



We Have Always Been Cyborgs. Digital Data, Gene Technologies, and an Ethics of Transhumanism

Stefan Lorenz Sorgner 2022 (Bristol University Press) ISBN: 978–1529219203.
240 pp.

Aura Elena Schussler 

Received: 2 February 2022 / Accepted: 2 April 2022 / Published online: 25 April 2022
© The Author(s), under exclusive licence to Springer Nature B.V. 2022

The recent monograph, *We Have Always Been Cyborgs. Digital Data, Gene Technologies, and an Ethics of Transhumanism*, written by the metahumanist philosopher Stefan Lorenz Sorgner, offers both a deep reflection and a significant contribution to contemporary debates on transhumanism. As a metahumanist, Sorgner's theories are bringing critical thinking, both to transhumanism and to posthumanism by developing a 'weak transhumanism' and a 'weak posthumanism' philosophy (i.e., metahumanism). His metahumanist philosophy is characterized by a methodological insight which is situated 'beyond' the dualist concept of humanism (rendered by the mind–body dualism), being thus a non-dualist approach—(meta can mean “beyond”, according to its etymological Greek roots)—and also in 'between' transhumanism and posthumanism, by integrating central elements from both (here meta can also mean “in between” according to its same Greek roots) [1, p. 138].

The book represents a mindful and well-balanced critical philosophical approach to the central issues related to current and emerging technologies; this includes a series of political, ethical, and ontological questions linked, for example, to freedom and privacy (such as relating to digital data collection,

surveillance and the internet panopticon), gene technologies (preimplantation genetic diagnosis, moral bioenhancements and CRISPR-Cas9 technology), and immortality (mind uploading and cryonics), all of which are analyzed through the lens of Sorgner's weak transhumanism. This is an inspiring work starting with the title itself, *We Have Always Been Cyborgs. Digital Data, Gene Technologies, and an Ethics of Transhumanism*, a title that encapsulates a non-dualist anthropology as well a non-utopian way of understanding the past, present and future of the human condition and evolution. To be sure, Sorgner's transhumanist reflections on the concept of 'cyborg' have nothing to do with the idea of the cyborg promoted in mainstream society through the images found in films such as *RoboCop* or *Ghost in the Shell*. Nor does his weak transhumanist philosophy have anything to do with the way in which the media promote, portray and understand transhumanism—such as some sort of “cold-hearted, blood-sucking Silicon Valley billionaires” [1, p. 5] or as “Superman on Viagra” or “Wonderwoman with Botox” [1, p. 109]. Sorgner's statement that “We have always been 'cyborgs' since we became *homo sapiens sapiens*” [1, p. 13] originates from a naturalistic ontological position, merged with an evolutionary epistemological approach, alongside a non-dualist inquiry. That is why the title of the book seems to be situated both beyond and between Donna Haraway's [2] metaphorical discursive construction of the cyborg and Katherine Hayles's [3] cartographies regarding the

A. E. Schussler (✉)
Department of Philosophy, Faculty of History
and Philosophy, Babeş-Bolyai University, 1 Mihail
Kogălniceanu Street, 400084 Cluj-Napoca, Romania
e-mail: aura.schussler@ubbcluj.ro; aursch2005@yahoo.
com

