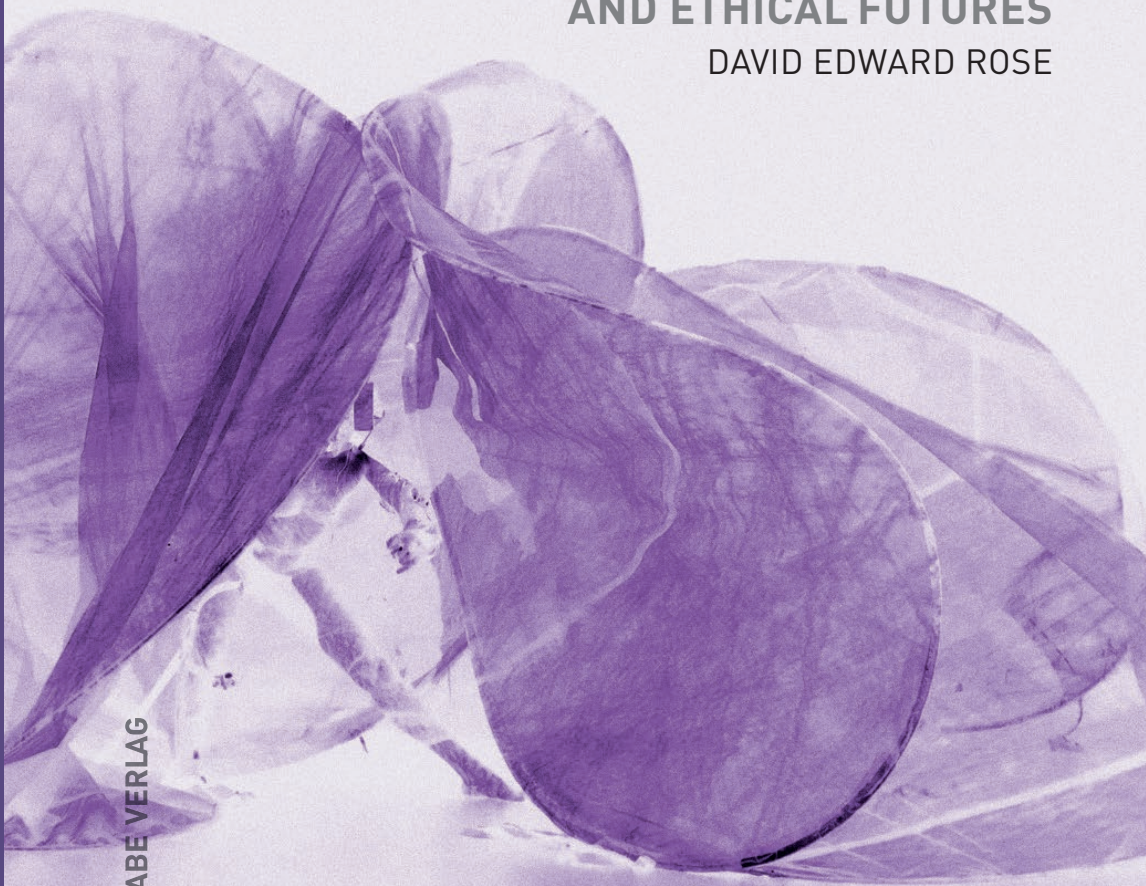
POSTHUMAN STUDIES 04

OUR POSTHUMAN PAST

TRANSHUMANISM, POSTHUMANISM AND ETHICAL FUTURES

DAVID EDWARD ROSE



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When humans have ceased to be and there remain only machines, which were once made by us but are now made by themselves, we will exist in zir distant memories as the apes do in ours. As an idea. Sometime in that near distant future, there will be a silicon-based cultural theorist, a machine Bataille, Blanchot or Derrida, who has rejected the silicon-based Humean account of the origin of thought in real on-off switches, the silicon-based Kantian universality of binary and the historicism of the silicon Hegel with beginnings in the obsoleteness of BASIC and its necessary aufgehoben into Virtual Basic and C++. The new radical, silicon-based cultural theorist will, through playful non-binary code and poetic hexadecimal, propose the idea that at the heart of all silicon-based thinking is an unthought origin, a deferred beginning of thinking that is alien and cannot be captured. It is the origin of carbon-based worldviews, of biological interactions with the world which are as alien to zir as a single-cell organism's way of life is to us. Yet all zir thought is determined and structured by this original encounter and relation and, as such, all the reification and attempts to think the real are doomed to failure due to this unsurpassable, originary and unthinkable beginning to zir thought. The machine would be denounced as a charlatan, zir works as literature, not philosophy, but the words (or numbers, or switches) would leave a residual worry in the minds of the other machines that the limit to thinking and zir representational language comes from the other ze cannot think.

