



Machines: to Have or to Be?

Small (Trans-, Post-, Bio-) humanistic
Thought Experiments

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Mai 2023

Keywords

Machines, artificial intelligence, humanism, cyborg, transhumanism, posthumanism

Abstract

When we think about “machines”, or “robots”, or “AI”, what comes to our minds is generally an extension of our common relationship with objects in our humane and mundane world: there is a clear distinction between the subject, “we”, and the object. Upon review of some of the most important literary trends of the last centuries, this article invites us to consider the prevalence of this classical ontological division, taking into consideration examples such as Frankenstein, the “brain in a vat” thought experiment, and the last advances towards the reality of “cyborg” beings. The question behind the article brings us to consider to what extent an absolute division between us and machines is still a thing in our days.

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To quote this article: Haupt, Sabine. 2023. “Machines: to Have or to Be? Small (Trans-, Post-, Bio-) humanistic Thought Experiments” *Journal of Ethics in Higher Education* 2(2023): 111–130. DOI: 10.26034/fr.jehe.2023.4043 © the Author. CC BY-NC-SA 4.0. Visit <https://www.globethics.net/jehe>

1. Introduction

The decline of the Western world is not imminent¹. At least not immediately. Humanistic thinking and acting are not endangered by computer-controlled prostheses that allow the blind to see again, the handicapped to walk again, or the heart-diseased to breathe again. And if complex interconnected computers contribute to increased traffic safety, a more sustainable use of natural resources, or better disease prevention, that is certainly commendable as well. However, as soon as one goes beyond the enumeration of such clearly positive examples, the assessment of so-called “human enhancement”, the technical “improvement” of the human body, becomes problematic. Where does the human end and the machine begin? Will the European Court of Justice someday have to decide whether a cyborg, that biotechnical hybrid known from science fiction films, half human, half machine, is the owner of their implanted devices and interconnected replacement organs? Or conversely, at what point of perfection or complexity should something like human rights be granted to an independently, possibly even “conscious”, thinking machine?

Perhaps these developments are just a matter of getting used to something new/our new reality/the new situation we find ourselves in, similar to the adaptation to railways, electrification, and mobile phones in past centuries. Maybe in the 21st century, we will soon get used to the idea that machines relieve us of decisions and responsibility, that Google Glasses control our field of vision, Google algorithms steer our buying behaviour, Google cars determine speed and distance, or Google household appliances dictate standardized cleaning and eating habits. It is not for nothing that Google, as one of the most powerful companies in the world, has heavily invested in robotics in recent years. But what could be more legitimate and human than

¹ This article is a translated version, with permission from the author, of the article: “Maschinen haben oder sein? Kleine (trans-, post-, bio-) humanistische Gedankenspiele”. In: Knut Weber, Philipp Reitsam u.a. (Hg.): Der futurologische Kongress I. Ingolstadt 2020, S. 30-35.

the dream of a healthy and perfect human, of a better and more comfortable life, the desire for a kind of technology-supported regression into infantile comprehensive care?

2. God-like (artistic) creators

Transhumanist visions are as old as the human imagination. The fact that humans surpass their immediate reality in their imagination, that they transcend the narrow boundaries of their world through art, religion, philosophy, and science, sets them apart from other beings. Even the myths of antiquity tell of such transgressions. Prometheus, Pygmalion, and their numerous successors have early on engaged in activities as god-like (artistic) creators. World literature is full of texts in which artificial humans, so-called androids, are brought to life through magic and art, and later also through fantastic technology. Literature is the place where transhumanist thought experiments can be thoroughly considered and imagined with all their consequences - and completely without danger. Conversely, it could also be said that transhumanism and posthumanism are themselves a form of literature, a myth, a narrative, a fantasy, a discourse that can be examined like all discourses by questioning and analysing its intellectual, historical, and aesthetic elements. Personally, we are particularly interested in the fantasies, fears, and desires that are told in transhumanism and posthumanism: what ideological and emotional aspects crystallize here, from which contexts the various transhumanist “narratives” originate, and what historical, political, religious, psychological, and philosophical significance they hold.

