

# Transhumanism and the idea of education in the world of cyborgs<sup>1</sup>

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Michał Klichowski

We are cyborgs. We are transhumans; transitory people that exist in a liminal phase<sup>2</sup>, waiting for a transfer to the posthuman world.<sup>3</sup> Our children do not need education; it is cyborgization that ensures their development. This is the idea of transhumanistic philosophy, a thoroughly (non-/anti-)pedagogic idea.

In this paper, I will present basic transhumanism ideas and stress the criticism on education created within this philosophy. This text is neither a systematic study on transhumanism nor a pedagogical analysis. It is merely an attempt at showing teachers how education can be deprecated in modern philosophies that are technologically-oriented.

## Basic theses of transhumanism

The transhumanism term was coined in 1957 by Julian Huxler, UNESCO's first Director-General.<sup>4</sup> According to the definition by the World Transhumanist Association, transhumanism is a philosophy whose essence is to use technology to overcome biological limitations of the man and improve the human condition. This overcoming and improvement are understood as freeing the man from illnesses, ageing processes, and achieving the state of full happiness, per-

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<sup>1</sup> Fragments of this article were published in Polish in the author's book: M. Klichowski, *Narodziny cyborgizacji. Nowa eugenika, transhumanizm i zmierzch edukacji*, Poznań 2014.

<sup>2</sup> S. Jaskulska, "Rytuał przejścia" jako kategoria analityczna. Przyczynek do dyskusji nad badaniem rytualnego oblicza rzeczywistości szkolnej, "Studia Edukacyjne", 2013, vol. 26, p. 88–89.

<sup>3</sup> S.L. Sorgner, *Nietzsche, the Overhuman, and Transhumanism*, "Journal of Evolution & Technology", 2008, vol. 20, no. 1, p. 36.

<sup>4</sup> G. Wolbring, *Why NBIC? Why human performance enhancement?*, "The European Journal of Social Sciences", 2008, vol. 21, no. 1, p. 31.

manent, top excitement, as well as replacing many organs (and the entire body at some point) with artificial elements (better than the original ones).<sup>5</sup> Transhumanism calls for maximum development and popularization of technology so that the above-mentioned full overcoming and human improvement could occur as soon as possible.<sup>6</sup>

Transhumanism is thus a philosophy of technology. Transhumanism seeks scientific ways of using technology to create posthuman beings. Transhumanism is not only an object of scientific research (as a certain phenomenon of the modern world), but many scientists claim that it is an important category of modern science, a significant current of research on the man<sup>7</sup>, or even a new paradigm in thinking about the man, his development and future.<sup>8</sup>

However, transhumanism is not only some philosophy or social phenomenon. For many people, transhumanism is a way of living, it is a collection of ideas that constitute their each action (both towards themselves and others). For thousands of our contemporaries, transhumanism is a rationality that designs the way we should sleep, eat, work, bring up children, live, love or learn; in short, the way we should exist.<sup>9</sup> And everything in line with the "Get the most out of your potential" rule.<sup>10</sup>

The vision of the transhumanist philosophy is based on a quasi-Aristotelian understanding of nature according to which everything naturally aims at perfection.<sup>11</sup> It seems, however, that this perfection is quasi-perfectionist here. It is transhumanism that "adopts the methodology of engineering thoughtfulness where everything is designed and evaluated from the effectiveness perspective".<sup>12</sup> Being perfect thus means being effective (physically, psychologically, intellectually). It is difficult to claim that this combination is perfect (thus, quasi-perfection).

The core of the transhumanist idea of (quasi)perfection is the assumption that it is possible to use technology in a way that allows human biology to be

<sup>5</sup> A. Bergsma, *Transhumanism and the Wisdom of Old Genes is Neurotechnology as Source of Future Happiness?*, "Journal of Happiness Studies", 2000, vol. 1, no. 3, p. 403–404.

<sup>6</sup> J.P. Bishop, *Transhumanism, Metaphysics, and the Posthuman God*, "Journal of Medicine & Philosophy", 2010, vol. 35, no. 6, p. 700.

<sup>7</sup> R. Campa, *Pure Science and the Posthuman Future*, "Journal of Evolution & Technology", 2008, vol. 19, no. 1, p. 1.

<sup>8</sup> B.M. Daly, *Transhumanism: toward a brave new world?*, "America", 2004, vol. 191, no. 12, p. 18.

