Eleven Takes on Critical Posthumanism

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1. *What is 'critical' about 'critical posthumanism'?*

First of all, one can break down the word 'posthumanism' in three components: a root ('human'), which is qualified by a suffix ('-ism': meaning a 'discourse', in the sense of 'everything that is being said about or anything that is being understood as…') and a prefix ('post-': meaning 'after' or 'following'). There are two different internal logics at work in the compound 'posthumanism': one which puts the emphasis on the suffix and actually takes the 'posthuman' as a new (compound) root, so that it designates 'a discourse about the posthuman' (that which somehow comes 'after' or 'follows' the 'human'). The other logic places the emphasis on the prefix 'post' to qualify 'humanism', meaning 'a discourse that positions itself somehow after the discourse of humanism'. One can make this distinction more visual by italicisation: posthuman*ism* versus *post*humanism.[1]

Posthuman*ism* is everything that is being said about, anything that relates to, this 'figural' entity called 'posthuman' (which itself is a qualification of another figure, called 'human'). I understand 'figure' here as a rhetorical figure (a 'personification') but also as a 'figuration' (a figure that is invoked for political purposes).[2]

*Post*humanism, on the other hand, is a discourse that positions itself not after the human, but after humanism. By starting to keep these two versions apart – in other words, by bearing in mind this double logic or semantics at work here – one is already beginning to develop a

[1] I believe I have consistently argued for this distinction: posthumanism = discourse; posthuman = figure, ever since *Posthumanism: A Critical Analysis* (first published in German in 2009), and most recently again in the *Live Handbook Environmental Humanities*, eds. Evi Zemanek and Timo Müller (Cham: Springer, 2025); available online and open access at: https://link.springer.com/rwe/10.1007/978-3-662-70886-6_28-1. See also my website at https://stefanherbrechter.com for various attempts at conceptual clarification.

[2] This is the way that 'feminist new materialists' like Rosi Braidotti, and also Donna Haraway (and Katherine Hayles to some extent) – all foundational figures of a certain posthumanism in different ways – use the 'posthuman' (and related figures) to tap into their perceived 'subversive' political potential. See my comment and critique of this 'politics of figuration' in "Postfiguration, or, the Desire of the Posthuman", *(Un)Learning to Be Human?* (Leiden: Brill, 2024), pp. 163-207.

critical handle on popular notions of posthumanism and the posthuman that tend to focus on the posthuman purely as a figure that is set to supplant the human, while posthumanism is a description of such an (supposedly inevitable) 'evolutionary' process. This rather facile understanding that somehow believes that 'we' used to be humans who now are becoming 'posthumans' (usually because of technological development, i.e. via 'becoming cyborg', as a kind of intermediary stage), or who might already be (thanks to even more technological development, i.e. by literally 'becoming' technology, or, indeed, by being increasingly replaced by technology, esp. AI). However, this is in fact what I would call, not post- but, *trans*humanism. The prefix 'trans-' signifies not 'after' but 'beyond' (two fundamentally different spatio-temporal conceptions). 'Trans-' implies a transition or an 'overcoming' (which bears a strong 'metaphysical' association), whereas the prefix 'post-' is much more ambiguous and complicated.[3]

A critical posthumanism of the kind that I and my colleagues of the Critical Posthumanism Network have been promoting does not focus on the supersession of the human (i.e. constructions of a posthuman future) but rather on the ongoing *deconstruction* and *critique* of humanism and its foundational question: *What does it mean to be human?* It is, if you want, a continuation of the project of 20th-century negative anthropology under contemporary conditions (characterised by a combination of accelerated technological development and anthropogenic climate change).[4] The emphasis is on a *critique* of humanism and the humanist notion of the human, not about wanting to overcome or negate the human as such. This is where the critique of *anthropocentrism* comes in. The main target within humanism is not its undeniable cultural, moral and scientific achievements but its 'exclusivity' so to speak, and its hubris, upheld by strategies that unduly and unnecessarily define the human as radically different and 'exceptional', at an *ontological* level, from nonhuman animals and (technological) objects.

[3] As one can see in discussions of postmodernism and the postmodern aware of the curious temporal logic of the 'post-', and in the work of Jean-François Lyotard more specifically; see my "Postmodern", in Bruce Clarke and Manuela Rossini, eds, *The Cambridge Companion to Literature and the Posthuman* (Cambridge: Cambridge University Press, 2017), pp. 54-68.

[4] See my "Critical Posthumanism and Negative Anthropology"; available online at: https://stefanherbrechter.com/wp-content/uploads/2025/01/CPH-and-Negative-Anthropology.pdf.

This is why critical posthumanists tend to stress the 'entanglement' of humans and nonhumans and argue for 'flat' ontologies (cf. Braidotti's often repeated motto "we are all in this together").[5] Where I maybe differ, especially from feminist new materialists, is that I don't think that 'individuality' should be simply amalgamated with 'individualism', 'autonomy' and 'personal freedom'. In fact, it's more helpful to say that we're all 'singularities' (cf. Jean-Luc Nancy's work in this respect), which however, doesn't make us 'exceptional' as such.[6] But that of course doesn't mean either that we're all the 'same' or that everything is 'relative' and so on. It just means that one should recognize that humans have become what they are through entanglement with biological, technical, spiritual… 'others' and that, as a result, they now find themselves in the position where they need to take decisions that are in the best interest of as many cohabitants of this planet, both human and nonhuman, as possible – a huge responsibility that requires a large amount of empathy, benevolence, disinterestedness and political change. This is what I believe the so-called 'Anthropocene' is supposed to signify: a huge ethical, political and ecological responsibility to work towards maximal multispecies 'social' justice (regardless of whether the long term effects of anthropogenic climate change are irreversible or not). Hence also the ongoing 'decentring' of the human, and a continued resistance to its current 'recentring' (i.e. the temptation to argue for the need to somehow 'make the human great again', that once could be rendered by the acronym MHGA, in analogy with the Trumpian MAGA) while still assuming a special responsibility for humans *not* to 'argue themselves out of the picture' at this time of crisis – i.e. not a straightforward anti- but a post-anthropocentrism, again assuming all the complexities and ambiguities of the 'post-'.[7]

2. *Critical Posthumanism, Science Fiction and Futurity*

The future is per definition unknowable. It lies beyond a horizon that recedes as we approach it. The future is always deferred and what actually arrives necessarily differs from our

[5] Cf. for example Braidotti (in the context of the Covid-19 pandemic): "'We' Are In *This* Together, But We Are Not One and the Same", *Bioethical Inquiry* (2020), available online at: https://link.springer.com/content/pdf/10.1007/s11673-020-10017-8.pdf.

[6] Cf. Jean-Luc Nancy, *Being Singular Plural* (Stanford: Stanford University Press, 2000).

[7] Cf. *Antae* Editorial Board, "'On not writing ourselves out of the picture…': an interview with Stefan Herbrechter", *Antae* 1.3 (2014): 131-144; available online at: https://www.um.edu.mt/library/oar//handle/123456789/12513.