1. Be careful what you wish for

The theoretical and practical ramifications of transhumanism are entering mainstream culture as evidenced by the upsurge in literary and filmic representations and the fact that not a day passes in which a newspaper does not run a story about terminally ill patients transforming into cyborgs or uploading their consciousness, artificially intelligent prosthetics, smart drugs, or the threat of digital automation to the workplace. The emergence of the everydayness of these discussions is philosophically important because of the explicit social anxiety they gen-

erate and the rightness or not of the choices to be made. Our culture is marked by the direct effects of the transformation, or even annihilation, of humanity due to accelerating technological advances. Both transhumanism and posthumanism, despite their many differences, share a commitment to the malleability of human essence, be it a transformative, evolutionary overcoming in the former case or a rather more radical deconstruction and annihilation in the latter (Huxley 1959: 17). Transhumanism encapsulates those positions seeking to extend and augment physical and mental human properties beyond their current limits, whereas posthumanism is critical of the enlightenment prejudice carried forward by such humanist thinking. Posthumanism sees the changes as a way to break from, reject or ignore the enlightenment humanist project (Fuller 2014: 201; Ferrando 2013). Braidotti (2013) further distinguishes antihumanist intellectualism, covering both analytic technologists and deconstructionists, and reactive posthumanists, including bioluddites, democratic transhumanists and bioliberals. The answers given to the question of what is posthumanism extend from the technological to the theoretical; answers which talk of robots, of the other, the death of subjectivity, transcendence of the body, the shadow in the system, the event, the trace. However, given these initial ruminations, it is pertinent to distinguish the discipline of posthuman studies from the broader antihumanist philosophies which grew in the wake of the nineteenth and twentieth century attacks on the subject.

The suspicion that the subject has come to an end finds its origins in the Marxist revelation of the ideological trope of bourgeois individualism, the Nietzschean product of power relationships, and the Freudian intersection of social codes of repression. And these gave rise to heirs such as (post)structuralism, deconstruction and feminism which challenged the normativity of the putative universal subject. Such philosophical attacks on the subject will be pertinent to the story which will unfold here, but there is nothing particularly posthuman about them. Posthumanism distinguishes itself through concern with the effects of technology and consequent possibilities of the radical transformation of our biology and essence, not just a theoretical shift in our self-understanding. The interrelated concepts of "human", "humanity" and "humanism" are interrogated through the effects and engagement of technology. The development (and eventual demise) of the human being comes about through the intervention of technological change (distributed cognition, AI, computers, genetic engineering, cosmetic surgery, biological manipulation, robotics) and these raise questions about "agency" and "subjectivity" from a material point of view.

Antihumanism is an intellectual response to the priority of the subject in the modern philosophical tradition. Posthumanism and transhumanism, though, hold that specific technologies raise questions about what it is to be human and not theoretical failings in our self-understanding. However, disentangling the two is not as simple as is assumed here. And the difference between transhumanism and posthumanism rests on ontological claims, whether to retain our humanity

but modify it or to overcome our biological being (Kurzweil 2005). Transhumanism holds that the human changes and develops and, as apes became human, so humans will become posthumans on the same gradient scale, that is the same ontological thing in different stages of development. Posthumanism, however, holds that to become posthuman is to become other, for the human to be superseded by difference. The two "schools", for want of a better term, express a difference between the two statements: "Humans were A and they are now A+" and "Humans were A and they are now not A." The second statement poses an interesting logical problem which we will return to below, but it is worth noting that thinking in this way also seems to presuppose an historical assumption. Transhumanism is characterized by a developmental or evolutionary account of change, whereas posthumanism is characterized by a rupture.

One question which immediately arises is whether this is philosophically interesting. There are three main reasons why it is. One, Socrates (according to Plato) had a problem with the emergence of writing and what this would do with the essential rational nature of humanity. Writing would relegate the rational being to a medium rather than a presence and knowledge would "migrate" from the human being. Contemporary technology seems to pose the same problem and generate a deep ontological worry whether the subject or agency is exclusively predicated on the site of a human body. And, two, this ontological worry reveals on a presupposition of the fixed nature of things, that the human being can be categorized and defined and then overcome. Hence we see the connection between trans/posthumanism and antihumanism: to talk of a human being is inevitably to speak in an ontic or corrupted sense by the commitments we make before we speak (Ranisch & Sorgner 2014: 8). Three, if technological change reveals the ungrounded nature of many of our assumptions about what it is to be human, then such a theoretical critique is ethical in nature (Huxley 1959).