<sup>9</sup> G. Dvorsky, *Better Living through Transhumanism*, "Journal of Evolution & Technology", 2008, vol. 19, no. 1, p. 1.

<sup>10</sup> J.P. Bishop, op. cit., p. 709.

<sup>11</sup> M. Hauskeller, *Reinventing Cockaigne. Utopian themes in transhumanist thought*, "Hastings Center Report", 2012, vol. 42, no. 2, p. 42.

<sup>12</sup> R. Ilnicki, *Bóg cyborgów. Technika i transcendencja*, Poznań 2011, p. 150.

radically changed, or even overcome. As a result, the man will enter an intellectual level (of intellectual effectiveness) that is yet unknown and unachievable for us, biological people. Transhumanism draws on the achievements in research into artificial intelligence. It does not, however, search for a method of creating an intelligent machine but a strategy for building a machine that will stimulate the growth of human intelligence and make it possible to transfer it from a body to a machine (robot) or to a certain system created by machines.<sup>13</sup>

Fighting with the limitations of human biology and proclaiming the concept of progress, transhumanists still call for the fight to be undertaken by a specific owner of a body (in order for the fight not to be imposed by the state, for example). Owning a body gives the right to manage one's body and get rid of it in the name of existing in a robot or a system. Everyone can thus decide on their own if, and what, transhumanist treatment they will undergo. This rule was named morphological freedom by transhumanists.<sup>14</sup>

The logics of transhumanism perception of a human can be compared to the logics of perceiving a computer file. The man can be (in the atmosphere of full freedom) modified (his biology can be transformed), his format can be changed (biology can be overcome), copied to a different device (transferred to a robot), or even uploaded to a different operating system (placed in a non-biological system). This logics of perceiving the man emerged under the influence of technological revolution (mainly the Internet revolution), which has introduced the order (called the logics of clicking<sup>15</sup>) of computer systems and nets to our cognitive system.<sup>16</sup>

Still, transhumanism is not a common project or a vision of modern technology. Transhumanism is a philosophy rooted in the postulates of the Enlightenment<sup>17</sup>, and transhumanists perceive themselves as heirs of the philosophy of humanism.<sup>18</sup> Exactly like the philosophy of the Enlightenment, it is transhu-

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<sup>13</sup> A. Jaokar, *The Power of Transhumanist Meditation*, "Journal of the Society for Existential Analysis", 2012, vol. 23, no. 2, p. 242.

<sup>14</sup> F. Jotterand, *Human Dignity and Transhumanism: Do Anthro-Technological Devices Have Moral Status?*, "American Journal of Bioethics", 2010, vol. 10, no. 7, p. 49.

<sup>15</sup> M. Klichowski, *Między linearnością a klikaniem. O społecznych konstrukcjach podejść do uczenia się*, Kraków 2012, p. 91–96; Z. Melosik, *Młodzież w kulturze współczesnej. Paradoxy pop-tożsamości*, [in:] *Pedagogika u progu trzeciego tysiąclecia. Materiały pokonferencyjne*, ed. K. Rubacha, A. Nalaskowski, Toruń 2001, p. 59–60; Z. Melosik, *Młodzież a przemiany kultury współczesnej*, [in:] *Młodzież wobec niegościnniej przyszłości*, ed. R. Leppert, Z. Melosik, B. Wojtasik, Wrocław 2005, p. 16–17; M. Klichowski, *Czy nadchodzi śmierć tekstu? Kilka refleksji na marginesie teorii technologicznego determinizmu*, "Studia Edukacyjne", 2012, vol. 23, p. 103–118.

<sup>16</sup> C. Doctorow, *Leaving Behind More Than a Knucklebone*, "Journal of Evolution & Technology", 2008, vol. 19, no. 1, p. 2.

<sup>17</sup> F. Jotterand, *At the Roots of Transhumanism: From the Enlightenment to a Post-Human Future*, "Journal of Medicine & Philosophy", 2010, vol. 35, no. 6, p. 617.