expectations – this is one of the meanings of Derrida's (non-)concept of 'différance'.[8] The radically unknowable future is 'other', 'monstrous', because it is uncontrollable and acts as a projection screen for our anxieties and desires. And this is where science fiction comes in. It is a genre that tries to anticipate future events by techniques like extrapolation of present 'trends'. It therefore is based on an analysis or at least a perception of the 'present' as it appears to be changing – a precarious present, poised, so to speak. In this, it is fictional, or maybe better, 'speculative'. It looks at the changing present through a more or less distorting mirror. It is in fact a curious form of 'self-reflection', filtered by contemporary social and cultural values and beliefs. These values, since we're mostly talking about (Western) modernity here, coincide with the rise of modern science, technology, economy, politics. *Science* fiction is an oblique mirror of science practice and of the role science (and technology) play in modern society. Increasingly, under what one might call '*post*modern' conditions, the cultural influence of science fiction has been growing, especially in its dystopian inflection, while the role of science has been changing, from a force of civilizational or social progress to an increasingly dark and threatening realm of apocalyptic scenarios – especially as a result of the threat of nuclear destruction during the Cold War and now, maybe even more so, because of climate change and various extinction threats. However, the utopian aspect of a possible better world and the overcoming of contemporary limitations and worst case scenarios has not been lost and actually lives on in a kind of overlapping space one might call 'technoculture' where science, its public perception and science policy, on the one hand, and cultural influences on science itself and its scientific 'imaginaries', or its 'constructions of the future' (i.e. the futurological dynamic that informs large parts of (techno)science and its economic and also military implications), on the other hand. It's a complex mix of fiction, factuality, politics, science and economics I call 'science faction'.[9] And it is one of the most important ideologemes that drives post-and transhumanist scenarios, from human enhancement to bio- and geo-engineering. As far as I'm concerned, given this complexity or complicity I'm rather sceptical that science fiction, or speculative fiction, as critics seem to prefer to call it today, to include a whole variety of anticipatory genres of literature and film (including 'cli-fi') can make a big *critical* impact on the contemporary cultural imaginary. It is no coincidence, for example,

[8] Derrida, "Différance", in *Margins of Philosophy* (Brighton: Harvester Press, 1982), pp. 1-28.
[9] See Stefan Herbrechter, *Posthumanism: A Critical Analysis* (London: Bloomsbury, 2013), pp. 107-134.

that speculation is both the motor of science fiction and the dominant form of financial capitalism in which science fiction - itself 'big business' and serving as an ideological screen – is heavily implicated (I think this is also Fredric Jameson's take on the genre).[10] Others, including Donna Haraway, seem to have a lot riding on the potential of speculation to produce 'radical' alternatives (to capitalism, humanism, speciesism…).[11] For others again, the boundary between science and fiction has completely disappeared – the so-called 'transhumanists', for example. I'm of course not against speculation, even less against science fiction, per se, but what happens very often in mainstream science or speculative fiction is that the initially radical and potentially 'subversive' aspect of science fiction and its future scenarios is taken back or 'foreclosed' in the end, in the inevitable moment of narrative closure. This is what Ivan Callus and I wanted to show in our article "What is a posthumanist reading?"[12]

(Science) fiction can of course play a strategic role in imagining fictional scenarios that extend, explore, negotiate or reject scenarios that involve posthumans and posthumanisation but it would be short-sighted to believe that it provides real solutions. There is in fact an intensive co-implication of science fiction and science fact at work in our 'late modern' times of technoscientific capitalism. Politics, economics, science and 'soft power' (e.g. Hollywood science fiction) cannot be disentangled as they feed off each other – this, also, is covered by the phrase 'science faction'. In other words, to say that something is 'mere fiction', especially in the time of so-called 'post-truth politics', is no longer possible. This is a major task for critical posthumanism to navigate through. It would be naïve to believe that something like humanism can be simply overcome because it keeps reinventing itself as a result of the fundamental desire that informs it, namely 'making the human great (again)', a desire that cannot be ignored, but which cannot be accepted or indulged either.

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[10] See Fredric Jameson, *Archaeologies of the Future: The Desire Called Utopia and Other Science Fictions* (London: Verso, 2005).

[11] Cf. Donna Haraway, *Manifestly Haraway* (Minneapolis: University of Minnesota Press, 2016).

[12] Stefan Herbrechter and Ivan Callus, "What is a posthumanist reading?", *Angelaki* 13.1 (2008): 95-111. See also chapter 4 "Posthumanism and science fiction" of my *Posthumanism: A Critical Analysis* (London: Bloomsbury, 2013), pp. 107-134.

3. *Are there any 'Posthumans'?*

The proliferation of figurations of posthuman 'others' (cyborgs, androids, mutants, chimeras, aliens, but also zombies and many other hybrid beings and 'monsters' of all kind). What has led to a lot of confusion is that the posthuman tends to mean something different for transhumanists and critical posthumanists. To go back to my definition, if one of the meanings of posthumanism is that it is a discourse about the posthuman, then transhumanism is certainly part of that discourse because it also speaks of the posthuman, namely as the anticipated final achievement of transhumanism: transhumanism is that philosophy or ideology that wants to overcome the human and reach a state of 'posthumanity' that is no longer defined by its current biological human condition. The 'trans-' for transhumanists actually signals 'transition' or 'transcendence' (from human to posthuman). In other words, transhumanists tend to think they know where we need to go, the only question is how to get there. The posthuman for many critical posthumanists, on the other hand, has very little to do with a 'transcendence' or indeed an overcoming of the human. One of the reasons Katherine Hayles named her book *How We* Became *Posthuman*, past tense, is to show that this transhumanist desire was already informing the birth of cybernetics. But one can go back a lot further of course. Humans it is safe to assume have always been unhappy with any 'biological determinism' – in other words, there must be more to 'me' than just this miserable and short existence. Humans have always aspired to more, have invented spirituality and religion, art and science to push boundaries of all kinds. It is in that sense that one might argue we've always been 'posthuman' because we always wanted to be more-than-human (one of the reasons 'we' have never managed to come up with a satisfactory definition of the human). It's this desire that makes us look for and want to become somehow posthuman. The question is, what should this 'posthumanity' actually look like. Since there's no agreement about what it actually *is* to be human, never mind what it *means* to be human, these entirely fictional figures of the 'posthuman' play very different roles. For transhumanists, they're the kind of technological 'angels' we must become to be immortal like gods. For (critical) posthumanists they're mainly strategic figures – political figurations – that reflect back to 'us' that being human is a contested conceptual terrain.[13] So these posthuman figures are projections of

[13] I've always recommended to my students to read Jeffrey Jerome Cohen's "Monster Theory: Seven Theses", in *Monster Theory: Reading Culture* (Minneapolis: University of Minnesota Press, 1996), pp. 3-25, at this point, but Elaine Graham's volume *Representations of the*

(human) desires and anxieties basically used to negotiate positions designed to either critique, reject, return to, continue or overcome humanism and its anthropo-self-centredness. That is how I would use the posthuman, but I acknowledge that for others, like Rosi Braidotti for example, who speaks from a position that was traditionally marginalised (all those traditionally silenced, or whose difference was repressed, by the humanist notion of 'man' or '*anthropos'*) the posthuman plays a more ontological role. If you have never been considered 'fully' human, maybe you *are* already posthuman, but not in a technological, but in an anthropo-critical or anthropo-political sense. This is basically the conceptual mess that post- and transhumanism have created. And it is part of critical posthumanism's job, in my view, to point this out (esp. now when the *anthropos* makes its return in the discussion around the 'Anthropocene' and whether this is a good name to call 'our' time of anthropogenic climate change, or whether this sends out the wrong signals – a critique which has nothing to do with the reality of climate change, in fact, which as far as I'm concerned is beyond dispute). My hope is that critical posthumanism can help us navigate through this mess.

4. *Who Comes After the 'Cyborg'?*

In the 1980s and 90s the idea of 'cyborgisation' had something jubilantly subversive about it (cf. the tone of Haraway's "Cyborg Manifesto").[14] The notion of 'transgressing the boundaries' was the battle cry of theory then. The task was to be as provocative as possible and to be seen to dissolve hardened and oppressive categories of gender, race, sexuality… and unhelpful binary oppositions like nature/culture and so on. The effects were certainly liberating, at a cultural level, and one can see today how much of an achievement this liberalisation often associated with 'postmodernism' actually was, as gradually all these celebratory and oppositional values that were at first widely embraced are now one-by-one taken back by a returning cultural conservatism. Posthumanism in this context is, on the one hand, the latest and most radical of these cultural liberation discourses because it tackles the most

Post/Human: Monsters, Aliens and Others in Popular Culture (Manchester: Manchester University Press, 2002) is also excellent in this context. In my own work, I've addressed this aspect more specifically in chapter 3 ("Our posthuman humanity and the multiplicity of its forms") of my *Posthumanism: A Critical Analysis*, pp. 75-106.