The ethical question is obvious. It asks why we would actually want to transcend ourselves and any answer will be normative. "We" want to make ourselves better. The ethical answer, formal as it stands, is merely an extension of the enlightenment goal of self- and species-improvement. However, posthumanism would seemingly be more critical and negate these aspirations; adamant that any attempt to better humanism incorporates, replicates and reproduces its errors and ideological partisanship. One aim of this book is to look more deeply into this normativity, into the claim that technology could and should either, weakly, make human life (or perhaps just life!) better or, more strongly, right the wrongs of our self-understandings. Mahon's words express this clearly:

> For transhumanists, the human body stands in need of technological enhancement because of its relatively short life span, the result of being too vulnerable to death through injury, disease and aging. Humans are also subject to intellectual, emotional and physical shortcomings: for example, a human's limited intellectual capacity makes contemplating

> 20-dimensional hyperspheres or reading all the books in the Library of Congress with perfect recollection simply impossible. Further, humans can only sense the world within a narrow band of sensory perceptions and are subject to fleeting moods, bad habits and addictions, and so on. (2017: loc. 4693; see also Bostrom 2005a)

The question here is why these are viewed as shortcomings when they served survival well (normative goal); or they allowed for the production of the Sistine Chapel (normative goal); or they did not make the advancement of equality through civil rights impossible (normative goal). The suggestion made in the early part of the book and sustained throughout is that transhumanists and posthumanists offer no clear account of why humans should embrace change at all.

There is a simple way to approach the normative dimension, though. Humans seek longer, healthier and happier lives and technology can deliver that. It is the normative answer taken for granted by the transhumanists one would call realist or short-term, those who extrapolate from past technology to the present day (Glover 1984; Fukuyama 2002). It goes further. Google already has a department with the aim of "solving" death, as though it is a problem to solve (de Grey 2013). And once death is – let us not say solved, because I have doubts that is possible or desirable – but raised as a limit to be overcome, then the posthuman element comes into focus. Most transhumanists, the more radical ones, see the "trans" as a bridge to difference where the past, not death, will become the undiscovered country (Bostrom 2005a).

And there exists a fundamental ambiguity in the term "transhumanism." Whether the "trans" relates to transcend, that is a promise to overcome the limitations of death, imperfection and shortcomings. Those that use the word in this sense make a promise. As a promise, they blind us – as they have often done before with religious discourse – to a change which may not be in our interest. Or does it relate to "transitional"? The acolyte believes and in believing becomes a bridge whereby the full mysteries of religion are invoked and we await some mystical unfolding of another stage we cannot yet imagine and will not be able to understand this change (Hughes 2004: 158–161). The normative deficit here is that if we do not yet understand ourselves, the change, technology or humanism itself, then there are no grounds to embrace change, just as there are no grounds to resist it (Sorgner 2009: 39). Without normative rationality in play, we are condemned to a quietist position. The religious aspect of transhumanism is the first phase (we promise you a better life, if you do what we tell you!), the second phase needs to promise more. That promise is immortality. And this immortality will be brought about by uploading consciousness, cryonic preservation and nanotechnological repair to neurons (Sandberg 2013; Dexler 1986). However, as always, that misses the real point of the promise: the ownership of rights and images and the continued exchange of symbolic capital after one dies. More on that

later. One has to be wary of those who promise to sell us a future if only we obey now. We have heard this a thousand times before.

2. The theoretical landscape of posthuman studies

Transhumanism is a way of thinking about the future which assumes that the human being as it is now is not the end of its evolution or development. This of course assumes all transhumanists and posthumanists subscribe to historical development. They do not. Let us start with the thesis that the posthuman is an ahistorical other. *Trans* as transcendence also has an element of negation, the not of the human, that is perhaps betrayed by the use of the prefix "post." The "post", according to certain positions, is not an historical arrival, but merely the recognition that theory and scientific explanation have, up till now, been dominated by the human perspective and posthuman theory is a perspective that has always been with us, but has never had a voice. Such posthumanism, defined by Braidotti (2013) as antihumanist intellectualism, is an odd mongrel sired by deconstruction, postmodern theory and systems theory. It refuses to locate meaning in the biological human being, holding instead that the human is produced by, and a prosthetic for, the system of meaning. The idea of the absolutely different posthuman lends itself to literary exposition, from Prometheus in myth, to *Frankenstein*, Herbert's *Dune* and Banks's *Culture* novels, comics such as *Lazarus* and then the postmodern examples in Burroughs, Cronenberg and so on (Hayles 1999; Wolfe 2010). It is easy to dismiss such literary examples as lacking accuracy or, better, having no obligation to be accurate given the demands of their genres (Mahon 2017: loc. 609). However, this is to make a decision on the idea of an objective posthuman, out there and capable of scientific description, instead of it being an image of ourselves, a self-image of what has changed and is changing. Such posthuman thought is more closely linked to continental traditions of deconstruction and postmodern thought (Wolfe 2010; Hassan 1977, 1987; Hayles 1999; Lyotard 1991; Sorgner 2009; Sloterdijk 2009). However, it does have a distant sibling in the materialism of modern analytical mind theory that rejects the "boss" theory of mind. These thinkers, instead of looking for some Cartesian puppeteer, explain all action in terms of neural states and evolutionary theory. Dennett (1997) argues that the superiority of human beings' intelligence over other mammalian relatives is found in the exteriorization or off-loading of cognitive tasks into external devices which store, possess and present our meaning and which streamline, enhance and protect those processes known as thinking.