<sup>18</sup> J.P. Bishop, op. cit., p. 700.

manism that is based on the claim that human nature can be corrected.<sup>19</sup> Also, transhumanism promotes the Enlightenment supremacy of the mind and the idea of using science to overcome human limitations.<sup>20</sup> What is more – in the context of the inheritance mentioned above – the word transhumanism was deliberately coined to refer to the tradition of humanism, i.e. a secular image of the world where the man is the highest moral value. Yet, by not accepting the fundamental role of humanity in the development of a man, transhumanism goes beyond humanism. Transhumanism is a project of transgressing the man; it is thus not humanistically anthropocentric but progress-centric. The man is understood as the highest moral value in the sense that it is the progress that matters most; it is the road to the posthuman that is the centre of everything.<sup>21</sup> Transhumanism is thus often called evolutionary humanism, where evolution is perceived as a process from the man, to transhuman, to posthuman.<sup>22</sup>

Evolution humanism approaches evolution as a 2-stage process. In the first stage, which is already historical for us, evolution was “blind”, which means that the man had no control over it. The other, transhumanistic, stage, is characterized with setting the man free from the oppression of biology, freeing him from random changes and adaptations, and moving humanity to another stage for the species.<sup>23</sup> In this context, transhumanism calls for erasing the human species both symbolically and genetically<sup>24</sup>, in the course of the evolution of the second stage. If only people want to, the human species can go beyond the limitations of the species, can take the man towards the new type of being that is very different from ours but equally exciting. Thanks to transhumanism, we will finally be able to fulfil the real human destiny consciously<sup>25</sup>. This threshold of the new species (posthuman) is a moment when the transhuman becomes a postbiological being, i.e. an individual whose mind will be able to exist (in the body of a robot or in some techno-system) without biological processes.<sup>26</sup>

Without doubt, the transhumanistic progress is a dehumanizing process. With every stage of this progress, the man will become (or is already becoming) “less human”. This process eliminates all human and natural flaws, and forms

<sup>19</sup> J. Hughes, *Contradictions from the enlightenment roots of transhumanism*, “The Journal of Medicine and Philosophy”, 2010, vol. 35, no. 6, p. 628.

<sup>20</sup> F. Jotterand, *At the Roots...*, ed. cit., p. 617.

<sup>21</sup> G. Rikowski, *Alien Life: Marx and the Future of the Human*, “Historical Materialism”, 2003, vol. 11, no. 2, p. 131.

<sup>22</sup> N. Agar, *Where to Transhumanism? The Literature Reaches a Critical Mass*, “Hastings Center Report”, 2007, vol. 37, no. 3, p. 13.

<sup>23</sup> F. Fukuyama, *Transhumanism*, “Foreign Policy”, 2004, vol. 144, p. 42.

<sup>24</sup> R. Ilnicki, op. cit., p. 165.

<sup>25</sup> G. Wolbring, op. cit., p. 31–32.

<sup>26</sup> G. Rikowski, op. cit., p. 128.

overhuman, non-human, supernatural, unnatural traits.<sup>27</sup> What is more, dehumanization is a procedure that creates artificiality by replacing biology (natural human elements) with technical products (artificial elements).<sup>28</sup> According to transhumanists, however, the man should not be afraid of being dehumanized even if the result of this process means disconnecting him from the *homo sapiens* species. The loss of species affiliation is not a threat according to them; it is not linked to losing the status of existence. The post *homo sapiens* state is post-human (non-human), but not post-existential.<sup>29</sup>

Transhumanism is thus a technical redefinition of the evolution of man. Transhumanism introduces the category of a cyborg, a man of the second stage of evolution, in the process of evolution. The archaic stage of blind evolution is therefore a human stage; the next one is a cyborg stage.<sup>30</sup> The transhuman and posthuman are some phases of the second stage of evolution – dehumanization/cyborgization, or some cyborg categories:

- transhuman – a transitional cyborg (the object of the dehumanization/cyborgization process),
- posthuman – a final cyborg (the result of the dehumanization/cyborgization – process).<sup>31</sup>

Transhumanists' attempts at crossing the point where the man finishes is nothing else but acting in line with the concept of the imperative to make the world a better place. The world of posthumans (quasi-perfect people) is a quasi-perfect world; it is a paradise where everyone lives like God.<sup>32</sup> The posthuman will achieve an intellectual state that incredibly exceeds the intellectual state of the geniuses that we know; he will be absolutely resistant to all illnesses, full of energy and forever young; he will be capable of controlling all his psychological processes to the full extent; he will never get tired, weary or irritated; and he will also achieve the permanent state of happiness, full love, peace, and states of conscience that are completely unknown for us now.<sup>33</sup> Furthermore, the posthuman will fulfil the cybernetic dream of the machine-man interface, as it will be possible to upload the final cyborg with everything that

<sup>27</sup> D. Mills, *While We're At It*, "First Things: A Monthly Journal of Religion & Public Life", 2012, vol. 228, p. 66.