[14] Donna Haraway, "A Cyborg Manifesto: Science, Technology, and Socialist-Feminism in the Late Twentieth Century [1985]", in *Simians, Cyborgs, and Women: The Reinvention of Nature* (New York: Routledge, 1991), pp. 149-182.

fundamental of the binary oppositions on which humanist 'common sense' is based: human/nonhuman (both in its human/technology and human/animal variants). Where theory was maybe a little naïve and blind-folded was that this liberation happened at the same time as the global economic base was being transformed by neoliberalism, which thrives on exactly the kind of values and proliferation of hybridities that theory was also championing because they opened up more and more new 'markets', producing 'commodities' and 'consumer choices' (i.e. 'lifestyles'). The political edge was of course lost in that process, the subversiveness was short lived and 'real' change was stopped, while the economic base was happily intensifying the disparity between rich and poor, between 'global North' and 'South', pushing the extraction of natural resources and global warming to unseen heights. What is maybe most striking is the role of technology and technoscience in all this. Modernity and its notion of 'progress' relies on a close association between technological development and capitalism so that accelerated technicisation and the increasing fusion between humans and technology was always going to be 'the next step', and early 20th-century cybernetics was the main source in this respect.[15] Beginning to see everything as interconnected and recursive 'circuits' and 'systems' with feedback loops based on the analysis of 'data' already is a radical form of posthumanism whereby the human becomes submerged in a flow of 'information', and where technology becomes the main driving force of evolution. Theoretical or philosophical posthumanism therefore comes quite late to this development and, maybe even worse, remains often blind to its own implication in promoting technoscientific capitalism by continuing to 'give it ideas', so to speak. However, a straightforward return to or the notion of a 'new humanism', and a rebalancing of technology, humanity and the rest is precisely the kind of ideology that has allowed technoscientific capitalism to reign supreme – it is no coincidence that transhumanists are also strong believers in a capitalist future, in fact it is now the unelected leaders of a few giant tech corporations who have amassed more ('virtual') capital than most nation states and who now seem to 'own' the world, and thus think they can decide where 'we' are going. They love the idea of cyborgisation, actually.

[15] Cf. N. Katherine Hayles, *How We Became Posthuman Virtual Bodies in Cybernetics, Literature, and Informatics* (Chicago: University of Chicago Press, 1999), but see also Bruce Clarke, *Posthuman Metamorphosis: Narrative and Systems* (New York: Fordham University Press, 2008) and William Rasch and Cary Wolfe, eds., *Observing Complexity: Systems Theory and Postmodernity* (Minneapolis: University of Minnesota Press, 2000) on systems theory.

They're betting all their money on autonomous AI and probably believe that, like driverless cars, a technological 'extraction' of the human from driving the planet will be a lot safer for everyone. No wonder they push towards downloading minds into computers because they're in the process of making the world unliveable for the kind of embodied minds humans (and many biological nonhumans) are. This is where (some) posthumanism may be seen as synonymous with 'dehumanisation', literally, and it's a trajectory that seems to become more and more inevitable because it's driven by the very human desire of self-transcendence that underlies humanism from the start.

Critical posthumanism has the almost impossible task here to navigate between a reactionary eco-humanism and a techno-utopian nihilism. All the undeniably great and 'promising' recent technological achievements, from biotechnology to artificial intelligence will have to be wrested away from the combination of technological determinism and libertarian economism that reigns across the centres of power today.[16] It's a question of survival, just like tackling climate change. Both are obviously related. If we're talking about a 'posthuman identity' I would say that it lies precisely in this realisation: entanglement, yes, by all means, but don't trust anyone, be they humans, machines or cyborgs. Technology was never intrinsically benign and thinking of ourselves as 'originarily' involved with technology is no reason to be cheerful. This is why Ivan Callus and I have always privileged thinking through a 'posthumanism without technology'[17] as an important aspect of a truly critical posthumanism. Technoscepticism (not technophobia) I believe is the best starting point for reflecting on what's going on around, with, before and 'after' us.

5. *What is 'Posthumanisation'?*

I have used the notion of 'posthumanisation' on occasion, however, I would say in a purely 'anthropological' sense. Philosophical anthropology since Kant and especially in the 20th century in its 'negative' version (i.e. humans are necessarily defined 'negatively', for example

[16] This is how I understand Bernard Stiegler's programme in his later work, especially in *The Age of Disruption: Technology and Madness in Computational Capitalism* (Cambridge: Polity, 2019).

[17] Stefan Herbrechter and Ivan Callus, "Critical Posthumanism or, the *inventio* of a posthumanism without technology", *Subject Matters* 3.2/4.1 (2007): 15-29.

through their 'undeterminedness', their 'eccentricity', their 'nakedness', their 'neoteny' and so on) is driven by the question 'what is the human?' The greatest catastrophe and humiliation to this very humanist venture would actually be if we were to find a definitive answer to this question. That's why the history of post/humanisation is littered with 'narcissistic wounds' to use Freud's famous phrase. As humans become more and more pre-occupied with themselves, trying to determine themselves through the mastery of 'others' (nature, animals, technology) the process of hominisation, of becoming human, reaches a turning point. On the one hand, finding out what it really means to be human recedes further and further away, while these 'others' we thought we could use to self-identify by differentiation and repression become ever more hauntingly insistent, to the point where they become threats to our 'integrity', 'autonomy', 'mastery' etc. That's where a certain posthumanisation could be said to take place. It is in fact the drive that emerges out of the anxiety but also the desire – both are connected – to become someone or something else; a drive that, like the Freudian death drive, finds some joy in self-destruction.

The challenge, or the hope, for a critical posthumanism lies in the idea that one might be able to think the human and the process of humanisation otherwise, along the lines of a gigantic 'psychoanalysis' of the human, at a species level, or 'humanism on the couch', one might say, talking through all of its repressed, hopefully righting all its wrongs in the process. That also would be a form of posthumanisation, the post being understood here in Lyotardian terms as a 'rewriting' of humanity.[18] This is neither a simple reconfiguration nor an actual rupture since posthumanism precisely happens where the distinction between culture and nature, programme and emergence, epistemology and ontology begins to break down, precisely, in preparation for something 'new' to arrive, so radically new that it would be an unforeseeable 'event', not to be predetermined and thus pre-empted.[19] Which explains, I believe, why one should be sceptical about any exclusively future-oriented understanding of the posthuman or

[18] I.e. in analogy to Jean-François Lyotard's, "Re-writing Modernity", in *The Inhuman: Reflections on Time* (Stanford: Stanford University Press, 1991), pp. 24-35.

[19] Here the entire discussion on the Derridean notion of the '*arrivant*' would be relevant, in contradistinction with any 'construction of the future', be it through science fictional or science factual scenarios, or indeed their co-implication, and be they eu-topian or dys-topian in outlook. See for example Jacques Derrida, *Specters of Marx: The State of the Debt, the Work of Mourning and the New International* (New York: Routledge, 1994).

posthumanism. As I've tried to show, for example in *Before Humanity*,[20] what gives rise to our un(der)-determination as a species is the fact that we suffer from a 'default of origin', as Bernard Stiegler calls it.[21] The main reason why we'll never know what it *really* means to be human is because we don't know at what stage exactly we *became* human, in the first place, in the paleoanthropological sense. We can therefore neither be sure when the process (of hominisation) started, nor where it will lead or end, or even whether it's actually 'completable' as such. In short, we have a problem of 'ancestrality'. We know that there must be a point in time where something happened that separated us from our (nonhuman? 'less-than-human'? not-yet human?) ancestors, but it will probably remain impossible to determine (scientifically, or metaphysically) when and why exactly this happened. It's this mystery that keeps us going, the great story of the human in which the hero is of uncertain origin and moves towards an even more uncertain future. Palaeontologists are actually quite fatalistic about this: 99% or so of species that have existed on this planet have gone extinct. Why should the last remaining human species be exempt?[22] In other words, the missing origin should point us into the direction of psychoanalysis and make us aware that maybe (at least some of) our future lies in the past. Knowing what the future holds for us will require a working through of the human unconscious, at an individual and a species level, rather than an exclusive focus on some technologically overdetermined 'futurology'.

