Transhumanism and Covid-19: Military Operations in Civilian Disguise?

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Omniwar Symposium, September 21, 2024

One Proposition and One Question

Proposition: Transhumanism is a military-intelligence operation

- Long standing
- Quasi-clandestine
- 2020-2050 time-frame for implementation

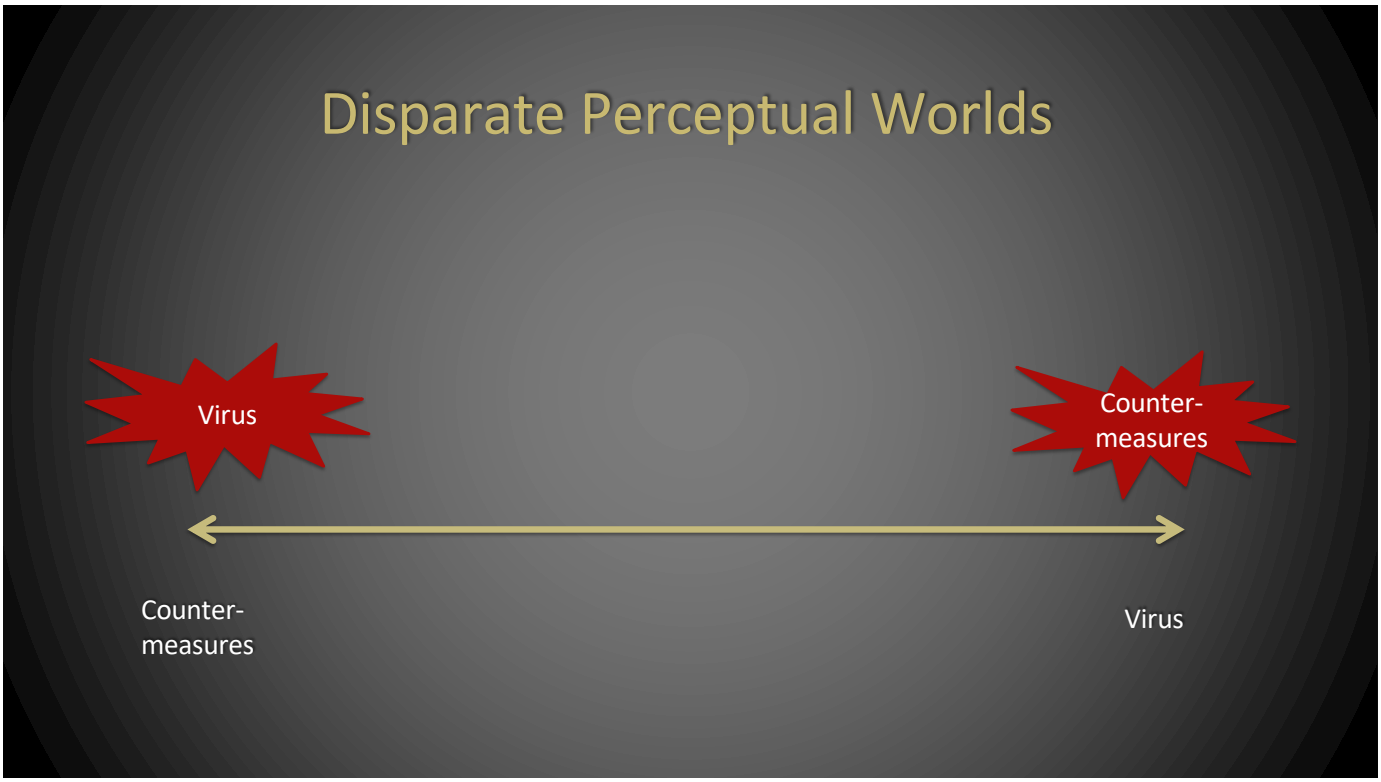
Question: Is Covid-19 a supporting psychological operation?

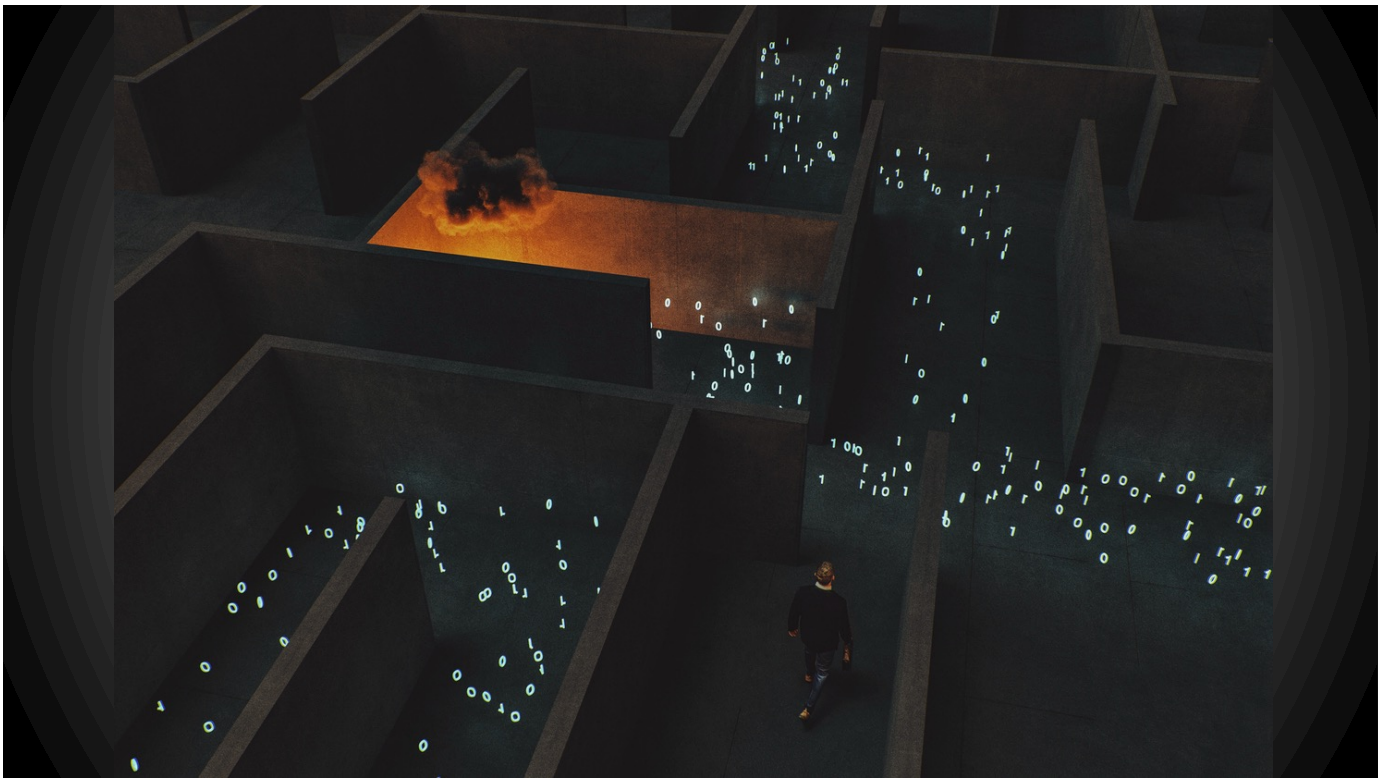
- For social engineering,
- Societal infrastructure
- And technological deployment?

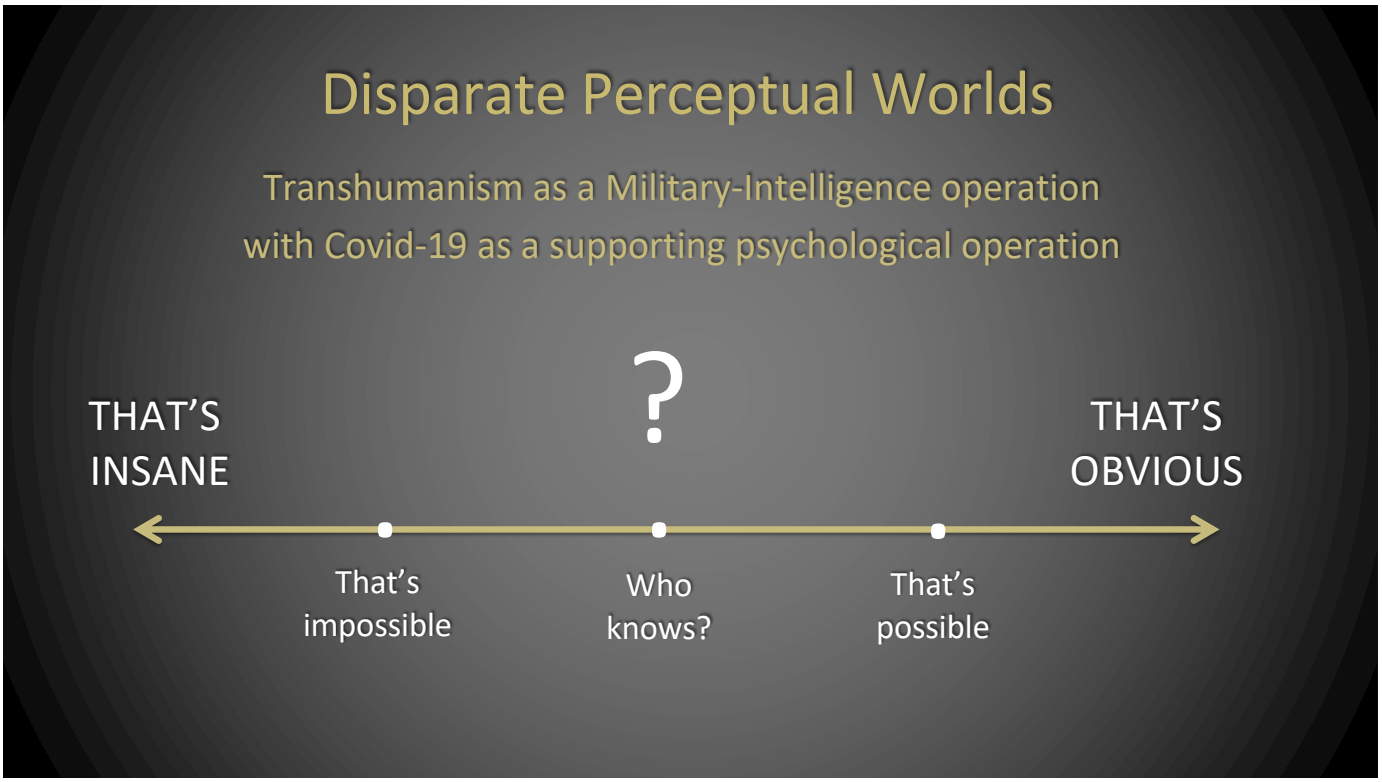
Disparate Perceptual Worlds

Transhumanism as a Military-Intelligence operation
with Covid-19 as a supporting psychological operation

Disparate Perceptual Worlds






Disparate Perceptual Worlds
Transhumanism as a Military-Intelligence operation
with Covid-19 as a supporting psychological operation
?
THAT'S INSANE
THAT'S OBVIOUS
That's impossible
Who knows?
That's possible

