BOOK REVIEW

Mark Coeckelbergh: *Human Being@Risk. Enhancement, Technology, and the Evaluation of Vulnerability Transformations*, Springer, Dordrecht-New York, 2013, 218 pp., $129

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To be alive is to be vulnerable. That is probably the most basic truth all living creatures confront, from the smallest to the greatest and from the most primitive to the most complex. As Hans Jonas states in the introduction to his wonderful treatise, *The Phenomenon of Life*, the paradoxical, still enigmatic fact that vital substance by some original act of segregation has isolated itself from the general fabric of things and set itself over against the world introduced the tension of 'to be or not to be' in the indifferent continuum of material existence. With life, Jonas observes with Friedrich Nietzsche, being appears *as* being in an emphatic sense for the first time. Life means mortality, it is existence affirmed but as such, given the inherent and continuous threat of relapsing back into non-being (all living creatures' ultimate fate anyway), it is existence as *concern*. Being alive as being free from the identity with matter implies having its own being as a burden and this means—hazarding some Heideggerian jargon—being a being that is always at risk. What distinguishes human life in this respect is the fact that it is consciously *aware* of this condition and is therefore able to act upon it. And this is precisely what technology is all about, according to the Flemisch philosopher of technology Marc Coekelbergh.

In his competent new book *Human Being@Risk. Enhancement, Technology, and the Evaluation of Vulnerability Transformations*, Coeckelbergh zooms in on this human condition of vulnerability or riskiness in an attempt to develop a both descriptive and normative philosophical anthropological framework that will allow us to address the multiplicity of new risks and threats that we face due to the avalanche of new and emerging technologies—which are ultimately invented, as Coekelbergh maintains, to deal with our vulnerabilities. Technologies are designed and employed to decrease our vulnerability—and technology is the human way of

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coping with vulnerability we could say—but at the same time they create all kinds of new vulnerabilities.

This paradox—or tragedy—is the starting-point of the book. Technology is both the solution *and* the problem: it is used to struggle against our vulnerabilities but at the same time it engenders all kinds of new vulnerabilities. And this is inevitably so. Therefore, technology will never allow us to finally overcome our condition of vulnerability, Coeckelbergh argues against many proponents of transhumanism and extropianism who strive for the radical transformation of the human into a posthuman being freed from all the vulnerabilities and limitations that plague our current human nature. Even fully designed posthumans would be vulnerable and have their limitations, only in different ways. Our technological anti-vulnerability strategies—even the most powerful ones—can only transform, not eliminate, our vulnerabilities.

The main theoretical contribution of this book consists in providing the outlines of a descriptive and normative philosophical anthropology of vulnerability and, based on that, an ethics and politics (as well as an aesthetics) of vulnerability that is able to deal with the impacts of new and emerging technologies on the human condition—in particular focusing on human enhancement technologies (HET) and new information and communication technologies (ICT).

Conventional approaches toward risk and vulnerability tend to be either objectivist or subjectivist, locating risk either in objective features of human nature or the world or considering it subjectively as bound up with our perceptions and experiences of ourselves and the world. Going beyond the dualist metaphysics that informs both approaches, Coeckelbergh proposes what he calls an *existential* conception of vulnerability, inspired mainly by existential and hermeneutic phenomenology (Heidegger, specifically), postphenomenology (Ihde, Borgmann, and Verbeek), and the tradition of philosophical anthropology (Plessner and Sloterdijk). Instead of partitioning the phenomenon of risk dualistically in a subjective and an objective dimension, the existential approach to risk precisely locates it in the *relationship* between subject and object or between man and world. Vulnerability is a characteristic of our *being*, of the way we *relate* to the world and the beings therein. It is part of the structure of our existence. Vulnerability means: *being* at risk.

Human enhancement is an area of technological innovation that is risky and controversial like no other, one could argue, and it is therefore no surprise that the ethical and political debates centering around it are intense and highly polarized. Radical, so-called transhumanist proponents of human enhancement hope that the convergence of new and emerging bio-, nano-, info-, and cognitive technologies (the so-called NBIC-technologies) will allow us to transform our human nature to such an extent that we will overcome all the discomforts attached to our humanity and become posthumans, "persons of unprecedented physical, intellectual and psychological capacity, self-programming, potentially immortal, unlimited individuals," as extropian extravagant Max More boldly proclaimed once (http://www.aleph.se/Trans/Cultural/Philosophy/princip.html). At the other side of the debate, so-called bioconservatives want to protect (what they take to be as) human nature against what they perceive as excessive technological interventions in the human body and

mind. Both camps persistently employ the notion of human nature, be it as something to be entirely overcome or as something to be preserved forever.