6. *Critical Posthumanism and the Question of Technology*

Technology cannot be 'trusted' to provide any desired outcome defined by either science, business or politics. That doesn't mean either that technology is something that cannot be controlled or at least deflected. The rampant technological determinism of transhumanists needs to be resisted, in my view, especially the one that sees technology as an autonomous 'sphere' similar or parallel to the 'biosphere',[23] not because there's no possibility for a certain

[20] See Stefan Herbrechter, *Before Humanity: Posthumanism and Ancestrality* (Leiden: Brill, 2023).

[21] Cf. Bernard Stiegler, *Technics and Time*, volume 1, *The Fault of Epimetheus* (Stanford: Stanford University Press, 1998).

[22] See for example Robin Dunbar, *The Human Story: A New History of Mankind's Evolution* (London: Faber & Faber, 2004), or Ian Tattersall, *Masters of the Planet: The Search for Our Human Origins* (Houndmills: Palgrave Macmillan, 2012) for a typical discussion.

[23] See for example Peter Haff's work on the so-called 'technosphere' defined by Earth systems science as the "most distinctive stratigraphy" of the "Anthropocene", i.e. it is supposedly the

kind of technology like AI or biotechnology or a combination of the two, to develop a 'life' of their own (if we could agree on what 'life' means in this case), that danger certainly exists. But it exists not because of an intrinsic desire or logic in these technologies to 'come alive' or to 'become conscious' (which is of course not the same thing). It exists because certain people, corporations and institutions have that desire *for* them and are pushing these technologies into directions that to them appear desirable, profitable or just 'cool'.

Let's take these two areas which seem to be the 'coolest' technologies at the moment. AI is represented either as the solution to all our problems – humans should abdicate and hand over power for their own good and for that of the planet – or as the worst nightmare along the lines of the well-known 'Terminator' scenario – a hostile takeover. As far as I can tell, AI is still pretty 'stupid' in many respects and it's even unlikely that it will ever be able to 'replace' humans, except we let it do so by becoming more like artificial intelligences ourselves. Every time we accept that AI might have become as good at something, or better than humans we are giving up a piece of ourselves and increase our dependence and our self-inflicted 'immaturity' (as Kant would probably see it). Look at what AI is currently doing to social media. The worst thing is that it's a process that is being encouraged by the social media platforms like Facebook, TikTok and so on themselves because it suits the economic interests of the tech bros who run them and they think it's to their advantage that this plays into the hands of anti-democratic populist politics they're close to. Saying that social media brings out the worst in people in terms of affectivity only adds to the problem, however, since that still risks being self-defeatingly humanist (humanism has always thought that humans need help with making the right choice to bring out the best in them, which presupposes a pretty pessimistic notion of what humans are 'really' like as long as they remain 'unenhanced' by education or other technological means). This doesn't mean that humans can thrive without education or technology but let's not forget what education and technology is for. We need to work for AI to assist us, not make sure that it can replace us. Similarly, social media should increase the

emergence of this additional sphere (driven by humans but now largely autonomous) that is the clearest sign that we're no longer in the Holocene; cf. Peter Haff, "Technosphere", in Nathanaël Wallenhorst and Christoph Wulf, eds., *Handbook of the Anthropocene* (Cham: Springer 2023), pp. 537-541.

social prospects of people not diminish them. If they don't enable that they need to be either resisted or changed, probably both.

Similar things can be said about biotechnology. The transformative 'potential' seems endless. The sky's the limit, if the world doesn't run out of energy and resources beforehand, that is. However, questions of social justice, accessibility and sustainability are rarely discussed during moments of techno-hype. It's like modern medicine: some breakthroughs and achievements are undeniable, like antibiotics, but every 'pharmakon' has its undesirable side-effects. It is both remedy and poison depending on the dosage…[24]

The problem is that all these posthumanising technologies are driven by economic and political interests that are themselves already functioning according to a posthumanist if not even a posthuman logic. Technoscientific capitalism thrives on science's very own understanding of posthumanism. Scientists themselves might often think of themselves as humanists (they're doing and developing all this knowledge 'for the benefit of humanity', after all, so their version goes) and nobody will doubt that scientists are normal moral beings but they're not operating in a value-free environment and have little control over the ways in which their insights, discoveries and inventions are used or developed (for example for military or economic purposes – the investors usually want their money back and more). When this hits upon a cultural superstructure that largely remains 'humanist' in its catalogue of values there is indeed a huge 'disconnect'. See for example the proliferation of 'bioethics' committees. What is their purpose apart from telling big corporations and politicians to please consider the 'dignity' of human beings and respect relatively 'safe' values like 'animal rights'. All very useful of course, but this is not addressing the real problems – neither the 'deep' economic nor the 'deep' ecological problems. That will therefore have to be the job of a critical posthumanism, namely to remind 'ourselves' that since we are 'technological' beings we have a special responsibility to use this to the benefit of the greatest number, not

[24] On the notion of the pharmakon see for example Bernard Stiegler's *What Makes Life Worth Living: On Pharmacology* (Cambridge: Polity, 2013).

according to either anthropocentric or misanthropic purposes, but by forming what I called "non/human solidarities".[25]

7. *Critical Posthumanism and Embodiment*

Posthumanism in my view is all too often associated with the figure of the 'cyborg' and the idea that humans will inevitably merge with machines or have already done so and are now turning towards and increasingly into 'artificial intelligence'. Even through 'cyborgisation' is a powerful and often strategically 'useful' metaphor I don't really believe that this is what is happening 'literally'. The thing is, we don't really know where a body begins and ends, for a start. However, a notion of bodily existence, a form of embodiment that is to some extent 'discrete' from its others and its environment is absolutely necessary to any process of 'individuation', even if this is a process that has to go through encounters with a plethora of others (other humans, animals, plants, objects, environments…). The aim of the cyborg figure is to critique a notion of individualism based on 'autonomy', but relationality (or 'entanglement') does not preclude the singularity of a body and a life that experiences itself as such. This counts for humans and all those nonhumans capable of 'experience' and 'autoaffection' – which is probably the majority of biological beings.

We are our bodies and our bodies can only sustain themselves through metabolism, which means the ingestion of others, of biological and mineral matter – which is something that many, from gnostic sects to transhumanist immortalists, have been finding rather repelling. This is one reason why critical posthumanism, esp. in its feminist new materialist, or indeed 'matter-realist', version (Braidotti, Haraway, Barad, Bennett etc.) is so insistent on our shared (bio)materialist embodiment. Even though Haraway's cyborg is an extension of the human biological body by technology, a 'cybernetic *organism*' is still very much a (bio)material being. It is a form of embodiment in the sense that it is a mind entangled with a body to an extent where these two cannot really be dissociated – which to be precise is the norm for any (bio)organic being. The Cartesian (humanist) mind-body dualism is not so much 'overcome' here but complicated or co-implicated. What changes in a posthumanist self-understanding

[25] Cf. Stefan Herbrechter, *Solidarities with the Non/Human, or, Posthumanism in Literature* (Leiden: Brill, 2025).

is not so much the mind-body distinction but the ways in which actual embodiment is the result of different and hitherto neglected relationships between the two. First, the exclusivity of the mind as the seat of consciousness has to be challenged.[26] Then, the exclusivity of human consciousness and minds also needs to be questioned (in my view more in the sense that certain nonhuman animals have complex minds and consciousness, rather than 'machines' being about to 'develop' some form of consciousness, even though some seem to very much *want* that to happen right now). The relationship between individual mind and individual body has to be complicated at both ends, so to speak: minds are 'extended' into various environments and consciousness is 'distributed' across entities and 'networks';[27] bodies, at a microbiological level, have 'fuzzy edges' which problematises the notion of biological species identity.[28]

All this means that the 'identity' of the human body is problematic to start with, which, for me, raises the question of posthuman *desire*. There seems to be an ideological struggle playing itself out on the back of 'cyborgisation' (and the notion of (body) 'enhancement' more generally) between a critical posthumanism which, strategically, emphasises a 'biocentric' approach, and a more transhumanist dynamic that places the emphasis on a 'technocentric' view of bodily development. Both are made possible by the larger shift away from the idea of the body as self-contained (literally, as a container of the self) towards the notion of embodiment (as a process or development). The fact that we (and many others) are 'embodied minds' leads critical posthumanists to seek alliances with other biological embodied minds, while transhumanists want to push the embodiment aspect of the mind to its very limits, through technological and pharmacological 'enhancement' (and ultimately 'post-biological' transcendence). Two very different versions of posthuman(ist) desire are here giving rise to two very different forms of politics despite obvious areas of overlap. I think

[26] That's for example what happens in "somatechnics"; cf. the EUP journal *Somatechnics: Journal of Bodies – Technologies – Power*.

