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REPLY

Hacking Technological Practices and the Vulnerability of the Modern Hero

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Abstract This reply to Gunkel and Zwart further reflects on, and responds to, the following main points: the Heideggerian character of my view and the potential link to Kafka (Gunkel), the suggestion that we should become hackers (Gunkel), the interpretation of my approach in terms of the Hegelian Master–Slave dialectic (Zwart), the lack of an empirical dimension (Zwart), and the claim that I think that modern heroism entails overcoming vulnerability (Zwart). I acknowledge Heideggerian influence, reflect on what it could mean to think about living with ICTs (information and communication technologies) as a kind of hacking, comment on the Hegelian interpretation of my approach and its application to human–technology relations, bring novels and films into the discussion (Houellebecq, DeLillo/Cronenberg), and clarify that contemporary works of fiction are not necessarily entirely modern and that it has been a central claim here and in my book that although modern thinking and practice attempts to overcome vulnerability with the help of technologies, this is not successful, or it is illusory.

Keywords Vulnerability · Information and communication technology · Heidegger · Hegel · Kafka · Houellebecq

In their replies to my article "The Art of Living with ICTs", which are gratefully received, David Gunkel and Hub Zwart do not only provide interesting interpretations of what I wrote on this topic, but also make their own original contributions to the discussion about technology and vulnerability. Although I cannot do full justice to these contributions

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within the limited space provided here, let me take this opportunity to continue the conversation.

1 Hacking Technology and Hacking Lives and Practices

Next to offering an eloquent and to-the-point summary of my article, which links it to the current discussion about the future of AI including my reply to Hawking in *Wired* (Coeckelbergh 2014), Gunkel offers two stimulating interpretations of my proposed 'shift in perspective'. The first one identifies my view as Heideggerian (without, however reducing it to this) and as going beyond Heidegger: it is Heideggerian in so far as it avoids an instrumental view of technology and does not reduce the question concerning technology to cost-benefit calculation but rather invites us to philosophically reflect on what it means to live through technology; it goes beyond Heidegger in its focus on knowing how to live with technology. I basically agree with Gunkel on these points. I hope, however, that if my term "vulnerability artist" must be interpreted as referring to Kafka's story "A Hunger Artist" (1922) at all (asceticism is only one possible way to cope with vulnerability; there are more possibilities), we may not only consider the solitude, sadness and melancholia of the hunger artist but also the life-affirming joy of the panther.

Yet the metaphor of the caged artist (or caged animal, for that matter) is misleading since, as Gunkel repeats, we are not just victims but also shape technology and shape our lives through technology. We can use technology differently. We can, as Gunkel writes, *hack* technology: 'successfully living with and through technology requires the practical skill and know-how of a hacker' who re-engineers, re-configures, and re-mixes. I believe this is an excellent metaphor for what vulnerability artists can and should do (there is a normative aspect here, although I would replace the term obligation with an ancient term such as virtue). Use and interpretation of technology is and should not be limited to what designers intended. Human excellence and human flourishing requires knowing-how to live through technology, including knowing-how to use and hack technologies. What remains unanswered in what I wrote is whether this is more than a metaphor, that is, whether it also implies that we better learn more practical known-how of ICTs, that we all become hackers, literally. I think this is certainly an option with 'potential' and it deserves further discussion in the light of moral and political concerns (e.g. we may consider the justice and fairness of the current knowledge and power gap between hackers and non-hackers), but what I mean by hacking is broader and has more to do with the flexibility in interpretation and use in general, and how this (re-)shapes human existence, vulnerability, and practice. In other words, my agreement with the point about hacking is not so much about hacking technology as such, but more about hacking our lives and our societies, which is also a hacking of and through technologies.

This is not only a philosophical point but has practical significance and implications. In an article on drones (Coeckelbergh 2013a) I proposed the notion of 'hacking' as a technological practice. I argued that technologies which are designed for surveillance and remote killing can also be turned into instruments that enable 'empathic bridging' and hence undo some of the distance made possible by the technology and re-face and re-humanize people. However, this is not about hacking (literally understood) or about designing a different technology (and Gunkel draws attention to my suspicion about design-oriented thinking) but rather about a different use, which is not necessarily something we decide to do but which comes *unexpected* and unintended, happens in spite

of intentions (e.g. the intention to follow a target). To say it in a more Heideggerian way: hacking as a different world disclosure and world revelation (and indeed a different praxis) may only be partly something that is up to us to decide. Hacking also happens, and in so far as it does, it escapes what Heidegger would call a 'technological' way of thinking. Just as technology should not only be interpreted "technologically", hacking should not only be interpreted in an instrumental way. Therefore, to say that the art of living with ICTs "should" involve hacking, acquisition of know-how, etc. is misleading in so far as it suggests that the desired change is entirely in our hands.