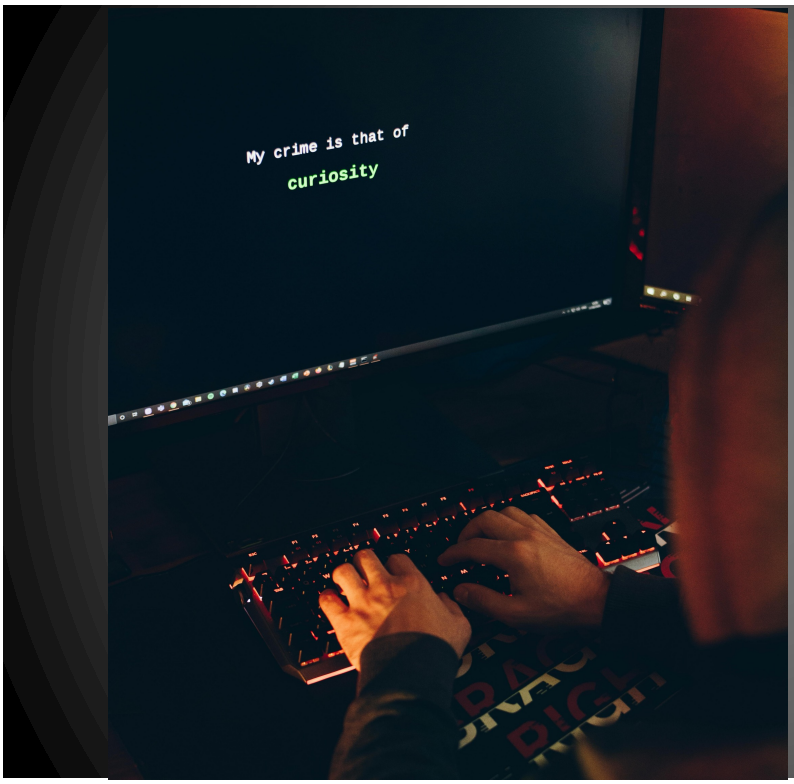

Disparate Perceptual Worlds
Transhumanism as a Military-Intelligence operation
with Covid-19 as a supporting psychological operation
Conspiracy theorist
Sheeple
Tinfoil hat
Right wing
Left wing
Anti vaxxer
Covidiot
THAT'S INSANE
THAT'S OBVIOUS
That's impossible
Who knows?
That's possible
Pandemic of the unvaccinated
Extremist
Normie
Misinformationist

Cognition is motivated

Emotion and motivation lead the way

Cognition is in the wake behind the boat

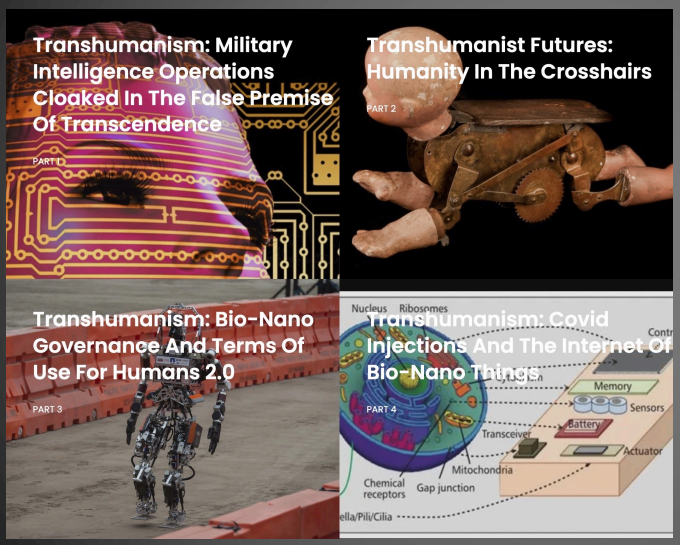
Motivating Cognition



Curiosity

An antidote,
and path to accuracy

Transhumanism as a Military Operation



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Part 1: https://propagandainfocus.com/bringing-transhumanism-down-to-earth-part-1-military-intelligence-operations-cloaked-in-the-false-promise-of-transcendence/

Part 2: https://propagandainfocus.com/transhumanist-futures-part-2-humanity-in-the-crosshairs/

Part 3: https://propagandainfocus.com/military-operations-in-civilian-disguise-part-3-bio-nano-governance-and-terms-of-use-for-humans-2-0/

Part 4: https://propagandainfocus.com/whos-pulling-the-strings-covid-injections-and-the-internet-of-bio-nano-things-part-4-testing-new-human-nodes-of-connectivity/

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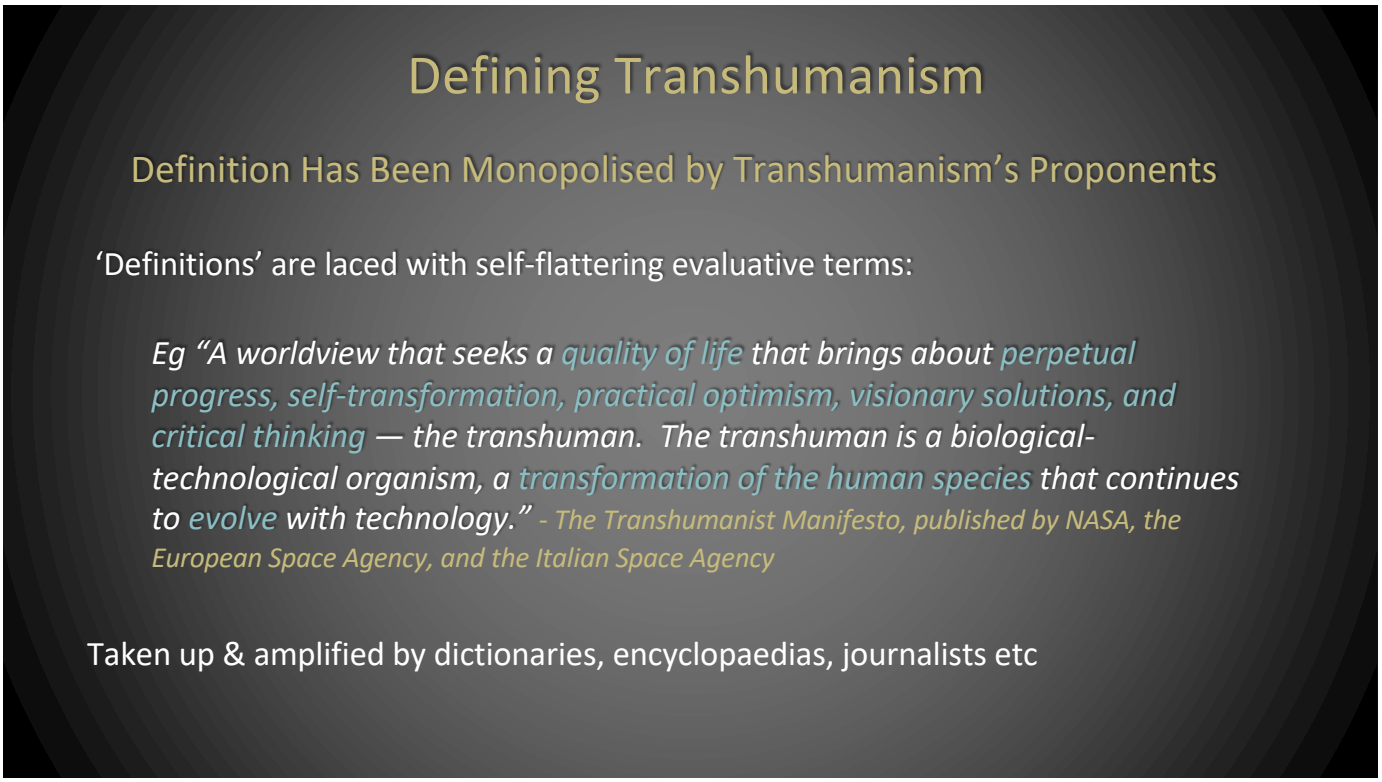
What is Transhumanism?



See the Transhumanist Manifesto, Humanity+. 2024. [Website]

In a similar vein: Humanity+, the source of the Transhumanist Manifesto, further defines transhumanism with reference to Max More, one of the pioneers of the movement, positioning transhumanism as: "The intellectual and cultural movement that affirms the possibility and desirability of fundamentally improving the human condition through applied reason, especially by developing and making widely available technologies to eliminate aging and to greatly enhance human intellectual, physical, and psychological capacities."[21]

Importantly, the benevolent self-definition advanced by transhumanists has been taken up and uncritically amplified more widely, by dictionaries, encyclopaedias, journalists, commentators and scholars, infecting virtually every effort to discuss the movement more deeply. Consider, for instance, the definitions offered by Wikipedia and Google's Oxford Dictionary:

"Transhumanism is a philosophical and intellectual movement which advocates the enhancement of the human condition by developing and making widely available sophisticated technologies." – Wikipedia

"The belief or theory that the human race can evolve beyond its current physical and mental limitations, especially by means of science and technology." – Google's Oxford Definition

By way of elaboration, Nick Bostrom, a leading academic transhumanist who hails from what is known as transhumanism's 'Oxford School',[36] offers a vision of posthuman beings that reads like a script for a new Disney fantasy film. In a paper

titled, ‘Human Genetic Enhancements: A Transhumanist Perspective’, he opines, “We can conceive of aesthetic and contemplative pleasures whose blissfulness vastly exceeds what any human being has yet experienced. We can imagine beings that reach a much greater level of personal development and maturity than current human beings do, because they have the opportunity to live for hundreds or thousands of years with full bodily and psychic vigor. We can conceive of beings that are much smarter than us, that can read books in seconds, that are much more brilliant philosophers than we are, that can create artworks, which, even if we could understand them only on the most superficial level, would strike us as wonderful masterpieces. We can imagine love that is stronger, purer, and more secure than any human being has yet harbored.”[40]

From transhumanism series Part 1

References

[20] Humanity+. 2024. The Transhumanist Manifesto. [Website]

[21] Humanity+. 2024. Transhumanist FAQ. [Website]

[36] Corby, P.M. 2019. The Hope and Despair of Human Bioenhancement: A Virtual Dialogue Between the Oxford Transhumanists and Joseph Ratzinger. Eugene, Oregon: Pickwick Publications.

[40] Bostrom, N. 2003. Human genetic enhancement: A transhumanist perspective. Journal of Value Inquiry, Vol. 37, No. 4, pp. 493-506. [Journal]

Definition as a Propaganda Device

By repeatedly pairing transhumanism with concepts such as ‘enhancement’, transcendence’, ‘intelligence’, ‘evolution’ and ‘progress’…

‘Defining’ terms function as subliminal cue-words, or ‘affective tags’ with the power to psychologically subdue and pacify

Threat-related emotions are suppressed (vigilance, caution)

and emotions associated with benign-to-benevolent material are evoked

Enhancement is in the Eye of the Beholder

The unasked question throughout is: What constitutes 'enhancement'?

Lethality (NATO, DoD, NASA)

Anti-love biotechnology (Academic Transhumanists)

Leaving transhumanism wide open to questionable agendas

Bostrom's fellow oxford transhumanists and contemporary co-authors Brian Earp, Anders Sandberg and Julian Savulescu, have advanced a vision of technologically enhanced love in *the American Journal of Bioethics*. The bioethicists and futurists advocate manipulating the experience of love in pursuit of what they call "well suited relationship bonds".[41] The key tool that Earp et al. propose for achieving this objective is "anti-love biotechnology".

Laying the blame on love for deviant scourges such as paedophilia, rape trauma and domestic abuse, the authors look forward to the prospect of a "love vaccine", which would work to "prevent unwanted love". They stress the "urgency of the ethical project", including finding a "cure for love", arguing that "under the right sort of conditions", anti-love biotechnology could even be "morally required".

