

## Cyborg enhancement - the authenticity debate revisited

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# Cyborg enhancement

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## The authenticity debate revisited

By Anne Gerdes

This short-paper outlines pro et con positions in the cyborg enhancement debate. By taking departure in the notion of situated cognition, it is illustrated how the opponent's and the proponent's positions toward cyborg technology raise different moral issues concerning the meaning of the value of authenticity, the real me, versus the enhanced "better me". Hence, does being true to ourselves entails making use of our unique human capacity for creativity, meaning that doing our best ought to involve enhancement? Or, is the value of authenticity incompatible with cyborg enhancement, because enhancement will inevitably be followed by alienation? Having outlined the landscape, I set out to explore arguments for both positions.

Keywords: Cyborg enhancement, authenticity, situated cognition, phronesis

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## Situated cognition – advanced tool using species

The notion of situated cognition can be explained for with reference to embedded cognition, implying that the surroundings may be seen as tools that can scaffold our mental activities<sup>1</sup>. By the same token, Ryle makes clear that we make sense of the world by being situated in practice:

“The statement ‘the mind is its own place’... is not true, for the mind is not even a metaphorical ‘place’. On the contrary, the chessboard, the platform, the scholar’s desk, the judge’s bench, the lorry driver's seat, the studio and the football field are among its places. These are where people work and play stupidly or intelligently. ‘Mind’ is not the name of another person, working or frolicking behind an impenetrable screen; it is not the name of another place where work is done or games are played; and it is not the name of another tool with which work is done, or another appliance with which games are played<sup>2</sup>.”

Yet, a more radical view is represented by the extended mind thesis, which holds that cognition goes beyond the individual organism<sup>3</sup>. In a similar manner, an embodied notion of cognition implies that our bodily being and presence in the world is considered

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<sup>1</sup>A short primer on situated cognition. Philip Robbins & Murat Aydede. The Cambridge Handbook on Situated Cognition, (eds.) P. Robbins & M. Aydede, 3-10, 2009.

<sup>2</sup> The Concept of Mind. Gilbert Ryle. The University of Chicago Press, 38-39, 1949.

<sup>3</sup> The Extended Mind. Andy Clark, David Chalmers.. Analysis, vol. 58, no 1. 1998.

important for our mental activities. Hence, in accounting for categorization and reasoning, Lakoff and Johnson argue that:

”..our categories arise from the fact that we are neural beings, from the nature of our bodily capacities, from our experience interaction in the world, and from our evolved capacity for basic-level categorization – a level at which we optimally interact with the world. Evolution has not required us to be as accurate above and below the basic level, and so we are not<sup>4</sup>.”

To summarise, these variants of situated cognition hold that mental activities are scaffolded by our bodily being in the world and by our interaction with artifacts, tools, and technologies: “what is special about human brains, and what best explains the distinctive features of human intelligence, is precisely their ability to enter into deep and complex relationships with non-biological constructs”<sup>5</sup>. Consequently, as reflected in the title of Andy Clark’s book, we are “natural born cyborgs”, who pair up with technologies in advanced ways, because we cannot avoid doing so. In fact, the ability to enhance our cognitive apparatus while using technology is what makes us human beings in the first place. With the growth in smart technologies, IoT, and ubiquitous technologies, which adapt smoothly to the needs of the user, it becomes impossible to avoid interacting with technology, and it becomes invisible how this interaction takes place as technology increasingly ceases to demand our attention<sup>6</sup>.

I shall not be elaborating further on these different positions towards cognition, but instead note that our being in the world and interactions with the surroundings and artefacts deeply influence who we are and how we reason, act and see ourselves. On the backdrop of these observations, it becomes interesting to discuss if technological enhancement can be said to constitute a threat to our human condition, as suggested by Fukuyama below?

“While it is legitimate to worry about unintended consequences and unforeseen costs, the deepest fear that people express about technology is not a utilitarian one at all. It is rather a fear that, in the end, biotechnology will cause us in some way to lose our humanity – that is, some essential quality that has always underpinned our sense of who we are and where we are going, despite all of the evident changes that have taken place in the human condition through the course of history. Worse yet, we might make this change without recognizing that we had lost something of great value. We might thus emerge on the other side of a great divide between human and posthuman history and not even see that the watershed had been breached because we lost sight of what that essence was<sup>7</sup>.”