As Coeckelbergh is right to assert, this notion should better be dismissed because of its biologist and ultimately essentialist tenor. In this book he proposes an alternative conceptual approach to deal with these questions. Concurring with transhumanists that humans have always changed, evolutionary and historically, yet maintaining that "there is *something* that is common to what it is to be human" (p. 32) and which makes that there are limits to the transhumanist project of re-designing ourselves at will, Coeckelbergh suggests to change the key term of the debate on human enhancement (as well as other domains of technological innovation) from human nature to *human being*. The introduction of this notion into the debate, specified in terms of *being-at-risk*, is the key conceptual operation of the book.

In contrast to traditional phenomenologists like Heidegger, and in accordance with the current consensus in both postphenomenology and philosophical anthropology, Coeckelbergh emphasizes that human being is technological through and through and that it is precisely through technology that human beings have always changed. Technology is part of man's existential condition. With Plessner, he states that human beings are 'artificial by nature' and referring to the work of postphenomenologist philosophers of technology like Ihde, Borgmann, and Verbeek and the social constructivist view of technology put forward by Latour, he contends that technologies change human existence by mediating the relationship between humans and their world as well as between humans and other humans.

Vulnerability is an existential condition and technology is what human beings employ to cope with this condition, which in turn transforms it. The effect of man's technological struggles against vulnerability, Coeckelbergh points out with a slightly pessimistic sense of tragedy that pervades the whole book, is not that they somehow overcome their vulnerabilities, these only get transformed in the process and even increase as a result of it. And in the meanwhile humans get changed themselves, they become other beings, faced with new and unprecedented vulnerabilities which call for new technological anti-vulnerability struggles. We will never be able to *conquer* vulnerability. Our only option is to negotiate as best as possible with the transformations in our vulnerability condition that every new technological innovation inescapably provokes and—to the extent that we are able to foresee and exert influence on these transformations at all—to ask ourselves explicitly what kind of vulnerability transformations we really want and which ones we find undesirable. This is a task for a normative anthropology and, being the deeply technological creatures that we are, this means in practice asking ourselves what kind of technologies we want. This question, again, becomes particularly urgent in the light of the possibilities opened up with human enhancement technologies.

The way humans give shape, technologically, to their existential condition of vulnerability is what defines—to a large extent—the phenomenon of culture, according to Coeckelbergh. Like the German philosopher Peter Sloterdijk, whose idea he mentions in this regard but does not deal with in any detail unfortunately, Coeckelbergh entertains what the former calls an *immunological* conception of human culture and history. That is to say, human cultures and the technologies that

constitute them can be understood as so many strategies through which humans protect and guard their fragile existences and fend themselves off, in increasingly complex 'technospheres,' against the threats and dangers of the outside (and inside) world. Again, like Sloterdijk, who argues that the interiors of these spheres have fundamentally shaped human beings via all kinds of feedback mechanisms into the existential, ecstatic-horizontal beings that we are, Coeckelbergh stresses the fact that the vulnerability transformations that make up culture alter our being. They change the *way we are*, that is to say they change our form of life.

Now, transhumanists seem to believe that the new and emerging HET that allow intervening in the most fundamental (e.g., biological and neurological) processes and mechanisms behind the human lifeform are so radically different from everything that came before, that they will lead to a transhuman and ultimately posthuman lifeform, which will be characterized, consequently, by transhuman or posthuman vulnerabilities. A crucial question then, of course, is what allows us to assert this, i.e., on what grounds can we determine whether, and in what sense, we have surpassed our 'humanity' and become trans- or posthuman beings.

Although Coeckelbergh announces that he will deal with this question in the second, normative part of the book, it is never really answered. This would somehow presuppose that we know, to use the words quoted above, what this 'something' is "that is common to what it is to be human". He certainly suggests that it would involve a "radical break with the past, a fissure in the history of vulnerability" (p. 82), but he never really explains what this break or fissure would have to look like. He only refers to the ambition attributed to transhumanists to transcend our condition of vulnerability completely and become in-vulnerable beings. These would indeed seem to have surpassed our condition of 'always-already-vulnerable beings' (p. 204) and achieved a quasi godlike status, but it is unclear what this would mean in actuality. I will return to this issue below. What is clear for Coeckelbergh is that the new technologies will radically transform our vulnerabilities and this means that they will confront us with the question what kind of vulnerabilities we want and what kind of human (or posthuman?) we thereby want to become. This calls for an ethics of vulnerability, based on a normative anthropology, and that is the subject of the second part of the book.

