Science and its Applications: Negotiating Human Enhancement across Media FMS Workshop, January 28–29, 2021

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Historicising and De-Historicising the Human : Human Enhancement Scenarios across Discourses and Media

My contribution will make some points about the notions of historicity of the human as implied in different contemporary theoretical approaches including post- and transhumanism. It will seek to position the concept of human enhancement in the context of these debates, and will go on to discuss materials from contemporary fiction and contemporary TV series, including Margaret Atwood's *Oryx and Crake* (2003) and Netflix's *Altered Carbon* (2018/2020), in the relation to these positions.

1.

Some forms of historicising the human in the discourse of modern 'theory' have yet to be taken in, and taken seriously, by the wider community of scholars and intellectuals. Among these is Michel Foucault's claim, proposed in 1966 in a book subtitled 'An archaeology of the human sciences,' that the human - "l'homme" - emerged around 1800, give or take some decades, as a correlative of coemerging 'human sciences' which were themselves made possible by an epistemic shift; and that consequently the human might "be erased, like a face drawn in sand at the edge of the sea" (Foucault 1966: 422) in consequence of some other future epistemic shift. Foucault has been hugely influential in connection with the cultural turn in literary studies, but his work has been selectively read and engaged with in the humanities, and this particular book has not been widely received. More recently, in a series of works that is still ongoing, Gesa Lindemann has worked out the social and historical dimensions of the human, defining the human as a central normative-cognitive institution in modern societies (2011). One of the parameters in the historical formation of this human, as identified by Lindemann, is the emergence of the embodied individual: the conception of the human being as a being which is individualised by virtue of possessing a solid three-dimensional living body (which also serves as the material basis for all affective and cognitive dimensions of the human), and which took shape, very roughly, in and around the 18th century. These attempts to historicize the human – as a recent configuration, as the correlative of particular knowledge formations and epistemes, as an institution of modern society – have not been widely taken up, and no doubt they appear highly counterintuitive.

[The history of knowledge, however, offers various instances – *eppur si muove*! may or may not be one of them¹ -- where the intuitive account has turned out to be inferior to the counterintuitive explanation, so it may perhaps be wise to reserve judgment.]

Without pursuing the intricate question of the wider re-historization of the human within which these accounts could find their place, I have referred to them here because I believe they allow us to approach the discussions around 'human enhancement' in a different and more appropriate light. If

¹ Cf. Mario Livio. "Did Galileo truly say, 'And yet it moves'?" A Modern Detective Story. An astrophysicist traces genealogy and art history to discover the origin of the famous motto." *Scientific American* May 6, 2020. Web.

the empiricities of 'Life, Labour, Language' and the embodied human individual, endowed with inalienable human rights, are modern phenomena (which have emerged and shaped the ways we live and produce knowledge as societies over the past two to three hundred years), this implies, for example, that the history of the evolution of humans, as established in the course of the past 150 to 200 years, would also need to be seen as a modern phenomenon. So would the foundational opposition of nature vs. culture, which we (embodied, evolved) humans invariably straddle, and which is the principle along which – very roughly – we structure and organise our institutions of knowledge production (This provides the epistemological framework for what we refer to, with a sigh, as the Two Cultures Problem, as well as for our theoretical engagement with *natureculture*². It is also co-emergent with what Foucault has described as *biopower*, a now pervasive form of power that 'takes charge of life, in order to promote it and make it flourish' and that, in doing so, operates with concepts of embodied human individuals, conceptualised as parts of populations (cf. Foucault, *Hist. Sex.* 1, part 5).

2.

I have felt it useful to prefix these reflections, in order to point out that "human enhancement" debates share these premises, but do not as a rule reflect on them. In fact, at first sight it may seem that debates about human enhancement have a tendency to treat the concept of the *human* as a known entity, taking it for granted. The question they address, and which they seek to resolve, is whether this or that form of *enhancement* is possible and above all ethically desirable. (It is in relation to this question only that the concept of the human becomes problematic: will the human as we know it endure through the process of its 'enhancement', or should 'enhancement' be avoided because its outcomes will no longer be human?)