3. Who owns the machines?

The myth of the artificial human, as mentioned, is ancient. Literature and art provide a wealth of more or less well-known examples, from Pygmalion to Frankenstein to Blade Runner and The Matrix, to name just a few of the most popular ones. However, in all these versions, it was always clear that they were fiction, allegories, satire, or philosophical thought experiments. In modern transhumanism and posthumanism, this is now changing. The

project of the artificial human is now presented, traded, and above all, sold as a real future project. According to the corresponding visions propagated by posthumanists like Google futurologist Raymond Kurzweil, humans in the future will not only own and operate machines but gradually transform themselves into machines. And this will continue until the resulting cyborg, as an intermediate stage between human and machine, is replaced by a new non-human, “posthuman” species: a fully mechanized, cybernetically structured, bodiless, and immortal artificial intelligence.

However, the question of who owns these machines has not yet been conclusively answered by any futurologist. The apologists of posthumanism imagine the self-replicating artificial intelligence, once it reaches a certain stage of development, as an autonomous entity that is no longer controllable by humans. In transhumanism, the boundary between human and machine is crossed from two sides: humans become more and more machine-like (think cyborg), while machines become more and more anthropomorphic, more “human” (think artificial intelligence or artificial consciousness). But where do these ideas and scenarios come from in the first place? What are they aiming for? Who benefits from them already today? And, another question that is becoming increasingly pressing: What could potentially oppose them?

For the aforementioned Raymond Kurzweil, the posthuman society will begin in just 30 years. Such spectacular predictions can be met with skepticism: When talking to robotics engineers, this goal seems to be still far away. The digitization of industry has only just begun and will certainly take another thirty years to reach all areas, according to computer scientists' estimates. So, we probably still have time to calmly reflect on, thoroughly discuss, and perhaps even solve some of the problems. However, this requires grappling with fundamental questions, including philosophical ones like: What is the human being, or what should they be? What is their essence? What is their worth? Why do we live? How do we want to live? Who decides our future? Who should own the new machines? etc.

All of these are fundamental questions that go far beyond the technical aspects. From an intellectual and cultural historical perspective, we see eight areas, eight thematic fields or problem clusters, which are relevant here. Eight areas in which art and literature, as well as mythological, philosophical, and religious texts, have developed ideas and concepts that are still relevant, if not central, to the current situation.

4. The android - a trivial men's fantasy

To begin, the dream of the artificial human is present in almost all religions and mythologies, through which the creative human, whether an artist or a scientist, attempts to prove their godlike qualities. The most well-known myth in our cultural sphere is Ovid's tale of the sculptor Pygmalion, who falls in love with his own statue. In the numerous later variations of this motif, the focus often revolves around creating an ideal, artificial woman. Thus, the android is initially a rather trivial male fantasy.

However, the trope of the artist as a creator is also a metaphor for bringing art to life, for the perfection of the artwork itself. The artificial human represents the most radical and consistent pursuit of the absolute artwork.

Because in this highest act of creation, the artist's creative power is most visible. They are the master of life and death, they have godlike control over mind and matter - at least according to the aesthetic utopia that emerges in the late 18th century. In contrast to the optimism of the transhumanists, literature at this time is predominantly pessimistic, or rather, “dystopian”. This was already the case around 1800, when fears of technification and industrialization first became a theme in literature. Goethe's ballad *The Sorcerer's Apprentice* (*Der Zauberlehrling*) from 1797 is one of the first and most famous examples. Goethe's story ends well, but literature of the 19th and 20th centuries is far more pessimistic.

The ironic twist of all transhumanist and posthumanist narratives is that through this kind of self-empowerment, humans might ultimately abolish themselves. The most recent publication, explicitly addressing this idea, is a book by Israeli historian and anthropologist Yuval Noah Harari,

provocatively titled: *Homo Deus* from 2015. The view following which: “Humans will lose their economic and military usefulness, hence the economic and political system will stop attaching much value to them” (Harari, 356, 2015)², is one of Harari's central thoughts.

The motif of the artificial human is thus imbued with a great deal of ambivalence from the beginning: the allure of exercising divine power is always accompanied by the fear of losing control over one's own creation or, in the ultimate consequence, being dominated and abolished by it.