The oxford academics, whose transhumanist endeavours have as their base the power and position of the oldest english-speaking university in the world, describe a future in which "we may one day find ourselves with an array of pills, biochips, and neuroceuticals that could successfully 'treat' problematic passions".[42]

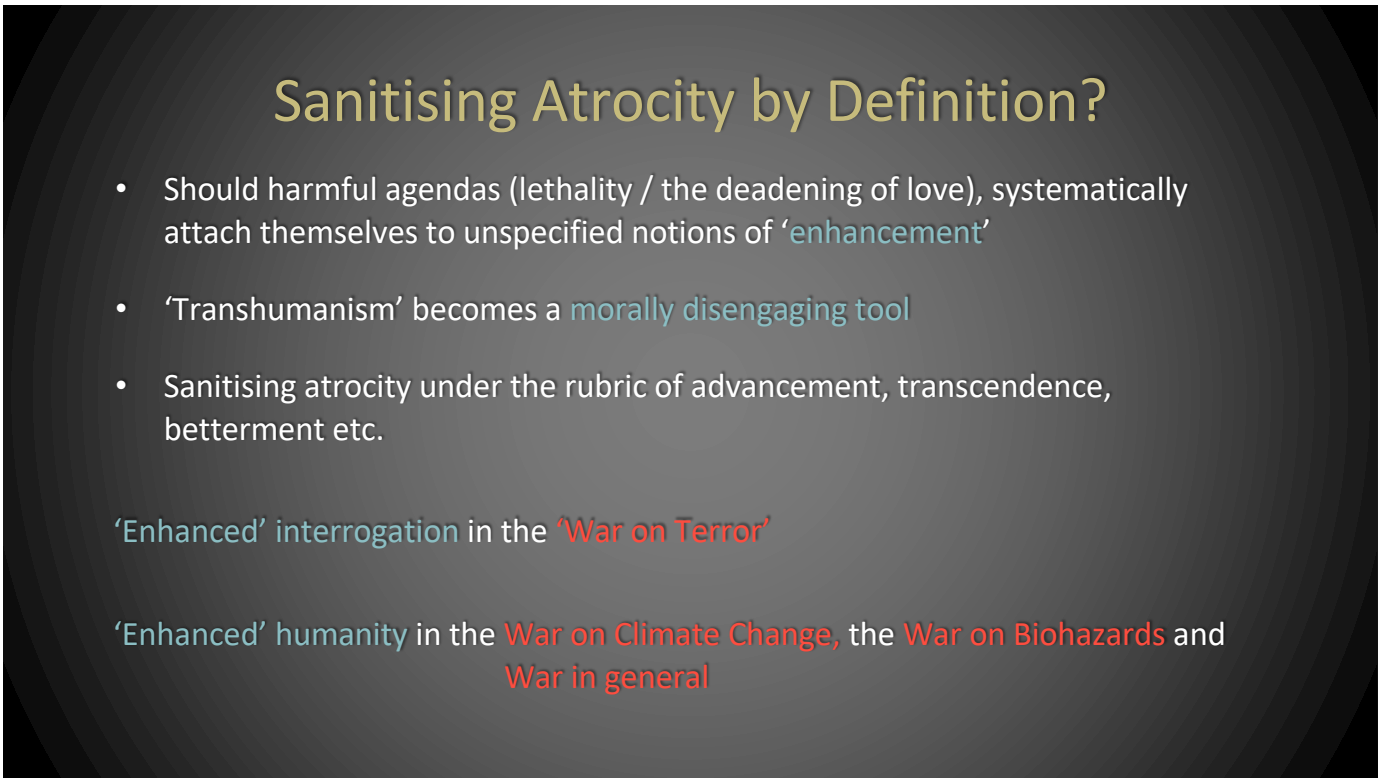
From transhumanism series **part 1**

Reference

[42] Earp, B.D., Wudarczyk, O.A., Sandberg, A., and Savulescu, J. 2013. If I could just stop loving you: anti-love biotechnology and the ethics of a chemical breakup. *The American Journal of Bioethics, vol. 13, no. 11, pp. 3-17.* [Journal]

‘Enhancement’s Dark History

‘Enhanced’ interrogation



"Moral disengagement is a psychological process by which a specific event, such as mass extermination, can be placed outside the boundaries of one's usual moral frame.[23, 24] A common device for achieving this is sanitizing language.[25, 26] Wrapped in the balm of neutral and forgettable terms, harm is rhetorically cleansed,[27] the reality fails to emotionally register, and indifference is invoked.[28] Hence, the banality of evil.

From transhumanism series Part 1

References

[23] Bandura, A. 1999. Moral disengagement in the perpetration of inhumanities. *Personality and Social Psychology Review, Vol. 3, No.* 3, pp. 193–209. [Journal]

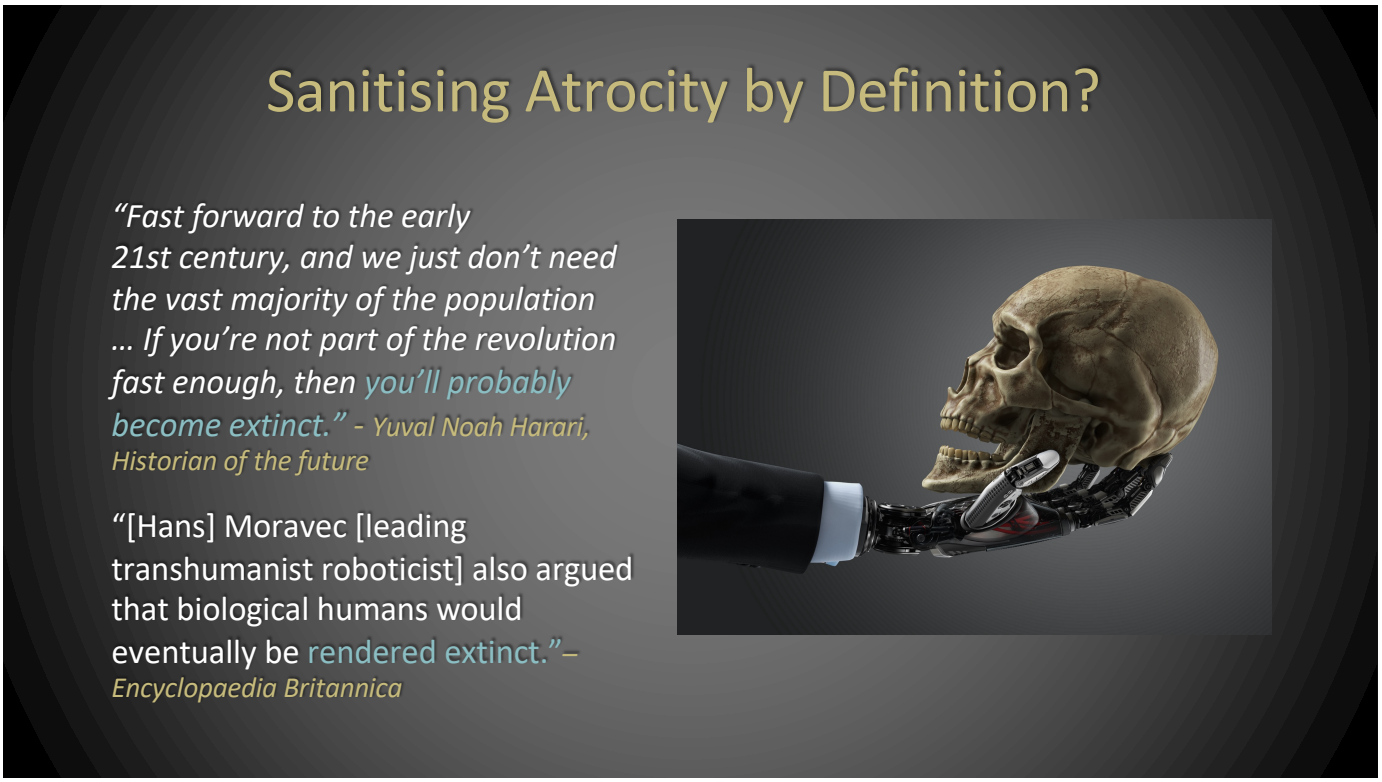
[24] Opotow, S. 1990. Moral exclusion and injustice: An introduction. *Journal of Social Issues.* Vol. 46, No. 1, pp. 1-20. [Journal]

[25] Bandura, A. 2002. Selective moral disengagement in the exercise of moral agency. *Journal of Moral Education. Vol.* 31, No. 2, pp. 101-119. [Journal]

[26] Cohen, S. 2001. *States of Denial: Knowing About Atrocities and Suffering.* Oxford UK: Blackwell Publishers. [Website]

[27] Poole, S. 2007. *Unspeak: How Words Become Weapons, How Weapons Become a Message, and How That Message Becomes Reality.* New York: Grove Atlantic

[28] Passini, S. 2017. From the banality of evil to the complicity of indifference: The effects on intergroup relationships. *New Ideas in Psychology, Vol. 47, pp.* 33-40 [Journal]



"Fast forward to the early 21st century, and we just don't need the vast majority of the population … because the future is about developing more and more sophisticated technology like artificial intelligence, bioengineering. Most people don't contribute anything to that, except for their data."[31]

"The ultimate value of human beings will be just as consumers that will do nothing useful at all …. However, you could have consumers which are not humans, which are not conscious."[32]

"If you're not part of the revolution fast enough, then you'll probably become extinct."[33]

And "[Hans] Moravec [leading transhumanist roboticist] also argued that biological humans would eventually be rendered extinct."

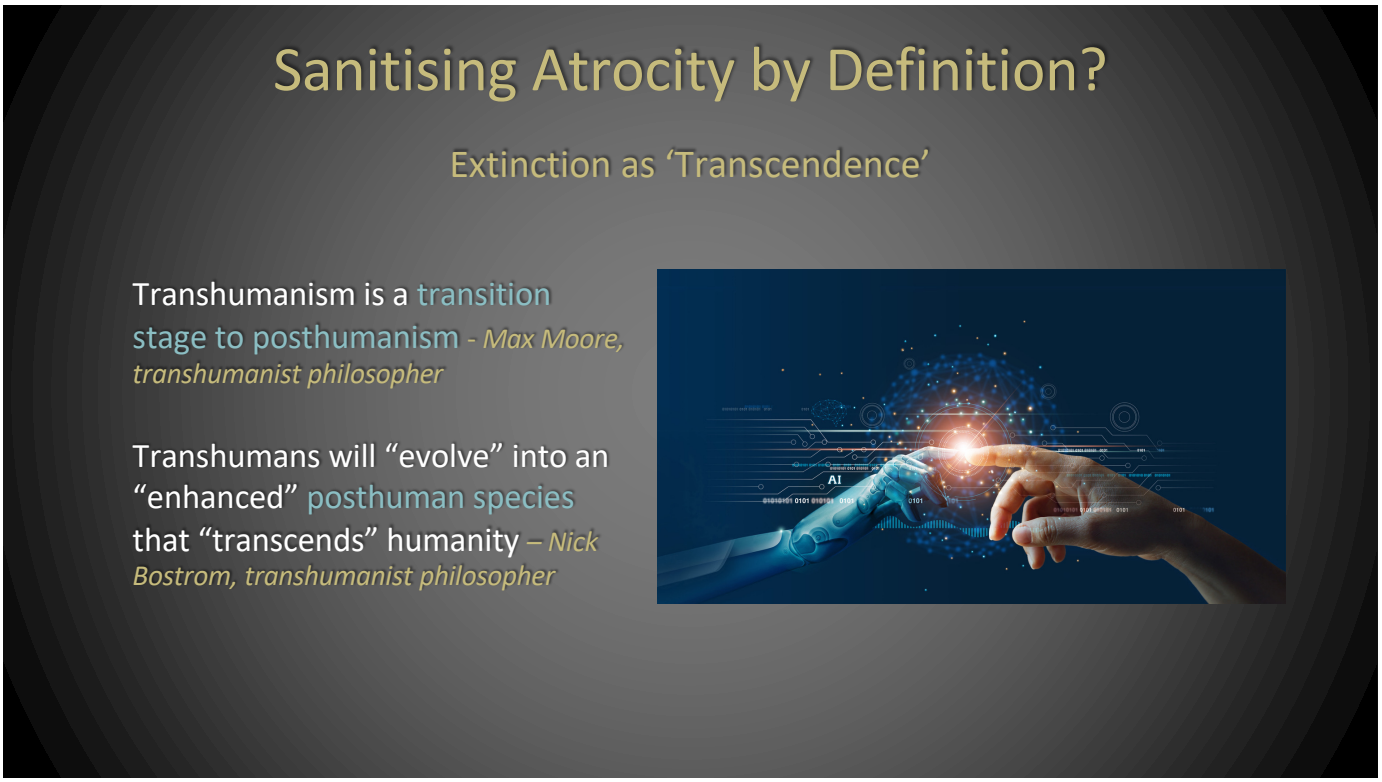
From transhumanism series **Part 1**

References

[31] Harari, Y.N. 2022. We Just Don't Need the Vast Majority of the Population. TED The Interview. TED, YouTube. [Website]

[32] Harari, Y.N. 2016. The Future of Humanity – with Yuval Noah Harari. The Royal Institution, YouTube. [Website]

[33] Harari, Y.N. 2015. Yurval Noah Harari and Daniel Kahneman Interview. Kolektif Kitap, YouTube. [Website]



"[A transhuman is] someone in the transition stage from human to biologically, neurologically and genetically posthuman. One who orients his/her thinking towards the future to prepare for coming changes and who seeks out and takes advantage of opportunities for self-advancement." Max Moore [46]

