THE BIOGENETIC HOLY GRAIL OF IMMORTALITY

"The proposition that we can live forever is obvious. It doesn't violate the laws of physics, so we will achieve it."

Arram Sabeti Founder of *ZeroCater*

"Success breeds ambition, and our recent achievements are now pushing humankind to set itself even more daring goals. Having secured unprecedented levels of prosperity, health and harmony, and given our past record and our current values, humanity's next targets are likely to be immortality, happiness and divinity."

Yuval Noah Harari Homo Deus

"Behold! I tell you a mystery. We shall not all sleep, but we shall all be changed, in a moment, in the twinkling of an eye, at the last trumpet. For the trumpet will sound, and the dead will be raised imperishable, and we shall be changed. For this perishable body must put on the imperishable, and this mortal body must put on immortality. When the perishable puts on the imperishable, and the mortal puts on immortality, then shall come to pass the saying that is written: 'Death is swallowed up in victory. O death, where is your victory? O death, where is your sting?'"

1 Corinthians 15:51-55

"The great unfinished task of the modern world is to turn death from a fact of life into a problem to be solved ..."

Peter Thiel Billionaire, futurist

"If you're under 40 reading this article [writing in February 2018] you're probably not going to die unless you get a nasty disease."

Dr. Ian Pearson Futrologist

"Get it right, and you can live in deluxe cyber-heaven, hopping into the real world as much as you like and living in unimaginable bliss online. Have too many casual taster sessions, use too much fully integrated mind-sharing social media, sign up to employment arrangements or go on corporate jollies without fully studying the small print and you could stay immortal, unable to die, stuck forever as just a corporate asset, a mere slave. Be careful what you wish for, and check the details before you accept it. You don't want to end up as just an unpaid personality behind a future helpful paperclip." (emphasis mine)

Dr. Ian Pearson

If technology allows our human bodies to live forever, would we be *living* or merely *existing*? I wonder ...

Our dining room wall formerly was adorned with one of my favorite pieces of personal artwork. (The picture is now in storage). I'm certainly not suggesting the artwork is worthy of residing in any of the world's great art museums. But it's special to me. It is a portrait in pastels and ink of Ahpeahtone, the Kiowa tribe's legendary pilgrim to the "Messiah." The portrait is based on a black and white photograph in a book I purchased at Fort Sill, Oklahoma several years ago.

I was at the Fort—as part of a training course during the Agency years—to learn about artillery warfare. While there, another classmate and I searched for Geronimo's grave. (I had no idea Geronimo was buried on the base until mentioned by one of our instructors). The grave marker was hidden on a secluded corner of the huge army base and hard to find. We finally stumbled across the grave in the waning minutes of daylight. We were unprepared for the surreal experience that followed our discovery. Several large trees stood like imposing sentinels over the great Indian chief's grave. Nearby, respectfully arranged according to hierarchical nearness to the chief, were several gravestones of his wives and tribal lieutenants. At the scene, young Indian patriots had hung bandannas in the trees. We observed dozens of red-colored bandannas descending from the branches like spooky Christmas ornaments, casting slithering shadows over the graves. An evening breeze rustled the bandannas. Almost lifelike. All of this gave the graveyard an otherworldly, eerie feel.

That scene remains permanently etched in my mind.

The lingering memory of that graveyard experience makes Ahpeahtone's portrait all the more special to me.

Ahpeahtone's personal story is fascinating. After his favorite son suffered a tragic early death, he began a quest that became an epic trek in Native American Indian lore. Since his childhood, he had heard from local missionaries as well as tribal oral legends about a "Messiah" who possessed supernatural powers. He embarked on a long and arduous search to find this legendary figure.

Why? He figured this "Messiah" was the only chance he had to see and talk to his recently departed son. Ahpeahtone's sojourn is not only a powerful story of human will, love and selflessness, but serves as an important vehicle to convey an important spiritual lesson.