What is now perplexing is that this extremely well-known, indeed central narrative pattern is completely ignored in the writings of transhumanism and posthumanism. The artificial creatures here are not hybrid monsters, suffering beings, or even satanic demons; on the contrary, as seen by one of their most prominent proponents, Canadian-Austrian roboticist Hans Moravec, they are our improved descendants, our exceedingly happy children.

5. A sorcerer's apprentice from Ingolstadt

Even Victor Frankenstein, Mary Shelley's unfortunate “sorcerer's apprentice,” harbours this dream of a better human as he begins his plans to create an android in Ingolstadt³:

² Yuval Hoah Harari, *Homo Deus. A Brief History of Tomorrow*, London: Vintage, Penguin Random House, first publ. 2015, [Editor Note: quoted from 2017 ed.], Ch. 9, 356. The idea that “war is obsolete”, present in Harari's work, may invite the radical shift from Harari's “liberal peace” into a new more troubled time paradigm in 2022, when the war in Europe, and the means of production and exchange, including military and cyber tactics, resemble a sorcerer who can no longer control the infernal powers he has evoked. [Editor Note].

³ Mary Shelley. 1818. *Frankenstein*, New York. Booklover's Library, 2022.

“ What glory would attend the discovery if I could banish disease from the human frame and render man invulnerable to any but a violent death! [...] A new species would bless me as its creator and source; many happy and excellent natures would owe their being to me. No father could claim the gratitude of his child so completely as I should deserve theirs. (Op. cit., 20, 29)

Victor Frankenstein aspires to surpass the boundaries of human existence and, through the creation of an artificial being, establish a new race. He is consumed by the idea of overcoming death and liberating humanity from suffering. However, his creation becomes a nightmare, as the android he brings to life turns into a monster, wreaking havoc and death. Mary Shelley's novel *Frankenstein* from 1818 poignantly explores the dangers and ethical questions surrounding the pursuit of artificial life and the manipulation of nature.

In both examples, whether Pygmalion or Victor Frankenstein, it becomes clear that the dream of an artificial human not only embodies a utopian notion of perfection and power but also carries risks, loss of control, and ethical dilemmas. Literature has long examined and portrayed these themes, serving as a warning against the potential consequences of such human hubris. Moravec refers to the artificially created intelligence by humans as “mind children,” as titled in his most famous book, in which he defines the evolution of robots as an ethically and morally superior development of humans. According to Moravec, we will one day love robots as our own children:

“ I see these machines as our offspring. [...] And we will love our new robot children because they will be more pleasant than humans. We don't need to incorporate all the negative human traits that have existed since the Stone Age into these machines. Back then, these traits were important for human survival. Today, in our large civilized societies, these instincts no longer make sense. [...] A robot

does not possess all of that. It is a pure creation of our culture, and its success depends on how this culture continues to evolve. It will fit in much better than many humans do. We will like them, and we will identify with them. We will accept them as children - as children who are not shaped by our genes but whom we have built with our hands and our minds.

6. The dream of human immortality

The potential dangers of abuse and social and political manipulation through Artificial Intelligence can, according to the widely quoted thesis of Swedish philosopher Nick Bostrom, best be addressed by having a “good” superintelligence, one that is competent and benevolent, take control of our planet as soon as possible. Political philosophy is familiar with this idea of a good and just ruler, invoked since Plato in the history of totalitarianism. At this point, the philosophical and political deficiencies of transhumanism become dramatically apparent.

The second narrative we would like to address is the likely even older dream of human immortality, which is already a central motif in the Epic of Gilgamesh, one of the oldest literary works in the world. The various religious concepts of soul migration and rebirth also belong to this context, as do myths and fairy tales in which heroes and heroines awaken from a hundred-year slumber. The quasi-religious vision of transhumanism suggests that the gradual overcoming of biology, which is inherently connected to disease and death, would enable increasingly longer, possibly eternal life. At the end of this development stands the fully technologized human or their immortal memory loaded onto an immaterial information carrier through "brain upload." The abolition of death is perhaps the most powerful promise intended to persuade humans to transform themselves into machines.