Nick Bostrom is co-founder of the World Transhumanist Association, an original signatory of the Transhumanist Declaration of 1988,[38] and Founding Director of the Future of Humanity Institute at Oxford University from 2005 to 2024. In a paper titled, *'Ethical Issues for the 21st Century: Transhumanist Values,'* he explains that:

"Transhumanists view human nature as a work-in-progress, a half-baked beginning that we can learn to remold in desirable ways. Current humanity need not be the endpoint of evolution. Transhumanists hope that by responsible use of science, technology, and other rational means we shall eventually manage to become post-human, beings with vastly greater capacities than present human beings have."[39]

From transhumanism series **Part 1**

References

[39] Bostrom, N. 2005. Ethical Issues for the Twenty-first Century: Transhumanist Values. Philosophy Documentation Center. [Website]

[46] More, M. 1994. Technological self-transformation: Expanding personal extropy. *Extropy, Vol. 4, No. 2, p.7.* Internet Archive. [Website]

Posthumanism

Post = after

=> Humans as a thing of the past

Definition Cleansed of Dogma and Spin

A project to engineer human biology by technological means on a mass scale

Military-Intelligence Transhumanism

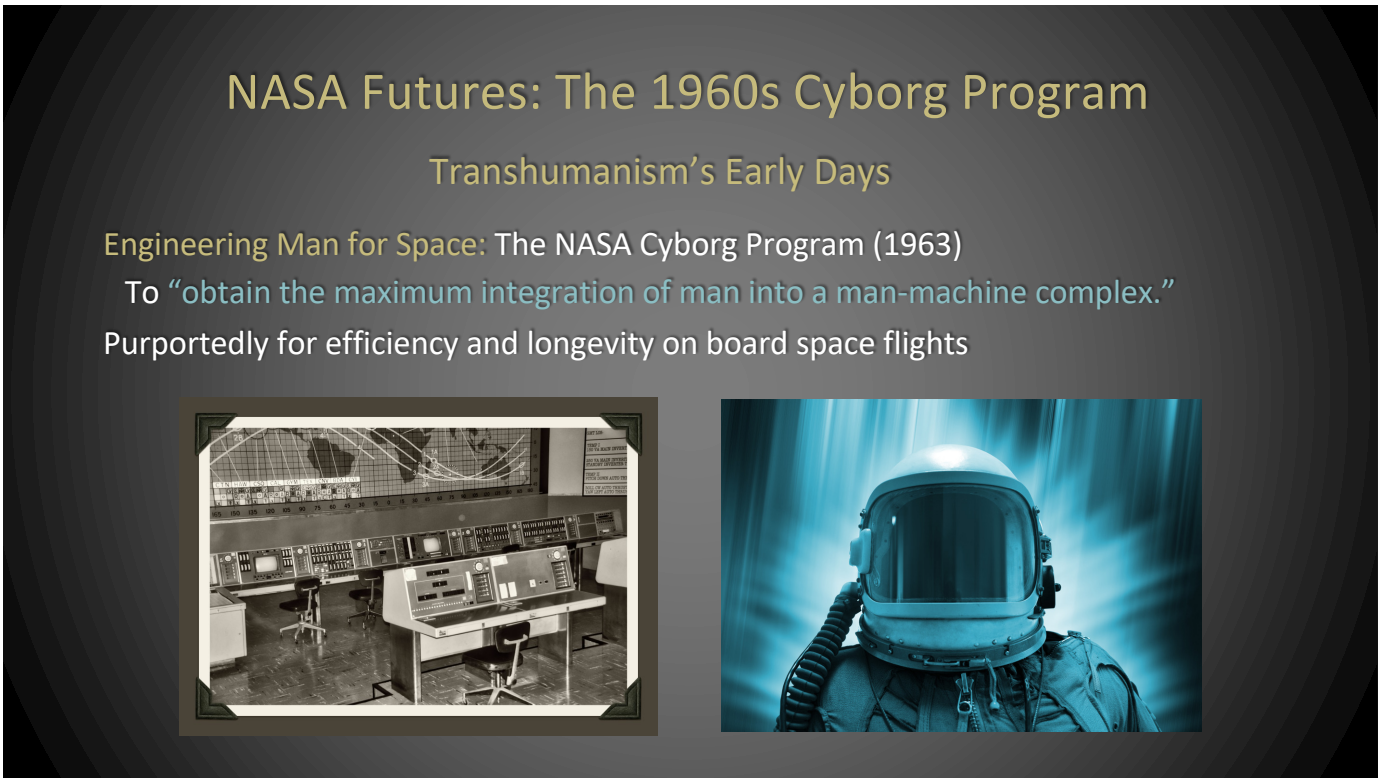
Primary Source Documents in 3 Categories

1. Futures documents
2. Policy
3. R&D

With ‘yes but’s

1. Transhumanist Futures


NASA



NASA'S Interest in cyborgs dates to the 1960s. In a document titled '*Engineering Man for Space: THE CYBORG STUDY*' (capitals in original), NASA's Office of Advanced Research and Technology received a report in 1963 on its '*CYBORG Program*', whose aim was to "obtain the maximum integration of man into a man-machine complex".[75]

The rationale for NASA's CYBORG Program — six decades ago — was to increase the "efficiency and longevity of the life process on board space flights". In other words, NASA's space programme provided a rationale, or perhaps a pretext, for funding research into areas that would otherwise be deemed too outlandish/immoral to fund, i.e. cyborgs.

From transhumanism series **Part 1**

Reference

[75] Driscoll, R.W. 1963. *Engineering Man for Space: The Cyborg Study*. Final report to NASA Office of Advanced Research and Technology (OART). United Aircraft Corporate Systems Center, p.81. [Website]

In August 14 2001 the Chief Scientist from the NASA Langley Research Center, Dennis Bushnell, gave a talk at a symposium organised by the National Defense Industrial Association (NDIA), on what amounts to a military-intelligence roadmap towards transhumanism.[49]

Bushnell was, at the time, a 40-year NASA veteran and remains NASA Langley Chief Scientist today. The presentation was titled '*Future Strategic Issues / Future Warfare'.* It was framed as a "heads up" to NASA's national security partners on the future of technology as applies to both the military and society, with a view towards the years 2025-2030.

The talk's stated purpose was to guide not only the Department of Defence (DoD)'s military strategy but also military-intelligence procurement decisions, and R&D planning. Its projections and predictions were derived from NASA's "futures" work with 30+ other national security agencies, including DARPA, the CIA, the DIA, the US Army, the Air Force, and numerous other national security bodies.

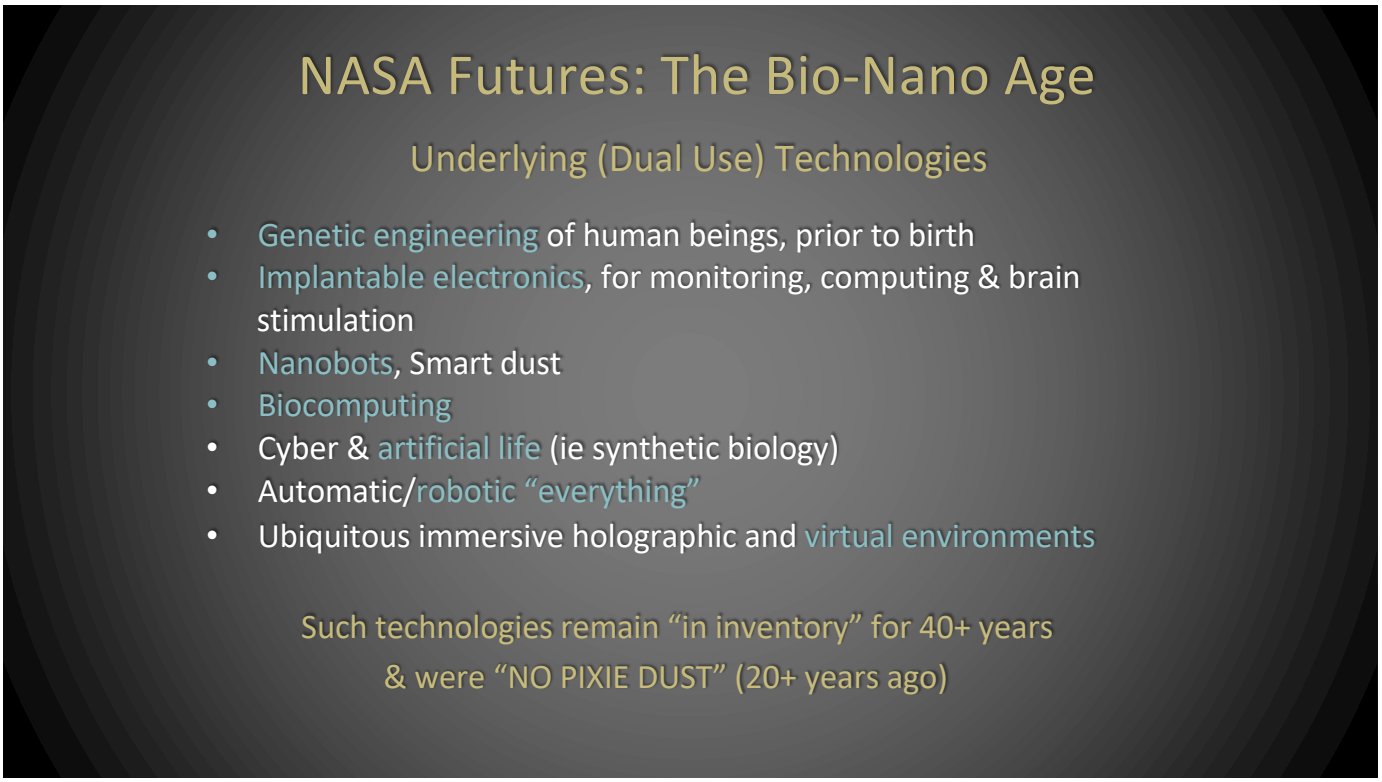
The talk predicted that the global explosion in technological revolutions would see the advent of a new era for humanity, slated to commence in 2020. NASA Langley dubbed this new era the Bio/NANO Age.

From transhumanism series **Part 1**

Reference

[49] Bushnell, D. 2001. *Future Strategic Issues/Future Warfare [Circa 2025].*

Presentation to The 4th Annual Testing and Training for Readiness Symposium & Exhibition: Emerging Challenges, Opportunities and Requirements, National Defense Industrial Association (NDIA), 13-16 August 2001. NASA Langley Research Center. Internet Archive. [Website]



As part of the talk's preamble, NASA-Langley stressed that the futuristic technologies it described were "NO PIXIE DUST" (emphasis in original, slide 4). Clearly aware that the technologies and concepts contained in the 113 slides would appear improbable to many audiences, the NASA Langley Chief Scientist Dennis Bushnell explained that new technologies such as those he described often take 15+ years to produce, after which they remain "in inventory" for "40+ years". Which, if true, would place a 40+ year veteran and head of a national security scientific research institute such as Bushnell in a prime position to know the status of classified R&D coming down the 'black science' pike.