[27] See N. Katherine Hayles's work since *How We Became Posthuman* in this respect; cf. her interview with Toni Navarro, "We need a more comprehensive view of cognition", *Dossier CCCB Interviews*; available online at: https://lab.cccb.org/en/katherine-hayles-we-need-a-more-comprehensive-view-of-cognition/.

[28] See my "Microbes", in Lynn Turner, Undine Sellbach and Ron Broglio, eds., *The Edinburgh Companion to Animal Studies* (Edinburgh: Edinburgh University Press, 2018), pp. 354-366.

this is what becomes visible in Donna Haraway's work as it develops from early cyberfeminism to a focus on companion species, multispecies justice and 'making kin' or 'staying with the trouble'. There is continuity as Haraway stresses, of course, but there's also clearly development and hence a strategic decision to side with what seems to be most threatened or worth preserving, at least to her.[29]

This is why I don't think the human body will become 'obsolete' (certainly not in the transhumanist sense). The long (Christian) tradition of the 'hatred of the body' culminating in transhumanism needs to be very much resisted. However, the body is 'naturally' obsolete, in the sense that it is subject to decay (even while 'alive'). Every body is both the 'seat' of life *and* death. The affirmation of life *and* the acceptance and the inevitability of death is what we 'existentially' share with every other biological entity on this planet, which should be a strong motivation for solidarity and its extension to as many life forms as possible. Does this extend to 'technological' life forms? Possibly, as long as they can be included in and are not somehow deemed above the idea of 'biodiversity' and the need for its preservation.

8. *Resisting Techno-Euphoria and Posthuman Desire*

There seems to be a growing consensus that what we need to save the planet is ever more better technology, that in the face of human-induced global warming we have no other choice than going for some form of 'geo-engineering' to somehow redress the rather dramatic situation the planetary climate finds itself in even though we have no idea what the actual side-effects of such 'remedial' actions might be. Basically, the geo-engineering mindset is very much like 'more of the same' in the hope to continue modernity's 'techno-logic'. It's all a huge wager placed on human/technological inventiveness which I think is a little misplaced given our actual track record. To see the planet as a 'spaceship' we should try and steer or as a 'technosphere' that we'll have to retune and somehow 'teach' how to look after itself, or use other forms of so-called 'geo-constructivism' to find engineering solutions to climate change, global warming and the loss of biodiversity, all threaten to turn into 'sorcerer's apprentice' scenarios. If any of these go wrong, they'll make things very much worse than they already

[29] Cf. Donna J. Haraway, *Manifestly Haraway* (Minneapolis: University of Minnesota Press, 2016).

are.[30] Apart from that, these scenarios are all based on the availability of resources we no longer have. The same counts for the 'interstellar' scenario that 'invites' us to invest into space travel *now* to explore the survival strategy of finding elusive 'exoplanets'.[31]

However, this should not be seen as a technophobic stance, but it seems clear to me that this is no time for techno-euphoria. I think critical posthumanism didn't necessarily do itself a favour in buying whole-heartedly into the idea of 'originary technology'. There is certainly a subversive appeal in undermining the idea of human autonomy by showing that it is in fact technology in its earliest and most 'primitive' forms that made us 'human', i.e. that it was technology that might have launched the extraordinary process of 'hominisation'. For sure, humans co-evolved with tool use (leading to bipedalism, developing hands, increasing brain size, allowing for neotony, and so on), extended their 'organs' through technical prostheses and externalised their 'minds' through symbols, and so on.[32] But what does it actually mean to say, it's technology that made us human, or that we're "natural-born cyborgs"?[33]

Instead of focusing on some form of originary 'technicity' as a new form of human 'essence' or 'exceptionality', I proposed the notion of 'originary mediality' as an alternative form of conceiving of development or evolution.[34] In other words, it is not so much the fact that tools, language and writing are technologies (in fact they're more like techniques or technics;[35]

[30] Frédéric Neyrat's work is very helpful here; cf. Neyrat, *The Unconstructable Earth: An Ecology of Separation* (New York: Fordham, 2019).

[31] On the notion of originary technicity/technology, based on the work of André Leroi-Gourhan and Derrida, see Bernard Stiegler's work, as well as the commentary by Arthur Bradley, *Originary Technicity: The Theory of Technology from Marx to Derrida* (London: Palgrave Macmillan, 2011).

[32] Roberto Marchesini has very incisive things to say about how the entire (humanist) tradition, including 'philosophical anthropology' uncritically relies on 'instrumentalising' technology as some form of extension or remedy corresponding to an originary human 'lack' or underdetermined 'being'; see his *Technophysiology, or How Technology Modifies the Self* (Newcastle upon Tyne: Cambridge Scholars, 2023).

[33] As Andy Clark famously suggested in *Natural-Born Cyborgs: Minds, Technologies, and the Future of Human Intelligence* (Oxford: Oxford University Press, 2004).

[34] See my "Posthumanism 'without' Technology, or, How the Media Made Us Post/ Human: from Originary Technicity to Originary Mediality", in *(Un)Learning to Be Human*, pp. 146-162.

[35] Cf. Stiegler's *Technics and Time*.

while calling all this technology is a bit of an anachronism and maybe even a '*bêtise*',[36] because technology already seems to imply a rather 'modern' set of values and meanings; the danger is projecting a modern mindset into 'deep time'). In fact, what this transition from just another primate species to homo sapiens rather demonstrates is the importance of *mediality*, rather than the technicity, of so-called 'technical' solutions to perceived problems. 'Thinking' as *meditating* for a start (as a 'medium') between a self and a world that actually arise out of this very mediating process is surely the most originary 'technique' of all if you want, except that it's actually the *medium* (the being or finding oneself in the 'middle' or in the midst of things or a 'world', or an *Umwelt*) that makes this all happen, its mediality, not its technicity (i.e. not its 'making' or its *tekhnê*). And there is no need to think that this is a uniquely human capacity, it's probably just a matter of intensity. That this 'originary mediality' should then give rise to ever more complex inventions and consciousness shouldn't lead us to believe that, like Prometheus, we stole the fire from the gods (the humanist version) or that the fire actually is the true hero of the story (the transhumanist version). In other words, I think that in embracing too uncritically the notion of 'technogenesis' (or 'originary technology') posthumanism scores a bit of an own goal, because it becomes in the end virtually impossible for it to clearly dissociate itself from transhumanism which claims that since we've always been a 'technological' species there's really no need to resist our accelerated 'becoming' technology as such (one might even imagine a Deleuzian form of transhumanism here).

One should start by acknowledging there are only technolog*ies* (not technology as such), best understood as 'ways to solve perceived problems'. One has to look every single time how these technological solutions 'mediate' self and world to keep a critical handle on the unwanted side-effects and their 'pharmacological' nature (both 'poison' and 'cure'). Obviously, in an environment that is governed by short-term economic profit, an 'entanglement' of science, capitalism and governmentality, this is very challenging. This is also why alternative forms of mediating self and world in non-Western (i.e. non-modern) cultures and societies are gaining so much importance generally, including for critical posthumanism,

[36] I use '*bêtise*' or (animal) stupidity here in analogy with the rather 'stupid' and 'violent' reduction of subsuming the incredible variety and irreducible plurality of 'animals' to the so-called 'animal question'. Cf. Jacques Derrida, "The Animal That Therefore I Am: More to Follow", *Critical Inquiry* 28 (Winter 2002): 369-418.

like 'animism', for example,[37] especially at a time when Western modernity seems to be hellbent to drive the planet against the wall (literally).