A third point would be the idea of progress that emerged in the 18th century, the notion that human history follows a specific purpose, a telos, serving as a replacement for the older Christian narrative of salvation. For the

enlightened intellectual, the goal is no longer the Kingdom of God and redemption from sins but the improvement of human living conditions.

For the French philosopher and mathematician Nicolas de Condorcet, one of the co-founders of the idea of progress, human progress was primarily a moral and political category. The purpose of progress is the pursuit of happiness, as stated in the American Declaration of Independence of 1776. Transhumanism also argues with this pursuit of human happiness. The justification for research in the field of genetic engineering or neuro-enhancement is still the improvement of human living conditions. However, posthumanist thinking has departed from this ethical foundation. In posthumanism, the idea of progress has become detached and has turned into an end in itself. In a world without humans, “happiness” is no longer a relevant value. The category of “progress” that seeks to meet human needs is replaced here by the idea of a superior, quasi-natural law-like evolution to which humans must submit themselves.

7. The great ideal of ethics

Transhumanism and posthumanism, therefore, draw upon the 19th-century biological theory of evolution, specifically Charles Darwin's notion of an inherent dynamism within nature for the advancement and higher development of biological species. This theory gradually came to be applied to social realms in the early 20th century. The terminology of transhumanism also belongs to this context. The word was coined in 1957 by biologist and philosopher Julian Huxley, the first Secretary-General of UNESCO and brother of writer Aldous Huxley, whose science fiction novel *Brave New World*, published in 1931, became one of the most well-known dystopian works depicting a totalitarian state. Julian Huxley was also involved in formulating the Universal Declaration of Human Rights in 1948. He is one of the key proponents of the so-called “evolutionary humanism”, whose first commandment states: “Serve neither foreign nor domestic gods but the great ideal of ethics, which is to alleviate suffering in the world!” Thus, transhumanism, from an ideological and conceptual standpoint, is initially a humanistic utopia that draws a cultural conclusion

from Charles Darwin's theory of biological evolution, suggesting that modern secularized humans are ethically responsible for their further evolution⁴. Julian Huxley was also one of the most important theorists of socialist eugenics.

In contrast to the fascist eugenics of National Socialism, Huxley was not concerned with forced sterilization or the murder of supposedly “unworthy life”, but initially focused on improving living conditions through better hygiene and nutrition. However, he also entertained various ideas of genetic manipulation and selective breeding to enhance human genetics.

In contemporary posthumanism, this social dimension of the concept of evolution is entirely lost. Human happiness or human suffering no longer matter. Evolution, in a way, surpasses humans. What matters is the most efficient transmission of information, which can be achieved faster, more targeted, and more accurately through cybernetics than through biological genetics.

The idea of transhumanism and posthumanism predates the term itself. The Huxley brothers were particularly influenced by various essays of the 1920s, including those by J.B.S. Haldane and John Desmond Bernal. However, even the American author Herbert George Wells, often regarded as one of the pioneers of science fiction (alongside Jules Verne), posed the most fascinating question in the world at the end of a speech titled “The Discovery of the Future” in 1902: “What comes after humanity?” This is a question also posed by Michel Foucault at the end of his famous work of history of science, *The Order of Things*, published in 1966, where he considers, through a thought experiment, the “imminent end” of humanity⁵.

⁴ Editor Note: See also Julian Huxley's work: *Religion without Revelation*, London/New York: Harper, 1927, 381p.

⁵ French: *Les mots et les choses*, Paris: Gallimard. Foucault, M. (1970). *The Order of Things* (2nd ed.). Routledge.