In the interest of brevity, the story ends poorly. Even though Ahpeahtone eventually locates the individual described by others as the Messiah, the individual confesses he is a mere human himself and lacks the supernatural powers needed to restore Ahpeahtone's son. Thus, Ahpeahtone's noble quest ended much like that of the Sumerian hero Gilgamesh's search for a longevity-giving plant on behalf of his friend Enkidu, Herodotus's Fountain of Youth, Ponce de Leon's search for the Fountain of Youth in the New World, Rowling's Philosopher's Stone, Dorian Gray's sale of his soul for an elusive eternal youth, or Barrie's Neverland.

Failure.

Each story, in its own way, portrays a futile human quest for immortality.

These cultural lessons are lost, apparently, on many of today's *hierarchical-minded* technocrats and hi-tech titans, who see a techno-immortality as not only desirable but attainable. In my previous writings, I describe three separate paths the elites pursue in their quest for increasing human longevity: healthspanners (those seeking medicines and natural techniques to significantly expand a human's lifespan); those seeking to enhance and prolong human mental

and physical capabilities by fusing individuals with AI-enhanced "partners" (Elon Musk's *Neuralink* comes to mind); and, those who view the body as potentially immortal.

Perhaps this latter group of individuals—though pursuing various versions of immortality for the loftiest of motives—should be careful what they wish for. Such a quest is reminiscent of the fate of Ovid's *Cumaean Sibyl*, who asked for eternal life rather than eternal youth. In response, the god Apollo let her physical body rot, but kept her voice alive. Eventually she deteriorated to the point where only her voice, kept in a jar, survived.

I rather suspect that today's technological pursuit of human immortality will end up in much the same way: at the end of the day, little more than a shrill voice in the darkness.

But even the quest itself could have dangerous implications, according to recently deceased and well-known physicist Stephen Hawking:

"There is no time to wait for Darwinian evolution to make us more intelligent and better natured ... Once such superhumans [AI-enhanced] appear, there are going to be significant political problems with the unimproved humans, who won't be able to compete. Presumably, they will die out, or become unimportant. Instead, there will be a race of self-designing beings who are improving themselves at an ever-increasing rate. If the human race manages to redesign itself, it will probably spread out and colonize other planets and stars." ²⁵

Today's techno-immortalists—lavishly funded by the global wealthy elites—envision a fundamentally different quest from the Healthspanners or the AI-enhancers. They aren't content with merely extending the length of human life; they aspire to live forever! One scientist, for example, in recent years sponsored a \$1 million contest—the Palo Alto Longevity Prize—for researchers who can stop aging.²⁶

These elites pushing for immortality, however, face a daunting task: even before the current pandemic more than 150,000 people died every day around the globe, an estimated two thirds of whom from aging-related diseases.

It should come as no surprise that the largest majority of SARS-Cov-2 victims are among the most elderly.

Undeterred, techno-assisted medical researchers now view the aging process not so much as a biological reality but as a physical one, similar to the way entropy demolishes a machine. If the human body is essentially perceived as a machine, so the logic goes, why shouldn't it be viewed as a computer in the future. If so, why shouldn't human bodies be subject to such phenomena such as exponentiality and convergence? In this vein, techno-savvy immortalists view aging as a program, and this concept is difficult to dislodge from global algorithmic mindsets.

As a result, today, a number of immortalist startups are trying to harness exponential curves. One, among many examples, is *BioAge*—led by 35-year-old CEO Kristen Fortney—a start-up that uses machine learning and employs highly qualified researchers to crunch the genomics data in a well-funded search for the type of biomarkers that can be used to predict

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²⁵ See quote in, Max de Haldevang, "Stephen Hawking left us bold predictions on AI, superhumans, and aliens," *Quartz*, Oct. 14, 2018.

²⁶ Mark Miller, "A better way to 'live forever,' even for nonbillionaires," *Reuters*, Nov. 8, 2018.

mortality. The company also tests a variety of AI-designed drugs and has its people search for unexpected substances. Barcelona-based *Grifols*, for example, harvest antibodies from the blood of recovering Covid-19 patients. As early as March 2017, researchers at Columbia University announced that they had stored an entire computer operating system on a strand of DNA.

