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Response to Mark Coeckelbergh's Review of *Transhumanism, Nature, and the Ends of Science*

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<https://wp.me/p1Bfg0-55B>.

My thanks to Mark Coeckelbergh for his review (2020) of *Transhumanism, Nature, and the Ends of Science*. Having nothing negative to say about the review, my response offers a sketch of the overall conception of the book and discusses two themes that his review does not address.

The original title of the book was *On Limit*. My editor resisted the title; it wasn't searchable, you know. But this remains the book's central theme. I see the play of infinity and limit as the central dynamic of our time. Technology has become so transformative that transhumanism is the *de facto* goal for society, the fulfillment of the modernist dream of infinite willfulness and power. Opposing this are a few 'downwingers' (sensu Fuller) who believe that humans need boundaries to not only restrain but also guide us. Nietzsche is the crucial, ambivalent figure here, proclaiming the will to power while also voicing the Madman's concern that without guardrails we are apt to find ourselves disoriented, straying through an infinite nothingness.

### **The End of Technoscience**

This brings me to the book's initial claim: that the supposed distance between the 'wackiness' of transhumanism and the goals of science and technology is illusory. Current science and technology policy is merely transhumanism on the installment plan. And a second claim: rather than being liberatory, further technological advance is more likely to result in our trivialization, enslavement, or destruction. In brief, technoscience has completed its historical mission, at least in the developed world. Continued technoscientific advance is likely to lead to one or more of three ends: a 'pink police state' where we trade our political freedom for consumer pleasures (cf. China); the loss of our autonomy through the wiping away of the distinction between technology and drugs, as technological pleasures overpower our will; or a global catastrophe through the inadvertent or intentional occurrence of a grey goo scenario. This point is summed up by the title of chapter four, referencing the Silicon Valley gang, 'Aging Boys will be the Death of Us'.

Coeckelbergh is correct in noting that the book turns on the interplay of technology (promoted by the party of infinity) and the environment (defended by the party of limit). This formulation, however, threatens to obscure a central element of the book. Granted, this is a critique of science and technology from the perspective of environmental philosophy. But it is environmental philosophy of a markedly different sort. For my concern with the environment is framed within a larger compass—my embrace of a version of naturalism that embraces the human mind and body and society as well as animals and ecosystems.

Coeckelbergh passes by this aspect of the book. Of course, everyone picks out the parts of a book that most engage them. But my guess is that my account of naturalism, as well as a second theme consisting of a defense of censorship, are the parts of the book that will draw the most attention and criticism.

To take up the second point first: applied to the cultural sphere, the idea of limit appears as censorship. As Shattuck (1997) notes, there is a long philosophical, literary, and religious tradition that defended censorship. In recent decades, however, our culture has embraced an ethic of anything goes. Why the switch? In part, my answer follows from Heidegger's account of art. In 'The Origin of the Work of Art' Heidegger argues that the 'work' of an artwork is to make truths real and visceral for people; in that sense, art is more 'philosophical' than philosophy. I tie this point to an account of media studies where I discuss popular entertainment across the 20<sup>th</sup> and into the 21<sup>st</sup> century. I argue that the movement from cultural limits (aka censorship) to infinity (anything goes) has been driven by a series of technological innovations in mass media that made censorship impossible.

### **The Production Code**

My account begins with Classic Hollywood film from the 1930s, from the enforcement of the Hollywood Production Code in July of 1934. In the 1930s and 1940s, movies had a monopoly on popular entertainment: at that time nearly 70% of the American population went to the movies *each week*. Being subject to the Code, Hollywood movies both mirrored and reinforced the dominant ethic of the time.

Make no mistake, there were a number of problems with the ethic enforced by the Production Code. This was an era when racism, sexism, and heteronormativity were not merely common but the norm. In spite of these dolorous facts, the Code had one outstanding value: it provided guardrails—a vibrant, easily accessible representation of social norms. It defined the proper and improper and gave our culture a common stock of language and images that we could both refer to and debate.

How did this change? Through technological advance. Innovations in the mass presentation of images (first TV, then cable TV, cassettes, DVDs, etc.) spurred the development of alternative media. Then came the Internet and most recently the explosion of social media. Restrictions like the Production Code became impossible. It wasn't as if society had a debate and *voted* for new standards—or rather, the lack of standards. Very few were making arguments in favor of universally available, explicit, and quite degraded representations of sex (e.g., Pornhub). Rather, these new cultural standards were reverse-engineered: standards were changed by technology making pornography available in the privacy of one's home and impossible to regulate.