8. Unholy alliances

In certain conditions, as Foucault suggests, “one could well bet that humans will disappear like a face on the seashore erased by the sand”. Although Foucault did not specifically have in mind the transition from the “Anthropocene” to the “Machinozoic”, the underlying philosophical thesis is that humans are neither the pinnacle of creation nor the end of evolution. This perspective is directly related to the fifth aspect of our historical analysis. It is noteworthy that numerous science fiction novels have developed scenarios of apocalypse, drawing on a long religious and literary tradition. The narrative archetype here is the New Testament's Book of Revelation by John of Patmos, which envisions that the new and redemptive can only appear once the decadent old has disappeared in a radical, spectacular, and violent manner. There are clear historical and ideological connections between religious-apocalyptic thinking and totalitarian thought, particularly in the early 20th century. Cultural scholar Klaus Vondung explored these connections in his work: *The Apocalypse in Germany* (Die Apokalypse in Deutschland) three decades ago⁶. At times, it almost seems as if this unholy alliance between the longing for progress and apocalyptic thinking is gaining prominence once again in political discourse. For some posthumanists, the idea that humanity may soon vanish from this planet and be replaced by a new, more capable, and resistant intelligence is enticing.

9. Is our reality just an illusion?

Another aspect concerns the ancient question of personal identity, specifically the question of the connection between body and mind, matter and soul.

To what extent are we truly individuals, indivisible holistic entities? What is the basis of our uniqueness? Do we actually possess a - perhaps even immortal - soul, or is it all just an illusion, an ideological construct? Are we

⁶ German original: *Die Apokalypse in Deutschland*, München: Deutscher Taschenbuch Verl, 1988. Engl. translation: University of Missouri Press, 2000.

perhaps just pure matter, manifesting in multiple forms and unstable personalities? Is consciousness an epiphenomenon, an accompanying condition of matter? Or is it a special form of information processing that is not necessarily tied to a specific physical carrier? Just structure, information? So that, as Raymond Kurzweil claims, it would be possible to store, upload, and network individual consciousness. He describes the mechanism of such an upload as follows:

“ Brain upload means scanning a brain in every detail and recreating it in another suitable medium. After that, the personality and all memories and abilities of a person would be captured.

In his dialogues from 1956, inspired by the principle of Platonic dialogues, the Polish science fiction author Stanislaw Lem expresses skepticism about the principle of uploading or creating an exact copy of consciousness. He explicitly leaves the question of personal identity open:

“ Whether the copy that arises after your destruction is truly YOU, and whether such a possibility thus opens up the chance for you to be reborn - that proof still needs to be provided.

10. Myth of the universal simulation

Almost sadistic nightmarish visions of such brain uploads can be found in Thea von Harbou's novel *Metropolis* (1926), the basis for Fritz Lang's famous film, as well as in the appendix to Oswald Wiener's satirical avant-garde novel: *Verbesserung von Mitteleuropa* (1969), which describes violent adjustments (operations, infusions, amputations) for the creation of the so-called “bio-adapter”, an early form of cyberspace.

As a precursor to the concept of cyberspace, the following should be considered: *the myth of the universal simulation*, a recurring scenario that has been explored in various facets, particularly in modern cinema. This concept has its roots in Plato's famous “Allegory of the Cave”. The underlying epistemological question is: What if our reality is just an

illusion? What if everything is merely fabricated by an all-powerful machinist, an evil spirit as feared by Descartes, or - in the modern constructivist version - by our own brain that imagines everything? If we are all victims of a gigantic deception, or in the solipsistic version: if only we alone are real and all other people are part of a total simulation, what then? Science fiction films like the legendary Matrix trilogy directly reference this thought experiment. In contemporary philosophy, particularly in the philosophy of mind and consciousness, such thoughts are explored. The most well-known example is the “brain in a vat” thought experiment that has been circulating in philosophical literature since the 1980s. It involves a human brain submerged in a nutrient solution and supplied with information that creates the illusion of the existence of its body and a real environment.

That such ideas are widespread, even popular, may also be related to the psychiatric context. It is fascinating to see how certain fantasies developed during a paranoid psychosis correspond to this pattern, the feeling of being fundamentally deceived and manipulated. It is therefore conceivable that this fantasy is an anthropological constant activated in philosophy, art, and certain courses of illness.

A somewhat specific example, particularly prevalent in postmodern science fiction, concerns the “deconstructed” human image articulated in the symbol of the cyborg. In the context of the so-called “cyberpunk” movement, human bodies and identities are radically shaped as cultural and technological constructs. The politically ironic cyberpunk genre emerged in the American subculture of the 1980s, and numerous dark comics and films, as well as William Gibson's famous *Neuromancer* trilogy, are part of this context. Heroes in this genre are often highly skilled hackers.