And that was almost five years ago.

Why are these companies (and their wealthy sponsors) going to such lengths? In his book *Immortality*, British philosopher Stephen Cave asserts that the thoroughly human paradox of being aware of one's mortality and yet not being able to image nonexistence has led to four immortality narratives:

Staying alive—"like all living systems, we strive to avoid death. The dream of doing so forever—physically, in this world—is the most basic of immortality narratives."

Resurrection—"the belief that, although we must physically die, nonetheless we can physically rise again with the bodies we knew in life."

Soul—the "dream of surviving as some kind of spiritual entity."

Legacy—"more indirect ways of extending ourselves into the future" (such as glory, reputation, historical impact or children and their memories).²⁷

In my college history classes I point out the differences between western and eastern concepts of immortality: in the west, many of us believe in the eternal survival of an immortal soul, whereas in the east, immortality is attained by memories passed on to our descendants. In this light, Marc Freedman—founder of the encore career movement—published an interesting book called *How to Live Forever: The Enduring Power of Connecting the Generations.*" Among Freedman's observations:

"Silicon Valley is trying to conquer the wrong problem in the wrong way ... Real happiness comes from having a sense of purpose—and not defeating death, but accepting it and living accordingly. We need to accept and embrace mortality with the wisdom we are a species that can live on not just literally, but by passing on from generation to generation what we've learned from life."²⁸

Well said.

Several of today's technocrats and techno-futurists, including Ray Kurzweil among others, refuse to be bounded by the *Hayflick Limit* and have set the year 2045 as the date for a machine-human singularity. In 2011, for example, 35-year-old Russian billionaire and internet media magnate Dmitry Itskov founded *The 2045 Movement*, an organization that aims to make human beings immortal by transferring their personalities into a carrier superior to the human body. Itskov's life goal is to stay alive forever. His group's ideology is "to create technologies enabling the transfer of an individual's personality to a more advanced non-biological carrier, and extending life, including to the point of immortality."

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²⁷ Stephen Cave, *Immortality: The Quest To Live Forever And How It Drives Civilization*," New York: Crown Publishers, 2012.

²⁸ Cited in Miller, "A better way."

The project seeks to accomplish this goal in four chronological steps (each representing a further degree of disembodiment): the first step, *Avatar A*, aims by 2020 or so to give the human brain control of a remote humanoid body by using a brain-computer interface (BCI); the next step, *Avatar B*, seeks to implant the brain into the body itself by 2025; *Avatar C*, the next step in the process, envisions a completely robotic body that the computerized brain could be uploaded into by 2035; and, the final stage (about which the organization provides few details) is *Avatar D*, where a "hologram-type avatar" or a "substance-dependent mind" is created. Despite skepticism that such an ambitious schedule will depend on discoveries that humanity is not yet close to achieving, Itskov is already planning for his digital immortality—seeing himself as having several bodies in different forms, living on Earth and in space while his consciousness moves between them.²⁹

Sigh!

Many of you may be saying: "With the pandemic, I'm just trying to stay healthy for one more week, one more month or one more year. My trust is in the latest vaccine. How can I possibly be thinking about immortality?"

Don't worry. Others are doing that thinking for you. Mostly in research labs outside the public eye. They are in it for themselves. If you think for a minute that they will altruistically extend the benefits of their well-funded research (either to extend human life longevity or conquer death itself), to the rest of us peons, you will be sorely disappointed.

Their techno-vision of the future is a self-inclusive one.

Meanwhile, I will try to squeeze every ounce of life out of every day: and place my trust in eternal life elsewhere ...

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²⁹ See, among other sources, Tom Ward and Chelsea Gohd, "New Tech Is Giving Humanity Many Potential Paths to Immortality," *Futurism*, August 17, 2017; Doug Bolton, "Russian billionaire Dmitry Itskov seeks 'immortality' by uploading his brain to a computer," *Independent (UK)*, March 14, 2016].