The 'choice', therefore, 'we' seem to have, as the species whose actions (including our 'technologies') are threatening the biosphere of this planet, is the infamous politics of the ostrich, namely to put our heads in the sand and hope for the best, or, indeed, have a civilizational rethink. This actually reminds me of two 'gnostic' approaches based on two different but equally nihilistic notions of 'askesis'.[38] One form of asceticism would thus translate into 'degrowth' and 'rewild', and into extracting ourselves as possible from the world aiming for zero consumption and embracing all the painful consequences. The other form would, maybe somewhat perversely, gamble on the salutary effect of destruction and hope for a quick restart after the inevitable collapse, i.e. the sooner we get the inevitable catastrophe over and done with the better, let's therefore consume this world, force the 'great acceleration', and hope to reach the next one asap (whether on this planet or elsewhere). Both of these versions are nihilistic in their rejection of the material here-and-now with all its pain, suffering and injustice, but also its beauty, vulnerability and care (all the 'evils' the gnostics despised). And this is I think what motivates the insistence on 'entanglement' in all versions of critical posthumanism (it's also why one ultimately cannot afford to be radically *anti*humanist, and certainly not *anti*human; only *anti*anthropocentric). Going back to what I said about the originary mediality of technologies, one would have to privilege a politics that pursues those kind of technologies (and these would include all kinds of 'nonhuman technologies' of course) that give us the best chance and the widest range of future decision-making to protect this biosphere for as many (humans and nonhumans) as possible, based on caring and sharing.

9. *Critical Posthumanism and the 'Anthropocene'*

My impression is that posthumanism (like many other discourses) was somewhat overtaken, or at least taken unawares, by the discussion on climate change and the Anthropocene

[37] On animism and posthumanism see my "Animism without Humans, or Belief without Belief", in *Before Humanity*, pp.82-111.

[38] This is Jacques Lacarrière's interpretation of ancient Gnosticism in *The Gnostics* (Stoke Ferry King's Lynn Norfolk: Daedalus Press, 1977).

becoming central issues for theorising. At least, if you read the first books coming out on posthumanism as such (from the late 1990s), ecology and climate change aren't playing a central role, yet. The ecological turn, together with the animal and the nonhuman turn came later and have complicated things substantially, also for posthumanism. One of the effects is that materialist, especially feminist new materialist, versions of posthumanism are now dominating the theoretical scene (cf. the enormous influence of Rosi Braidotti, Karen Barad, Jane Bennett and many others). The focus for critical posthumanism has since become a new kind of ecological thinking which emphasises the notion of 'entanglement', where 'hybridity' or 'cyborgisation' used to dominate posthumanism's earlier phase. While certainly not technophobic (critical) posthumanism nevertheless now focuses on biological entanglement at all scales, from microbiological forms of symbiosis to planetary 'meshwork' between geological, atmospheric and biomaterial forms of agency.[39]

As part of this discussion on the Anthropocene and anthropogenic climate change, posthumanism like any other theoretical discourse has been hugely affected by another, arguably the most recent 'turn', namely the 'geological turn',[40] and as a result has been extended into 'deep time'.[41] Deep time here means both a connection between contemporary postanthropocentric or posthumanist thinking and the human and nonhuman *past*, as well as the human and nonhuman *future*. As a result, questions like 'how did we become the kind of humans we think we are?', 'to what extent could the hominisation process or evolution have been different?', 'where exactly should we draw the line between primates, early hominids and modern humans?', and so on, have moved into focus. One could speak of a kind of 'paleo-posthumanism' that by returning to human origins speculates on possible alternative developments and rethinks our relationship to technics, nonhuman others and the 'world'. This goes way beyond what is traditionally considered as ecocriticism, which

[39] Cf. my "Microbes", in Lynn Turner, Undine Sellbach and Ron Broglio, eds., *The Edinburgh Companion to Animal Studies* (Edinburgh: Edinburgh University Press, 2018), pp. 354-366; and Timothy Morton, *Hyperobjects: Philosophy and Ecology after the End of the World* (Minneapolis: University of Minnesota Press, 2013).

[40] Christophe Bonneuil, "The Geological Turn", in Clive Hamilton et al, eds., *The Anthropocene and the Global Environmental Crisis: Rethinking Modernity in a new Epoch* (London: Routledge, 2015), pp. 15-31.

[41] See Stefan Herbrechter, "Posthumanism and Deep Time", in Herbrechter et al., eds., *Palgrave Handbook of Critical Posthumanism* (Cham: Springer, 2022), pp. 29-54.

tends to address the question of how to make humans more aware of their environmental impact.

On the other side of the timeline, the ecological dimension of posthuman deep time is entering into the fray of what one might call 'constructions of the future'.[42] In this context, critical posthumanism has to go beyond traditional ecocritical notions of 'sustainability' which, in a time of now *irreversible* anthropocenic climate change is literally no longer enough. The ideological fight over the human, nonhuman and planetary future now rages between, on the one hand, technofuturists (usually of a transhumanist denomination) who see the only solution and hope of survival (Darwinian evolution by non-biological means, so to speak) in various geo-engineering and exoplanet scenarios, different forms of fatalism and nihilism, in view of the 'inevitability' of a variety of extinction scenarios, and the neo-primitivist 'degrowth-and-rewild' scenario, on the other hand (which map onto the two gnostic forms of askesis I mentioned above). Again, we are past simple ecocriticism here, since whatever seemed to be in need of ecological critique is fast disappearing into a 'postnatural' and, if transhumanists get their way, into a 'postbiological' world or a purely technical '*oikos*'. The question is, how far the notion of 'ecology' will be able to stretch…[43] And the other question is, to what extent are ecology and technology incompatible and also whether one needs to start thinking more seriously about what 'ecotechnics' might mean.[44]

10. *Critical Posthumanism: Some 'Pedagogical' and 'Aesthetic' Implications*

It seems quite obvious that in times where our survival and that of the planet's biosphere depends on finding out how and to what extent we have to change our lives,[45] we're speaking at once about a 'political' but also a 'pedagogical' and an 'aesthetic' task – I've tried to address the latter two in my last two volumes: the pedagogical task I named '(un)learning to be

[42] See my current work at: https://stefanherbrechter.com/critical-posthumanist-politics/.
[43] See Timothy Morton, *Dark Ecology: For a Logic of Future Coexistence* (New York: Columbia University Press, 2018), and *Ecology without Nature: Rethinking Environmental Aesthetics* (Cambridge: Harvard University Press, 2009).
[44] On Jean-Luc Nancy's notion of "ecotechnics", see Ben Hutchens, *Jean-Luc Nancy and the Future of Philosophy* (Cambridge: Acumen, 2005), pp. 141-155.
[45] See Peter Sloterdijk's take on Rilke's phrase in *You Must Change Your Life: On Anthropotechnics* (Cambridge: Polity, 2014).

human?' and the aesthetic one I tried to capture under the title 'solidarities with the non/human'.[46] To stay human, or rather to find out what being human could also mean, we have to keep deconstructing the still dominant humanist and anthropocentric notion, value system and worldview. We have to unlearn those 'behaviours', those forms of 'individuation' that turn us into hostile and ego-centric forces that make us turn against each other and against the rest of the world. This 'deep' learning process needs to extend backwards into finding out how we got into the current situation, how we've become what we seem to be today, in order to find better alternatives; it also needs to extend into the future and engage rather forcefully into the current debate about 'deep futures', i.e. how to survive or leave the Anthropocene behind? One might call the pedagogical programme that a critical posthumanism should champion the 're-worlding of the human', while steering clear, however, of any temptation to believe that somewhere out there we'll eventually find another 'world' we can colonise and start over again. No, it's a re-worlding that is strictly reserved for 'earthlings', in Latour's terms.[47] This process will of course involve technics but should not be driven by techno*logics*. Some of the very humanist techniques, esp. all those having to do with language (reading, writing, rhetoric), should in fact not be 'unlearned', but 'relearned', given that the way so-called 'social media' have been developing under techno-media-capitalist conditions, and which are driving us straight into what Bernard Stiegler called 'stupidity' and generalised 'proletarianism'.[48]