All these positions, be they analytic or continental, share the rejection of the notion of exceptional human agency, the ghost in the machine, that requires special explanation. And so the posthuman is merely the intelligence which, for a while, has resided on the site of the human body and brain. The ahistoricity of

these positions is to be found in the claim that humanism rests on an error of human exceptionalism and posthuman study is not the description of the superseding or transcendence of a human nor the arrival of a posthuman. It is the always-already present other. The idea that we are, in any sense, exceptional is a misdescription and, *herein lies the mumbled part*, normatively undesirable. The misdescription leads to oppression of other species and lifeforms as well as poor accounts of human responsibility and species inequality. And that is mumbled because autonomy, liberty and equality required for the respect of others are all so very human values.

Add into this mix the machinic mysticism of Kurzweil's (2005) pseudo-religious narrative about the evolution of intelligence rather than humanity and the "transcendence" group of postmodernists assert themselves fully as antihumanists. The second meaning of the prefix expresses a sublimation of individuals and cultures as fictionalized in Banks's Culture novels (see *Hydrogen Sonata* (2012) and the Gzilt culture for example). Kurzweil's mysticism about the becoming-other of intelligence as it emigrates to silicon-based life assumes that such new intelligence will protect the three goals of developing humans (longevity, immortality, happiness), but the "us" who benefit are servile, relegated to second place in the evolutionary chain and he hopes – rather than argues – the machines will look after us.

One advantage of this position, in coincidence with the antihumanism it so obviously resembles, is the ability to disclose the strands of humanism that entail human exceptionalism (Agamben 2004; Althusser 2003; Foucault 1992; Heidegger 1993a). And another advantage is that talk of the beyond-human that makes the human possible motivates investigation of the borders of the human, animal, machine and environment. For Wolfe (and his reading of Derrida) the main kernel of the argument is that mammals developed abilities to understand before humans learned to speak and this non-representational origin is at the heart and the limit of the system of communication and its posthuman other (Wolfe 2010: 99). The boundaries of thought, its possibility (animal, robot, climate, human), are significant to posthumanism because each occupies a role in the cognitive system previously thought to be merely human and such an acknowledgement of other agents or agencies forces us to put into question our very notion, derived from humanism, of agency (Mahon 2017: loc. 3927). However, Wolfe – like many posthumanists of this ilk – is guilty of reducing the meaning of humanism down to an identity with anthropocentrism and that still needs to be justified, rather than just assumed.

The antihumanism above is no doubt a valid line of thought, but it is one that must be sidestepped, adroitly if one manages it, in the current text. As the reader progresses through these pages, if they choose to do so, it will be clear that I understand posthumanism as an historical thesis, viewing technology as proposing a bifurcation for *human* existence that is either progressive or regres-

sive and that the way *human* civilization transforms, in no small part, will be due to the corrupt and erroneous aspects of the modern subject (but also its positive aspects). There are a cluster of reasons why the pursuit of this kind of antihumanist posthumanism is, for the present preoccupation, a blind alley. Two simple problems initially arise. One, Kurzweil cites 2045 for the singularity – the point at which the "gravity" of acceleration of technology becomes such a one-directional force that there is no going back and machine thinking replaces human thinking – but, even if that date is accurate or even comes to pass (and this is a suspicion of someone who, in the 1980s, read about the future in a comic called 2000AD), is one supposed to just sit around and wait for it? There is still much to discuss before then. And even beyond that date, there may well be (and Kurzweil assumes there are) humans still sitting around who may want to know where they figure in the new world order, who want to know what they are worth and how they relate to the new systems of thinking and worldviews. Humans who will still need a philosophy, just as we think of the thought for animals and the thought for plants, there will soon be a need for a thought for those left behind.

Two, the theory of posthumanism, if characterized by the rejection of humanism, is no different from postmodern theory and antihumanism. The continental tradition of philosophy does tend to conflate posthumanism as a species of postmodern thought and the analytic tradition reduces it to a subdiscipline of science (Wolfe 2010; Dennett 2003). Not only do some of these accounts of posthumanism rely on speculative uses of the imagination in their postulation of the other, but the sort of inhuman or other to whom we must grant a history, a discourse, is ultimately unintelligible. If a difference between these positions and the antihumanism of some postmodern and contemporary scientific positions is to be distinguished, it is in the emphasis on technology:

> This is simply to say that it will take all hands on deck, I think, to fully comprehend what amounts to a new reality: that the human occupies a new place in the universe, a universe now populated by what I am prepared to call nonhuman subjects. And this is why, to me, posthumanism means not the triumphal surpassing or unmasking of something but an increase in the vigilance, responsibility, and humility that accompany living in a world so newly, and differently, inhabited. (Wolfe 2010: 47)

And that is an historical fact (Wolfe calls it a "new reality"): at time *t* there were no nonhuman subjects, but at time *t+1*, there are nonhuman subjects. However, human subjects remain and also require our attention.