From transhumanism series **Part 1**

Consistent with this, Harvard science historian Peter Galison writes that classified scientific research is “on the order of five to ten times larger than the open literature that finds its way to our libraries.” Thus, it is “we in the open world […] who are living in a modest information booth facing outwards, our unseeing backs to a vast and classified empire we barely know.”[50]

From transhumanism series **Part 1**

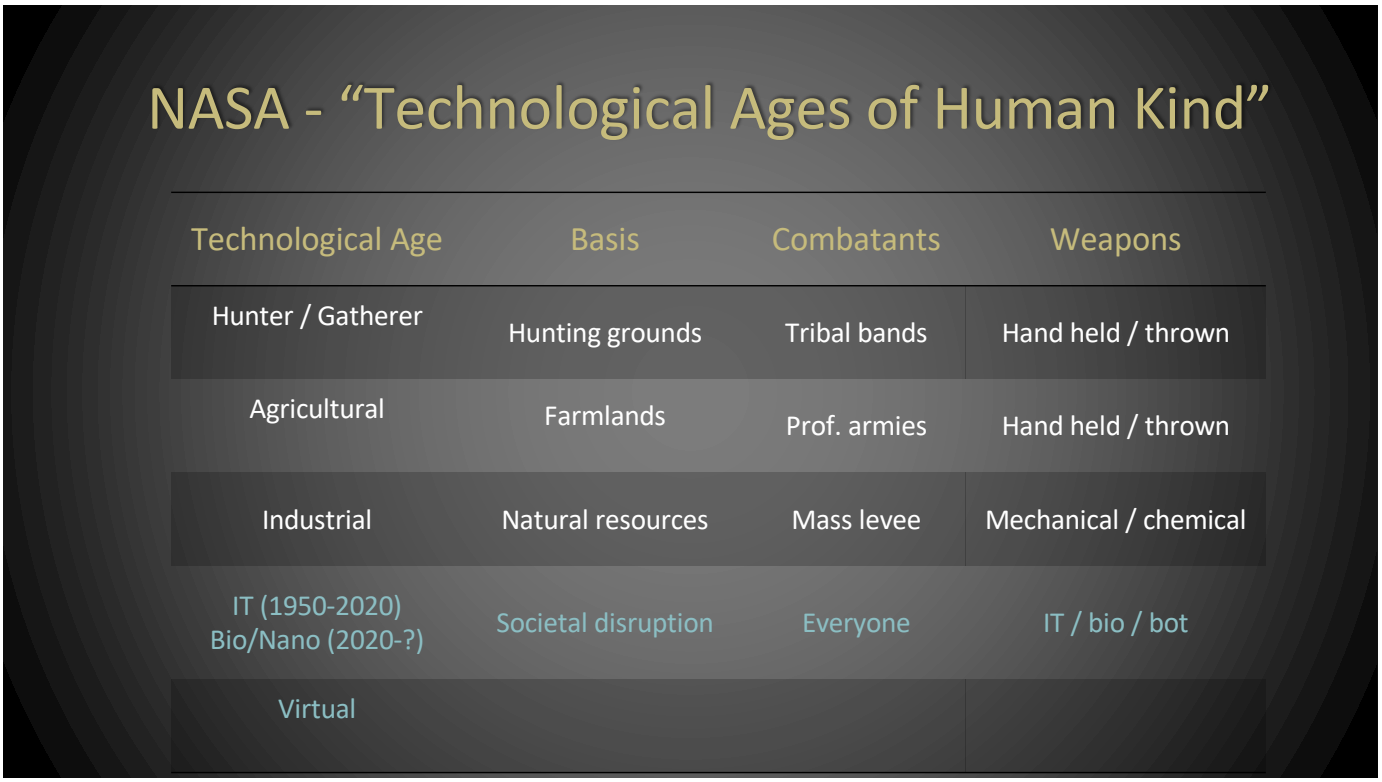
Reference

[50] Galison, P. 2004. Removing knowledge. *Critical Inquiry, Vol. 31, No. 1, pp. 229-243*. [Journal]

The 21st Century Trojan horse

NASA's Bio-Nano technologies to be deployed under

"Trojan horse 'civilian' systems"



While such developments may have seemed too far from reality in 2001 for most commentators to entertain, in 2020 NASA Langley's 2001 presentation gained new salience as key prognostications began making their way into real life. In 2020, "social disruption", which was slated by NASA Langley to replace the farmlands of the Agricultural Age and the raw materials of the Industrial Age, descended right on time for a 2020 commencement to a new Bio/NANO era, as listed on slide 12 of the NASA document.

The social disruption of 2020, moreover, powered, for the first time in history, mass rollout of injectable gene-based BioNano technology (cf BioNTech 'vaccines'), underpinned legally and logistically by the Military-Industrial Complex, particularly the US DoD and the National Security Council (NSC).[64, 65, 66, 67, 68] In the process, rapid mass transition to the "tele-everything" described in the NASA Langley document (tele-medicine, tele-education, tele-commerce, tele-socialisation etc, slide 16) came into being, laying a practical social pathway to the Virtual Age, in which, "the world and society will shift even more to tele-everything".[69]

From transhumanism series **Part 1**

References

[64] Webb, W. 2020. Operation Warp Speed is using a CIA-linked contractor to keep Covid-19 vaccine contracts secret. *Unlimited Hangout*. [Website]

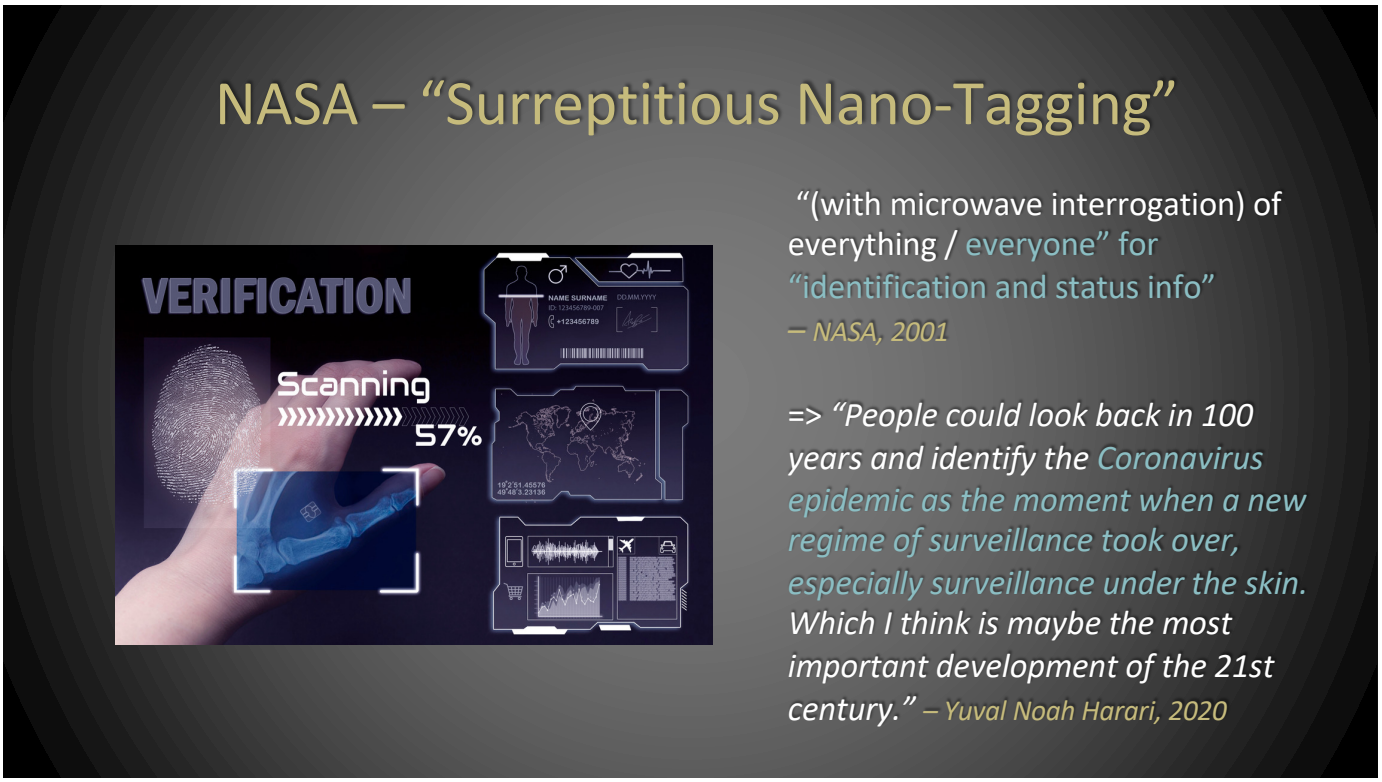
[65] Lerman, D. 2022. Government's national security arm took charge during the Covid response. *Brownstone Institute*. [Website]

[66] Latypova, S. 2022. The role of the US DoD (and their co-investors) in “Covid Countermeasures” enterprise. *Due Dilligence and Art*. Substack. [Website]

[67] Latypova, S. 2023. Proof that the vaccines were a military-backed countermeasure. *Brownstone Institute.* [Website]

[68] Baletti, B. 2023. Government contracts with COVID vaccine makers let Federal agencies bypass normal regulatory process, FOIA documents show. *The Defender.* Children’s Health Defense. [Website]

[69] Bushnell, D. 2015. Thoughts on Major Existential Societal Issues and Their Prospective Solutions. *Professional Pilot.* Queensmith Communications Corporation, p. 58. [Website]



Slides 41 and 88 also foresaw the "surreptitious nano tagging (with microwave interrogation) of everything/*everyone*" [italics added] for "identification and status info".

In a similar vein, on April 14, 2020 — a month after the World Health Organization had declared Covid-19 a pandemic — Yuval Noah Harari explained that, with the arrival of Covid-19, we were seeing "a change in the nature of surveillance. Previously surveillance was mainly above the skin. Now it's going under the skin. Governments want to know not just where we go or who we meet — above all they want to know what is happening under our skin".[72]

He also told *The Late Late Show* on 16 April 2020:

"What's happening now, it's really a watershed in the history of surveillance. First of all, we see mass surveillance systems entering and being adopted in democratic countries, which previously resisted them. Secondly, we see the nature of surveillance changing from over the skin surveillance to under the skin surveillance."[73]

By "under the skin surveillance" Harari explained to BBC Hard Talk in May 2020 that he meant not merely medical measurements such as temperature or heart rate. Under the skin surveillance, he stressed, would enable governments and corporations (if they can now be distinguished from one another) to monitor not just what we do, but what we think and feel, to the extent that the corporate state would "know me better than I know myself".

Harari added that he thought it was likely that "people could look back in 100 years and identify the Coronavirus epidemic as the moment when a new regime of

surveillance took over, especially surveillance under the skin. Which I think is maybe the most important development of the 21st century".[74]

From transhumanism series **Part 1**

References

[72] Harari, Y.N. 2020. Yuval Noah Harari In Conversation With Rahul Kanwal. India Today, YouTube. [Website]

[73] Harari, Y.N. 2020. Yuval Noah Harari on COVID-19's Impact on Humankind. The Late Late Show with James Corden, YouTube. [Website]

[74] Harari, Y.N. 2020. Coronavirus: Yuval Noah Harari, Philosopher and Historian, on the Legacy of Covid-19. BBC HARDtalk, YouTube. [Website]

In 2011, a report prepared jointly by NASA Langley and a private government contractor described a database of 800+ internal and external technologies of interest to "multi-government" activities.[80]

Listed was simulated reality as above. Accordingly, hypothetical space scenarios, probably useful to no one, had provided the justification for the development of real-world technologies that could be used to hijack individuals' perception of reality.

Next on NASA's technological agenda was "Super Humans". NASA's super humans are based on:
"Physical Interfaces includ[ing] physical and neural interfaces that augment human capabilities, such as exo-skeletons and infrared vision …. [Said] neural infrared vision interfaces hard-wire visual sensing capabilities directly into the nervous system. The ability to see in different parts of the spectrum could be valuable for space operations."

And while this may represent just one small step for a cyborg astronaut, it is a giant step for human kind. It betrays a vision of homo superior whereby the 'super human' is not the transcendent creative genius of academic transhumanists' tomes, but one whose perceptions of reality are externally defined and managed for them, in line with their manufacturers' requirements.

From transhumanism series **Part 1**

Reference

[80] Hay, J., Mullins, C., Graham, R., Williams-Byrd, J., Reeves, J.D. 2011. *Innovative*

Technologies for Human Exploration: Opportunities for Partnerships and Leveraging Novel Technologies External to NASA. The Tauri Group and NASA Langley Research Center. [Website]

NASA Futures: More Mission Creep

From Human Survival (1963) to Human Demise (2020)

"We morph into our brain children and become human contaminated machines"

"The major existential issue will then become, 'Whither Humans'?'"