cyborg—as a hybrid entity placed between the carbon-based organic components (of a living organism) and the silicon-based electronic components (of an artifact): in the paradigm of a naturalist account of the human existence (as *homo sapiens sapiens*), shaped both by the ‘will-to-power’ and by evolutionary processes (as enhancements), which are rooted in ‘technology’ (technology understood here both, inside and beyond its instrumentalist limits, including also its creative understandings, close to art, reason and education, namely as *technē*, in Heidegger’s terms). In this paradigm of thought, Nietzsche’s ‘will-to-power’ anthropology should be understood as a more complex approach regarding human evolution, which does not deny Darwin’s evolutionary theory (where the basic human motivating force is the fight for survival), but instead presents a revised driving force underlying evolutionary processes. This is because, for Nietzsche, people struggle for power, mastery and self-overcoming, aspects that, in a weak transhumanist interpretation of Nietzsche, can be realized through science, education and technological development. As Sorgner emphasizes, the etymological roots of the word ‘cyborg’ are linked to the Greek word *kybernaetes*, which means the “helmsman of a ship” [1, p. 13]: a position that brings a paradigm shift in the metaphysical understanding of the human being—seen as an entity created in the likeness and image of God. This ‘helmsman’, being nothing more than the first *homo sapiens*, by means of evolution (and not by means of some sort of a divine spark) created language. In this regard, our capacity to develop a language—and not necessarily our capacity to speak verbally, as a universally valid norm for humans which is based upon the divine spark in us (as in the logocentrist argument)—becomes one of the first examples of an upgraded technology that enabled early humans to adapt, survive, communicate, and evolve over time.

The structure of the book follows the line of a philosophical-intellectual crescendo, constructed both around the main contemporary transhumanist agenda as well as that of the future existential risks and benefits regarding our not-so distant posthuman condition. *We Have Always Been Cyborgs* is divided into five main chapters, each providing a series of complex analytical and ethical tools for investigating transhumanism. The first chapter, entitled “Transhumanism: In a Nutshell”, has an introductory character (which helps

the reader to become familiar with the main transhumanist agenda, philosophical roots, concepts, theories, and arguments) and offers a critical discussion which allows the reader to understand transhumanism beyond the paradigm of hard technological determinism and optimism. In addition, the chapter is written from a hermeneutical ethical position regarding the concept of “good” which, in Sorgner’s weak transhumanist thought overcomes the normative claims of Renaissance humanism, being situated in the paradigm of negative and morphological freedom regarding the prolongation of the human health span, through various technological means, and in the name of a greater plurality of human flourishing. Like many transhumanists, Sorgner embraces a naturalist ontology regarding existence: a position that is close to Spinoza’s non-dualist anthropology. This Spinozist approach, merged with a secular and Nietzschean insight, is one of the methodological tools that the author uses to distance himself from any claims of “naïve materialism” [1, pp. 11–30]—in which the world and existence are reduced only to matter. When Sorgner develops his cartography on transhumanism, he identifies transhumanism with a “nihilistic, positive pessimism” [1, pp. 11–19], an aspect that, for the reader, does not transform transhumanism into an antagonistic movement. This is because he grounds his arguments beyond the traditional onto-epistemological stability and metaphysical essentialism regarding suffering and existence, namely in the paradigm of a continual becoming through technology, shaped by a Nietzschean understanding of reaffirming life in the name of *Amor fati*—which turns suffering into an existential assumed fact. In this regard, Sorgner’s position on transhumanism, as a “nihilistic, positive pessimism”, surpasses Schopenhauer’s *ontological pessimism*, and affirms both an *alethic nihilism* and an *ethical nihilism*, in contrast to Nietzsche who affirms an *alethic nihilism* but aims for an overcoming of *ethical nihilism*; that is to say, a naturalist way of understanding suffering, and also a non-universal and idiosyncratic way of affirming the fluidity and multi-perspectival assumptions of living a good life.

Chapter 2, “On a Silicon-Based Transhumanism”, is an investigation of various technological developments and visions, which are widely discussed by transhumanists and others. The first part of this chapter is a critical analysis of the idea of immortality; a topic that is addressed again in the fourth chapter. However, is immortality even possible? According to the