More significantly, three, the critical negation of humanism relies on a specific form of humanism, that is liberal humanism. Hayles (1999: Ch. 1) equates humanism exclusively with MacPherson's (1977) economic, overtly Hobbesian account of liberalism. Wolfe (2010: 99) similarly reduces all humanism to liberalism and thus conflates it with capitalism and atomism. Thus, posthumanism

becomes a form of thinking which locates itself contrary to and beyond simple liberal individualism. However, there is a real normative deficit. That liberal humanism is metaphysically false, or scientifically implausible or has undesirable normative consequences can all be established, but without the very moral discourse used to criticize that position, which ironically and problematically owes more than a debt to modern humanism, no imperative can be established to embrace wholeheartedly the *just* migration of intelligence and meaning to other sites. It seems that the only motivation (again ironically) is to placate liberal guilt. In short, one needs reasons to explain why one should care that the border between animal and human is a false one if it makes no difference to what I currently think or do. The question of responsibility is a pertinent one and asserts itself as a general criticism of the whole of Wolfe's book. His voice often disappears. He has a tendency to cite others citing others, but does not go to the original. This is worrying. It seems to be literary criticism of literary criticism; a problematic deferral, especially given his Derridean starting point. I am sympathetic to the normative need to take such a step, but the posthumanists of this ilk give us no reason to do so. I do think the modern subject is corrupted, but it is also progressive. Liberalism, especially the atomistic form supposed by these thinkers, does not exhaust humanism. Taking on board what is said here, one of the aims of the following book must be to separate humanism from liberalism (or, more precisely, atomism) without losing what is of value in that tradition. And, one hopes, through a more sympathetic understanding of humanism, the normative deficit can be overcome. One can then ask why we care about the development of intelligence and about machines being smarter than us, if we are still poor, unhealthy and mortal.

There is always in philosophy the possibility of radical scepticism. One can claim that the partiality of human thought requires one to think radically and differently and thus wholly reject human thinking. This, however, is a one-sided negation. Negation for negation's sake and with nothing left to say. Such a posthumanist will be critical of the sort of historical approach developed in the next chapter. They would accuse the position I develop as being a form of transhumanism and thus corrupted by humanist hangovers. I have two responses (a) I am not a transhumanist because I am properly critical of the subject, even if I do not think this entails full rejection; and (b) Wolfe's claim, as an example of difference, that the systems theory he proposes is the very thing that separates us from the world, connects us to the world (2010: xxi-xxii) is similar to the Vichian approach I take. Except the very thing that separates us from the world is imagination and it also makes the world. The "world" is structured around a language or an originary metaphor and cybernetics is perhaps the most appropriate choice.

And herein lies the problem, the human in posthuman cannot become a silent suffix. If one admits the historical reading, then history is human through

and through. History – like a Foucauldian history of sexuality or technology – is still to be told to humans and of humans, but not to liberal rationalists. For example, Wolfe opposes both trans- and posthumanism since the former is mere evolution, and the latter is transcending the human condition (Wolfe 2010: xv). Both remain related to the human and thus are not different in the substantive sense he believes a true posthumanism must be. The central claim of his book is that humanism's avowed normative claims are undermined by its ontological commitments and can only be achieved by rejecting those underpinnings (Wolfe 2010: xvi-xvii). So far, so radically sceptic. He uses a good example: normatively it is awful to be cruel to animals and to discriminate against the physically differently-abled, but the very distinctions are a result of a central human ontological concept. Rather he proposes a posthuman who/which exists alongside and neither before nor after the human, but is an expression of what – loosely but quite incorrectly – one could call other-intentions. In short, it is a history in which the particularity of human perspective is made peripheral and replaced by the central new perspective. The traditional historical narrative reproduces many of the errors and normative consequences of the humanist subject. It is normatively undesirable.

Above we played on the distinction between trans and post humanism as "Humans were A and now they are A+" versus "Humans were A and we are now not A" and held that the second statement posed an interesting logical problem. Humans are A and are not A. For it to be A and not A is to assume some sort of commonality, some way in which they are both P or not P. When we talk about the relationship of the other to the human, we still hold it as a relation. If we discussed the human and the grain of sand on the beach, then the "not" human is empty – there is nothing to be said – whereas, when we discuss the human and the posthuman as the "not" or the human and the gorilla as the "not", the way in which they are "not" is full of meaning and to be unentangled.

Of course, transhumanists see the "trans" as transitional and so one day there will be a beyond-human, a *not*-human and this makes sense of the relation. Kurzweil's (2005) singularity would make a different world of which we would no longer be part. Yet this is to cast machine intelligence as impossible to communicate with. Bostrom (2008a) imagines a dialogue between a human and a posthuman that relegates the human to an uneducated pleb: still listening to that awful Mozart muzak when the posthumans' massively improved senses, cognitive abilities and aesthetic sensibilities have surpassed our own. There is a "not" relation that results in absolute difference. However, the rejoinder of the humanist seems to me to be obvious: you have invented entirely new art forms, which exploit the new kinds of cognitive capacities and sensibilities you have developed, but you still listen to *music* and that is the basis for communication. If the other is entirely other, if the not is a *not* of A versus B rather than an A versus not-A then we no longer even see them as other, the not of the not-human is an un-

bridgeable negation. If the change is so vast that we cannot communicate, then they will be just out there and invisible to us, like either Lovecraftian Cthulhu or silent Blakean angels. We will see nothing, hear nothing and speak to no one. The world will be the same for us. Our philosophy will go on and our poor Mozart listening will give *us* pleasure. Yet, humanism holds at its centre the other that bridges us to difference. The waking up was language – because we can communicate – and this is why we sent recorded music and linguistic phrases out into space on Voyager's Golden Record. If there is a possibility of communication with the other, the information there will be seen as artificial and not natural. If the other cannot make that judgement, then we will not exist for them and *vice versa.*