In cyberpunk, as well as in the feminist transhumanism of the same period, the focus is on eliminating the organic-natural in favour of a culture-consciousness, oriented towards artificial worlds. It often revolves around the consciously provocative political demand for a harmonious coexistence of humans and machines/robots. In her 1985 *Cyborg Manifesto*, American

feminist Donna Haraway advocates for the blurring of boundaries between technology and nature, machine and body, male and female⁷.

She pursues three goals:

- 1) the abolition of socially and culturally constructed dichotomies such as male/female, technology/nature, reason/emotion, etc.,
- 2) the dissolution of the traditional identification of women with nature, and
- 3) exploring new utopian possibilities.

According to Haraway, the stories of feminist cyborgs aim to recode communication and intelligence to undermine command and control. From a detached, non-anthropocentric perspective, all living beings are equal, whether they are humans, animals, hybrids, or conscious artificial intelligences.

11. The cyborg as a political metaphor

If we interpret Haraway's intention correctly, her focus - in contrast to Kurzweil and Moravec - is less on real technology and more on the subversive power of irony. The figure of the cyborg becomes a political metaphor here, through which a feminist postmodern perspective opposes the supposed "natural order", meaning clear and fixed identities, linear biographies, and unequivocal hierarchies and value systems. What she opposes is hybridity, freely constructed provisional identity, freedom and self-determination instead of identity based on categories such as nature or nation. According to Haraway's vision, everyone can freely assemble their desired body, their desired identity. HE or SHE or IT can determine, change, and modify roles and identities like clothes or wigs.

⁷ Haraway, Donna (2004). "Cyborgs, Coyotes, and Dogs: A Kinship of Feminist Figurations' and 'There are Always More Things Going on Than You Thought! Methodologies as Thinking Technologies". *The Haraway Reader*. Routledge. pp. 321–341.

However, how this radical concept of freedom and self-determination aligns with the actual realities of digital progress is personally unclear to me. Because all the already tangible phenomena of algorithmic standardization, normative self-optimization, and antisocial automation, in our opinion, point in exactly the opposite direction, associated with a loss of freedom and choice.

12. The question of the chicken or the egg

Interesting and crucial in the intellectual history of transhumanism is the interplay between scientific-technological inventions or mathematical-cybernetic theories on one hand, and literary-philosophical thought experiments on the other. Facts and fiction often go hand in hand and mutually enrich each other. Biologists, geneticists, cyberneticians, robotics engineers, bioinformaticians, and neurologists often draw upon age-old human dreams unfolded in literature, perhaps often without knowing or analyzing it in detail. Thus, literature, long before the current transhumanist publications by Hans Moravec, Marvin Minsky, Ray Kurzweil, or Jürgen Schmidhuber, is the true inventor of a transhuman reality.

Current examples of this transfer can be found in the novels of Iranian-American science fiction author Fereidoun M. Esfandiary, also known as FM-2030, who laid the foundation for the new transhumanist movement with his essayistic work *Are You a Transhuman?* in 1989⁸.

But the influence of literature goes back much further, to the 19th century. Here, we especially think of the satirical-utopian novel *Erewhon* by Samuel Butler, published in 1872. The first-person narrator discovers an unknown civilization living in secrecy, which, after a revolution against the rule of machines, only uses archaic technology. Machines and modern technical devices of all kinds, even pocket watches, are forbidden. The reasons for this taboo are explained at the end of the novel in a manifesto quoted by the narrator. The central concern is the fear of machines that can think and act

⁸ FM-2030, *Are You a Transhuman?: Monitoring and Stimulating Your Personal Rate of Growth in a Rapidly Changing World*, New York: Warner Books, 1989.

independently. By the way, Butler's novel is an important source for the first part of Frank Herbert novel *Dune* and the famous science fiction series *Dune: The Butlerian Jihad*.⁹

Literature does not simply create such ideas and scenarios out of thin air. Samuel Butler was familiar with the writings of Charles Darwin, which he vehemently criticized. This more or less critical reference to the natural sciences also applies to modern authors. It is their engagement with physics and biology, cybernetics and neurology, that leads them to their literary ideas in the first place.