– NASA Langley Chief Scientist, 2015 & 2020

References

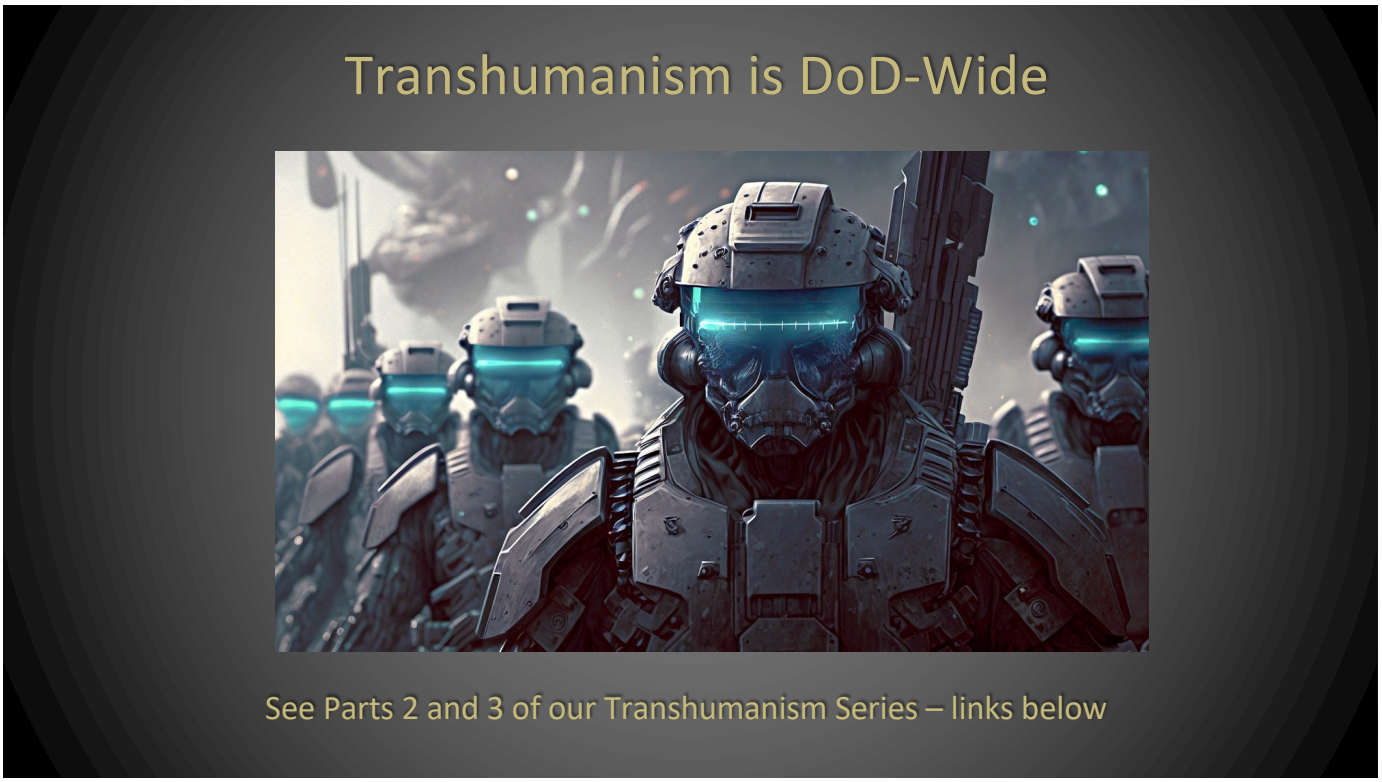
Bushnell, D. 2015. Thoughts on Major Existential Societal Issues and Their Prospective Solutions. *Professional Pilot.* Queensmith Communications Corporation. [Website]

Bushnell, D. 2020. *Disruptive Technologies and Their Putative Impacts Upon Society and Aerospace – Entering The Virtual Age*. Technical Memorandum. Hampton, Virginia: NASA Langley Research Center. [Website]

Yes but those are just NASA 'futures'.

Of course they're space-age.

That's all sci-fi pie-in-the-sky.



Part 2: https://propagandainfocus.com/transhumanist-futures-part-2-humanity-in-the-crosshairs/

Part 3: https://propagandainfocus.com/military-operations-in-civilian-disguise-part-3-bio-nano-governance-and-terms-of-use-for-humans-2-0/

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The DoD entered the 21st century with its *Defense Science and Technology Strategy 2000,* published in May of 2000. The Defense Science and Technology Strategy declared that in order to "provide for national security in the 21st century", the DoD would need to be "building our portfolio of technology investments … leveraging the technology explosion, and enabling the Revolution in Military Affairs."

The document opened by proclaiming, "the technologies that will make our forces lighter, more mobile, and more lethal will be key." [18]

From transhumanism series **Part 2**

Reference

[18] DoD. 2000. D*efense Science and Technology Strategy 2000*. Washington, DC: Office of the Secretary of Defense, p.1. [Website]

In July of 2000, the US Government announced its National Nanotechnology Initiative (NNI),[4] whose aim was to accelerate progress in nanotechnology research. In tandem, "a White House letter (from the Office of Science and Technology Policy and Office of Management and Budget) sent in the fall of 2000 to all Federal agencies has placed nanotechnology at the top of the list of emerging fields of research and development in the United States.[6]

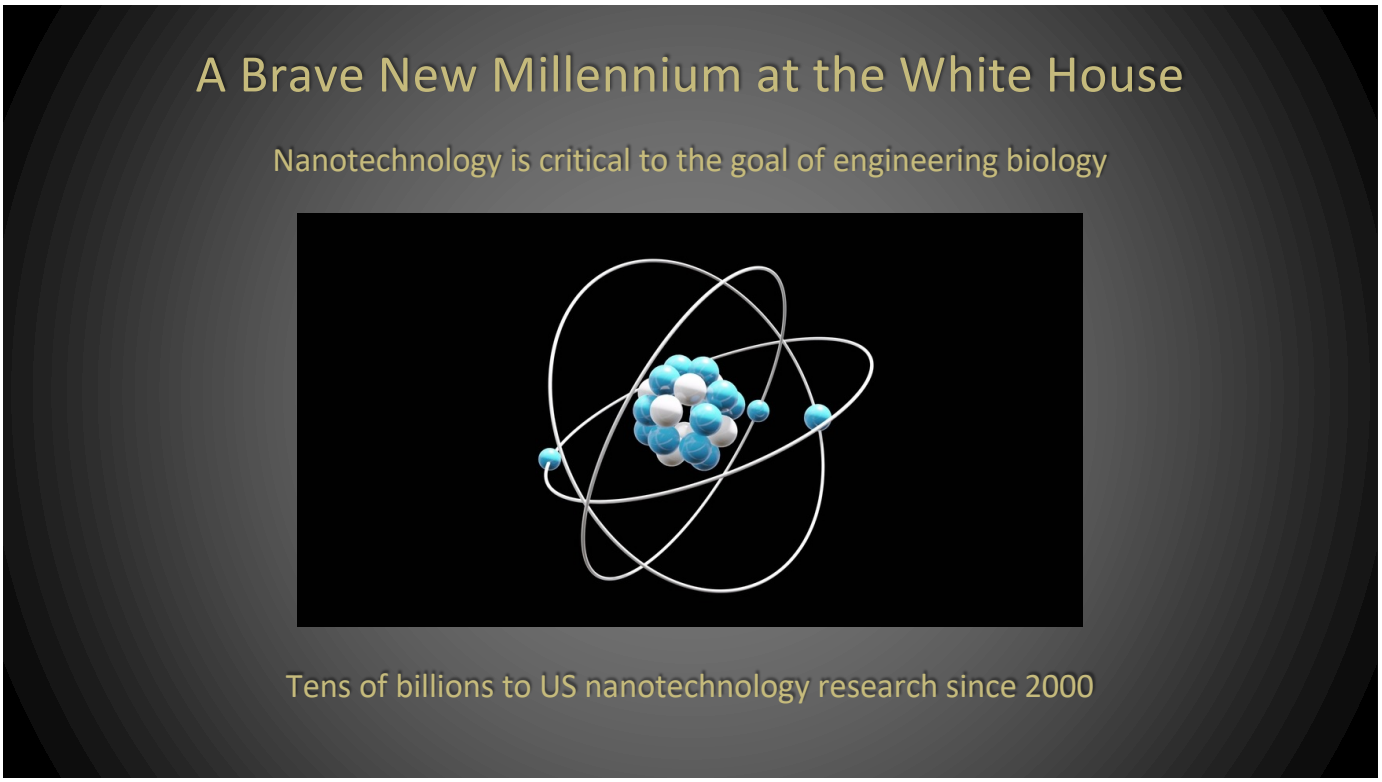
A heading preceding the NNI overview read, "National Nanotechnology Initiative – Leading to the Next Industrial Revolution."
Klaus Schwab similarly declared the arrival of a new Industrial Revolution in the Covid context – the Fourth Industrial Revolution -
which would see the merger of our physical, digital and biological identities. In 2020 he said that Covid-19 had "accelerated the ongoing Industrial Revolution" such that "the Fourth Industrial Revolution is now a reality".

From transhumanism series **Part 2**

References

[4] National Science and Technology Council. 2000. *National Nanotechnology Initiative: The Initiative and its Implementation Plan*. National Science and Technology Council Committee on Technology, Subcommittee on Nanoscale Science, Engineering and Technology. [Website]

[6] Roco, M.C., and Bainbridge, W. Eds. 2001. *Societal Implications of Nanoscience and Nanotechnology*: NSET [Nanoscale Science, Engineering, and Technology Subcommittee] Workshop Report. National Science Foundation. [Website]



The status of nanotechnology policies is significant to transhumanism's trajectory in that nano-technological materials and tools are critical to the transhumanist project of re-engineering biological life. According to a 2010 report from the Air War College titled *Nanotechnology: Threats and Deterrent Opportunities by 2035,* "the ability to work in nanoscale is … leading to unprecedented understanding and control over the basic building blocks of all natural and man-made things".[8]

Nanotechnology, the report explains, "is about much more than dealing with the very small". It quotes Mihail C. Roco, Senior Advisor for Science and Engineering at the NSF, as saying that nanotechnology represents the convergence of science and engineering "where the fundamental principles of life can be found."[9]

In an applied sense, according to a 2001 National Science and Technology Council workshop report:

"… the nanoscale is not just another step toward miniaturization, but a qualitatively new scale; … among the envisioned breakthroughs are human organ restoration using engineered tissue, 'designer' materials created from directed assembly of atoms and molecules, as well as emergence of entirely new phenomena in chemistry and physics."[10]

Those entirely new phenomena, The Air Force Research Laboratory explains in *Nanoscience Technologies: Applications, Transitions and Innovations*, arise because nano-sized materials are smaller than the scales at which conventional physics apply and larger than those where atomic physics dominate.[11] This intermediate state between conventional and atomic physics results in oddities such as "forc[ing]

electrons into unique energy states", which in turn promote features including altered magnetic properties, "improved superconductivity" and exceptional strength.[12]

Tens of billions of dollars have been invested in U.S. nanotechnology research since 2000, $43 billion under the NNI alone.