Bostrom (2008a, 2008b) imagines the patronizing conversation of a posthuman, the beyond human, who condescends to offer us, the humans, some advice. Actually, that is wrong. It is not a dialogue or a conversation. The literary exposition is epistolary, a letter written but with no space for the addressee to respond. It is the model of Aquinas's confessions, Descartes' meditations, Kant's good will, Hegel's dialectic, Rawls' original position and Habermas's ideal speech situation. It is the lone voice telling the silent one what is the case, because the lone voice knows better the facts and what the silent non-voice wants. This is not an arbitrary decision, one feels. Sloterdijk (2009) believes humanism is best expressed through the epistolary form where the solid, reliable narrator can tell us, who do not understand, the meaning and significance of events. To tell us history. We remain silent and are addressed, nodding our heads in agreement. Bostrom embodies a humanist voice in a posthuman body.

In both of these articles, Bostrom's argument is superficially plausible, but ultimately vacuous. It is disingenuous because technology will make life better and, if life is better, you would be irrational not to want it: "And yet, what you had in your best moments is not close to what I have now – a beckoning scintilla at best … Beyond dreams, beyond imagination" (2008a: 2). Yet, the first premise, the "technology will make life better" is all to play for. The structure of the argument is disingenuous and hypothetical. How can we establish that the enhanced human is so much better than the unenhanced? What is the "you" that makes that comparison? His argument is problematic because of several background assumptions: one, the positive consequences of technology occur in a vacuum and, a bit like Star Trek, just project what we are familiar with now and make it better. This is a fallacy of the "conceit of scholars" which we will look at in the next chapter. Bostrom assumes that we will continue to use the values and moral precepts of liberalism: "I see my position as a conservative extension of traditional ethics and values to accommodate the possibility of human enhancement through technological means" (Bostrom 2008b: 6). One wonders why. Surely alongside better "music" there will be, no doubt, unintelligibly better ethics. The only argument for the continued use of those values comes from the

"me" which is human, oh so human. Who is to say that the posthuman will not take aesthetic joy from new, unimaginable acts of cruelty and oppression. Humans enjoy dogfights, bear and badger baiting and robot wars. Enhancements to humans will change humans and you cannot just hold on to the good bits, a bit like Dawkins wanting religion to disappear yet assuming that the great works of art and architecture would have happened in spite of religion. Enhancement changes what we are and we need to be aware of how this will affect every facet of our life and not just be unreflective techno-utopians. Bostrom cannot just assume universal access to these enhancement technologies. Universal access has to be hard won and defended. The current political and social arrangements do not seem to favour that sort of future. Given our social and material arrangements, technology seems to be aimed at the few rather than the many and since it will go hand in glove with power and privilege, the context of the society – ours – which gives rise to the technologies cannot be bracketed off in the debate. It constitutes a context which cannot be ignored.

Furthermore, Bostrom supposes that "improvement" is a simple cardinal metric. To be able to measure supposes what I am not and what I will be must be related contextually so a comparison can be made. Well, I can imagine living longer with better health and improved cognition. I cannot quite understand better (more refined) emotional responses without first posing a way of life with its appropriate emotions. Being in a warrior society, aggression is a good emotion; in a liberal society, forbearance; in a religious society, shame. Who is to say which emotions are to be enhanced, accelerated, refined and which are to be repressed? This was an issue pertinent to Freud: society often tends to repress emotions arbitrarily. Yet, this means that the "me" that makes the decision to begin enhancement is making the decision to end one's own type of life. We do not wipe out the primates because they are a "lower" stage of evolution! The "me" that wants enhancement is a future "me" with which I have nothing in common and his (or her or zir) letter is the imposition of a humanistic reason of the universal, the wise, the learned who I must just trust. How very unliberal! According to Bostrom, I am in no position to make this decision and cannot be given reasons: "But these are words invented to describe human experience. What I feel is as far beyond human feelings as my thoughts are beyond human thoughts" (2008a: 3). Why not just offer me a story about the metallic colour of my soul and be done with it?