As far as aesthetics is concerned, posthumanist literature and art (to take just these two forms of creative expression) are in a somewhat self-contradictory position – a position that is nevertheless representative of the 'human' as such in postanthropocentric times. I tried to articulate this by saying, somewhat provocatively maybe, that 'there is no posthumanist

[46] Cf. Stefan Herbrechter, *(Un)Learning to Be Human?* (Leiden: Brill, 2024) and *Solidarities with the Non/Human, Or, Posthumaism in Literature* (Leiden: Brill, 2025).
[47] Cf. Latour, *Down to Earth, Politics in the New Climatic Regime* (Cambridge: Polity, 2018).
[48] See Stiegler, *States of Shock: Stupidity and Knowledge in the Twenty-First Century* (Cambridge: Polity, 2015).

literature',[49] 'there is no posthumanist art', as such.[50] Both literature and art are fundamentally humanist (not human) in their very essence because both presuppose human 'receivers' (not necessarily 'senders'). Humans appreciate literature and art, and it is in fact the very way in which humans 'read' certain texts, objects or performances that makes them worthy of the label 'literature' or 'art'. That basically is what aesthetics does: by identifying and reading a 'work' in a particular way and by being thus affected by it in an either psychologically or somatically transformative sense, or indeed both, one comes to a 'shared' experience of 'beauty' and transformative 'insight' that has concrete political effects, which range from a confirmation, to a negotiation or to the resistance and replacement of existing beliefs and values. This is actually true for 'works' produced by humans or nonhumans (animals, or AI). As a human I can appreciate the outcome of aesthetic practices by all of these, but I doubt that there's much of a truly aesthetic appreciation in AI (while many nonhuman animals probably have some ability of aesthetic appreciation).[51] In terms of AI, why would you want to programme an 'aesthetic' function here in the first place? Just to show that AI can be 'creative', too? Which would take me back to what I said about 'posthuman desire' earlier. I think this sort of thinking needs to be resisted (which doesn't mean that there are now many forms of creativity that are assisted by AI, or that human creativity is the result of many forms of 'entanglement' and 'distributed cognition', that is not the point). When I said, there is no posthumanist literature this is what I meant: you can and should have works that explore what it is like to be a bat, or indeed a thing, or to engage with 'alien phenomenologies';[52] we need literature that speculates on climate disasters and worlds without us; we also need literature that challenges our established (humanist) reading habits (our 'literacies') and extends them in the way platforms or networks based on 'distributed cognition' foreground human-nonhuman interaction and 'entanglement'. However,

[49] Cf. Herbrechter, "Posthuman/ist Literature? Don DeLillo's *Point Omega* and *Zero K*", *Open Library of Humanities* 6.2 (2020): 1-25.

[50] Cf. Herbrechter, "Posthumanism", in Charlie Gere and Francesca Franco, eds., *The Bloomsbury Encyclopedia of New Media Art, Volume 1: History and Theory* (London: Bloomsbury, 2024).

[51] See for example Roberto Marchesini's work, esp. his *The Creative Animal: How Every Animal Builds its Own Existence* (Cham: Springer, 2022).

[52] Cf. Thomas Nagel, "What is it like to be a bat?", in *Mortal Questions* (Cambridge: Cambridge: University Press, 1979), pp. 165-180; and Ian Bogost, *Alien Phenomenology, or What It's Like to Be a Thing* (Minneapolis: University of Minnesota Press, 2012).

ultimately, their main aesthetico-political purpose will remain to affect *humans*. The implied and ideal reader or viewer of these works will remain the human. Otherwise, to put it starkly, what would be their point? Humans are of course already being aesthetically affected by AI produced literature or art, but they are because they are 'reading' them either 'as if' they were produced by humans (i.e. they're more or less wilfully being 'deceived' by them) or, because they find it intriguing that they are being challenged by the fact that nonhumans can produce literature or art, too. This can lead to several possibilities: either the death of literature/art (i.e. I'm no longer interested if it's done by AI); or some form of continuation as 'pure entertainment' or 'consumption'; or, indeed, new forms of co-authorship and hence new forms of affectivity and appreciation (for humans, that is). However, in all of these scenarios it would probably not make sense to speak of 'posthuman' art or literature, or literature/art 'without' humans. What a posthuman*ist*, as opposed to a literally posthuman, aesthetic *may* achieve, however, is new forms of solidarity between humans, and between humans and nonhumans, and that, in my view, is what critical posthumanism is all about.[53]

11. *Critical Posthumanism, 'Theory' and the 'Posthumanities'*

What role do academia and the humanities in particular (still) play in contemporary society? This is in fact the question about the role and future of 'theory' or 'thinking'? Critical posthumanism arises out of what Herman Rapaport called the "theory mess"[54] of the 1990s. This means that critical posthumanism is (apart from certain affinities with negative anthropology) the continuation of so-called 'French Theory' – poststructuralism and deconstruction. There is an important continuity with Derridean deconstruction, which itself, I would claim, is 'proto-posthumanist', at least in spirit together with large parts of the wrongly designated 'antihumanism' of poststructuralism (cf. Lévi-Strauss, Althusser, Foucault, Lacan, Barthes, Lyotard, Deleuze and 'the end(s) of man' topos).[55] A radical critique of

[53] On this kind of solidarity see also Timothy Morton, *Humankind: Solidarity with Nonhuman People* (London: Verso, 2017).

[54] See his *The Theory Mess: Deconstruction in Eclipse* (New York: Columbia University Press, 2001). For an authoritative historical guide to the rise and decline of Theory see François Cusset, *French Theory: How Foucault, Derrida, Deleuze, & Co. Transformed the Intellectual Life of the United States* (Minneapolis: University of Minnesota Press, 2008).

[55] Cf. Jean-Luc Nancy and Philippe Lacoue-Labarthe, *Les fins de l'homme : à partir du travail de Jacques Derrida* (Paris : Galilée, 1980).

humanism and anthropocentrism had been 'in the air' so to speak since the 1950s, or since the rise of structuralism. What poststructuralism added was a focus on and a problematisation of subjectivity, language and difference. But again the 'post-' in poststructuralism is not a straight forward supersession. And what posthumanism, at least in its 'critical' version, adds to this, is a return to Heidegger's question concerning technology and the erosion of conceptual boundaries within and between the Cartesian human-animal-machine construct, leading to a proliferation of 'monsters' and 'hybrid' identities. This is of course an extremely simplistic account of what actually took place, especially with all the 'wars' and 'turns' taking place during the rise of theory, and the ways it institutionalised itself and, then, as people began to react against it, as it became hegemonic.[56] Critical posthumanism, basically, extends the poststructuralism of French Theory in two respects: the relationship between technology and humanity, which it sees as 'originary' (they are co-implicated in their evolution from the very beginning), and the extension of subjectivity to more and more nonhumans (and the ethical and political implications this has – which also explains posthumanism's 'environmental' or 'ecological' turn, as well as its affinity with animal studies).