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<sup>4</sup> Philosophy in the Flesh. George Lakoff, Mark Johnson. Basic Books, 30, 1999.

<sup>5</sup> Natural-Born Cyborgs: Minds, Technologies, and the Future of Human Intelligence. Andy Clark. Oxford Uni Press, 10, 2003.

<sup>6</sup> The Computer for the Twenty-First Century. Mark Weiser. Scientific America, 94-101. 1991.

<sup>7</sup> Our Posthuman Future. Francis Fukuyama. Consequences of the Biotechnology Revolution, 101, New York, Picador, 2003.

## Does technological enhancement constitute a threat to our human condition?

To deliberate about this question, one could start by answering affirmative, by stressing that cognition is embodied, and if we radically alter our neural or biological makeup to become cyborgs, this move would imply that we were no longer humans with the same mental capacities as ordinary humans. Hence, this would entail that our interactions with others and our understanding of the surroundings would change in, presumably, unpredictable ways. However, one could also reject the threat from cyborg enhancement, and instead emphasise that improvement through technology is a natural outcome of being human since as species we are distinctly characterised by being able to enhance our mental capacities by the creative development of, and engagement with, technology.

In what follows, I will frame the discussion of the abovementioned positions by taking departure in Taylor's notion of authenticity<sup>8</sup>, which stresses the importance of being true to oneself to find self-fulfillment in life. Furthermore, the Aristotelian concept of phronesis is introduced to elaborate on the notion of moral maturity, which serves as an important precondition for authenticity.

As an ethical norm, authenticity is what enables me to develop my identity and come to grasp with who I really am, and how I justify my life choices. However, to be true to oneself, by seeking self-fulfillment, is not equivalent to egoistic self-realisation, but rather has to do with becoming a well-balanced person, which of course demands to enter into relations with others. Consequently, no woman is an island. In our striving after the good (or the bad) we are mutually dependent on each other – we live, so to speak in a state of surrender to each other. From a phenomenological perspective, this is a question of a fundamental human condition, which we do not have the ability to transcend. Hence, we cannot arrive at ethics through isolated thought, but are, so to speak, born into it<sup>9</sup>.

By the same token, Taylor points to the dialogical feature of our existence as a condition for the ideal of authenticity<sup>10</sup>. He sets out to restore the ethics of authenticity, which has been crippled by pessimistic analysis of contemporary culture emphasizing degraded modes of authenticity, namely egoistic narcissistic self-fulfillment. Concerns about the dark sides of individualistic self-realization have neglected “that a powerful moral ideal is at work here, however debased and travestied its expression might be.”<sup>11</sup> In addition, Taylor raises critique against post modernistic voices defending a culture of soft relativism that implies a kind of neutral liberalism, which highlights self-determining freedom and thereby silence discussions about what constitutes the good life, since this is up to each individual to seek out for him or herself. As such, postmodern variants stresses that authenticity involves creating and constructing oneself, preferably, or, quite often, in opposition to norms and morality. However, these perspectives overlook that authenticity

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<sup>8</sup> The Ethics of Authenticity. Charles Taylor. Harvard University Press. 1991.

<sup>9</sup> The Ethical Demand. Løgstrup, K. E. (1997), University of Notre Dam Press, Notre Dame.

<sup>10</sup> Footnote 8, p. 33-35.

<sup>11</sup> Footnote 8, p. 15

requires “openness to horizons of significance”<sup>12</sup>, i.e. “a pre-existing horizon of significance, whereby some things are worthwhile and others less so, and still others not at all.”<sup>13</sup>:

“Otherwise put, I can define my identity only against the background of things that matter. But to bracket out history, nature, society, the demands of solidarity, everything what I find in myself, would be to eliminate all candidates for what matters. Only if I exist in a world in which history, or the demands of nature, or the needs of my fellow human beings, or the duties of citizenship, or the call of God, or something else of this order *matters* crucially, can I define an identity for myself that is not trivial. Authenticity is not the enemy of demands that emanate from beyond the self; it supposes such demands.”<sup>14</sup>”