silicon-based transhumanism of some strong transhumanists such as Ray Kurzweil or Martine Rothblatt—who take for granted the term ‘immortality’ when claiming the idea of “digital immortality” [4] via mind uploading—immortality is feasible. However, for Sorgner as well as for many proponents of carbon-based transhumanism, immortality (as it is understood in the literal common sense as eternity) is not a realistic option at all. This is because he supports the idea that the term ‘immortality’ should be conceived of in rhetorical-metaphorical terms, and not in onto-metaphysical ones. Here, Sorgner’s ‘cosmological singularity’ argument [1, p. 28] is a plausible one. This is in line with the theory of the “heat death” of the universe [5], which suggests that over many billions of years, all the stars will burn out and the universe will turn into a huge black hole, from which it follows that immortality is not possible. After arguing against the literal sense of the term immortality, Sorgner does not completely reject the hypothesis that one day humanity will be able to digitally upload the mind—once the whole brain and nervous system can be scanned through nanobots, then “the reinstantiating of those details into a suitably powerful computational substrate” [6, p. 166] may bring about life extension as a form of ‘cyber-consciousness’, as Kurzweil [6] and Rothblatt [4] imagine. He also criticizes Elon Musk’s simulation argument (which is a reinterpretation of Nick Bostrom’s simulation argument) that we are already living in a computer simulation, or that at least chances are very high that this is the case. If Musk’s argument is valid, it would mean that the likelihood is extremely high that we are already living in a scenario similar to that which the Wachowskis presented in the *Matrix* film series, in which the distinction between artificial and fundamental reality is blurred—a scenario that is hardly realistic nowadays. Sorgner is skeptical regarding this theory, but he does not completely reject the possibility, concluding that for this to be possible, it would be necessary that “we, too, have to consist of a binary code, one and zero on a hard drive” [1, p. 25]—an aspect that is similar to the mind uploading hypothesis. After convincingly establishing that this current digital age requires upgraded humans resulting from various emerging technologies such as implanted chips, the Internet of Things, cyborg technologies or gene editing, the author asserts that upgraded humans will need smart cities. That is why the topics of digital

data collection and the internet panopticon represent new challenges for European democratic-liberal politics. Considered in metaphorical terms, as the “new oil” of our globalized world [1, p. 37], the collection of digital data turns into a “pragmatic must-have” [1, p. 37] for most European countries, given that China has already implemented a social credit system that enables it to collect such digital data. This geopolitical insight draws attention to the likelihood that, to be able to compete with China, both on the economic and political level, European countries need to embrace a paradigm shift regarding freedom and privacy. This means that the internet panopticon—complemented with an Internet of Things or implanted chips—must be created in ways that do not jeopardize our privacy, promote more human plurality, democracy and negative freedom, and avoid becoming a totalitarian surveillance system. Also, if we must choose between health and privacy, as the COVID-19 pandemic has shown us, then, according to Sorgner, we must choose health and freedom by ensuring a democratic way of using our digital data collection.

The opening line of the third chapter, “On a Carbon-Based Transhumanism”, is a Nietzschean insight on transhumanist debates, being grounded in perspectivism and in a secular, naturalistic and pluralistic understanding of humanity. In a weak Nietzschean approach, Sorgner moves beyond both, onto-metaphysical dualistic foundations and Christian-Kantian claims regarding morality and enhancements. However, considering future moral bioenhancements, the question is whether moral (bio)enhancements should be obligatory or a free choice? Here, the obligatory direct moral (bio)enhancement—as proposed by Julian Savulescu, Ingmar Persson and Molly Crockett regarding the administration of citalopram or oxytocin—is a challenging question. First of all, because in Nietzschean ethical nihilistic terms—the one that “affirms that any non-formal judgement concerning the good life is plausible” [1, p. 11]—this moral bioenhancement outlook is highly problematic with respect to the alteration of negative freedom, and of the pluralist conception of a good life. Regarding the free choice of moral bioenhancement (proposed in order to inhibit impulses to cause direct harm), Sorgner argues against paternalistic and exclusivist moral claims. One of the examples given by him is that of a sadomasochistic couple who, by embracing a voluntary moral bioenhancement in order to avoid social marginalization, have to give up

