozz-Tox, Rock Island IL
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Transhumanism Pub: More Human than Human Edition
Should We Seek Artificial Enhancement?

Things assumed or not assumed in this discussion:

- Assumed: some form of moral realism is true—there are objective moral truths. For example, the statement "It is morally wrong to maim a baby unjustly merely for amusement" is obviously true.
- Not assumed: that it's ever possible to create conscious mental experience using artificial hardware, whether in an independent artificial neural network or in a device implant.
- Assumed: some terminology:
  - enhancement might take the form of pharmaceuticals, brain-computer interface (BCI) implants, or genetic alterations. Let us use "drug enhancement", "BCI enhancement", and "genetic enhancement" for each sort, respectively.
  - "uploading" will refer to the attempt, whether successful or not, to transfer one's mental life from the "wetware" of the brain to some external information processing and storage system ("the cloud").
  - Computational Theory of the Mind (CTM): The mind is essentially the program running on the hardware of the brain, that is, the algorithm that the brain implements, something in principle discoverable by cognitive science. (Schneider 2009, p246)

Guiding Questions:

- Suppose a tech company promises digital immortality through uploading your mind to "The Cloud": should you go for it?
- If reliable, affordable means were available to improve your cognitive processing power, memory/information storage, logic/problem solving abilities, language abilities, etc., through brain-computer interfaces (BCIs) or even genetic alterations, should you pursue them?
- If telecommunications technologies evolve to the point that BCIs enable direct communication of thoughts from your mind to others and vice-versa, should we collectively get on board?
- Are we, as some philosophers maintain, "natural born cyborgs"?

Thought Experiments:

- Center for Mind Design—brain enhancement shopping (Schneider forthcoming, Introduction)
- Gradual enhancements to "posthuman" status (Schneider forthcoming, Chapter Five)
- Epistemological worries about enhancement (Schneider 2009, Introduction)
- Sawyer's *Mindscan* and the "reduplication problem" (Schneider 2009, Chapter Nineteen)

Arguments:

- An argument against "uploading" and some forms of enhancement (Schneider forthcoming):
  1. Either the
     (a) psychological continuity theory of personal identity is true, or
     (b) brain-based materialism is, or
     (c) the soul theory is, or
     (d) the no-self view is.
  2. If brain-based materialism is true, then uploading/enhancement results in the annihilation of self.
  3. If the psychological continuity theory is true, then uploading would (at best) result in two persons—one copied into the cloud, and one in the brain (the "reduplication problem").
  4. The soul theory is too questionable, and the no-self view would have no problem with uploading.
  5. More theorizing is necessary to settle the disputes between the psychological continuity theory, brain-based materialism, or the no-self view.
  6. If that's so and each view recommends different answers regarding uploading, then we should assume a position of "metaphysical humility", which recommends against moving hastily into procedures which won't guarantee our survival.
  7. Uploading is one such case.
  8. So, we shouldn't seek to upload our minds into the cloud.
     1. note: patternism (a version of psychological continuity theory) inherits the problems for the computational theory of mind (endorsed by transhumanists Kurzweil and Bostrom).

- An argument for uploading of a certain sort:
  1. Either the psychological continuity theory of personal identity is true, or brain-based materialism is, or the soul theory is, or the no-self view is.
  2. The soul theory isn't true, and neither is brain-based materialism.
  3. If the psychological continuity view is correct and we can be reasonably sure that the cloud can harbor conscious entities, then the most plausible result would be some form of duplication of one's consciousness, not a transfer of mind from one location (the brain) to another (the cloud).
  4. If the no-self view is correct, then our persistence is always altered anyway, so there's no harm in uploading, even if there are reasons to not seek the discontinuation of consciousness in one's brain.
  5. Duplication might be interesting, and so long as we take steps to avoid unjust harms when pursuing a given project, we should pursue it.
  6. So, we should pursue uploading, provided we don't end the continued persistence of consciousness in our biological bodies and we have good reason to believe that the cloud can host consciousness.
     1. note: there's an inherent "techno-optimism" latent in this argument
     2. techno-fortune favors the metaphysically bold

- An argument against BCI enhancements (Bostrom 2014, p54)
  1. While BCIs actually exist and have promising applications in helping people who are severely injured, the promise of technologies becoming available on the consumer market appears weak, for the following reasons:
     (a) it is difficult to get a machine to interpret neural activity and represent it to another (for telecommunications purposes) when we already have systems that allow us to read and send information, albeit indirectly.
     (b) implants can lead to infections and other bodily complications
  2. Developing superintelligent artificial neural networks will be the more promising route, by contrast.
  3. We should take whatever is the most promising route to superintelligence.
  4. Thus, we should not seek BCI enhancements for the purposes of reaching superintelligence.

- An argument in favor of enhancing future generations (not individuals already born):
  - We have reasons to doubt the computational theory of mind, and reasons to doubt that machines will independently be capable of being conscious.
  - We know that we are conscious, and we can see many areas for improvement.

  - Neurophysiologists have already devised hippocampus prostheses that enable patients with damaged memory function to regain some function (Schneider forthcoming, Chapter Eight).
  - If there's a promise for some potential cognitive enhancements via BCI implants, there will be an increasing market for such technologies.
  - If genetic enhancements—in tandem with BCI enhancements—can accelerate the path to superintelligent decendants, the future of the world will be better, even if that means a transition from humanity to posthumanity.
  - We should pursue whatever projects will lead to the most prosperous outcome for our descendants.
  - So, we should enhance future generations with BCIs and safe genetic alterations.

Suggested Reading (all available via major online book retailers):

- Bostrom, Nick. (2014) *Superintelligence: Paths, Dangers, Strategies*. Oxford University Press. ISBN: 978-0198739838.

- Clark, Andy. (2003) *Natural Born Cyborgs: Minds, Technologies, and the Future of Human Intelligence*. Oxford University Press. ISBN: 978-0195148664

- Schneider, Susan. (2009) *Science Fiction and Philosophy: From Time Travel to Superintelligence*. 1st edition. Wiley-Blackwell. ISBN: 978-1405149075.

- Schneider, Susan. (forthcoming 1 October 2019) *Artificial You: AI and the Future of Your Mind. Princeton University Press*. ISBN: 978-0691180144.