The New Human Created by Technocracy: Bio-Digital Convergence

by **Jon Rappoport**, *No More Fake News*
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We have a stunning February 2020 report, *"Exploring Biodigital Convergence,"* released by *"Policy Horizons Canada… a strategic foresight organization within the Government of Canada…"*

The report lays out a pattern of joining biology and digital technology to create new humans.

This IS the planned future.

It doesn't take a genius to see that this is the far shore of a global control grid.

I'll start with a sprinkling of quotes from the report; they give you a general notion of what this "revolution" is about:

"Biological and digital systems are converging, and could change the way we work, live, and even evolve as a species."

"More than a technological change, this biodigital convergence may transform the way we understand ourselves and cause us to redefine what we consider human or natural."

"Digital technologies and biological systems are beginning to combine and merge in ways that could be profoundly disruptive to our assumptions about society, the economy, and our bodies.

We call this the biodigital convergence."

"Full physical integration of biological and digital identities."

"Biodigital convergence is opening up striking new ways to: Change human beings — our bodies, minds, and behaviours…Change or create other organisms …"

Now here is a passage that should pull you up short:

"Digital technology can be embedded in organisms, and biological components can exist as parts of digital technologies. The physical meshing, manipulating, and merging of the biological and digital are creating new hybrid forms of life and technology, each functioning in the tangible world, often with heightened capabilities."

"Robots with biological brains and biological bodies with digital brains already exist, as do human-computer and brain-machine interfaces. The medical use of digital devices in humans, as well as digitally manipulated insects such as drone dragonflies and surveillance locusts, are examples of digital technology being combined with biological entities. By tapping into the nervous system and manipulating neurons, tech can be added to an organism to alter its function and purpose. New human bodies and new senses of identity could arise as the convergence continues."

That last paragraph has citations referring to published studies. I plowed my way through one, which detailed experiments with rats. The researchers found new ways of embedding many, many "threads" in the rats' brains. These threads can presumably deliver information/commands to the brain. That would be the goal.

So this report on biodigital convergence is more than theory. It's more than speculation. It's extrapolation from current research. And it's "forward looking." At times, it barely

contains its enthusiasm for a future in which humans aren't humans anymore. Humans are "more."

Here are several other quotes from the report:

"…biology is subject to influence and manipulation that was not possible a few years ago."

"For example, gene sequencing [enabled by digital technology] combined with artificial intelligence (AI) leads to understanding genetic expression, which is then used to alter existing organisms to create organic compounds in new ways or even entirely synthetic organisms."

"Neural nets — computer systems that are designed based on biological brains — are an example of how biological understanding is shaping digital technology."

One hand washes the other. The biological and the digital hands collaborate.

But surely, people still understand that biology is fundamentally different from digital technology. Right? Read the next quote from the report:

"As we continue to better understand and control the mechanisms that underlie biology, we could see a shift away from vitalism — the idea that living and nonliving organisms are fundamentally different because they are thought to be governed by different principles. Instead, the idea of biology as having predictable and digitally manageable characteristics may become increasingly common as a result of living in a biodigital age. Any student of biology today will have grown up in a digital world and may consciously or subconsciously apply that [new] frame of reference to bioinformatics and biology generally."

The report is talking about a cultural shift.

People immersed in "the digital world" will no longer view

biology as VITAL AND ALIVE and the digital as MECHANICAL AND DEAD.

Instead, living biology will just be one more territory to be manipulated; like a machine that can be improved.

Therefore, the whole concept that LIFE IS VIOLATED by manipulating it and altering it radically…will fade out and go away.

The idea that biology is one thing and the digital is another will vanish.

Continuing to quote from the report:

"As digital technology became more complex and connected, the system began to mimic the characteristics of the biological world, leading to the notion of technological ecosystems. Biological models are also being used to develop digital tools, such as AI based on neural nets."

Did you catch that phrase, "technological ecosystems?" Suddenly, the non-living—machines and data—is thought of as living. And many tech oriented people would say, "Well, of course. The systems ARE living. And if you don't agree, you're hopelessly old-fashioned and holding on to an irrelevant paradigm."

The report: "Biodigital convergence is…moving away from the centralized models of pharmaceutical and industrial biotech toward widespread commercial and consumer use. These range from bioprinters that create organic tissue, to synthetic biology machines that can be programmed to create entirely new organisms. For example, Printeria is an all-in-one bioengineering device that automates the process of printing genetic circuits in bacteria. It is intended to be as easy to use as a domestic desktop printer and is projected to cost $1,500."

Anyone can EXPERIENCE the blending of digital and biological by carrying out experiments at home.

And speaking of home, here from the report is a "possible scenario" occurring in the new biodigital world; up close and personal.

Note: Given what you've already read so far, this scenario is a decidedly Lite and cheery version of what it would be like to live in the new world. Further, there are all sorts of pseudoscientific assumptions about medical/health solutions and climate change EMBEDDED PERMANENTLY in the AI programs that govern daily life:

From the report: "I wake up to the sunlight and salty coastal air of the Adriatic sea. I don't live anywhere near the Mediterranean, but my AI, which is also my health advisor, has prescribed a specific air quality, scent, and solar intensity to manage my energy levels in the morning, and has programmed my bedroom to mimic this climate."

"I send a brain message [a thought] to open the app that controls my insulin levels and make sure my pancreas is optimally supported."

"I check my brain's digital interface to read the dream data that was recorded and processed in real time last night. My therapy app analyzes the emotional responses I expressed while I slept. It suggests I take time to be in nature this week to reflect on my recurring trapped-in-a-box dream and enhance helpful subconscious neural activity. My AI recommends a 'forest day'. I think 'okay', and my AI and neural implant do the rest."