The *transhumanist* participants in this debate about human enhancement have made up their minds. They favour mostly optimistic versions and visions of human enhancement³: "We believe that humanity's potential is still mostly unrealized," the *Transhumanist Declaration* states. "There are possible scenarios that lead to wonderful and exceedingly worthwhile *enhanced* human conditions." They also concede, that there are risks. But they call for research as well as careful deliberation in order to find out "how best to reduce risks and expedite beneficial applications." Above all, they argue for the individual's right to choose:

"We favor morphological freedom - the right to modify and enhance one's body, cognition, and emotions. This freedom includes the right to use or not to use techniques and technologies to extend life, preserve the self through cryonics, uploading, and other means, and to choose further modifications and enhancements."

Those who have reached such states of "morphological freedom" and choose to exercise their right to it, will no longer be "transhuman", but "posthuman"⁴.

[At this point, I would be appropriate refer to the wider and far more complex discussion around the concept of the posthuman, which is frequently connected to the challenging of anthropocentrism, speciesism, and all forms of 'human exceptionalism' vis-a-vis other sentient beings and other forms of matter – in order to emphasise that both the trans- and the posthuman invoke a fairly simple two step model of the historicity of the human: Step 1 – the 'natural human' we have known so far, and about

² References ####

³ Cf. "Transhumanist Declaration (2012)." In Max More and Natasha Vita-More, eds., *The Transhumanist Reader: Classical and Contemporary Essays on the Science, Technology, and Philosophy of the Human Future,* Blackwell-Wiley, 2013.

⁴ Cf. "Trans and Post," More et al, 431-437.

whom we are accustomed to discuss which of its features are 'anthropological invariants' and which are culturally specific, which are the result of nature and which of nurture, and so on; Step 2: the postnatural human, emerging in consequence of technoscientific progress.]

In order to illustrate how this conception of human enhancement is aligned with a particular form of historicising the human, I may draw on Sherryl Vint's *Bodies of Tomorrow* (2007), who states that "technology is rapidly making the concept of the 'natural' human obsolete. We have now entered the realm of the posthuman, the debate over the identities and values of what will come after the human"⁵ The historical sequence posited here involves a 'natural' human, which has evolved over several million years (depending where you draw the line), but which is now obsolescent, and a new, 'posthuman' human, differentiated from the natural human through the effects of technology, and specifically of "technologies of body modification" (Vint 7), which are putting "into crisis the boundaries among human, animal, and machine" (8). That this historical process should take place is, apparently, *inevitable*. "It is inevitable that technoscience will continue to enact changes on the current state of human embodied existence." (26).

From this position Vint derives the need for an ethics of human enhancement:

"While many visions of the posthuman desire to transcend the limitations of the human body through technology or genetic redesign, I argue that it is important to return to a notion of embodied subjectivity in order to articulate the ethical implications of technologies of bodily modification" (Vint 8)

Vint develops this argument across a sequence of readings of science fiction novels, concluding that: "It is imperative that we develop an ethically responsible model of embodied posthuman subjectivity which enlarges rather than decreases the range of bodies and subjects that matter. Such representations are the path to an ethical, accountable, embodied posthumanism, to being more rather than less human in our next iteration." (Vint 190)

I have great sympathy for Vint's position and I share its essential commitments. I will nevertheless proceed to point out where this argument might leave room for additional and more productive perspectives even though I will hardly be able to realise these in the current format of a draft paper.

3.

I have quoted extensively from Vint's argument because it affords a clear perception of the outlines of the state and the stakes of the argument around 'human enhancement' – of its potential as well as of its limitations [though I should emphasise that I also submit these statements with a view to be able to improve them through the discussions at our workshop]:

1. By taking a position in the human/posthuman discussion which appears to come with the theme of human enhancement, Vint shares the same discursive universe with the fictional narratives she analyses.

2. Unlike some, but not all, of the fictional narratives around human enhancement, there is little in the way of an explicit role for science or scientist participants, and little in the way of an explicit interest in what science and scientists might contribute to the discussions of human enhancement, the human and the posthuman. Science figures here not as a possible partner in a dialogue, but as 'technoscience' and 'technology' – ultimately as an instrument that "is neither emancipatory nor oppressive in itself"

⁵ Sherryl Vint. *Bodies of Tomorrow: Technology, Subjectivity, Science Fiction*. Toronto Buffalo London: University of Toronto Press, 2007. 7.