<sup>28</sup> J.P. Bishop, op. cit., p. 701–702.

<sup>29</sup> I. Persson, J. Savulescu, *Moral Transhumanism*, "Journal of Medicine & Philosophy", 2010, vol. 35, no. 6, p. 660.

<sup>30</sup> G. Rikowski, op. cit., p. 121.

<sup>31</sup> M.J. McNamee, S.D. Edwards, *Transhumanism, medical technology and slippery slopes*, "Journal Of Medical Ethics", 2006, vol. 32, no. 9, p. 514.

<sup>32</sup> M. Hauskeller, op. cit., p. 40.

<sup>33</sup> J.P. Bishop, op. cit., p. 701.

is available in the memory of machines.<sup>34</sup> The posthuman world itself is maximized to the maximum. In the imagination of transhumanists, the life of a posthuman is a maximum experience that we have not known before. Michael Hauskeller claims that the monuments of the posthuman world will be maximally beautiful and majestic, music will penetrate the mind maximally with a maximally desired rhythm, sex will mean maximum and continuous ecstasy, each moment will be filled with divine happiness, each view will bring the experience of maximum charm, every element of the world will be understandable, and each system will be immediately learnable.<sup>35</sup>

Thus, transhumanism promises the man what has been promised by religion so far – a posthuman paradise.<sup>36</sup> Transhumanism also has a lot in common with the spiritual aspirations to achieve higher states of mind; yet transhumanism wants to achieve this aim not through spiritual practices but through implementing technological solutions in the man.<sup>37</sup> Such implementation is meant not only to enrich the man cognitively, but also morally and spiritually.<sup>38</sup> The posthuman is simply to be perfect in every way (although it may be quasi-perfection again).

It is worth adding that in this context Nick Bostrom made an assumption that the dignity of the cyborg (both the transitional and final ones) will be radically greater than the dignity of the man.<sup>39</sup> This announcement sparked off a considerable debate among bioethicists, philosophers, sociologists and futurologists, dividing researchers into transhumanism into two groups: those promoting the thesis of greater dignity of the cyborg, and those claiming that cyborgs are deprived of any dignity.<sup>40</sup>

<sup>34</sup> M.N. Tennison, *Moral Transhumanism: The Next Step*, "Journal of Medicine & Philosophy", 2012, vol. 37, no. 4, p. 405.

<sup>35</sup> M. Hauskeller, op. cit., p. 41–42.

<sup>36</sup> R. Ilnicki, op. cit., p. 161.

<sup>37</sup> N. Bostrom, *Human vs. Posthuman*, "Hastings Center Report", 2007, vol. 37, no. 5, p. 4.

<sup>38</sup> F. Jotterand, *At the Roots...*, ed. cit., p. 618.

<sup>39</sup> N. Bostrom, *In Defense of Posthuman Dignity*, "Bioethics", 2005, vol. 19, no. 3, p. 202–214; A.R. Chapman, *Inconsistency of Human Rights Approaches to Human Dignity with Transhumanism*, "American Journal of Bioethics", 2010, vol. 10, no. 7, p. 61–63; W. Evans, *Singularity Warfare: A Bibliometric Survey of Militarized Transhumanism*, "Journal of Evolution & Technology", 2007, vol. 16, no. 1, p. 161.

<sup>40</sup> I. de Melo-Martin, *Human Dignity, Transhuman Dignity, and All That Jazz*, "American Journal of Bioethics", 2010, vol. 10, no. 7, p. 53–55; A.L. Bredenoord, R. van der Graaf, J.J.M. van Delden, *Toward a "Post-Posthuman Dignity Area" in Evaluating Emerging Enhancement Technologies*, "American Journal of Bioethics", 2010, vol. 10, no. 7, p. 55–56; L.M. Henry, *Deciphering Dignity*, "American Journal of Bioethics", 2010, vol. 10, no. 7, p. 59–61; L. MacDonald Glenn, G. Dvorsky, *Dignity and Agential Realism: Human, Posthuman, and Nonhuman*, "American Journal of Bioethics", 2010, vol. 10, no. 7, p. 57–58; J.Z. Sadler, *Dignity, Arete, and Hubris in the Transhumanist Debate*,