The question of origin, that is, what comes first: literary imagination or scientific theory, would be akin to the question of the chicken and the egg. One cannot determine what came first, the literary fictions or the scientific concepts; both are part of a dynamic developmental process in which knowledge unfolds, articulates itself, and constantly changes.

One indication of this interaction is, for example, the fact that literature accurately follows the technological development in the depiction of the creation process of androids. In antiquity, the Middle Ages, and the Renaissance, artificial humans were created through magical and alchemical procedures. This applies to the animation of Pygmalion's statue as well as to the homunculus of alchemy or the golem of Kabbalah.

It is only in the late 18th and early 19th centuries that the first, strictly technical procedures come into play: automakers and opticians, physicists, mechanics, and engineers, later also biologists and photographers, now take over the production of artificial humans. In terms of intellectual history, philosophers such as Francis Bacon, René Descartes, and Julien Offray de La Mettrie in the 17th and 18th centuries paved the way by describing the animal, and also the human body, as a machine, which now allowed previously tabooed medical-anatomical interventions. Accordingly, the

⁹ Frank Herbert. 1965. *Dune*, Chilton Books; Brian Herbert, Kevin J. Anderson. 2002. *Dune: The Butlerian Jihad*. Tor Books.

groundbreaking title of La Mettrie's famous work from 1748 is *L'homme machine*, the machine-human.

13. A human inferiority complex

Texts from the 20th century accordingly tell the story of how artificial intelligences reach a new, superior stage of evolution compared to humans and replace human life with new technological forms of existence and reproduction. Posthumanism regards humans as outdated models of evolution. The philosopher Günter Anders interpreted it as *The Antiquatedness of Human Beings*, title of his famous work from 1956, as a human inferiority complex, even as self-disgust in the face of one's own physical frailty, as “Promethean shame” in which modern humans compare themselves to the perfection of machines¹⁰.

Of course, we can surrender to this development, participate, and be enthralled by all the digital marvels and innovations of transhumanism. Maybe we only participate half-heartedly and reluctantly, out of fatalism, convenience, or thoughtlessness, integrating ourselves into the digital world by obediently uploading our personal data, becoming transparent, adapting to standardized algorithms that calculate what we should eat, how much we should weigh, what we should know, whom we should love.

We can do this trustingly if we believe that no matter how sensitive and intelligent a person may be, they can never know as much about themselves as a perfectly regulated algorithm. And for those who do not want or cannot participate in this development, they will be taken care of as well as possible: with a state-mandated and calculated basic income, with antidepressants, computer games, cybersex.

All this will be available. Yes, why not? Perhaps it is fortunate to be a machine: devoid of drives and desires, fully provided for in a virtual

¹⁰ Günter Anders, *The Antiquatedness of Human Beings* (Die Antiquiertheit des Menschen: Über die Seele im Zeitalter der zweiten industriellen Revolution, München: C. H. Beck, 1956).

manner. Oswald Wiener has already envisioned this form of desublimation and alienation with his “bio-adapter” until its totalitarian end back in 1969.

14. Living with robots

Do we want to? And if not, why not? It is important to think about this, to become clear about what we actually expect from life, from ourselves, and from our fellow human beings. It is not sufficient to simply be reflexively-unreflective and be “against” it because we cannot imagine that the promises of transhumanism can work at all, because much of it is technically not feasible, or because we assume that the social and political problems in transhumanism will not be solved but rather worsened. This is especially true since material inequality is increasing (paradoxically parallel to growing cultural standardization). While these are indeed realistic criticisms, they may not be sufficient in the long run. What if in 50 or 100 years more and more transhumanist projects actually work? Would we be in favour then?

Why not live together with humanoid robots who take away the burden of everyday life, take out the trash for us, take care of us in hospitals, maybe even talk to us or provide sexual satisfaction when we are lonely? If life and consciousness are indeed predictable, material phenomena, then there is no reason beyond our discomfort to argue against the concept of the “homme-machine”.