(Vint 190; cf. Atwood 2005 speaking in the context of *Oryx and Crake* of science as a tool – neither good nor bad, it depends on humans what they do with it).

3. By embracing the problem of the human/posthuman in the form in which it presents itself, Vint's argument illustrates how the human/posthuman debate around human enhancement actively and effectively contributes to maintaining of the notion of the 'natural' human from which it claims to distance itself (because it is too exclusive and exclusionary) but which it simultaneously claims is under threat of obsolescence (though worth preserving, and in fact extending beyond those too exclusive, exclusionary and restrictive manifestations in which it has hitherto been available). By suggesting that this problem arises only now (or that it is soon to arise), in consequence of the latest technologies or of future technologies, it obscures the fact that these problems have been around for quite a while – in fact, they have been around in some form for at least two or three hundred years.

(In order to illustrate the 'history', or perhaps 'genealogy', of the human/posthuman debate and its relation to problematising the 'natural' human, consider the following fairly well known examples, which emerged in the course of the 18th and early 19th centuries: On the problem of the difference between humans and machines, cf. LaMettrie 1748, and numerous fictional narratives since the early 19th century; On the question of the artificial creation of life, cf. Mary Shelley (1818). The question of critiquing the too exclusionary definition of the human did not emerge with our current human/posthuman debate, but neither did it emerge thousands or millions of years ago as part of an evolutionary process; it has a tradition in our modern societies, which emerged when, for instance, some middle-class (and some working-class) women in France and England in the 1790s started wondering why the newly declared *droits de l'homme et du citoyen* should be exclusively restricted to white middle class men; cf. also the slave revolution in Haiti in the early 1800s, et passim;⁶) These problems have posed themselves in ever evolving form, and they have been part of a negotiation of the human which our societies have been engaged in - not for a few million years, not for a few hundred thousand years, but for a few hundred years – a distinctly modern conception of the human, which is not there once and for all, but has been constantly under construction and revision, and which continues to be produced, reproduced, negotiated and renegotiated across a wide range of discourses, fictional and non-fictional, scientific and non-scientific, in modern societies.)

Against this background I propose that in the form in which it presents itself to us (which is also the form in which Vint, for instance, engages with it), the human/posthuman problem linked to the theme of human enhancement is troubled by a serious misrecognition. It proposes a way of historicising the human which effectively de-historicises it. It tends to obscure the history of the emergence of the modern human and its ethically relevant embodied subjectivity and to conflate it with the 'natural human' supposed to have existed for a few hundred thousand years (or a few million years, depending where you draw the line). We will do better critical and analytical work, I argue, if we do it against the background of an awareness of the discursive history (and the discursive dynamics) of the 'natural human' whose potential end the technologies of human enhancement, and the conceptual framework of the posthuman, appear to confront us with.

⁶ yet the natural embodied human subject possessing rights had not been around for hundreds or thousands or millions of years before it became problematic in that way; it arose around that time, as indicated for example by the fact that torture could no longer be maintained as a legally regulated practice in European societies.

On the basis of the three points made in the previous section, I suggest three goals for further work on issues of human enhancement:

- What angles of analysis, and what prospects are there for the involvement of scientific and scientists' perspectives in this debate? To what extent and in what ways do scientists take part in these debates around human enhancement already? (In Richard Powers's *Generosity*, we see a fictional geneticist character touring talkshows and drawing prestige and large sums in research funding by peddling transhumanist visions of human enhancement – skilfully implemented, opportunistic manoeuvres whose human cost the novel glaringly exhibits). (cf. 3.2.)
- 2. How do fictional representations of posthuman scenarios and of technologies of human enhancement and their effects construct the concept of the human (which is about to be enhanced)?
- 3. And how do these constructions of the human and the posthuman relate and compare to the more traditional forms of negotiating the human?

I will not be able to devote any space to the first of these questions here, although it may be the more productive and relevant one in terms of FMS interest.