## Transhumanism and education

The transhumanist philosophy questions many of our cultural, philosophical and ethical assumptions on human life and the future of the human species.<sup>41</sup> An excellent exemplification of the transhumanist objection to the cultural standard is the case of Fereidoun M. Esfandiary, a transhumanist philosopher and writer, who in the 1970s replaced his name and surname with the following signs: FM-2030. Esfandiary claimed that man's name(s) and surname(s) cause a reconstruction of the cultural systems of his ancestors and mark us with the traits of our ancestors or social classes, thus consolidating cultural stereotypes and causing the man to be a prisoner of tradition. He called for getting rid of names and surnames, so that everyone could decide for themselves what signs would identify them.<sup>42</sup>

The transhumanist philosophy is thus meant to make us realise that human life should be rethought; it should be redefined in isolation from any ways of capturing<sup>43</sup> the life from a traditional, culturally widespread or justified from the point of the outlook on the world, and should be constituted with "new paradigmatic solutions".<sup>44</sup> Also, redefinition is needed for the strategies of acting that allow humanity to take care of making next human generations better<sup>45</sup>. Such actions have been undertaken by people for ages, and the milestones for the changes in these interactions were subsequent tools that were invented: from stone pebbles, to writing and print, to the Internet (for now).<sup>46</sup> Education has been the formal process of making people better. It is education that has to be redesigned in the transhumanist concept, too, taking into account the fact that changing the man through technology and education are ethically equal categories of action, and that technology is (and will always be!) more effective than education.<sup>47</sup> The sense of the education that is

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"American Journal of Bioethics", 2010, vol. 10, no. 7, p. 67–68; R. ter Meulen, *Dignity, Posthumanism, and the Community of Values*, "American Journal of Bioethics", 2010, vol. 10, no. 7, p. 69–70.

<sup>41</sup> F. Jotterand, *Response to Open Peer Commentaries on "Human Dignity and Transhumanism: Do Anthro-Technological Devices Have Moral Status?"*, "American Journal of Bioethics", 2010, vol. 10, no. 7, p. 7.

<sup>42</sup> I. Bárd, *The Doubtful Chances of Choice*, "At the Interface/Probing the Boundaries", 2012, vol. 85, p. 9.

<sup>43</sup> G. Rikowski, op. cit., p. 126.

<sup>44</sup> A. Cybal-Michalska, *Młodość akademicka a kariera zawodowa*, Kraków 2013, p. 13.

<sup>45</sup> M. Bess, *Enhanced Humans versus "Normal People": Elusive Definitions*, "Journal of Medicine & Philosophy", 2010, vol. 35, no. 6, p. 641–642.

<sup>46</sup> M. Klichowski, M. Przybyła, *Cyborgizacja edukacji – próba konceptualizacji*, "Studia Edukacyjne", 2013, vol. 24, p. 143–144.

<sup>47</sup> H. Greely, B. Sahakian, J. Harris, R.C. Kessler, M. Gazzaniga, P. Campbell, M.J. Farah, *Towards responsible use of cognitive-enhancing drugs by the healthy*, "Nature", 2008, vol. 456, no. 7223, p. 702–705.

known to us is based not only rethinking, but also radical questioning. The effectiveness of the transhumanist philosophy is thus an element that constitutes the emergence of the concept of a world without education.

Transhumanism is a philosophy that can delight us and make us anxious. Woody Evans notices that for many people transhumanism is simply ridiculous, detached from the real world and resembling science fiction. Still, Evans underlines it that transhumanism is a collection of predictions that are not detached from reality but based on the state and dynamics of the modern world of technology. He claims that transhumanism is like satellite navigation in a smartphone; if someone had mentioned it 25 years ago, he would have been considered crazy, yet today everyone uses it.<sup>48</sup> Therefore today we say that the world of cyborgs is a utopian idea<sup>49</sup>, but in 25 years we will become (or maybe we even are today) cyborgs ourselves.

This is also confirmed by Freeman Dyson, who claims that transhumanism describes what is possible today, cannot be achieved with the solutions of modern technology, but what will affect us soon, because transhumanism forecasts are based on the current state of technology and are linked to the directions of its development. Transhumanism is to be a dream-like, yet predictive, philosophy. In this context, Dyson says: "Science is my territory, but science fiction is the landscape of my dreams".<sup>50</sup>

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<sup>48</sup> W. Evans, *Singularity Terrorism: Military Meta-Strategy in Response to Terror and Technology*, "Journal of Evolution & Technology", 2013, vol. 23, no. 1, p. 15.

<sup>49</sup> M. Hauskeller, op. cit., p. 41.

<sup>50</sup> R. Campa, op. cit., p. 4.