To find out what constitutes significant issues for me is not something that I can do in isolation. Being true to myself involves coming to grasp with my original way of being – “I am called upon to live my life in this way, and not in imitation of anyone else’s.”<sup>15</sup>” Hence, I need to be in contact with myself to be true to my own originality, which does not imply a slide towards subjectivism in the shape of fulfilment as just of me. Consequently, as above-mentioned, Taylor understands the notion of authenticity on the background of the dialogical feature of our condition, emphasizing the demands of our relations with others – “self-definition in dialogue”<sup>16</sup>. Hence, he argues that we define and form our identity through dialogical interactions with significant others in our surroundings (for instance, we keep having inner conversations, reflecting the views of our parents long after they are gone)<sup>17</sup>:

“So the ideal of self-choice supposes that there are *other* issues of significance beyond self-choice. This ideal couldn’t stand alone, because it requires a horizon of issues of importance, which help define the *respects* in which self-making is significant.”<sup>18</sup>”

To sum up, Taylor is not seeking to strike a middle ground between the above-mentioned culturally pessimistic and post modernistic positions. Instead, he sets out to restore the ideal of authenticity as a valid ideal, holding that it makes sense to argue in reason about ideals. Moreover, such arguments can make a difference - we are not locked up in an iron cage, determined by the systems of modernity, such as capitalism, bureaucracy, and technology; rather we have the ability to transcend the instrumental reason of our time<sup>19</sup>.

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<sup>12</sup> Footnote 8, *ibid.* p. 66-67

<sup>13</sup> Footnote 8, *ibid.* p. 38

<sup>14</sup> Footnote 8, *ibid.* p. 39-40

<sup>15</sup> Footnote 8, *ibid.* p. 29

<sup>16</sup> Footnote 8, *ibid.* 68.

<sup>17</sup> Footnote 8, *ibid.* p. 33.

<sup>18</sup> Footnote 8, *ibid.* p. 39-40

<sup>19</sup> Footnote 8, *ibid.* p. 94-ff.

After having outlined the ethics of authenticity, I'll move on to the discussion of whether self-fulfillment may be stifled or stimulated by cyborg enhancement. But, before doing so, Parens' quotation below will be used to guide the discussion and at the same time it wisely reminds us, that from time to time we allow ourselves an ambivalent attitude towards a complex question:

“I think that when we engage in debates about enhancement technologies, it can help to recognise that people on both sides are speaking out of the framework in which they feel most comfortable. And I think it is crucial to recognise that none of us, if we are reflective, feels comfortable only in one of these frameworks. Even if we settle in one for the sake of debating each other, in our day-to-day lives we shuttle between them. One might say that in our day-to-day lives we are often more prone to allow ourselves such thoughtfulness-and ambivalence- than when we sit down to engage in scholarship.<sup>20</sup>”

### The opponent's argument: The demand for moral maturity means that there is no short cut to fostering authenticity

“Many believe that “soul-making” is impossible without struggle (..), and that achievements ring hollow without sacrifice or effort.<sup>21</sup>”

Growing moral maturity is a prerequisite for authenticity and for the fulfilment of our life projects. Hence, Aristotle ponders upon the man of prudence, i.e., the *phronimos* or *spoudaios*<sup>22</sup>, and we are advised to act as the *phronimos* would act since he knows what to do and to do it well (at the right time, in the right way and to the right extent). At first impression, this may sound abstract to the level of being trivial since Aristotle's observations leave the novice with no clear sense of what to do. But, Aristotle addresses those who already are experienced, and to them, his ethical inquiry may inform them about how to become better men:

“In every subject it is the man educated in it who judges correctly, and the man of good general education is the good judge in general. This is why young people are not proper students of morals and politics: they are inexperienced in the practical side of living, whereas our arguments derive from and are about precisely that<sup>23</sup>”.

Likewise, *phronesis* is described as the kind of practical wisdom allowing one to cultivate a sense of what is good for one-self and others. Moreover, it is illustrated how our

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<sup>20</sup> Authenticity and Ambivalence: Toward Understanding the Enhancement Debate. Erik Parens, 38. The Hastings Center Report, vol. 35, no 3 (May – Jun., 2005), 34-41, 2005.

<sup>21</sup> Ethics of Human Enhancement: 25 Questions & Answers. Fritz Allhoff, Patrick Lin, James Moor, John Weckert. Studies in Ethics, Law, and Technology, vol. 4, issue 1, 22, 2010.