More specifically, critical posthumanism extended theorising into science practice and institutions, it reopened the 'animal question', it radicalised critiques begun by 'technocultural studies', it embraced work done in 'media philosophy' and so on. And it has thus begun to deconstruct the very centre of the humanities: i.e. the human, following and extending attacks by 'antihumanists' from within and without the humanities almost throughout the 20th century with the result that there's very little left that corresponds to what used to be called 'common sense' (which is usually just a synonym for the established, traditional, humanist value system). There's also very little left that could be called 'intuitive' as a result of complexification and extended radical critique. This is why it's become so difficult for theory to regain the 'mainstream' debates which of course perceive theoretical discourses like critical posthumanism as 'difficult' (and, hence, probably easily 'dismissable'). However, what happened in the so-called 'theory wars' and the resulting 'rise' of theory, has

[56] François Cusset gives a detailed account in *French Theory: How Foucault, Derrida, Deleuze & Co Transformed the Intellectual Life of the United States* (Minneapolis: University of Minnesota Press, 2008).

been transformative at least in the humanities. Basically, it's a combination of philosophy and literature that has taken place. Theory drags philosophy out of its splendid isolation and 'seriousness', and conveys social 'relevance' to literature, or fiction more generally. At the same time theory also 'fictionalises' philosophy, emphasising its speculative element, while it 'philosophises' literature, by attributing existentialist, metaphysical, ontological life-transforming power to it.

However, for such a theoretical discourse to reach the '(hu)man in the street', never mind to find the ear of politicians or 'policy makers', or indeed to give productive ideas to 'activists', it would have to find ways of translating its highly specialised language and make it more 'accessible' – which always involves a compromise on complexity and conceptuality. In liberal democracies political decisions are arrived at through lobbyism, so that's what would have to happen for critical posthumanism to reach a wider public. It would involve deriving a programme out of its theorising, ideally backed up by empirical 'data' (for which you'd need the social sciences, backed up in turn by the so-called 'exact' sciences), with which you could start entering what's left of the 'public sphere' (including its usually depoliticised reincarnations on 'social media') and, with the help of media campaigns you could then try and sway governments to change their short-term party-political self-interests and the bureaucratic apparatuses they tend to push ahead before them. I'm not saying this cannot be done – and at least, in liberal democracies, you're allowed to do this kind of thing with relative freedom and impunity, whereas under totalitarian or autocratic regimes you won't even have access to the necessary 'information' and 'channels' to find out and disseminate. But you can also see the obstacles and the price you'll have to pay in gaining widespread support. As an academic you're extremely badly placed for this because the little 'authority' and 'autonomy' you have you would have to forsake once you enter into the general fray of public discussion. I think sooner or later you'd have to choose between university and 'life', especially since the university as a social institution has lost most of its own autonomy due to its 'corporatisation'.[57] It is now merely a kind of social knowledge and diploma factory. If there were 'post-humanities' they'd have to be pretty good at shielding what they're doing from all

[57] See the by now classic analysis by Bill Readings, *The University in Ruins* (Cambridge: Harvard University Press, 1997) and the vast discussion it has been creating ever since.

kinds of conservative forces while disseminating radical and critical posthumanist ideas, all the while creating secure posts and a new generation of 'tenured radicals'.[58] I doubt that this is what's going to happen, but one shouldn't give up hope. And, besides, there's a lot of thinking going on outside academia and the university; it may even be the case today that universities are actually places where a certain kind of thinking *cannot* happen anymore…

In any case, it is probably safe to say that critical posthumanism doesn't translate, at least in any straightforward way, into a political programme or a lifestyle guide. If we just take the two main conceptual 'pillars' of critical posthumanism – the critique of anthropocentrism and the necessity to think human subjectivity as relational, entangled with nonhumans of all kinds, technical, biological, mineral etc. – these can lead to very different forms of politics. The complication that the prefix 'post-' usually brings, also applies to postanthropocentrism, which can be understood as a move 'beyond' an anthropocentric worldview (this is the typical 'ecological' reading connected to environmentalist green politics, sustainability and so on); however, the 'post-' can also be the sign of a rethinking of anthropocentrism as such, and, in fact, this can be the sign of a *return* of anthropocentrism in a different form or at a different level (this seems to be the conclusion that the 'eco-modernist' movement wishes to draw by believing in a 'good Anthropocene', namely that if humans are now the most powerful form of agency at a geological and atmospheric level, rather than adopting a 'conservationist' attitude, this should lead us to fully, and hopefully responsibly, of course, embrace the fact that there is no longer a 'nature' to preserve, only a planetary 'system' to govern). Since humans have irreparably transformed (some would insist on 'damaged', however) the planet the task is now how to 'run' it in a way that guarantees not only the survival but the continued thriving of the human species. Usually this is accompanied by calls for more invasive and ambitious technology, not less.[59] Posthumanism is, in fact, in many ways the symptom of the

[58] I expressed myself on this in two long review pieces in *Word & Text*: "The Posthumanist University", review of *For the University*, by Thomas Docherty, *Word & Text* 3.1 (2013): 121-30, and "The Nonhumanities, or, ceci n'est pas une critique – Review of *Hacking the Academy: New Approaches to Scholarship and Teaching from Digital Humanities*, eds Daniel J. Cohen and Tom Scheinfeldt", *Word & Text* 20 (2020): 191-204.

[59] Cf. the discussions in Clive Hamilton, Christophe Bonneuil and François Gemenne, eds., *The Anthropocene and the Global Environmental Crisis: Rethinking Modernity in a New Epoch* (London: Routledge, 2015).

crisis that modernity finds itself in, and the question of which way any 'solutions' to the crisis lie is very much in the balance, also *within* posthumanism. That's what the various 'constructions of the future' scenarios are all about and the question which role technology should play in this is at the heart of posthumanism. In fact, posthumanism has brought Heidegger's 'question concerning technology' back to the fore of philosophical thinking by 'ontologising' it.

If we look at posthumanism's second conceptual 'pillar', the relationality of humans, nonhumans, technology, nature and so on, this realisation which is anything but new, can equally lead to very different conclusions. It's precisely because we're co-implicated or entangled with technology, for example, that a transhumanist trajectory seems more and more inevitable, especially when the biological conditions on the planet will continue to take a turn for the worse. Is cyborgisation the beginning of a solution or the acceleration of a catastrophe waiting to happen? It is also quite obvious that biological entanglement with micro-organisms is not necessarily a positive form of ecological equilibrium – as seen in the recent COVID-19 pandemic. Especially, since there is now an increasing conversion of micro-biology and bio-, nano- and gene-technology the idea of 'entanglement' can just as well be said to steer 'us' to even more intensive and invasive forms of technoscientific capitalist forms of biopower and biopolitics. From a somewhat cynical point of view, you could therefore say that posthumanism has contributed massively to the 'mess' we, as a species amongst other species, find ourselves in and which we have inflicted upon nonhumans and the planet, even while the planet is beginning to turn against us (but not 'us' exclusively). To call for 'taking our responsibility' for this situation, as *critical* posthumanist usually do, me included, might look to others like the ultimate hubris, the ultimate anthropocentric escape route (after having created the mess, let's at least try to clear our collective conscience), while for others again it might be a call to action that will make geo-engineering look like our ultimate 'duty' (we've got to save the planet, and us, and as many others as possible, by gaining control over the climate). Therefore, when I say critical posthumanism doesn't easily translate into a political programme I'm not trying to shirk the issue but in a situation where you have to choose between two 'evils', one only has limited options: for example, try and remain somewhat detached (or 'critical') in order to better assess and monitor the situation, try and steer the discussion away from any knee-jerk reactions to give in to either of the evil options; or, to be

absolutely pragmatic about this, choose one's camp and fight in the hope that the choice is the correct one. This is true for ecological and technological problems, as well as for addressing the Anthropocene and the problem of AI, since if posthumanism has shown anything it is that all of these are connected. The Anthropocene as the period that signifies the 'culmination' or 'triumph' of modern human development is also its downfall, its catastrophe and probably the time announcing its extinction. AI could spell our end or our best chance of some form of survival. The challenges of controlling (or at least 'guiding') AI and the planet's climate are not co-occurring by chance, as Heidegger would probably say.[60]

[60] Cf. Heidegger's famous quote from Hölderlin's poem "Patmos": "wo aber die Gefahr ist, wächst das Rettende auch [but where danger is, grows the saving power also"], in "The Question Concerning Technology", *Basic Writings*, ed. David Farrell Krell (New York: Harper & Row, 1977), p. 333ff.