From transhumanism series **Part 2**

References

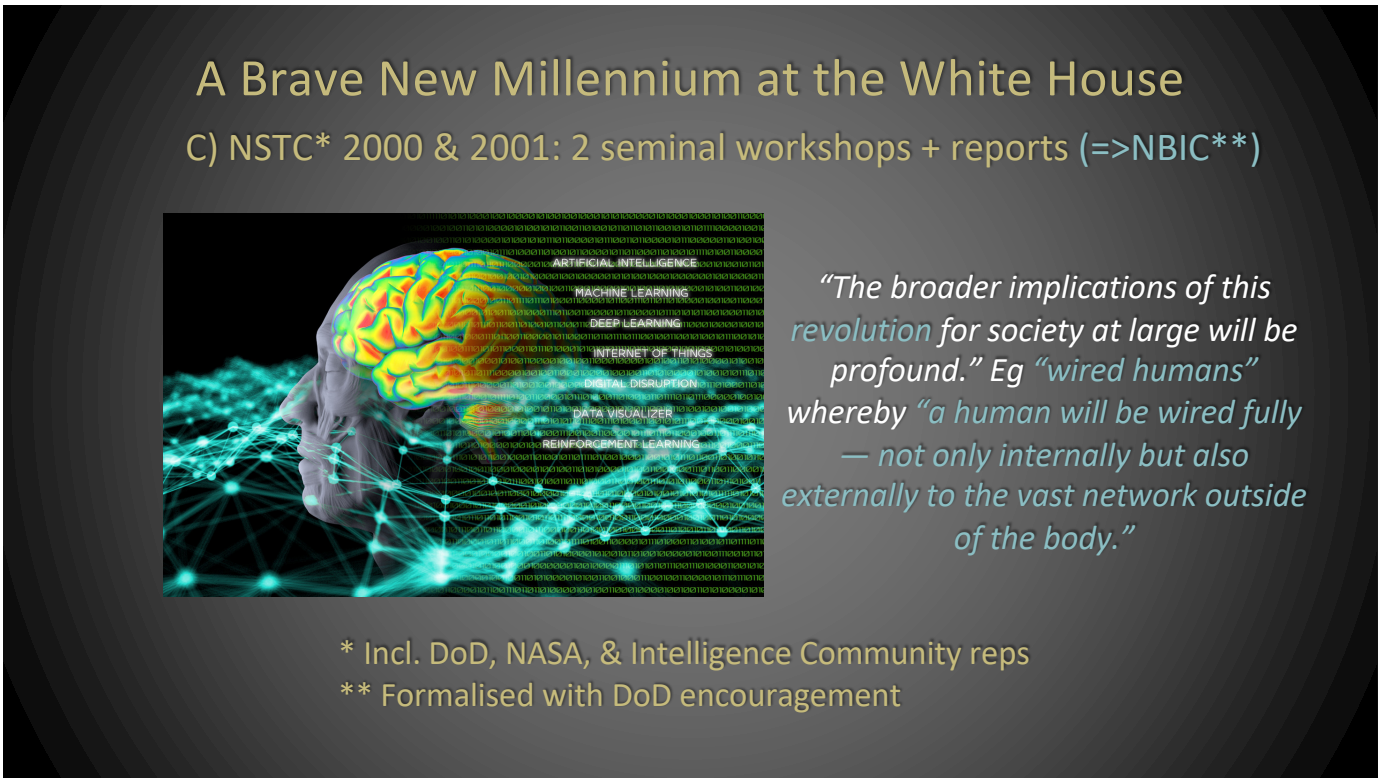
[8] Hauth, C.P. 2010. *Nanotechnology: Threats and Deterrent Opportunities by 2035*. Research report submitted to the Air War College Air University, p.7. [Website]

[9] ibid., pp.2 and 7. [Website]

[10] Roco, M.C., and Bainbridge, W. Eds. 2001. *Societal Implications of Nanoscience and Nanotechnology*: NSET [Nanoscale Science, Engineering, and Technology Subcommittee] Workshop Report. National Science Foundation, p.vi. [Website]

[11] Air Force Research Laboratory (AFRL). 2010. *AFRL Nanoscience Technologies: Applications, Transitions and Innovations*. Air Force Research Laboratory, Wright Patterson Air Force Base, p.4. [Website]

[12] *ibid., p.4.* [Website]



In September 2000, almost a year before NASA Langley's August 2001 'futures' presentation[1] to the National Defense Industrial Association (NDIA) described in **Part 1**, another 'futures' workshop took place the National Science Foundation (NSF) headquarters in Alexandria Virginia. The workshop was titled 'Societal Implications of Nanoscience and Nanotechnology'. It was organised by the National Science and Technology Council (NSTC), a cabinet-level council of advisers to the President,[2] which provides "the principal means for the U.S. President to coordinate science, space and technology policies across the Federal Government".[3]

The workshop was held two months after the US Government's National Nanotechnology Initiative (NNI) was announced in July 2000, and spawned a 280-page report in 2001, which advised that "a revolution is occurring in science and technology, based on the recently developed ability to measure, manipulate and organize matter on the nanoscale". The report predicted that, "over the next 10 to 20 years [2010-2020], nanotechnology will fundamentally transform science, technology, and society". It added, "there is little doubt that the broader implications of this nanoscience and nanotechnology revolution for society at large will be profound".[7]

The report offered the example of "wired humans", looking towards a future in which "a human will be wired fully — not only internally but also externally to the vast network outside of the body."

The following year a second workshop was held, titled, *Nano Bio Info Cogno: Converging Technologies for Improving Human Performance*.[15] The 2001 workshop spawned a second report, edited by the same authors as the previous year's NTSC workshop summary, Mihail C. Roco and William S. Bainbridge of the NSF. The second

report, published in 2002, ran to 424 pages and launched what is now known as the NBIC initiative, an influential, international interdisciplinary convergence of activity across Nanoscience, Biotechnology, Information technology and Cognitive science / neuroscience (NBIC) domains.

Although not obvious in the NBIC report itself, a later NATO document made clear that the NBIC initiative had come about with DoD backing. The 2021 NATO report reads, “NBIC is a scientific project bringing together four previously distinct domains: nanotechnology (nanorobot technology, nano-sensors, nanostructures, energy, etc.), biotechnology (bio-genomic technology, bio-engineering, neuropharmacology, etc.), information technology (computer science, microelectronics, etc.) and cognitive technology (cognitive science and neuropsychology). The project was formalized with the encouragement of the US Department of Defense (DoD) in 2002 and subsequently taken up by major international institutions and a number of nations, to bring together future technologies”.[17]

From transhumanism series **Part 2**

References

[1] Bushnell, D. 2001. *Future Strategic Issues/Future Warfare [Circa 2025]*. Presentation to The 4th Annual Testing and Training for Readiness Symposium & Exhibition: Emerging Challenges, Opportunities and Requirements, National Defense Industrial Association (NDIA), 13-16 August 2001. NASA Langley Research Center. Internet Archive. [Website]

[2] The White House. no date. National Science and Technology Council. Office of Science and Technology Policy. [Website]

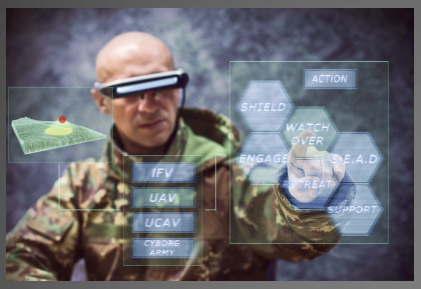
[3] Roco, M.C., and Bainbridge, W. Eds. 2001. *Societal Implications of Nanoscience and Nanotechnology*: NSET [Nanoscale Science, Engineering, and Technology Subcommittee] Workshop Report. National Science Foundation, *c*over page. [Website]

[7] *ibid.,* pp. 1 and iv. [Website]

[15] Roco, M.C. and Bainbridge, W., Eds. 2002. *Converging Technologies for Improving Human Performance: Nanotechnology, Biotechnology, Information Technology and Cognitive Science*. Arlington, VA: National Science Foundation. [Website]

[17] Claverie, B., and Du Cluzel, F. 2021. “Cognitive Warfare”: The Advent of the Concept of “Cognitics” in the Field of Warfare. In B. Claverie, B. Prébot, N. Buchler, and F. du Cluzel, Eds. *Cognitive Warfare: The Future of Cognitive Dominance*. NATO Collaboration Support Office, p.6. [Website]

Brave New 21st Century DoD Technologies



- Nanoscience
- Micro- and nano-robots
- Molecular engineering (=> synthetic biology)
- Augmented reality
- Nanoscale sensors (=> bioelectronics)
- Biosensors with smart sensor webs (=> Internet of Bodies)

Eg "embedded bionic chips" in soldiers

Technologies of interest to the DoD, as listed above, were described as enabling "the combination of biology with information technology, electronics, optoelectronics, sensors, and actuators".[20] The subsequent DoD-backed NBIC initiative of 2002 cites the 2000 DoD Science and Technology Strategy report, offering "embedded bionic chips" in soldiers as an example of the revolutionary technologies emanating from the national security realm.[21]

Within a decade, the NASA Langley Chief Scientist told an audience of environmental scientists in 2011, "Humans are becoming cyborgs", adding, "we have put brain chips in about 10,000 people … DARPA is working on brain chips for super soldiers. Fifteen, 20 years out if you don't have all of these chips in you, you can't compete."

From transhumanism series **Part 2**

References

[20] DoD. 2000. D*efense Science and Technology Strategy 2000*. Washington, DC: Office of the Secretary of Defense, p.11. [Website]

[21] Roco, M.C. and Bainbridge, W., Eds. 2002. *Converging Technologies for Improving Human Performance: Nanotechnology, Biotechnology, Information Technology and Cognitive Science*. Arlington, VA: National Science Foundation, p.334. [Website]

Sample Futures Papers Since 2000

Eg 'Cyborg Soldier, 2050'

On Human/Machine Fusion and the Future of the DoD

- US Army DEVCOM & The Under Secretary of Defense for Research & Engineering, 2019

Advocates "A national effort to sustain U.S. dominance in cyborg technologies"

Outlines 4 categories of cyborg technology to be "technically feasible by 2050 or earlier". Incl. cyborg brains. (Both brain "enhancement", eg better "target acquisition & engagement", aka killing; & brain networking, eg direct data exchanges between neurons & microelectronic systems.

Cyborg Soldier 2050: Human/Machine Fusion and the Implications for the Future of the DOD (2019):[31]

- Performing Organizations – Director, US Army Combat Capabilities Command Chemical Biological Center; Naval Research Laboratory; National Defense University; U.S. Army Medical Research and Development Command; Georgetown University, and; the Office of the Under Secretary of Defense for Research and Engineering. Sponsoring Orgnization – the Office of the Under Secretary of Defense for Research and Engineering.

The report outlines four domains of cyborg technology and notes that an upcoming two way data transfer between brains and machines and/or brains and electronics will create a "revolutionary advancement in future military capabilities". Specifically:

"This technology is predicted to facilitate read/write capability between humans and machines and between humans through brain-to-brain interactions. These interactions would allow warfighters direct communication with unmanned and autonomous systems, as well as with other humans, to optimize command and control systems and operations.

"The potential for direct data exchange between human neural networks and microelectronic systems could revolutionize tactical warfighter communications, speed the transfer of knowledge throughout the chain of command, and ultimately dispel the 'fog' of war. Direct neural enhancement of the human brain through neuro-silica interfaces could improve target acquisition and engagement and accelerate defensive and offensive systems."

The report goes on: “The U.S. Government should support efforts to establish a whole-of-nation approach to human/machine enhancement technologies”, involving the commercial sector as well as government, with the rationale that, “a national effort to sustain U.S. dominance in cyborg technologies is in the best interests of the DOD and the nation”.

From transhumanism series **Part 2**

Reference

[31] Emanuel, P., Walper, S., DiEuliis, D., Klein, N., Petro, J.B., and Giordano, J. 2019. *Cyborg Soldier 2050: Human/Machine Fusion and the Implication for the Future of the DoD*. Aberdeen Proving Ground, MD: U.S. Army Combat Capabilities Development Command (DEVCOM) Chemical Biological Center, sponsored by the Office of the Under Secretary of Defense for Research and Engineering. [Website]

