Is the human species soon to be extinct?

5

Transhumanism

With the twenty-first century tech revolution, it appears that humanity is on the cusp of* a new stage in its evolution. Operating a drone via brainwaves, using a prosthetic arm that has a usb port and laser, having a camera for an eye: The experiments conducted in the labs of scientists or even in the basements of self-dubbed* biohackers seem to *come right out of* a science-fiction novel. But the question is: Are these DIY* experimenters real pioneers or are they coaxing the future into existence*? *To put it in other words*, is technology offering us the promise of a better life or do these technological advances *pave the way for* a *dystopian* future?

> on the brink/verge/
> threshold of
>
> self-named
>
> do it yourself
> be one step ahead /
> anticipate (negative
> connotation)

People *tend to* agree with the idea of using technology to *overcome* physical limitations that were caused by an accident, a disease, or a genetic condition. The use of devices to make up for* a lost limb or an impaired* sense is nothing new: *think of* hearing aids, false teeth and prosthetic arms. Transhumanists are just bringing it to a new level. Helping the sick, the injured and the elderly to treat their ailments* or overcome their physical limitations seems quite a noble mission for the tech pioneers.

> compensate
>
> damaged
>
> their illnesses

It also appears that biohackers are individuals who think outside the box*: their experiments also bring about novel* forms of art. Well-known in the cyborg world is the artwork of Neil Harbisson, who perceives colours through vibrations thanks to an antenna implanted in his skull. Another quaint* example is that of Moon Ribas, an artist who dances to the tremors of earthquakes that she can feel through the vibrations of an online seismic sensor implanted in her feet.

> think differently/
> unconventionally
> original
>
> odd and original

However, the goal of transhumanism *goes far beyond* a simple form of body art or a palliative solution. It indeed aims at transcending* our human condition by improving our senses and eventually, staving off* ageing and, ultimately, death.

> go beyond
>
> counter

First, transhumanism can be seen as a way of becoming an improved model of oneself. Bionic implants and cognitive enhancements could augment our senses, for example, providing us with senses that some animals have, such as night vision or ultrasonic hearing capacities, or giving us the ability to control magnetic fields. As

a result, this would *boost our performance* in our everyday life, making us more efficient or able to *complete tasks faster*. In some fields, this could have tremendous consequences. For example, the use of high-tech prostheses such as carbon blades by athletes could greatly improve their performance. In the US military, powered suits* and exoskeletons are developed to increase the strength and endurance of the soldiers.

wearable mobile machines powered by technologies to increase strength and endurance

However, these ambitions *raise great ethical concerns*. One of the risks is that they might *create greater divides* in a society where not everyone would be able to *afford* these technological enhancements. As a consequence, these technological breakthroughs* could actually generate more inequalities as well as engender discrimination. It might indeed create a new breed* of cyborgs or superhumans against which simple humans could not compete on the job market or in sports. Even worse, it might also mean that at some point the human would be made redundant*. What is more, these new devices contain unpredictable potentials, often unanticipated by their creators. It thus becomes quite tricky to *foresee* the impact such technologies can have on society and makes their regulation an intractable* problem.

advances
species

obsolete

unsolvable

Ultimately, *advocates of transhumanism* dream of the day when humans can free themselves from the limits of their body. Even though the fascination with immortality *goes a long way back*, with our current culture of youth and fear of ageing, the idea of using technology to overcome the effects of ageing has never looked so enticing*. Since the 1960s, cryonics* has seduced quite a few people as a way to transcend death. Nowadays, some transhumanists dream of being able to upload their mind to a hard drive and escape death to achieve digital immortality, or replace organs with artificial ones to extend the human *lifespan*. However, tinkering* with life and death seems like a hazardous enterprise*. Moreover, is transcending death a desirable goal? After all, isn't the awareness and acceptance of our own mortality what makes us human?

appealing
freezing of a human corpse

playing with
risky business

The twenty-first century certainly marks the advent* of a new era, in which transhumanism appears to be a central question. Some see the *eventual* integration of tech into our bodies as inevitable while others *dismiss* this scenario as a *mere* apocalyptic vision of the future. Whatever the future looks like, it seems to be crucial to make sure the implications are considered and debated. What also appears urgent is to put biohacking at the top of the legal and political agenda. How will tomorrow's world be shaped? No one

marks the beginning of

can answer that question for sure. But what is certain is that it is up to us, the citizens of the world, to *devise the rules* and *establish the boundaries* of that technological and biological revolution.