An ethics of vulnerability, for Coeckelbergh, consists in the normative evaluation of anti-vulnerability strategies and the vulnerability transformations they bring about. This is explicitly an ethics of technology in the sense of an evaluation of the way specific technologies alter our risks and vulnerabilities. Going beyond the standard, 'humanist' dichotomy between human ends and values on the one side and value-neutral technological means on the other, Coeckelbergh employs his relational perspective in which humans and technology are seen as co-constitutive and values and ends are intrinsically tied to the technological configurations in—and through—which we exist. There is no external point of reference from which to evaluate 'technologies'. Transforming ourselves and our world technologically changes our vulnerabilities and therefore goes along with changes of our values and thus our evaluations, and these in turn are implicated in our technological actions.

But how can we deal, from this perspective, with the radical vulnerability transformations that the new HET are expected to bring about in the future?

Following Hans Jonas and Günther Anders, Coeckelbergh suggests to use our imagination and consult our emotions, even when those will possibly be changed through HET as well. Also artistic (e.g., literary) imagination could help us here (Michel Houellebecq's 2005 novel *The Possibility of an Island* is discussed at some length as an example). Such a 'heuristic of imagination and emotion' should guide what he calls an '*imaginative* ethics' of vulnerability, which he fruitfully applies in his exploration of possible posthuman vulnerabilities brought about by ICT and HET. One of the conclusions of this exercise is that *in*vulnerability is definitely not on the horizon. Neither is it desirable.

In the last two chapters of the book Coeckelbergh also develops a politics and a normative aesthetics of vulnerability, understanding the former as an antivulnerability strategy and the latter as the *art* of coping with vulnerability. New ICT and HET profoundly affect the very principles underlying our political structures, and Coeckelbergh analyzes them in particular with respect to freedom, justice, and the public–private distinction, critically revisiting the fundamental views on these matters held by important, though exclusively liberal political theorists like Hobbes, Rawls, Arendt, and Nussbaum. No attention at all, unfortunately, is given to the important developments in political thought by contemporary continental 'leftist' philosophers like Badiou, Rancière, Agamben, Žižek, Laclau, Nancy, Balibar Mouffe, and Critchley, not even Hardt and Negri.

Particularly interesting here I found the idea that vulnerability transformations must be approached from an ecological perspective, doing justice to the fact that vulnerability is always *shared* vulnerability (or co-vulnerability) in *common* environments. This perspective is also emphasized in the final chapter on aesthetics, which proposes a non-anthropocentric, relational-ecological approach 'beyond the human' to vulnerability and again highlights the tragic nature of our vulnerable condition. Our fate, Coeckelbergh writes in his conclusion, will always remain that of the tragic hero Achilles, who could never get rid of the heel that stood in the way of his being *totally* invincible.

Although the approach laid out in this book is clearly inspired by the work of Heidegger, in particular the early Heidegger of *Being and Time*, it is remarkable that for all its emphasis on the dangers of technology for the (being of the) human being, there is no mention at all of what the later Heidegger called *the* danger of technology, i.e., of the *essence* of technology. Granted, *Being and Time*'s distinction between fear (for beings) and anxiety (for being) is taken up in the sense that our being-vulnerable not only means that we fear particular risks all the time but also that, given our existential condition of being-at-risk, we have to face vulnerability *Angst*. For the rest, however, the risks and dangers of technology are taken only in an 'ontic' sense in this book—or so it seems.

For Heidegger, *the* danger of technology did not reside in concrete technologies like the atom bomb, the computer, or genetic engineering, but in technology's essence, which he understood most generally as a mode of manifesting of being and as a way in which human beings disclosed beings. Technology's true danger is not of the order of technology at all, Heidegger proposed, it is 'ontological'. It concerns our way of understanding the being of beings, including our own being. *Modern* technology's way of disclosing beings was a 'challenging' one, according to

Heidegger, reducing all of being to a standing reserve of material and energy, but the *danger* of modern technology (i.e., its true danger) consisted in its imperial or hegemonic nature, i.e., in its inherent tendency of imposing itself as the *exclusive* mode of disclosing. As such, it represented a threat to 'human nature,' which for Heidegger consisted in the human being's openness or free relationship to being. The reign of modern technology, irrespective of the concrete risks and dangers it presented to mankind (and those are increasing all the time, as Coeckelbergh shows us), represents the danger for the human being of losing his free essence, by getting stuck, as it were, in what Heidegger called enframing [*Gestell*]. For Heidegger, modern technology, being the culmination of metaphysics as the increasing forgetfulness of being, was threatening what Coeckelbergh calls "that something that is common to what it is to be human," which for Heidegger was man's openness to being or in other words: his 'ontological freedom' (in his latest writings, Heidegger conceived of enframing also as the onto-historical dynamic through which man and being were 'delivered over' to each-other, i.e., as a prelude to what he called the event (of appropriation) or *Ereignis*, but I won't take that into account here).