Yet if we take our discomfort seriously in the face of such scenarios, then we should delve into it mentally, even as enlightened, liberal-humanist, not necessarily spiritually-oriented materialists. We should consider our concept of humanity, reflect on how a non-materialistic, non-informational understanding of life and consciousness could be conceived. And by that, I mean more than an ethical-political concept.

What makes a human being human? What do terms like “life” and “consciousness” mean? Are thoughts and feelings truly “matter” and thus mechanically producible? What role does the body play in this? Is there such a thing as somatic autonomy? These are questions that are currently

being discussed under the heading of “embodied cognition” by philosophers, neuroscientists, and roboticists.

Perhaps it would be possible to counter the animism attributed to artificial intelligence, which is the naive yet arrogant belief in the creation of synthetic consciousness, and thus the “vitality” of machines, with a different animism, possibly equally irrational, but which has a different cultural and political connotation. It is a way of thinking and living that does not view the body solely as a functional unit, regulated and simulated by information, but as an impulse or drive, as experience, as spontaneous uncontrollability¹¹. A kind of “bio-humanist” attitude that does not exclusively identify what we experience as “self” with the brain and information. With the necessary ideological caution, perhaps we could critically revive the old animistic-romantic concept of an animated nature, and counter the speculative realism of a world of objects, conceived as independent of humans, which amounts to confront the totalitarian “naturalization” of technology with the re-naturalization of nature and the human body.

15. The puzzle structure of art

In similar context, our final question would be about the specific task of literature, on how it could oppose/counter/challenge the standardization of the digital human image, the binary yes-no, like/dislike schema. We believe it can do a lot here because good, free, original art and literature thrive on ambivalence and ambiguity. It is about representing and enduring

¹¹ Comment by the Editor: uncontrollability (Unverfügbarkeit) may refer to an idea found in the Hartmut Rosa’s work the *Uncontrollability of the World*, transl. J. C. Wagner, Polity Press, 2020. We speak of the experience of uncontrollability following Rosa, when “we are called” by some type of experience and “we react and respond” to it, provided some further conditions. E. g. with “falling snow”, we react as we get “a feeling of inner change or transformation” and the assumption, or “hope it might be worth engaging more closely” with that, which appeals to us, precisely because “we not fully understand it, nor have not yet exhausted it”. We don’t know exactly at what time t1 snow falling starts, when it might stop at t2... (Ibid. p. 49).

contradictions. This is about dialectics, about the “riddle-character” of art, as Adorno called it.

The precursors are, among many others, Samuel Beckett and Franz Kafka. Role models are here to be unpredictable, creative beyond clear rules, expectations, and predefined patterns. That does not mean equipping a text generator with a random principle, but rather something similar to creative madness with relevance.

The lack of openness and ambiguity in digital codes was also one of the central theses of computer specialist Joseph Weizenbaum, who, after developing the legendary language program ELIZA, warned vehemently about the “power of computers” in the mid-1970s. Instead of Weizenbaum, we would rather let a great and wise writer have the final word, namely Brigitte Kronauer. She also emphasizes the central role of ambiguity and ambivalence as agents of human freedom and human culture.

“ Our recognition and exploration of ambivalences - a thinking that always seeks alternatives to apparent inevitabilities - and our ability to cope with them is a civilizing act and a strenuous prerequisite of culture. It is already culture and the opposite of any form of fundamentalism.

Naturally, this also includes any form of digital fundamentalism.

16. Short biography

The Swiss/German intellectual, novelist and literary scholar Sabine Haupt (born in 1959 in Gießen, Germany) is living and working in French-speaking Switzerland. Professor Haupt teaches General and Comparative Literature at the University of Fribourg (Switzerland). In addition to her academic work, she also publishes for the press, radio, and television. Her most recent novels are: in 2022. *Die Zukunft der Toten*, 216p.; 2021. *Lichtschaden. Zement*, 321p., and in 2018. *Der blaue Faden. Pariser Dunkelziffern*, 520p., publ. in Biel by Die Brotsuppe. See also: <http://www.sabinehaupt.ch>. Email: sabine.haupt@unifr.ch