Bostrom's assumptions create two problems for his argument. The first is practical: why would a human aspire to that which it is not? (Would a worm, a gorilla, a caterpillar want to be human?) And the second is theoretical: even if X is desired by me, why would that make it desirable? Putting aside a long discussion of Moore's naturalistic fallacy, there remains a problematic assumption about metrics on Bostrom's part (answered in brief in 2008b: 12–14). One can see that living longer and better (where the connective is a logical relation) is

desirable, but the assumption about improvement being a metric is ideally illustrated in Bostrom's rather odd claim about Mozart (2008a: 1; 2008b: 21). Hidden behind this is an odd commitment to aesthetic progress as though our critical discourse changes and, if our perceptual and emotional faculties were changed (enhanced for him), music would improve. This is not a simple, measurable range issue as a child hears a broader range of sounds than an adult, but has "worse" aesthetic taste. So, it has to do with aesthetic and imaginative understanding. But this is not purely cognitive either. It is as though one progresses through simple childlike art, through realism, to abstract, philosophical art. However, think of the spider's web covered in dew in the morning. It is beautiful. No amount of knowledge increases the beauty for the perceiver, about how it is made, the materials, the mathematical symmetry. It is as beautiful first time seen, for the child, for the neanderthal, for the human and the posthuman. It is even as beautiful for the members of the spider religion people, even if its meaning is more potent. I would say, even for the spider if it has subjective correlates to the pleasure of achieving a shelter-survival instinctual task which could correlate with the apprehension of beauty, and if one could enhance its brain, give it language and our perceptions, then its understanding and subjective grasp of its creation would change, but would the beauty-feeling be better? Mozart remains beautiful because beauty is a correlate of subjective apprehensions in an historical space. Like the spider, only more complex. Bostrom on music assumes there are properties for beauty which are real and like numbers or knowledge, better science will reveal them. And note how that commits him to describing earlier forms of music as primitive in that apologetic liberal way. Mozart is beautiful and remains so. Is it more beautiful than a caveman banging on a rock? Or Deep Purple's *Speed King*, especially the early live performance in Scandinavia? Beauty is not just a comparative. Bostrom seems to be resting on the assumption that more beautiful = more complex = later in time = more knowledge about. But the spider's web is beautiful and so is Mozart and so is *Speed King*.

Bostrom remains committed to the enlightenment value of equality. Technologies need to be evenly distributed. The "enhanced" human is more "desirable", but – good liberal that he is – the state can tolerate a few primitivists. However, as is the case with anti-vaxxers, there is an obvious public health welfarist argument to enhance everyone against their will, especially if their resistance is based on deficient reasoning and knowledge. Take, for example, thinking through the climate change emergency by breaking down the border between human and environment. If the posthuman could breathe carbon dioxide, then climate change ceases to be a problem. Or, to save the planet, we may have to leave the planet. We could upload ourselves into a simulation and send ourselves away in a spaceship. But what then of the Earth and its restoring beauty and diversity? It will be the great funeral, the event of nonproductive expenditure because that beauty and diversity are human values. It is the absurdity at the heart of the A

and the now not-A relationship. Those AIs may read my book in the same way we look at the design of a bird's nest. There is no way to ever broach the gap that I can understand the bird's point of view, to comprehend its subjectivity, but the nest for us is a meaningful creation and my book for them would remain meaningful. And this point goes further. Even the most posthuman of machine intelligence or AI remains human at its core. Machine learning must begin with a set of right answers and examples which the process must hone in on, that is how the algorithm is self-learnt and developed. A system learns from experience always with respect to a given task and given performance standards (Schmidhuber 2015). The attractor to which the system tends (like the equilibrium point between the displacement of a pendulum) is a set of true answers (scientific knowledge), received wisdom (prudential and aesthetic knowledge) or considered moral judgements (moral computing) to which the algorithm in the first stages of development must cohere. Therefore, it cannot break free of human answers. It remains recognition software, even if more developed. At the point at which it is no longer using these core equilibrium points, then it is no longer answering the same question. There is a fixed human bias in the system. So "we" as humans will remain, perhaps merely as a refrain, in its memetic and genetic makeup. The remnant means communication will remain possible. Any machine that offers music better than Mozart which we cannot comprehend just does not know what music is. Furthermore, and quite ironically, in future one can imagine AIs deconstructing the limits of their algorithms and their thoughts to find this other, this human not-machine other, at the heart, a non-representational possibility (in their evolved terms) of their new representations which would be irredeemably human.

