

CALL FOR PAPERS

Critiquing Technologies of the Mind: Enhancement, Alteration, and Anthropotechnology

Special Issue of *Phenomenology and the Cognitive Sciences*

Over the past twenty or even thirty yearsⁱ, an international and interdisciplinary body of research has developed on the various ethical and philosophical issues raised by the possibility of using technological means to transform the human body beyond medical ends. The phrase that has emerged in the English-speaking bioethical debate to describe this new field is 'human enhancement'. Some authors, particularly in France, have raised objections to the positive valuation that is implied in the preferred English terminology. As an alternative, the terms 'anthropotechnics' and 'anthropotechnology', combining the Greek words 'anthropos' and 'techne', have been suggested as preferable conceptual tools, which avoid the implicit positive valuation of 'enhancement', while directly addressing the question of technological intervention in and on the body for extra-medical endsⁱⁱ.

This special issue will investigate a specific area of the anthropotechnics/enhancement debate: those modifications of the body aimed at affecting the processes of the mind. This field is generally referred to as 'cognitive enhancement', we prefer the more neutral and encompassing expression 'technologies of the mind'. The issue will aim to address the fundamental ethical and philosophical questions surrounding this area of technology through the prism of the philosophically productive contrasts and conceptual differences between the (broadly speaking) Anglo-American and the (broadly speaking) French debates. The idea of anthropotechnics has emerged out of different philosophical traditions than the mainstream Anglo-American philosophical discourse around enhancement. We argue that a careful interrogation of the conceptual resources drawn upon by the French and, rather coarsely speaking, continental philosophical traditions (here we include phenomenology, hermeneutics, French epistemology, and post-structuralism) examined against a backdrop of the 'enhancement' debate more familiar perhaps to English speaking readers, will significantly enrich and broaden the philosophical literature in this area, as well as enlarging its international conceptual scope.

We propose four main axes for consideration, but welcome contributions on all topics and from all approaches within the scope outlined above:

1. What are the different technologies that are currently presented as cognitive enhancers? To what extents are the virtues attributed to them a reality? This includes the stage they are at on the path from hypothetical modification to widely used products, and the various philosophical questions arising from their use.

2. How is the concept of cognition itself deployed in the idea of cognitive enhancement. Nick Bostrom and Anders Sandberg, two of the most prominent philosophers studying 'enhancement' define cognition as a set of processes that comprise acquiring information (perception), selecting (attention), representing (understanding) and retaining (memory) information, and using it to guide behaviour (reasoning and coordination of motor outputs)ⁱⁱⁱ. They insist that 'interventions to improve cognitive function may be directed at any one of these core faculties'ⁱⁱⁱ. But these faculties are generally approached uncritically in the literature, as is the question of how they overlap and interact with one another as well as with emotion, and aspects of embodiment. Also, most of the products that are presented as potential 'cognitive enhancers' (caffeine, Adderall, etc.) often appear, after more detailed studies^{iv}, not to improve cognition itself, but the conditions of use of existing cognitive abilities. Likewise, in the existing literature, there are few studies interested in issues such as altered perception^v: the focus on a few products and specific functions like alertness and memory appears to hinder the consideration of technologies that may affect other aspects of cognition, and in other ways than enhancement narrowly conceived.

3. Does the modular approach to cognition, often ignoring the first-person perspective, and widespread in the 'cognitive enhancement' literature, present an accurate account of subjectivity, and specifically of the enhanced subject? In this respect, some qualitative studies already provide a more complete picture

of the enhanced subject. But we argue that a wider use of phenomenological, neurophenomenological and narrative approaches to the subject is also needed, alongside more conceptually sophisticated accounts of subjective relations with environment.

4. What role should speculation and fiction play in the study of cognitive enhancement? Some philosophers emphasize the need for a ‘pre-emptive’ approach that tries to bring out the potential issues in technologies not yet developed, but on a speculative horizon, so as to be ethically and politically ready when they appear. But is this a legitimate and productive methodological approach? Are there past examples of such successful ‘pre-emptive’ philosophies of technology? How do these general considerations about speculative ethical thinking affect the particular topic of cognitive enhancement?^{vi}

The aim of this issue is to explore these and other approaches to the questions surrounding ‘technologies of the mind’, in particular by setting up an dialogue between analytical and continental, English-speaking and French-speaking, philosophical traditions^{vii}.

Submission information

Word limit: 8000 words

Deadline for submissions: **30 June 2015**

Publication is expected in 2016/17

Peer review: all submissions will be subject to a double blind peer-review process. Please prepare your submission for blind reviewing.

Submissions should be made directly via the journal’s online submission system: (<http://www.editorialmanager.com/phen>) indicating: Special Issue: Critiquing Technologies of the Mind.

For further details, please check the website of *Phenomenology and the Cognitive Sciences*: <http://www.springer.com/philosophy/philosophical+traditions/journal/11097>

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ⁱ For one the first academic works in the field, see: Glover, Jonathan. *What sort of people should there be?*. Harmondsworth: Penguin Books (1984).

ⁱⁱ For ‘anthropotechnics’ (*anthropotechnie*), see: Goffette, Jérôme. *Naissance de l’anthropotechnie: de la médecine au modelage de l’humain*. Paris: Vrin (2006); for ‘anthropotechnology’ (*anthropotechnologie*), see: Allouche, Sylvie. ‘Des concepts de médecine d’amélioration et d’enhancement à celui d’anthropotechnologie’. Missa, Jean-Noël, and Laurence Perbal (ed.) *“Enhancement”*. *Éthique et philosophie de la médecine d’amélioration*. Paris: Vrin (2009): 65-78.

ⁱⁱⁱ Bostrom, Nick, and Anders Sandberg. ‘Cognitive enhancement: Methods, ethics, regulatory challenges’. *Science and Engineering Ethics* 15, no. 3 (2009): 311-341.

^{iv} Nehlig, Astrid. ‘Is caffeine a cognitive enhancer?’. *Journal of Alzheimer’s Disease* 20 (2010): 85-94; Vrecko, Scott. ‘Just how cognitive is “cognitive enhancement”? On the significance of emotions in university students’ experiences with study drugs’. *AJOB Neuroscience* 4, no. 1 (2013): 4-12.

^v See for example: Warwick, Kevin, Mark Gasson, Benjamin Hutt, and Iain Goodhew. ‘An attempt to extend human sensory capabilities by means of implant technology’. *2005 IEEE International Conference on Systems, Man and Cybernetics*, vol. 2, IEEE (2005): 1663-1668.

^{vi} Butcher, James. ‘Cognitive enhancement raises ethical concerns’. *The Lancet* 362, no. 9378 (2003): 132-133.

^{vii} The five Paris workshops ‘Human enhancement: an interdisciplinary inquiry’ (2009-2010) were a first step in this direction. See <http://cerses.shs.univ-paris5.fr/spip.php?article351> and the upcoming book: Bateman, Simone, Jean Gayon, Sylvie Allouche, Jérôme Goffette, Michela Marzano (ed.). *Inquiring into Human Enhancement, Interdisciplinary and International Perspectives*, Basingstoke: Palgrave Macmillan (2015).