

This copy is for your personal, non-commercial use only. To order presentation-ready copies for distribution to your colleagues, clients or customers visit <https://www.djreprints.com>.

<https://www.wsj.com/articles/looking-forward-to-the-end-of-humanity-11592625661>

## ESSAY

# Looking Forward to the End of Humanity

Covid-19 has spotlighted the promise and peril of ‘transhumanism,’ the idea of using technology to overcome sickness, aging and death.



ILLUSTRATION: BRIAN STAUFFER

*By Adam Kirsch*

June 20, 2020 12:01 am ET

It sounds bitterly ironic now, in the midst of a global pandemic, but not long ago some of the most forward-looking people in the world believed that humanity was close to abolishing death. “If you ask me today, is it possible to live to be 500? The answer is yes,” said Bill Maris, the founder of Google Ventures, in 2015. Three years later, biomedical researcher Aubrey de Grey estimated that “people in middle age now have a fair chance” of never dying.

Eternal life through advanced technology seems like a pipe dream for a society that, until recently, had trouble manufacturing enough masks to save doctors' and nurses' lives. Yet Covid-19 may turn out to be just the kind of crisis needed to turbocharge efforts to create what its advocates call a "transhuman" future. With our biological fragility more obvious than ever, many people will be ready to embrace the message of the Transhumanist Declaration, an eight-point program first issued in 1998: "We envision the possibility of broadening human potential by overcoming aging, cognitive shortcomings, involuntary suffering and our confinement to planet Earth."

Transhumanists, many of them associated with nonprofits and think tanks like Humanity Plus and the Extropy Institute, have long been driven by the fear that our entire species could be wiped out by nuclear war, asteroid collision, technological accident—or a pandemic. In March, as the coronavirus was spreading around the world, the science writer Tom Chivers observed that it proves the need for technological protection against such existential threats: "Humans could be around for a billion years, or more, if we don't screw it up. Coronavirus won't be the thing that kills us all, but it's a bloody good illustration of how something could," he wrote in the online magazine UnHerd.

---

#### SHARE YOUR THOUGHTS

---

*Do you think technology will ever make sickness and aging obsolete? Join the conversation below.*

---

People have always feared death and dreamed of escaping it. But until now, that hope has been formulated in religious terms. Transhumanism promises that death can be conquered physically, not just spiritually; and the movement has the support of people with the financial resources to make it happen, if anyone can. Jeff Bezos, Peter Thiel and Elon Musk are among the Silicon Valley moguls who have invested in life-extension research. In 2013, Google entered the field by launching the biotech firm Calico, short for California Life Company.

Transhumanists envision several possible avenues to immortality. Nanorobots could live inside our cells and constantly repair damage, halting aging in its tracks. Genetic engineering could eliminate the mechanisms that cause us to age in the first place. Such technologies are still out of reach, but transhumanists believe we will be able to master them sooner than most people think, with the help of superpowered artificial intelligence.

Ultimately, however, the hope is that we won't just use computers—we'll become them. Today, cognitive scientists often compare the brain to hardware and the mind to the software that runs on it. But a software program is just information, and in principle there's no reason why the information of consciousness has to be encoded in neurons.

Advertisement - Scroll to Continue

The Human Connectome Project, launched in 2009 by the National Institutes of Health, describes itself as “an ambitious effort to map the neural pathways that underlie human brain function.” If those pathways could be completely mapped and translated into digital 0s and 1s, the data could be uploaded to a computer, where it could survive indefinitely. The physicist Michio Kaku has theorized that this is how humanity will overcome the logistical challenges of deep-space travel: “We're going to put the connectome on a laser beam and shoot it to the moon. In one second, our consciousness is on the moon. In 20 minutes we're on Mars, in eight hours we're on Pluto, in four years our consciousness has reached the nearest star.”

---

## MORE IN IDEAS

---

[The Pandemic Made Our Relationships Stronger](#) June 26, 2021

[The Godfather of Critical Race Theory](#) June 25, 2021

[Why We Keep Telling Legends of Sea Monsters](#) June 24, 2021

[Golfing With the Father I Never Knew](#) June 19, 2021

---

This may sound like science fiction, but it's also the natural conclusion of the technological advances of the last 20 years. The internet has already made it largely unnecessary to physically visit places like banks, post offices and movie theaters, and the lockdown has given a big push to this trend. As our physical worlds shrink in an effort to avoid contracting Covid-19, our virtual worlds are expanding to make up for it. For the foreseeable future, many of us will be attending virtual schools, worshiping at virtual churches and socializing at virtual parties. And the history of the internet suggests that once things move online, they seldom move back—just ask department stores and CD manufacturers.

The pandemic is also exposing one of the biggest challenges that will emerge along with the transhuman future: new kinds of social inequality that will make the existing ones seem minor. During the months of lockdown, a sharp division emerged between people who work with information—images, words, numbers—and people who work with objects—shelving

groceries, delivering packages, nursing the sick. The former can shelter in place and communicate through screens, but the latter have to venture out into the physical world, putting themselves at risk of infection.

As technology makes it possible to escape more of the burdens and dangers of physical existence, this class and professional divide could deepen into an existential one, with a virtual elite being served by an embodied working class. Of course, wealth and power have always offered some insurance against life's risks. During the Civil War, Americans could pay a substitute to take their place in the draft; soon, you may be able to pay someone to take your place in the disease- and danger-ridden physical world, while you stay behind the safety of a screen.

A transhuman future in which mortality is optional may sound like paradise, but if it arrives sooner for some of us than for others, it could prove to be a dystopia.

*Appeared in the June 20, 2020, print edition as 'I'*

## UPCOMING EVENTS

June <b>30</b> 2021	1:00 PM - 1:45 PM EDT WSJ Pro Cybersecurity Webinar: Aligning IT and Cybersecurity
June <b>30</b> 2021	7:00 PM - 7:45 PM EDT WSJ+ Live: Daniel Kahneman and His Co-Authors on the Crisis of 'Noise'

### ADD TO CALENDAR

Copyright © 2021 Dow Jones & Company, Inc. All Rights Reserved

This copy is for your personal, non-commercial use only. To order presentation-ready copies for distribution to your colleagues, clients or customers visit <https://www.djreprints.com>.