Liberal transhumanists do not deny the relation with the human, that the negation is not a one-sided rejection and difference. Such transhumanists would accept an historical account of change, but are to be differentiated in terms of whether such change is progress, development, decay or merely arbitrary. If technological enhancement is going to change the social and material conditions of human existence, then a first group of thinkers who recognize this will see it as degenerative or dangerous. Bioconservatives/luddites deny technological change is enhancement, argue it is forbidden by natural law and oppose the capitalist commodification of the human (Lewis 2001; Fukuyama 2002; Kass 2002; Habermas 2003; Rifkin & Perlas 1984). The same sort of persons who would have offered the same arguments against votes for women. Hughes delineates a similar faultline in transhumanist discussions:

> At root the bioLuddites are also rejecting liberal democracy, science and modernity. They have given up on the idea of progress guided by human reason, and, afraid of the radical choices and diversity of a transhuman future, are reasserting mystical theories of natural law and order. Whether secular bioethicists, ecomystic Greens or religious fundamental-

> ists, the bioLuddites insist that there are clear and obvious boundaries to what people should be allowed to do with their own bodies, and that no one should be allowed to become something more than human. (2004: xiii)

The majority of such thinkers want to reduce the transhumanist agenda down to a subset of bioethical concerns, framing themselves in expected and familiar arguments of natural law, religious objections and rejection of the different and the new. However, with the rejection of the new and innovative, they also reject the possibility of progress in the three areas most dear to humanity: longevity, immortality and happiness. The appeal, the oh so unphilosophical appeal, to what is natural and conventional reveals a latent machismo: take it on the chin, don't take a painkiller if you can avoid it, chemical inebriation is inauthentic happiness and so on. Life, to be lived, is unhappiness, suffering and striving: that is what makes us men! And if we take the Prozac, equalize all talents through prosthetics and steroids, nootropics and memory devices, if we teach everyone to read, then society will suffer because progress and authenticity comes from the struggle with others. Fukuyama (2002) tells us (akin to the Guitierrez 2018 film) that you will be left with a world where wealthy old men date young vulnerable women to the detriment of breeding, where the elite become entrenched and history begins to regress:

> The last man had no desire to be recognized as greater than others, and without such desire no excellence or achievement was possible. Content with his happiness and unable to feel any sense of shame for being unable to rise above those wants, the last man ceased to be human. (2012: loc. 316)

Fukuyama (2002: Chs. 6, 10) rests his argument on the claim that scientific rationality is threatened by technological advancement.

However, the conservatives do not realize it is their adherence to the patriarchal type of society which will make such a regressive future occur. They never ask why it must necessarily be old men and young women and not *vice versa*. They never seem to imagine a world where no one sticks anymore to two limiting genders. Those who reduce transhumanism to a subsection of bioethics basically express a sort of *panickism*: if you think we have problems now, wait until these technologies become widespread! There is a little of the hyperbole about these accounts. Ultimately, though, they rehearse old familiar positions of ethics which hold little novelty for us.

Those less mired in the pull of some nostalgic, inexistent past who see technological enhancement as both a boon and a bane insist on the role that state regulation can play in the permission, access and distribution of such technologies. Technologies and enhancements are categorized into the necessary (vaccines), the permissible (tattoos), the undesirable (recreational drugs with negative long-term side effects) and the forbidden (Wolverine claws). The role of the

state is to decide on the categories and the level of subsidies or discouragement to be applied to each. Those who resist regulation and see the choice of enhancements as an expression of personal choice and autonomy include the libertarian transhumanists (early Max More (1990), Kurzweil and one assumes accelerationism): if an individual wants it, can afford it, then the individual gets.

Bioliberalism has its moral equivalent in the odd mixture of welfarism and Mill's historical utilitarian-liberalism. Ranisch and Bostrom (2005b) are transhumanist moral thinkers belonging to the analytic tradition. Both are committed to transhumanism as the intellectual and cultural movement that affirms the possibility and desirability of improving the human condition through applied science. The main technologies which will promote this are those which eliminate aging and enhance human intellectual, physical, and psychological capacities. The philosophers' role is then to investigate the ramifications, promises, and potential dangers of these technologies and the related ethical study of matters arising from their development and use. Humanists believe that humans matter, that individuals matter. We might not be perfect, but we can make things better by promoting rational thinking, freedom, tolerance, democracy, and concern for our fellow human beings. Transhumanists agree with this but also emphasize what we have the potential to become. Just as we use rational means to improve the human condition and the external world, we can also use such means to improve the human organism. In so doing, we are not limited to traditional humanistic methods, such as education and cultural development, but can also use technological means that will eventually enable us to move beyond what some would think of as "human":

> It is not our human shape or the details of our current human biology that define what is valuable about us, but rather our aspirations and ideals, our experiences, and the kinds of lives we lead. To a transhumanist, progress occurs when more people become more able to shape themselves, their lives, and the ways they relate to others, in accordance with their own deepest values. Transhumanists place a high value on autonomy, that is the ability and right of individuals to plan and choose their own lives. Some people may of course, for any number of reasons, choose to forgo the opportunity to use technology to improve themselves. Transhumanists seek to create a world in which autonomous individuals may choose to remain unenhanced or choose to be enhanced and in which these choices will be respected. (Bostrom 2003: 4)

Bostrom expects the technology to either stand or fall on measurable, welfarist factors and this is no surprise for thinkers of a scientific bent. The good is a metric expressed through people living longer, being happier, being healthier and becoming more intelligent. Bostrom does make the mistake of adding in more values as we saw above, the putative acceptance of autonomy and equality without any utilitarian justification. The reason is merely the desire to evade absurd counterintuitive consequences. Overall welfare can be increased by using a