2 Vulnerability Narratives

Zwart engages with my central argument about vulnerability and technology in a different way: by interpreting it in a Hegelian fashion. He reads Hegel's Master–Slave dialectic as one in which the Master becomes increasingly vulnerable and dependent on the Slave, who develops and deploys technologies (I would add: who has the know-how). This point is interesting in itself since it connects my ideas about vulnerability and risk to the issue of power: the Master does not only become more vulnerable but was already vulnerable from the outset, which makes him throw himself into the hands of the Slave (which is risky). Coping with vulnerability in specific ways thus creates specific power relationships, which in turn shape our vulnerability. Zwart's Hegelian interpretation also invites the thought that perhaps the contemporary situation is one in which technology-ignorant Masters (users, 'non-technical' people) are becoming increasingly dependent on the supposedly heteronomous Slaves who were meant to serve them: those with technological (ICT) know-how (programmers, hackers), the 'technical' people. (See again my point about a gap in know-how and the moral-political concerns this raises.) But Zwart encourages us to move on to applying the dialectic to our relationship to technology: 'We may read this as a simile for the human–technology relationship as such'. First we are Masters using the technologies as Slaves (accepting the risks involved), but then they render us dependent and vulnerable. This is an interesting way of putting what I said in *Human Being @ Risk* (2013b) and suggests an obvious application to the question regarding robots. The term "robot", which is coined by Karel Capek in his 1920 play *R.U.R.*, means 'slave' in Czech. Initially the robot is a Slave. But it is risky to throw ourselves in the hands of the machine, since we become dependent on it. New vulnerabilities are created. We fear that the Slave becomes a Master. Similar interpretations may be given to the relationships we have to the internet, smartphones, artificial intelligence, etc.

What Zwart offers here is a very attractive narrative and a hermeneutically powerful and practically fruitful way of interpreting, and indeed further developing, the perspective on vulnerability and technology I presented here and in my book. In particular, Zwart's contribution may help me to further reflect on the "political" dimension of human being-at-risk and human vulnerability coping and to elaborate and explore different ways in which the narrative of vulnerability and technology may be framed and developed. It may also be interesting to think about the relevance of Marx here (Marx who was of course influenced by Hegel). However, I think there are dangers in reducing the human–technology relationship to this Hegelian dialectic. First, while it makes sense to say that technologies 'increasingly manage to re-sculpt our bodies and lives' this may all too easily be interpreted in a deterministic way—an interpretation which, as Gunkel also notes, I reject. We become increasingly dependent on technologies, they render us vulnerable in new ways, etc., but the interpretation in terms of the

Master–Slave dialectic suggests the implication that humans have no room to co-shape their vulnerabilities and to co-sculpt their lives and the risks. Does a Hegelian framework leave enough space for including the possibility of (more) symmetrical relationships—between humans and between humans and technology? But there may be another, related and perhaps deeper problem with this approach: the Hegelian dialectic seems to assume that the two parties (Master and Slave) are first not related and then become related in the course of the narrative. And even then they remain basically separate individuals. Now whatever this may mean for human–human relationships (in response to this assumption I would suggest that humans are social from the outset; the dialectic can only take place against the background of a given sociality), for thinking about human–technology relationships this picture is misleading. It is not only true that 'the Master is vulnerable from the very outset', as Zwart writes, but it is also true that the Master is *technological* from the very outset. The Master–Slave narrative, applied to the human–technology relation, suggests that technology is something entirely external to the human, whereas if we understand humans as technological beings and as always already tool-making and tool-using, then a different picture emerges, one which is more ambiguous and nebulous and in which it is difficult if not impossible to disentangle "human" from "technology", and to distinguish between Masters and Slaves. To construct a narrative: maybe it is typically modern to assume individualistic and externalist views of humans and of human–technology relations; maybe it is typically modern that today others are revealed as individuals and that technologies (and their risks) are disclosed and revealed as external things or agents. Perhaps this is why the Hegelian narrative works so well. But it need not be the only epistemic—and indeed social and moral—possibility. If we see technology as more closely connected to, if not entangled with, human existence and human vulnerability, then we can think about coping with technology and risk as coping with vulnerability. This is what I have tried to do here and elsewhere, but further work may be needed to clarify the implications for (thinking about) the human–technology relation.