to what they consider to be their conception of a good life, for the sake of those who do not understand/accept their idiosyncratic way of life—an aspect that threatens human diversity. Thus, a proper approach to moral development, for Sorgner, is rather an indirect moral enhancement which can be achieved through education by expanding human cognitive capacities. Furthermore, Sorgner argues (against Jürgen Habermas' position) that educational and genetic enhancements are structurally analogous events, because both have the same goal—the improvement of a child's life (during a phase in which children cannot decide for themselves). In this respect, he emphasizes the conceptual delimitations between education and educational enhancements, in order to argue that, as an enhancement, education is a technology that needs a 'helmsman'/*kybernaetes* which is built around the 'open notion' of 'parents'—that involves both the idea of a biological parentage and a "cultural parentage" [1, p. 84]—linked to our cyborgic continuous becoming. These distinctions are important to understand why Sorgner, in a weak transhumanist paradigm of thought, emphasizes that educational enhancements can be irreversible (based on Aristotle's *hexis* argument) and that genetic enhancements can be reversible (through siRNA), and not an inverse, as Habermas argues from a dualistic ontological, bioconservative and paternalistic position. On the other hand, Habermas perceives a child's genetic enhancement as a threat to autonomy, which also leads to the instrumentalization of the child and to the breaking down of human equality. I wish to point out here that Sorgner's criticism regarding Habermas's standpoint is a plausible one, because neither autonomy nor equality and instrumentalization are naturalistic achievements, but rather hierarchical anthropological/social values that feed the metaphysical anthropology with essentialist claims. In Savulescu's utilitarian and paternalistic position concerning the principle of procreative beneficence (PB)—by means of in vitro fertilization (IVF), and preimplantation genetic diagnosis (PGD) and with regard to the question of creating "Children with the Best Chance of the Best Life" [1, p. 103]—turns into a 'moral duty' and an obligation that parents have to consider. In this place, Sorgner's asserts from a liberal ethical standpoint, that PB is an inconsistent, violent, and immoral principle because of the way that Savulescu wants to enforce the use of these emerging technologies as a moral duty for parents. It follows that PB is based on an exclusive and

anti-pluralistic moral argument, since it restricts the negative freedom of parents to use natural methods of reproduction, as well as the idiosyncratic flourishing of a good life. I would add to this that Sorgner's argument in favor of the principle of procreative autonomy (PA) is more morally appropriate, because it supports both negative freedom and an open notion of the human—that is to say, the pluralistic condition of human existence.

Chapter 4, "Fictive Ethics", offers ethical reflections on a wide variety of topics such as genetic enhancement, cryonics, utopias, and freedom. Resuming a consideration of the problem of gene technologies and their ethical implications for parents, Sorgner emphasizes a non-essentialist and pragmatic paradigm, arguing that both gene modification and gene selections are a parental virtue and not a vice—as Michael Sandel asserts, in a paternalistic understanding of the virtue of "parents' unconditional love" that stands at the basis of his *communitarian argument* (which in Sorgner's opinion may lead to narcissistic disorders on the part of the individual) [1, p. 125]. In these pages, the Nietzschean will-to-power ontology (ingrained in Nietzsche's aristocratic virtue—the one that rejects Christian and crowd morality) led to an axiological twist concerning the paternalistic, normative, and universally valid understanding of virtues; that is to say, to a multi-perspectival way of connecting to life and existence, alongside a naturalized understanding of virtues and mortality. In this paradigm the Nietzschean virtue of truthfulness becomes, for Sorgner, a central virtue concerning parenting, which makes the parents' decision in favour of genetic enhancements to be not a moral problem, but a key towards human flourishing. In addition, Sorgner's interpretation regarding the concept of the *Overhuman* (seen as a member of a new species, that of the trans-/posthuman), situates Nietzsche both beyond and between the communitarian argument; beyond, due to his masterly virtues theory, and between due to his two-class community ideal—where he "prioritizes the good over the right and aims for a social structure which is in the interest of all its members" [1, p. 119] with regard to the concept of the good life as a radically pluralist concept. Here the key to Sorgner's weak transhumanist philosophy is Nietzsche's perspectivism, which makes him criticize the "universally valid non-formal concept of the good" [1, p. 139], promoting instead morphological freedom and human enhancement. Also, Sorgner's non-dualist thinking, constructed around a non-dualist understanding of