Basic vocabulary

come right out of = F *tout droit sorti de* **to put it in other words** (used to introduce a reformulation) = to say it differently **to pave the way for** = to prepare the ground for, to make something possible **dystopian** = nightmarish (adjective derived from the noun "dystopia," the antonym of "utopia," the idea of a perfect society living in harmony) **people tend to** (used to evoke a generality or a common opinion) = Generally, people… **to overcome (difficulties, obstacles)** = F *surmonter* **think of** (used to introduce an example) = for example **to go far beyond** = F *aller bien au-delà de* **to boost our performance** = to improve our abilities, capacities **to complete a task** (coll.) F *réaliser une tâche* **to raise great ethical concerns** = F *soulever des problèmes d'ordre éthique* **to create a greater divide** = to widen the gap **to afford** = to be able to buy something **to foresee** = to predict **ultimately** = finally, lastly (usually to emphasize the most important point) **advocates of transhumanism** = proponents of transhumanism **it goes a long way back** = it has been here for long **lifespan** = F *durée de vie* **eventual** (FA) = last **to dismiss** = to ignore, to disregard, decide not to consider **mere** = simple **to devise the rules** (coll.) F *concevoir, élaborer les règles* **to establish the boundaries** (coll.) F *établir les limites*

Notes

1 **Biohacking** refers to "The activity of exploiting genetic material experimentally without regard to accepted ethical standards, or for criminal purposes." (*The Oxford Dictionary*)

2 **Cryonics** refers to "The practice or technique of deep-freezing the bodies of people who have just died, in the hope that scientific advances may allow them to be revived in the future." (*The Oxford Dictionary*)

3 **Genetic engineering** refers to "The deliberate modification of the characteristics of an organism by manipulating its genetic material." (*The Oxford Dictionary*)

4 **Humanity+** (read Humanity plus) is an international organization that advocates the use of technology to enhance human capacities.

advocate = promote

5 Ray Kurzweil and the singularity

Ray Kurzweil is a director of engineering at Google, an inventor and a futurist.

"Ray Kurzweil is an engineer who has radically advanced the fields of speech, text and audio technology. He's revered for his dizzying — yet convincing — writing on the advance of technology, the limits of biology and the future of the human species." TED Talk

https://www.ted.com/speakers/ray_kurzweil

"To people who work with tech or who are interested in tech and who are familiar with the idea that Kurzweil has popularised of "the singularity" – the moment in the future when men and machines will supposedly converge – and know him as either a brilliant maverick and visionary futurist, or a narcissistic crackpot obsessed with longevity, this was headline news in itself." *The Guardian*, Feb 2014 (Are the Robots about to Rise?)

*https://www.theguardian.com/technology/2014/feb/22/
robots-google-ray-kurzweil-terminator-singularity-artificial-intelligence*

to revere someone = to admire someone, to worship someone / **dizzying** = making someone feel unsteady, confused, or amazed / **a maverick** = non-conformist / **narcissistic** = vain and self-centered / **a crackpot** (informal) = an eccentric or crazy person / **to be headline news** = *F faire les gros titres*

For further information

▶ Quote 1

Two definitions of transhumanism

"Transhumanism is a loosely defined movement that has developed gradually over the past two decades. 'Transhumanism is a class of philosophies of life that seek the continuation and acceleration of the evolution of intelligent life beyond its currently human form and human limitations by means of science and technology, guided by life-promoting principles and values.' (Max More 1990)"

https://humanityplus.org/philosophy/

"Though the term was coined by biologist Julian Huxley back in the late 50s, transhumanism as an organised movement is just a quarter-century old, conceived by a group of Californian academics, inventors, entrepreneurs and artists committed to the idea of engineering an improved human race."

https://newhumanist.org.uk/articles/1497/future-perfect-the-transhumanist-quest-to-defeat-death

> **Quote 2**

An excpert of the Transhumanist Declaration

"1. Humanity stands to be profoundly affected by science and technology in the future. We envision the possibility of broadening human potential by overcoming aging, cognitive shortcomings, involuntary suffering, and our confinement to planet Earth.