As far as I could see, Coeckelbergh never explains what this 'common something' exactly amounts to in his view (or it would have to be our unconquerable vulnerability). To be sure, as someone who leans more towards a philosophical-anthropological conception of the human and emphasizes that humans are fundamentally technological beings ('artificial by nature') and have always changed precisely through technology, he does not seem to share Heidegger's fear that technology (that is to say, its essence, which he does not consider in this book anyway) could somehow threaten our ontological essence. Yet this fear is not totally misplaced.

As I would like to suggest, in critique of Heidegger, and following the work of the French philosopher Bernard Stiegler, technology in its concreteness could very well represent that danger which Heidegger perceived as being exclusively ontological, precisely because—pace Heidegger—it is constitutive of the ontological dimension. Technology in its 'ontical' sense is not just 'part of man's existential condition,' as Coeckelbergh has it, it forms the very *constitution* of it. Man's existential condition, his ontological freedom or groundlessness [*Grundlosigkeit*] or what Stiegler calls his 'original lack of origin' [*défaut d'origine*] comes down to the technical condition in the sense of man's 'essential accidentality,' to put it most paradoxically. Technology is the accidental supplement 'compensating' for man's original lack of qualities. It comes man's deficiency 'to the rescue,' as it were (as Prometheus' gift to make up for the 'fault' of his brother Epimetheus, who forgot to endow the human with attributes while creating the mortal beings). As such, however, it is also always endangering man's existence.

This radical ambivalence of technology, its 'pharmacological' nature of being both 'cure' and 'poison' to use Stieglerian terminology, is similar to the one Coeckelbergh points to when he emphasizes throughout that technologies "at the same time reduce and increase our vulnerability" (p. 145), i.e., that they are "at the same time the problem and the solution, the disease and the remedy" (p. 5). However, with Stiegler one can argue that technology is ambivalent in an even more

fundamental sense of being *both* the condition of possibility *and* the condition of *im*possibility of our 'being-human' as such, i.e., of our 'possession' of that mode of being that Heidegger called 'being-there' and that we generally call 'human,' and therefore also of the 'being-vulnerable' and the 'being-at-risk' that is typical for humans. Technology first of all comes to the rescue of our most fundamental '*vulnus*,' the 'wound' of having no origin, of somehow 'being disabled by nature' (p. 145) as Coeckelbergh puts it.

Being a *pharmakon*, however, technology can both 'enable' and 'disable' us with respect to this original wound. Stiegler emphasizes that this original wound, our *défaut d'origine*, since it is the very 'thing' [*das Ding*] that drives and guarantees the human adventure as being open, free, and indeterminate, is a wound that 'needs to be,' a *défaut qu'il faut*, and that as such is in need of constant care, of a *therapeia* that can only come from technical *pharmaka* in their insurmountable ambivalence. Heidegger's trope that modern technology as enframing could somehow spell the death of man's free essence (the danger) while simultaneously opening the possibility of a new encounter with this essence (the rescue or salvation), could be re-interpreted in more 'ontico-ontological' terms as man's 'pharmacological condition'. Especially with regard to the two domains of technology that are the central focus of Coeckelbergh's book, namely the new ICT and HET, the precariousness of this pharmacological condition is becoming pregnant as never before. All the more since the aim of transhumanists to abolish vulnerability and uncertainty alltogether and the dominant trend in ICT for increasing automatization and adaptation of our cognitive systems to the digital networks does seem to threaten the openness and indeterminacy characteristic of man's being, as is indicated by Coekelbergh as well in his discussion of these technologies. Indeed, it is the future of our very 'humanity' itself that is at stake here.

Although it fails to consider *the* danger of technology in the Heideggerian-Stieglerian sense explained above, which I think is crucial to any discussion of trans- and posthumanism, this book is an outstanding reflection on the far-reaching implications of the new ICT and HET for the human condition (as a vulnerable condition). It is thoroughly unique and original in showing the importance and extreme usefulness of philosophical anthropology and the phenomenological tradition for thinking through the consequences of the epochal technological mutations of our time, in particular concerning HET. By imaginatively employing the rich conceptual apparatuses offered by these traditions, and through many fine phenomenological analyses, the author has succeeded in crafting a much more profound and sophisticated ethical and political perspective on human enhancement than almost any other book on the subject that I know of. It deserves to be widely read and has the potential of becoming a key reference for the debate on enhancement.