<sup>22</sup> Nicomachean Ethics. Aristotle. The Philosophy of Aristotle. Transl. by J.L. Creed and A. E. Wardman, (eds.) R. Bambrough The Philosophy of Aristotle, Penguin Group, New York, 2011.

<sup>23</sup> Ibid., p. 315, Book I.

sociality plays a significant role in shaping us as moral reasoners capable of ethical deliberation about daily life issues and life projects. In a similar manner, the same observation is elegantly made by Dreyfus in his interpretation of Heidegger's understanding of *phronesis*:

“[...] *Phronesis* shows that socialization can produce a kind of master whose actions do not rely on habits based on reasons to guide him. Indeed, thanks to socialization, a person's perceptions and actions at their best would be so responsive to the specific situation that they could not be captured in general concepts<sup>24</sup>”.

In addition, Dreyfus emphasises the phenomenologically rooted description of our being, as being present “*always already* in a world<sup>25</sup>” that is organised by our embodied experiences. As such - and in line with the observations above, particularly, concerning embodied cognition - conceptual understanding is seen as subordinated to experience-based understanding. Hence, all though we initially might need rules and context-free principles to guide us, we gradually develop the kind of expertise, which allows us to act effortlessly in different domains. In the Dreyfus brothers' renowned phenomenology of skill acquisition, which they applied to argue against the feasibility of artificial intelligence<sup>26</sup>, the development of expertise is characterized by reference to the expert, who has a deep situational understanding of his area based on tacit knowledge (instead of analytical principles), which guides meaningful action in a given domain.

Thus, in exercising professional judgement, the development of skills moves from rule-based behaviour independent of context to situated context-dependent engaged action. This is also what allows us to grow moral maturity, and hence mirrors Aristotle's concept of *phronesis* in recognizing our experience-based knowledge and everyday moral judgements as the basis of authenticity in the formation of life plans. Hence, as mentioned above, young people, lacking practical experience, do not yet know means to bring about good ends, and as such, they are still moving towards finding themselves and their ways of flourishing.

Yet, cyborg technologies may support me in achieving personal goals, but at the same time, I might perhaps not be able to follow suit with or keep track of, the “new me” represented by my technology enhanced the self-developmental project. From a performance-oriented perspective, as a cyborg, I might become a better version of me. However, from a mastery-oriented perspective, I would not know how that came to happen, because I, so to speak, overtook myself, while developing apace, leaving little room for growing moral maturity in accordance with my newly gained talents. Alas, I may find that I have turned into a new and alienated version of myself, who does not reflect the authentic me, who developed through my situated, (real) embodied being in the (real) world.

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<sup>24</sup> The Myth of the Mental: How Philosophers Can Profit from the Phenomenology of Everyday Expertise. Hubert L. Dreyfus, *Proceedings and Addresses of the American Philosophical Association* 79 (Nov., 2005), 47-65. 2005.

<sup>25</sup> *Ibid.*, p. 49.

<sup>26</sup> *Mind over Machine*. Hubert L. Dreyfus, Stuart E Dreyfus. The Free Press, New York, 1986.

## The proponent's argument: Authenticity can, and ought to, be driven by creativity

“Man is the only creature that refuses to be what he is<sup>27</sup>”.

However, returning to Clark's notion of “natural-born cyborgs,<sup>28</sup>” makes us realise that the way we blend in with technology might be what makes us humans in the first place:

“It is because our brains, more than those of any other animal on the planet, are primed to seek and consummate such intimate relations with non-biological resources that we end up as bright and as capable of abstract thought as we are. It is because we are natural-born cyborgs, forever ready to merge our mental activities with the operations of pen, paper, and electronics, that we are able to understand the world as we do<sup>29</sup>.”