Zwart is right, however, in pointing out a lack of engagement with what he calls 'the "empirical" dimension' (which includes fiction in his view) and in warning for a too straightforward picture of the world based only on theorizing. I think this is true for the present article, and his "case study" of the movie *Limitless* (based on the novel *The Dark Fields*) offers a beautiful opportunity to further reflect on what it means to cope with vulnerability today. However, let me first submit that in other publications I engage more with "empirical" matters and in fact also use fiction, though perhaps not as much as I would like to do: in *Human Being @ Risk* (2013b) and elsewhere I interpret for instance Houellebecq's novel *The Possibility of an Island* (2005) to respond to the discussion about human enhancement and to explore 'new moral, anthropological, and social possibilities' (Coeckelbergh 2013b, p. 113). I use that "case" to reflect on how we can and should cope with human vulnerability (e.g. Should we reduce emotional vulnerability? Should we embrace the transhumanist project of annihilating human vulnerability?), and argue—based on the novel—that Houellebecq shows us that human vulnerability has a complex ecological and holistic structure.

More importantly, however, I would like to respond to Zwart's claim that my 'verdict' is that 'modern heroes, notably in contemporary action films, are very powerful and have limited vulnerability'. Zwart then shows that in the film *Limitless* the hero's experience of invulnerability turns out to be 'transitory and illusory'. I admit that I said this, of course, and I am happy to accept Zwart's interpretation of the film (which by itself shows that the approach I propose makes possible interesting interpretations). However, I wish to raise two objections to Zwart's interpretation and application of my claim. First, I claim that what I say is true for *modern* heroes and films. But clearly our contemporary culture,

including its novels, films, and heroes, is not necessarily entirely modern. On the basis of Zwart's interpretation, we can conclude that Eddie has a modern dimension (he uses a drug and "collaborates" with technology to enhance himself, thus becoming more powerful and reducing his vulnerability). But at the same time to the extent that the film, and especially the novel, shows that this modern attempt fails and is illusory, it takes distance from a modern view. (Perhaps the film is more modern, at least to the extent that a President is interpreted as a powerful Master.) Second, this also shows that there is a difference between trying to be invulnerable and actually being (remaining) invulnerable. Zwart seems to ignore this when he interprets what I wrote as supporting 'the claim that modern heroism entails overcoming vulnerability with the help of enhancement and computers'. This is an unexpected interpretation, since I have argued in my book and in this issue that modern heroism and transhumanism *tries*, *attempts* to overcome vulnerability but *fails* in this. Zwart's interpretation of the film thus rather supports than undermines my point.

Consider for instance the film *Cosmopolis* (2012), based on a novel by Don DeLillo and directed by David Cronenberg, which I regularly use in teaching about vulnerability and technology and which is also set in Manhattan and in finance. A currency speculator, Eric Packer, rides through Manhattan in his stretch limousine full of financial ICTs on his way to his hairdresser. During the ride he remains undisturbed by the traffic jams, anti-capitalist protests, and the message from his security service that someone wants to kill him and that there is an 'imminent' threat. In other words, here we have a typical modern hero, who denies his vulnerability and is the ultimate Master (but dependent on his financial technologies, his people, etc.). But as he starts losing his fortune, Eric's life gradually deteriorates and he sets out on a path of self-destruction. He leaves the car. He murders. It turns out that he is very vulnerable indeed and that he is far from perfect. Towards the end of the film he shoots himself in the hand: perhaps this is because he realizes his vulnerability, or wants to experience it in a very direct way. In the end he meets his (potential?) murderer. His fate seems to be sealed. I do not have the space here for more details and an elaborate discussion but let me conclude that, firstly, this part of the narrative and this dimension of the "hero" is far less modern (and indeed Don DeLillo is often seen as a postmodern writer) and closer to what we may call the tragic (and the tragic-comic perhaps). But more importantly, on the whole and like *Limitless*, the film and the novel invite us to reflect on how we can and want to deal and live with risk and vulnerability—and with ICTs. And indeed on how answers to these questions are never straightforward.

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