I will draw briefly on the 2018 TV serial *Altered Carbon*, as well as on Atwood's *Oryx and Crake*, in order to offer some suggestions on points 2 and 3.

5.

For those not familiar with Altered Carbon, allow me to cut and paste an overview from wikipedia:

The series takes place over 360 years in the future, with most episodes the first season set in the year 2384 in a futuristic metropolis known as Bay City. In the future, a person's memories and consciousness are recorded onto a disk-shaped device called a *cortical stack*, which is implanted in the vertebrae at the back of the neck. These storage devices are of alien design and have been reverse-engineered and mass-produced but can only be made from the material on Harlan's World. Physical human or synthetic bodies are called "sleeves" and stacks can be transferred to new bodies after death, but a person can still be killed if their stack is destroyed and there is no backup. Only the wealthiest, known as "Meths" in reference to Methuselah, have the means to change bodies through clones and remote storage of their consciousness in satellites, so they never have to die of old age before being resleeved.

Takeshi Kovacs, a political operative with mercenary skills, is the sole surviving soldier of the Envoys, a rebel group defeated in an uprising against the new world order. In the first season, set 250 years after the Envoys are destroyed, his stack is pulled out of prison by 300-year-old Meth Laurens Bancroft, one of the wealthiest men in the settled worlds. Bancroft offers him the chance to solve a murder-Bancroft's own-to get a new shot at life. In the second season, set 30 years later, Kovacs, now in a new sleeve, continues search lost love Envoy leader Quellcrist to for his and Falconer. (https://en.wikipedia.org/wiki/Altered Carbon (TV series))

The human/posthuman debate is central to this series. The cortical stacks, and the biotechnology that allows those with sufficient funds to overcome the deterioration which normally comes with

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resleeving, provide the basis not only for the "morphological freedom" sought by contemporary transhumanists, but also for 'eternal life'. The elimination of death is seen by some in the series as the destruction of what is essentially human. In the past plot, narrated through flashbacks of Kovacs, there are long speeches by Quellcrist Falconer, who originally developed cortical stacks (relying on knowledge and materials belonging to 'Elders' on a different planet) and who turned rebel leader of a group which aims to destroy this technology because she now understands that the elimination of death is also the elimination what is essentially human.⁷

This plot forms the background to a detective plot that has its own share of human enhancement and the posthuman. Kovacs, whose stack was sentenced to being frozen indefinitely after the failed rebellion, is brought back and given the chance to earn a pardon by solving the sleeve-murder of Bancroft, who was killed minutes before the next 48-hour upload of his consciousness from his stack to a 'cloud' was due, and who therefore is back in a new sleeve, but has no memory of the 48 hours leading up to his murder. In order to clear this up, Kovacs is fitted into the body of a recently deceased policeman (or rather its upgraded version, "equipped with military grade neurachem and combat muscle memory" s1e1 0:15). He gets access to unlimited funds, and builds a local team which includes not just humans such as local detective Kristin Ortega, whose partner used to own the body into which Kovacs has now been resleeved, but also "Edgar Poe" the AI proprietor of the AI hotel "The Raven" in which Kovacs stays. They all become a posthuman team, of a kind not unfamiliar form other series, excelling at posthuman teamwork. They draw on various forms of human enhancement, too. When human detective Ortega is badly injured in a fight, and her arm needs to be amputated, the unlimited financial resources available to Kovacs allow him to choose the best, most powerful and indestructible artificial limb as a replacement. After a brief recovery, she looks her old self, but ends up with a superpower that will come in handy in all future fist fight scenes.

These instances also demonstrate, however, that the issues which plagued human society, also plague this posthuman society: There is deeply engrained inequality in this posthuman society, since the best enhancements are only available to the privileged few.⁸ (Ordinary citizens may not be able to afford being resleeved, so their sleeve-death is also real-death. Victims of crimes are entitled to be resleeved at the expense of the state, but they are not allowed to choose the new sleeve, so may end up in a sleeve whose age, ethnicity or gender does not at all match their previous one.) There are conflicts about the legitimacy of resleeving in this society: the 'neo-C's, a posthuman form of Catholicism reject being resleeved. The new posthuman opportunities also provide options for cruel and deadly sex games, which many of the male Meth's seem to require for sexual arousal. A particularly evil and manipulative operator of an exclusive brothel therefore takes the precaution of secretly reencoding all prostitutes as neo-C, so that when their mauled dead bodies are found by the police, they will not be able to be 'spun up' again to testify against their killers.