My point isn't to label these particular changes as good or bad. I'm happy to defend some forms of pornography. (Some have labeled this book 'conservative'; to my mind, it is Aristotelian.) The point is to highlight how societal mores have come to be determined by technological innovation rather than by political deliberation. Some of the results have been beneficial: it was good that stereotypes of race, class, and gender were challenged. But matters did not stop there. Norm-breaking became a goal pursued for its own sake; transgression in the service of an ethical or political end became an aesthetics of transgression. We've been left with a radically libertarian culture driven forward by technological innovation.

If this account of things makes sense we face two issues: scientific and technological advance has given birth to technocracy, and this technocracy is at least implicitly transhumanist in orientation. Both issues can be dealt with in the same manner—by putting some type of governor on technological development. But where can we find a criterion that would help us put the brakes on technology? This is where I make the turn toward naturalism.

### **Reimagining Naturalism**

Naturalism, of course, has long been passé, and is well-ridiculed. As Nietzsche asks, what could it mean to follow nature? And what's more natural than disease, famine, and toothaches? Note, however, that rather than making a metaphysical claim, my turn toward naturalism is based in our lived experience. The phenomenological and existentialist traditions provide a basis for criticizing the attempt to live life at the speed of an electron. Which is what I see as the basic contradiction in the transhumanist project.

It turns out that when limit is applied to the cultural sphere it means much more than censorship. When we talk about cultural limits the image is of a border with a no trespassing sign, a carceral inside and a free outside. But boundedness also comes through mood, tone, and rhythm. Consider the speaker's pregnant pause or the timing of the comic: these have a mood and rhythm that can be either honored, ignored, or broken. Other behaviors have tempos and rhythms that are constitutive of our very make up as humans, our ability to live life at a human pace rather than at the speed that technology operates at.

Of course, human tempos vary. We sometimes eat fast food, and at other times enjoy a leisurely meal. We go for a stroll, and sometimes sprint. But these choices lie within human bounds: popping a pill is not eating, no matter how nutritious it is, and human speech can only be processed at a certain pace. This is true for a wide range of human experiences: having a conversation; spending time with a friend; playing with children; enjoying a work of art; working in the garden; having sex. A human life means getting in tune with the inherent rhythms of an activity.

This strikes me as a viable form of naturalism.

Many of these rhythms are derived from nature—both our own (for instance, our heartbeat) and nature writ large (the turn of the day and the seasons). In one sense these patterns are accidental, but they are also deeply embedded in our body and psyche. Paul Shepard (1982) highlights the historical basis for what's natural for humans. Shepard sees us suffering from a culture-wide mental illness rooted in our being out of sync with nature: "Culture in racing ahead of our biological evolution, does not replace it but is injured by its own folly." For millennia our lifeworld consisted of small social groups living in constant contact with nature. Modern humans are perhaps 200,000 years old; some of our social habits go much further back than that, to the time of Homo Erectus and even to our mammalian past. This anthropological heritage has been destroyed in a geological blink of an eye—over the last 125 years or so.

## Out of Joint

In our headlong embrace of technology we've ignored the paleontological dimensions of our being, where our habits, reactions, and sanity are rooted in ancient rhythms. The Industrial Revolution occurred a mere 200 years ago, 99.9% of the way through our history as a species. Think of the changes since then: electric lights, indoor plumbing, the growth of mega-cities, birth control, Google, Skype.... We express concern about attempts to domesticate wild animals, but we have done nothing less to ourselves.

I am not claiming that life in the Pleistocene, with its lack of ibuprofen, indoor plumbing, and dental care, was better than life today. The point is simply that we haven't co-evolved with these innovations. Our bodies and minds are out of sync with the world we've built. And in the face of this situation we make plans to accelerate things even further. It's left our life out of joint, as we ignore the natural rhythms to the enjoyment of a meal: pouring a glass of wine, cutting vegetables, timing the salmon, and tending to the pasta to make sure it's taken out at the right moment. To have a machine that does this all doesn't save time; it drains meaning from the time that we have.

There is a pacing to situations which allows our life to ripen. One does not rush the time spent playing with a child or with a sick relative. There is a pattern to the well-lived day, just as there is a natural unfolding to the stages of our life, even as we struggle against our inevitable end.

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