2. We believe that humanity's potential is still mostly unrealized. [...]

3. We recognize that humanity faces serious risks, especially from the misuse of new technologies. [...] Although all progress is change, not all change is progress.

4. Research effort needs to be invested into understanding these prospects. [...] We also need forums where people can constructively discuss what should be done, and a social order where responsible decisions can be implemented. [...]

6. Policy making ought to be guided by responsible and inclusive moral vision, taking seriously both opportunities and risks, respecting autonomy and individual rights [...] We must also consider our moral responsibilities towards generations that will exist in the future. [...]"

https://humanityplus.org/philosophy/transhumanist-declaration/

broadening = widening / **misuse** = wrong use / **prospects** = future possibilities

> **Quote 3**

An artist's vision of transhumanism

"Biological evolution is being surpassed by technological evolution. As technology and access to technology becomes ever more democratised it fosters a culture of hacking, disruption and invention allowing the individual to design their own evolution or even strive for immortality. Although they come from distinctly different backgrounds, from academia through to experimental bedroom hackers, transhumanists remain passionate about how technology can improve the world or improve the human experience in the world."

David Vintiner, *Futurists* (photography)
https://davidvintiner.com/projects/futurists/

foster = promote / **strive for** = work hard to achieve

> **Quote 4**

Book review: *To Be A Machine* by Marc O'Connell

"Would you pay to freeze your head upon death? Do you long to free your mind from the "meat" that hosts it? Is ageing a disease? [...] It's fair to assume that you've never pondered such things. After all, life's too short, as any proponent of transhumanism will tell you. But after digesting Mark O'Connell's adventure

amongst its adherents, such questions will overwhelm what a biohacker might call your "wetware", or what the unenlightened might call the brain. *To Be A Machine* is a portrait of a movement that believes biology is our keeper, death our great disgrace and technology our redeemer; a "liberation movement", O'Connell calls it, "predicated on the conviction that we can and should use technology to control the future evolution of our species".

[...] What fate, one wonders, could one day await those mere mortals who defy their duty to upgrade? If we fail to be fixable, might we in turn become disposable?"

<div align="right">written by Alice Bloch July 2017, The New Humanist
https://newhumanist.org.uk/articles/5210/book-review-to-be-a-machine</div>

ponder = think about, consider / **overwhelm** = F *surcharger* / **wetware** (computing) = human brain / **unenlightened** = ignorant / **redeemer** = F *rédempteur* / **predicated on the conviction** = built on the idea / **disposable** = F *jetable*

▶ Quote 5

An internet user's opinion on immortality

"Immortality, while seemingly amazing, would be extremely destructive to all of humanity. We could become careless with our life choices; we would have eternal 'do-overs.' Achievements would mean nothing because the amount of time given to us is enough to complete anything. The many shortcomings that we experience can either make or break our mindsets. For many, they boost our need for a higher meaning in life – we want to 'seize the day.' Arieff told us that her losses and gains have made her realize the value of life. 'It is the knowledge of how quickly, sometimes tragically, things can change or disappear that fuels my urgency to be in the present,' the author says. Also, criminals have endless opportunities to kill or rob, dictators and their armies could control a country forever, and consequences could lose their meaning with the inflation of time. If we could create technology that supported the human body forever, it would no doubt be expensive. The costly catch would create another barrier between the upper and lower classes. The wealthy could abuse this technology, possibly leading desperate poorer groups to servitude just for immortality."