Hence, we are driven by creativity in a way that no other animals are. In continuation thereof, Taylor notices the eighteenth century shift in the understanding of art from imitation to creativity and originality. Thereby, he acknowledges the close ties between art and authenticity, but he also stresses the misconceptions following this link. Hence, as pointed out above, all though authenticity involves originality, this doesn't mean leaving out morality, as may be the case when speaking of art. Here, aesthetic fulfilments may be defined by “the kind of feeling they arouse in us, a feeling of its own special kind, different from the moral and other kinds of pleasure<sup>30</sup>.” So, even though authenticity represents a kind of freedom on par with that of art - in the sense that it implies finding “the design of my life myself, against the demands of conformity<sup>31</sup>” - Taylor maintains that authenticity should not be accompanied by the strongest form of self-determining freedom leading to freedom of choice at the cost of significance and “towards a point where our major remaining value is choice itself.<sup>32</sup>”

However, this argument, against full self-determining freedom, does not necessarily entail individual self-realization of the worst kind, a kind not followed by self-definition in dialogue, but driven by self-centered individualism. Rather, the argument strikes a backward-looking tone in downplaying the point that authenticity also demands of us that we strive to be our best, which also implies applying the best available means to achieve self-fulfillment. As such, transhumanism argues that we not only can but also ought to use enhancement technologies to improve ourselves. In the light of societal fragmentation, a community of transhumanists can, of course, be viewed as an exclusive group of likeminded, an enclave who doesn't wish to participate or engage with the

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<sup>27</sup> The Rebel – an Essay on Man in Revolt. Albert Camus. Vintage Int. 1951.

<sup>28</sup> Footnote 5, the title of the book.

<sup>29</sup> Footnote 5, *ibid.*, p. 6

<sup>30</sup> Footnote 8, *ibid.*, p. 64

<sup>31</sup> Footnote 8, *ibid.*, p 67-68

<sup>32</sup> Footnote 8, *ibid.*, p. 69



broader society. Yet, they may also be viewed as frontrunners, who, in the long run, contribute to the development of a flourishing society.

The idea of a technology-borne evolutionary development is wittily described in Ian Pearson's article "The future of human evolution"<sup>33</sup>. Here, the transformation from human being to cyborg is outlined in a prediction of a development bringing us via *homo optimus*, the optimized human being with improved qualities further to *homo cyberneticus*, (the technology-integrated human being) and *homo hybridus* (hybrid woman) where a complex interplay between biology and technology can enrich the species. Finally, we have the species *homo machinus*, which entirely removes biological reproduction from the equation. Furthermore, Pearson imagines the dissolution of the "I" for the benefit of a form of distributed cognition with technology-optimized minds coupled in networks.

Joking apart, if feasible and without major risks, we are demanded to take our future evolution seriously by improving ourselves beyond our biological limitations, some of which are not fit to the modern world. In that sense, cyborg technologies will not remove us from ourselves, but can be seen "as tools that can facilitate our authentic efforts at self-discovery and self-creation"<sup>34</sup>." Of course, one could argue that our present embodied being in the world provides the foundation for a set of universal moral values and that technologically driven individual self-realisation could come at the cost shared human moral values, followed by a dangerous polarisation and fragmentation of the moral world. However, on the other side, one could as well argue that our future post-human condition would allow us to do better than well in developing common ground and adapt new sets of shared moral values, which would surpass our present moral standards.

### Concluding remarks

According to the critic's argument, enhancement has a built-in paradox, which, in the long run, undermines our human condition in possible unforeseen ways – that is, self-fulfillment through enhancement will eventually lead to alienation in the strongest sense thereof because we will cease to be humans. On the other hand, the proponent's argument runs that since we are gifted with creativity, a uniquely human trait, this demands of us that we strive to become the best we can by cultivating ourselves through the use of state of the art human-made tools and enhancing technologies. Moving beyond what we are now, towards what we can become in the future, does not constitute a threat to our human condition; rather, it is an inevitable human condition that we ought to persistently ask ourselves, who am I, and what can I be?

"When we observe scholars and others debate about "enhancement technologies", I believe that we often see people who have (..) adopted either the gratitude or the creativity framework, as I am calling them. As one side emphasizes our obligation

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<sup>33</sup> *The future of human evolution*. Ian Pearson. Link: <http://www.btinternet.com/~ian.pearson> – Accessed 01/02/2017.

<sup>34</sup> Authenticity and Ambivalence: Toward Understanding the Enhancement Debate. Erik Parens. The Hastings Center Report, vol. 35, no 3 (May – Jun., 2005), 34-41, 2005.

to remember that life is a gift and that we need to learn to let things be, the other emphasizes the obligation to transform that gift and to exhibit our creativity<sup>35</sup>.”

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<sup>35</sup> Footnote 10, *ibid.*, p. 38.