humanism, overcomes both Kant's *categorical imperative*, as well as that of the traditional ontology of personhood, which has grounded a strong metaphysical anthropology in Western cultural history. However, it must be pointed out that Sorgner's weak transhumanism and person-centred/non-anthropocentric moral perspective with regard to non-human animals, silicon-based entities, objects, AI, etc.—does not necessarily embrace an object-oriented ontological way of thinking, but rather is open to the idea of continual becoming. This position requires a paradigm shift concerning the humanistic concept of the 'person'—as an 'I' endowed with sentience, sensibility and consciousness—to a 'post-person,' one that may include the aforementioned categories of entities. A pivotal aspect of this chapter is Sorgner's Nietzschean transhumanist approach, which reveals that transhumanism, both as a philosophy and as a cultural movement, should be understood in terms of a non-utopian paradigm: an aspect that also places the idea of the 'meaning of life' in terms of Nietzsche's 'eternal recurrence of everything' theory—which is neither a thought experiment nor *karma*, but a way to embrace our fate, as *Amor fati*, by developing an affirming mode of experiencing this-worldly life as a "*Yes-sayer*" [7, p. 157]. This is also in order to overcome the traditional utopia of personal immortality that was embraced by some transhumanists such as Robert Ettinger and Ray Kurzweil as a realistic option, and which transforms transhumanism into a new "Land of Cockayne" belief [1, p. 162]. Such a view implies a careful reconsideration of the transhumanist agenda in order not to fall into the trap of abstract goals because, throughout history, utopias (whether personal, religious, social, political, scientific or technological) proved to be dangerous. In this respect, the book provides a series of realistic options—from a naturalistic standpoint of this-worldly existence—where the present and future emerging technologies are deemed means to prolongate health spans and the quality of life, based on a radical plurality of choice and negative and morphological freedom. In this paradigm, cryonics and gene technologies, rather than digital immortality, provide pragmatic means to what a longer and healthier lifespan may represent in the future, by delaying the inevitability of death as long as possible. It is also a new perspective in terms of reconceptualizing life and death, as a fluid intra-changing continuous process, enabled by science and technology.

The concluding chapter, "The End as a New Beginning", is a three-page epilogue in which the author considers current global challenges and the imminence of the Sixth Mass Extinction. Focusing on personcentric ethics—seen as hierarchical, "depending on the capacity for suffering of entities" [1, p. 186]—Sorgner proposes a non-anthropocentric approach; that is to say, a "humbler self-understanding" [1, p. 186] and a "non-dualistic relational understanding of the world" [1, p. 187]. In this paradigm, our relationship with technology should be developed in the name of a balanced, harmonious and healthy environment for a "sustainable personal flourishing" [1, p. 187], thus overcoming the ontological dualistic bias between 'Nature' as something good and natural, and 'Technology' as something evil and artificial. This is, indeed, a challenge, but it is a part of our posthuman becoming.

We Have Always Been Cyborgs. Digital Data, Gene Technologies, and an Ethics of Transhumanism is a philosophical work constructed around the idea of a continuous process of becoming in terms of an evolution of human nature on its path of expanding cyborgic hybridity, given by various embodied and embedded technologies that enrich human existence on its way to the (not so distant) posthuman one.

References

1. Sorgner SL (2022) We have always been cyborgs. Digital data, gene technologies, and an ethics of transhumanism. Bristol University Press, Bristol
2. Haraway D (1990) Simians, cyborgs, and women: The reinvention of nature. Routledge, New York
3. Hayles K (1999) How we became posthuman: Virtual bodies in cybernetics, literature, and informatics. University of Chicago Press, Chicago
4. Rothblatt M (2015) Virtually human: The promise—and the peril—of digital immortality. Picador Paper, New York
5. Cox B, Forshaw J (2017) Universal: A journey through the cosmos. Penguin, London
6. Kurzweil R (2005) The singularity is near. Penguin, New York
7. Nietzsche F (2001) The gay science. Williams B (ed) Nauckhoff J & del Caro A (Trans). Cambridge University Press, New York

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.