<div align="right">https://www.nytimes.com/2018/11/15/learning/would-you-want-to-live-forever.html
Comment on a New York Times article (Would You Want to Live Forever)
Zoe Lee; Hoggard, Wilmington, NC; Feb. 21 2019</div>

seemingly = apparently / **careless** = F *négligent* / **do-over** = F *recommencements* / **seize the day** (Lat. *carpe diem*) = live your life to the fullest, live in the present

▶ Quote 6

Watch the documentary Transhumanism: Could we live forever? by BBC News

<div align="right">https://www.youtube.com/watch?v=STsTUEOqP-g</div>

Transhumanism

transhumanism, posthumanism	*le transhumanisme, le posthumanisme*
cyborg (half-android, half-human)	*être hybride (homme-machine)*
pioneers, trailblazers	*pionniers, innovateurs*
AI [eɪˈaɪ] artificial intelligence	*IA l'intelligence artificielle*
technological, medical, scientific breakthroughs / advances	*les progrès technologiques, médicaux, scientifiques*
bioengineering	*la bioingénierie*
genetic engineering [ˌɛndʒɪˈnɪərɪŋ]	*l'ingénierie génétique*
gene editing	*la manipulation des gènes*
eugenics	*l'eugénisme*
technological enhancements	*améliorations technologiques*
technological devices	*des dispositifs technologiques*
bionic implants	*des implants bioniques*
brain implants	*des implants cérébraux*
a bionic hand, arm, etc.	*une main, un bras bionique*
prosthetic limbs (arm, hand, leg, etc.)	*des prothèses*
high-tech prostheses	*des prothèses high-tech*
exoskeleton	*exosquelette*
cognitive enhancements	*améliorations cognitives*
to enhance (our bodies, our cognitive abilities)	*améliorer (notre corps, nos capacités cognitives)*
virtual reality (VR)	*réalité virtuelle (computer simulation that implies a complete immersion)*
augmented reality (AR)	*réalité augmentée (reality enhanced with technology)*
life extension	*prolongement de la durée de vie*
cryonics	*cryogénisation*
the afterlife	*la vie après la mort*
to play god	*se prendre pour Dieu, jouer les apprentis sorciers*
to outlive	*vivre plus longtemps que*
to outcompete	*dépasser, surpasser*
to overcome	*surmonter*
a utopia [juːˈtəʊpiə]	*une utopie*
a dystopia	*une dystopie*
cure diseases	*guérir des maladies*
eradicate diseases	*éradiquer des maladies*

A New Scientist survey about the future of science

Revealed: What the UK public really thinks about the future of science

The 2018 New Scientist Asks the Public survey reveals that people are well-informed about science and technology, but politicians are ignoring their hopes and fears
18 September 2018, By Graham Lawton, *The New Scientist*

THE UK public is well-informed and positive about science and technology, but its hopes and fears are largely being ignored by politicians. That is the key finding of an exclusive *New Scientist* survey of public attitudes to science, technology, medicine and the environment.

The 2018 New Scientist Asks the Public survey reveals that the issues uppermost in people's minds are genetic engineering, artificial intelligence, cancer and climate change. They believe these things are "most likely to have an impact on society and human life".

But people are not expecting a sci-fi apocalypse – public opinion is surprisingly upbeat. A majority of respondents expect the benefits of genetic engineering and AI to outweigh the downsides and think cancer can be cured. The poll also reveals broad support for genetically modified foods, with 69 per cent of people in favour of such crops saying they could help feed the world [...]

When it comes to AI, the government recently set up an Office for Artificial Intelligence to support this growing industry, but there has been little political debate about the possible impacts on society and human life [...]

Hurrah for genetic engineering

One unexpected finding of the survey is that 53 per cent of people support genetic engineering. This was driven mostly by its potential to cure or eradicate disease – seen as a positive by 80 per cent of the people who support the tech. Almost half of them also say they are optimistic about using it to improve human capabilities such as intelligence.

The main reason people worry about genetic engineering is that "it is too dangerous, we don't know the real consequences". Designer babies and the ethics of "playing god" also loom large, along with fears that the technology might only be used to benefit the rich [...]

Fears that tech will take over

Our survey reveals a variety of anxieties about current or near-future technology. Social media is seen in a negative light, largely because of fake news, trolls and peer pressure on young people.

Drones also stir up worries, with fears they can be used for surveillance or to deliver drugs and weapons into prisons. Brain implants are seen as highly dangerous, while virtual reality is seen as a positive, but only just. And even though 30 per cent of people say they are positive about artificial intelligence, 24 per cent are concerned about its possible downsides, such as its capacity to put millions out of work or outsmart us and take over the world. Robots inspire similar concerns.