All this may be seen as enhanced varieties of conflicts and issues of exploitation, privilege, and injustice with whose basic format we are sadly familiar. That this should be so may well have to do with the

⁷ S1e7, 0:31 Quellcrist Falconer: "It's not the protectorate we're fighting. It's immortality itself. The creation of stacks was a miracle, and the beginning of the destruction of our species. A hundred years from now, a thousand, I can see what we will become. And it's not human. A new class of people, so wealthy and powerful, they answer to no one and cannot die. Death was the ultimate safeguard against the darkest angels of our nature. Now the monsters among us will own everything, consume everything control everything. They will make themselves gods and us slaves. [...] if we do not stop the curse of eternal life in our realm our children will inherit despair. The ebb and flow of life is what makes us all equal in the end. The Uprising must end immortality."

⁸ S1e7, 0:44 Quellcrist Falconer: "Eternal life for those who can afford it means eternal control over those who can't. that is the gift I gave humanity."

idea that science fiction often uses scenarios based on technical progress which is not currently available, in order to mirror problems and conflicts of our own societies back to us.

What it does not do, however, is take us out of, and beyond the horizon of the problems characteristically associated with our modern notion of the human. On the contrary, it remains essentially concerned with human embodiment, and with equality and inequality, with the universality of norms and rights, and the infractions against these norms and rights.

In fact the story insistently reverts these posthumans to human universals. Cf. the following quotes:

Kovacs, as voiceover in the mode of the hardboiled detective (think of Marlowe in the Maltese Falcon):

"Technology advances. But humans don't. We're smart monkeys and what we want is always the same. Food, shelter, sex, and in all its forms, escape" (s1e2 0:25) or again:

"Humanity has spread to the stars. We set out like ancient seafarers to explore the limitless ocean of space. But no matter how far we venture into the unknown, the worst monsters are those we bring with us." (S1E3 0:00)

Season finale, Lizzie (who has done psychotherapy in virtual reality, guided by the AI Poe, who fell in love with her in the process): "It's time for you to send me away." Poe "I can't." Lizzie: "You can. You do. You already have. You gave me so much. Whatever it means to be human, Eddie... you are." (S1e10 0:09) -- Giving Poe the strength to release Lizzie out of VR, and to instantly turn to a baddy threatening him and pronounce: "You don't deserve to be called human, you despicable creature." (S1e10 0:09)

What I would like to show with these few references, is that *Altered Carbon* is far from devising a posthuman outlook that would essentially differ from the concerns, issues and problems with which we are familiar from the our now globalised modern human societies.

It is still a very worthwhile piece of serial TV. Its focus on focus on issues of privilege and longevity ring particularly strong in the context of a pandemic where the modalities and the costs of ensuring the longevity of the largest possible number of people, primarily within the responsibility of the nation states, are under almost permanent and intensive debate.

But it also suggests that much of the discussion around the 'posthuman' ultimately reverts to and reiterates features of the discussion we have been having – not forever, but for a few hundred years now – about 'the human'. And it implies that in order to make sense of the discussion around the posthuman (triggered, among other things, by scenarios of human enhancement), a recognition of the significant structural continuities that exist between the two debates is a much better starting point for any analysis, than the assumption that something new and unprecedented is going on in the case of the posthuman, while the 'human' can be left unexamined, simultaneously taken for granted rather than mapped according to its discursive history and to its specific constructions and corresponding functions within this history.

6.

[This is where I was planning to turn to Oryx and Crake as an instance of how literary fiction engages with future scenarios of human enhancement and posthuman societies. Given the fact that I am already inexcusably late with this draft paper, and that it is already overrunning the prescribed length for draft papers in an inexcusable way, I beg to be allowed to postpone this discussion, along with with the discussion of many other materials that I may not know and that your may draw my attention to, to the question and discussion time allocated for this paper.

Thank you for reading thus far and for all your coming comments, questions and responses.]