The neural implant, triggered by a mere thought from the compliant citizen, creates the virtual "forest day."

"The summary of my bugbot surveillance footage shows that my apartment was safe from intruders (including other bugbots)

last night, but it does notify me that my herd of little cyber-dragonflies are hungry. They've been working hard collecting data and monitoring the outside environment all night, but the number of mosquitoes and lyme-carrying ticks they normally hunt to replenish their energy was smaller than expected. With a thought, I order some nutrient support for them."

"Building codes and home energy infrastructure are synchronized, and require all homes be autoregulated for efficiency. Because houses and buildings are biomimetic and incorporate living systems for climate control wherever possible, they are continuously filtering the air and capturing carbon. I check my carbon offset measure to see how much credit I will receive for my home's contribution to the government's climate change mitigation program."

"I replace the smart sticker that monitors my blood chemistry, lymphatic system, and organ function in real time. It's hard to imagine the costs and suffering that people must have endured before personalized preventative medicine became common."

"Today's microbiome breakdown is displayed on the front of my fridge as I enter the kitchen. It's tracking a steady shift as I approach middle age: today it suggests miso soup as part of my breakfast, because my biome needs more diversity as a result of recent stress and not eating well last night."

"I take my smart supplement, which just popped out of my bioprinter. The supplement adjusts the additional nutrients and microbes I need, and sends data about my body back to my bioprinter to adjust tomorrow's supplement. The feedback loop between me and my bioprinter also cloud-stores daily data for future preventive health metrics. The real-time monitoring of my triglycerides is important, given my genetic markers."

"As my coffee pours, I check my daughter's latest school

project, which has been growing on the counter for the past week. She's growing a liver for a local puppy in need as part of her empathy initiative at school. More stem cells are on the way to start a kidney too, because she wants to help more animals. I grab my coffee, brewed with a new certified carbon-negative bean variety, and sit on the couch for a minute."

Many people reading this scenario would jump at the chance to live in that world—blithely assuming all would be well.

They would never guess their neural implants OVERRIDE decisions they themselves make that run counter to government "recommended behavior."

Nor would they imagine the varieties of strange hybrid creatures that abound in this Brave New World. Animal-human-machine creatures, whose functions are assigned by technocratic rulers.

And the last thing they'd realize is that they could very well BE those animal-human-machine creatures.

Finally, for now; there is one element which keeps people from admitting that "science fiction" can actually come to pass. They believe people living in a dystopian science fiction world would KNOW it was horrible and life-destroying—and would rebel.

But the Canadian report points out that our culture is burying that knowledge. People of the near-future could hold beliefs which affirm the biodigital convergence as a major ADVANCE. As PROGRESS. As an Evolved Reality. As Truth.

With the memory of the past…gone.

CODA: Under several headings, the report lists biodigital strategies. They're chilling. You can easily discern the implications.

HEADING: "What new capabilities arise from biodigital

convergence?"

"Altering the human genome — our core biological attributes and characteristics."

"Monitoring, altering and manipulating human thoughts and behaviours."

"Neurotechnologies read brain signals to monitor attention and manage fatigue."

"New ways to monitor, manage, and influence bodily functions, as well as predict, diagnose, and treat disease."

"Digital devices can be worn or embedded in the body to treat and monitor functionality."

"Biohacking with implanted digital devices to enhance bodily functions."

"Nanobots and nanomaterials can operate and precisely deliver drugs within living creatures."

HEADING: "New ways to change or create other organisms"

"Changing the type or amount of inputs that organisms need to grow."

"Synthetic biology draws inspiration from biology, engineering, computer science, and physics for the design and construction of new biological entities."

HEADING: "new ways to alter ecosystems"

"Changing and eradicating entire species."

"Altering the natural environment at scale."

HEADING: "New ways to sense, store, process, and transmit information"

"Turning organisms into biocomputers."

In the ENDNOTES section of the report, you can find links to published research on biodigital experiments.

Example: "Brain-machine interfaces (BMIs) hold promise for the restoration of sensory and motor function and the treatment of neurological disorders, but clinical BMIs have not yet been widely adopted, in part because modest channel counts have limited their potential. In this white paper, we describe Neuralink's first steps toward a scalable high-bandwidth BMI system. We have built arrays of small and flexible electrode "threads", with as many as 3,072 electrodes per array distributed across 96 threads. We have also built a neurosurgical robot capable of inserting six threads (192 electrodes) per minute. Each thread can be individually inserted into the brain with micron precision for avoidance of surface vasculature and targeting specific brain regions."

Example: "A project called DragonflEye, conducted by the research and development organization Draper in conjunction with the Howard Hughes Medical Institute, is turning the insects into hybrid drones. Live dragonflies are equipped with backpacks containing navigation systems, which tap directly into their nervous systems. The dragonflies can then be 'steered' to fly in certain directions. The whole thing is powered by miniature solar panels in the backpacks."

Example: "Scientists have created the world's first living organism that has a fully synthetic and radically altered DNA code. The lab-made microbe, a strain of bacteria that is normally found in soil and the human gut, is similar to its natural cousins but survives on a smaller set of genetic instructions."

Example: "…we built a dual-core CPU combining two orthogonal core processors in a single cell. In principle, human cells integrating multiple orthogonal CRISPR/Cas9-based core processors could offer enormous computational capacity."

Example: "The daring Chinese biophysicist who created the world's first gene-edited children has been set free after three years in a Chinese prison. He Jiankui created shock waves in 2018 with the stunning claim that he'd altered the genetic makeup of IVF embryos and implanted them into a woman's uterus, leading to the birth of twin girls. A third child was born the following year."

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