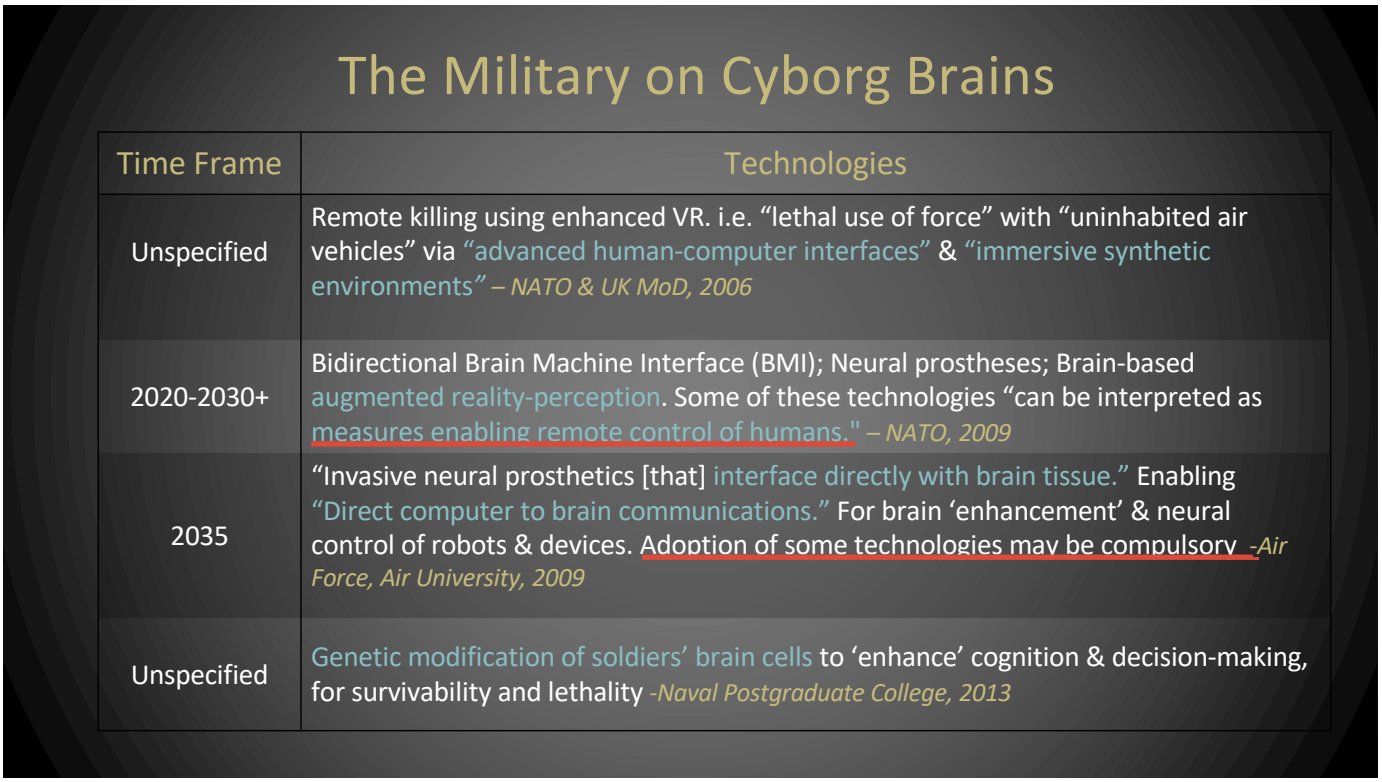
‘Cyborg Warrior’– Networked Brains

“The cyborg warrior is neither a human subject nor an autonomous robot, but an augmented and distributed system architecture, a hybrid man-machine network that integrates artificial and human cognition.”

- Scandinavian Journal of Military Studies, 2021

Reference

Nørgaard, K., and Linden-Vørnle, M. 2021. Cyborgs, neuroweapons, and network command. *Scandinavian Journal of Military Studies*, Vol. *4, No.* 1, pp. 94-107 [Journal].



References in order of appearance above

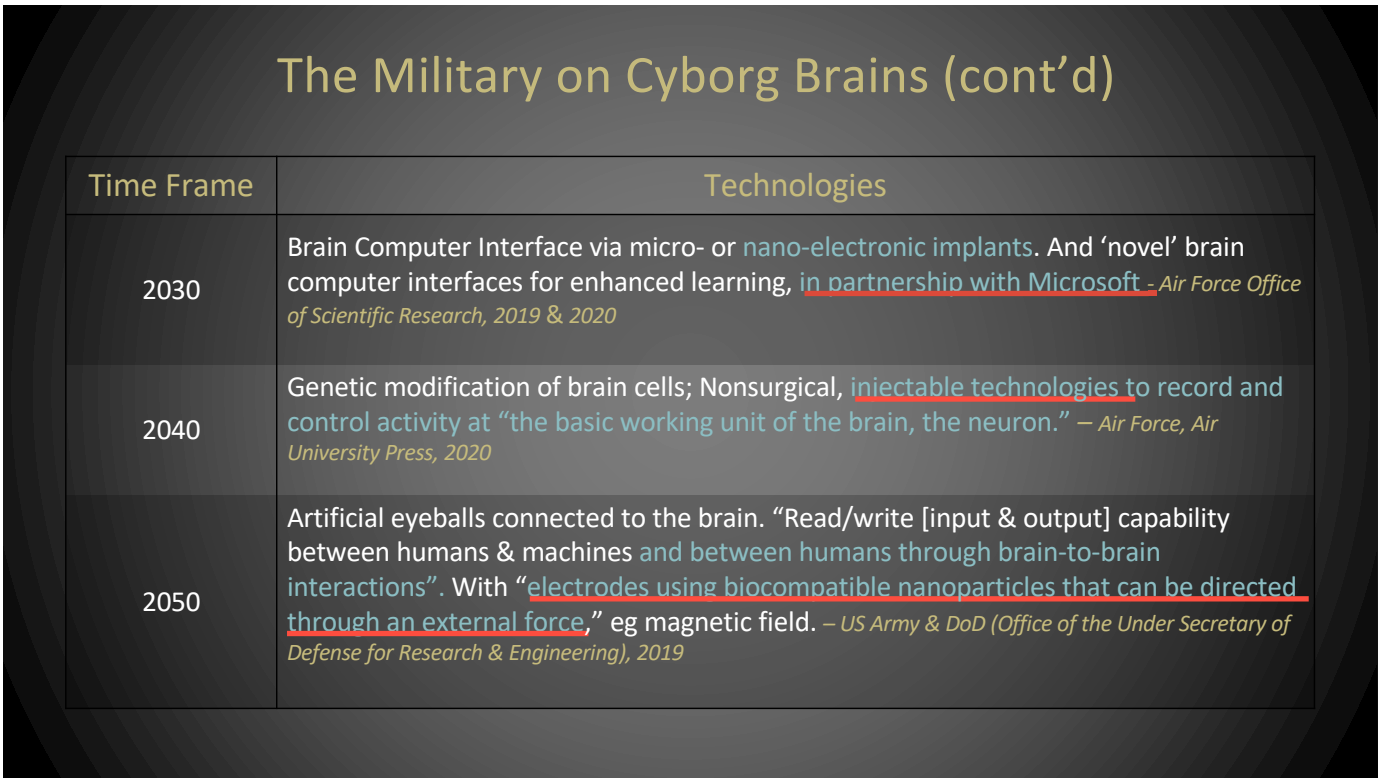
Taylor, R.M. 2006. *Human Automation Integration for Supervisory Control of UAVs*. Defense Science and Technology Laboratory, UK Ministry of Defence and NATO. [Website]

Reschke, S., van Erp, J.B.F., Brouwer, A.M., and Grootjen, M. 2009. *Neural and Biological Soldier Enhancement-From SciFi to Deployment*. Fraunhofer Institute for Technological Trend Analysis and NATO. [Website]

Finn II, M. 2009. *Cognition 2035: Surviving a Complex Environment Through Unprecedented Intelligence*. Air War College Air University. [Website]

Buchner, C.M. 2013. *Biologically Fit: Using Biotechnology to Create a Better Soldier*. Monterey, CA: Naval Post Graduate School. [Website]

From transhumanism series **Part 2**



References in order of appearance above

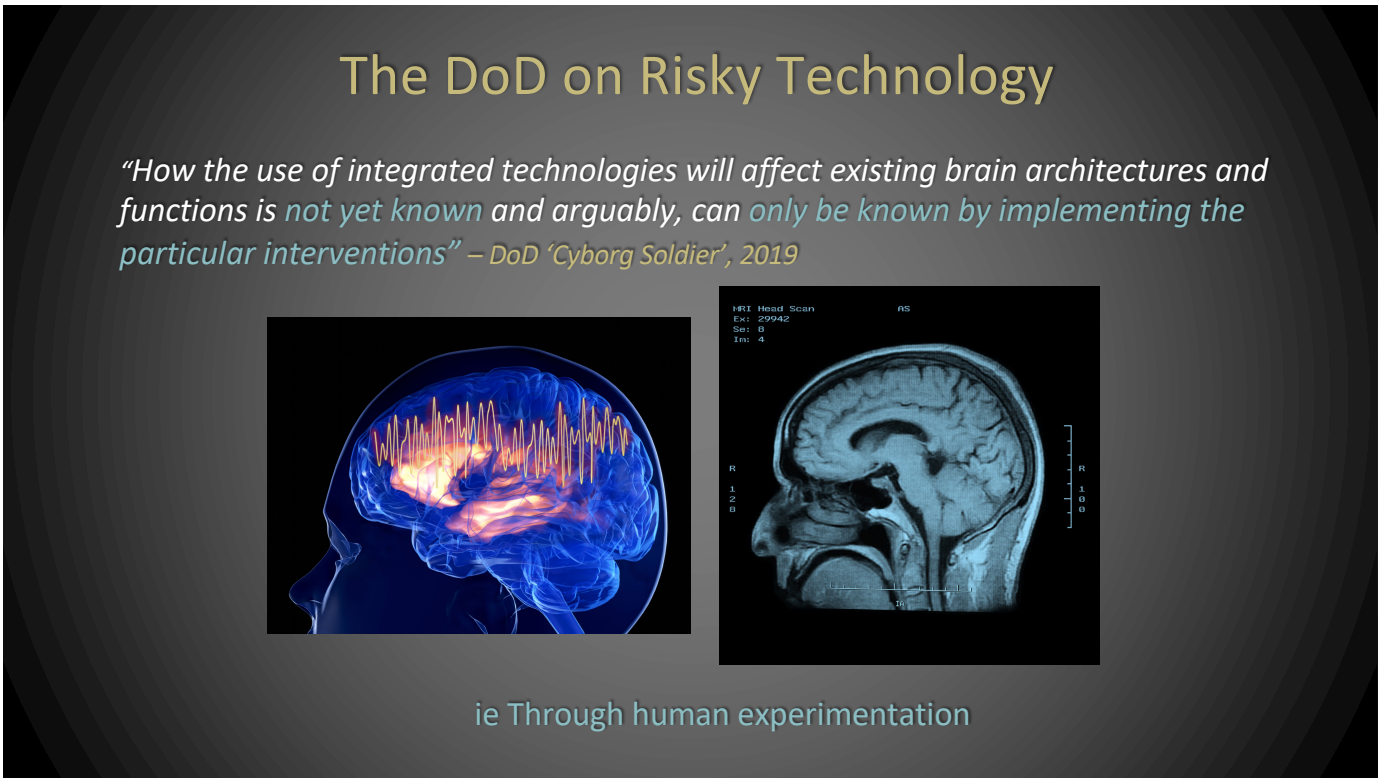
Olds, J. 2019. *Ideas Lab for Imagining Artificial Intelligence and Augmented Cognition in the USAF of 2030*. Final Report of a 15 month project sponsored by the US Air Force Office of Scientific Research, with contributors from Northrup Grumman and Raytheon. [Website]

Jordan, H. 2020. AFRL neurotechnology partnership aims to accelerate learning. *Air Force Research Laboratory*. [Website]

Vahle, M.W. 2020. *Opportunities and Implications of Brain-Computer Interface Technology*. Wright Flyer Papers No. 75. Air University Press, Muir S. Fairchild Research Information Center, Maxwell Air Force Base, Alabama. [Website]

Emanuel, P., Walper, S., DiEuliis, D., Klein, N., Petro, J.B., and Giordano, J. 2019. *Cyborg Soldier 2050: Human/Machine Fusion and the Implication for the Future of the DoD*. Aberdeen Proving Ground, MD: U.S. Army Combat Capabilities Development Command (DEVCOM) Chemical Biological Center, sponsored by the Office of the Under Secretary of Defense for Research and Engineering. [Website]

From transhumanism series **Part 2**



Despite advocating a whole of nation effort to achieve US dominance in cyborg technologies, the 'Cyborg Soldier 2050' report acknowledges that, "how the use of integrated technologies will affect existing brain architectures and functions is not yet known and arguably, can only be known by implementing the particularinterventions". In other words, through human experimentation.

From transhumanism series **Part 2**

Reference

Emanuel, P., Walper, S., DiEuliis, D., Klein, N., Petro, J.B., and Giordano, J. 2019. *Cyborg Soldier 2050: Human/Machine Fusion and the Implication for the Future of the DoD*. Aberdeen Proving Ground, MD: U.S. Army Combat Capabilities Development Command (DEVCOM) Chemical Biological Center, sponsored by the Office of the Under Secretary of Defense for Research and Engineering. [Website]

When the Office of the Under Secretary of Defense for Research and Engineering was created as part of the National Defense Authorization Act of 2017, a conference report accompanying the Act read: "The conferees expect that the Under Secretary of Defense for Research and Engineering would take risks, press the technology envelope, test and experiment, and have the latitude to fail, as appropriate."[70]

The DoD's 2022 Defense Science and Technology policy similarly declared that the Office of the Under Secretary of Defense for Research and Engineering would "breakdown barriers to success through policies that encourage innovation and **risk taking**."

From transhumanism series **Part 2**

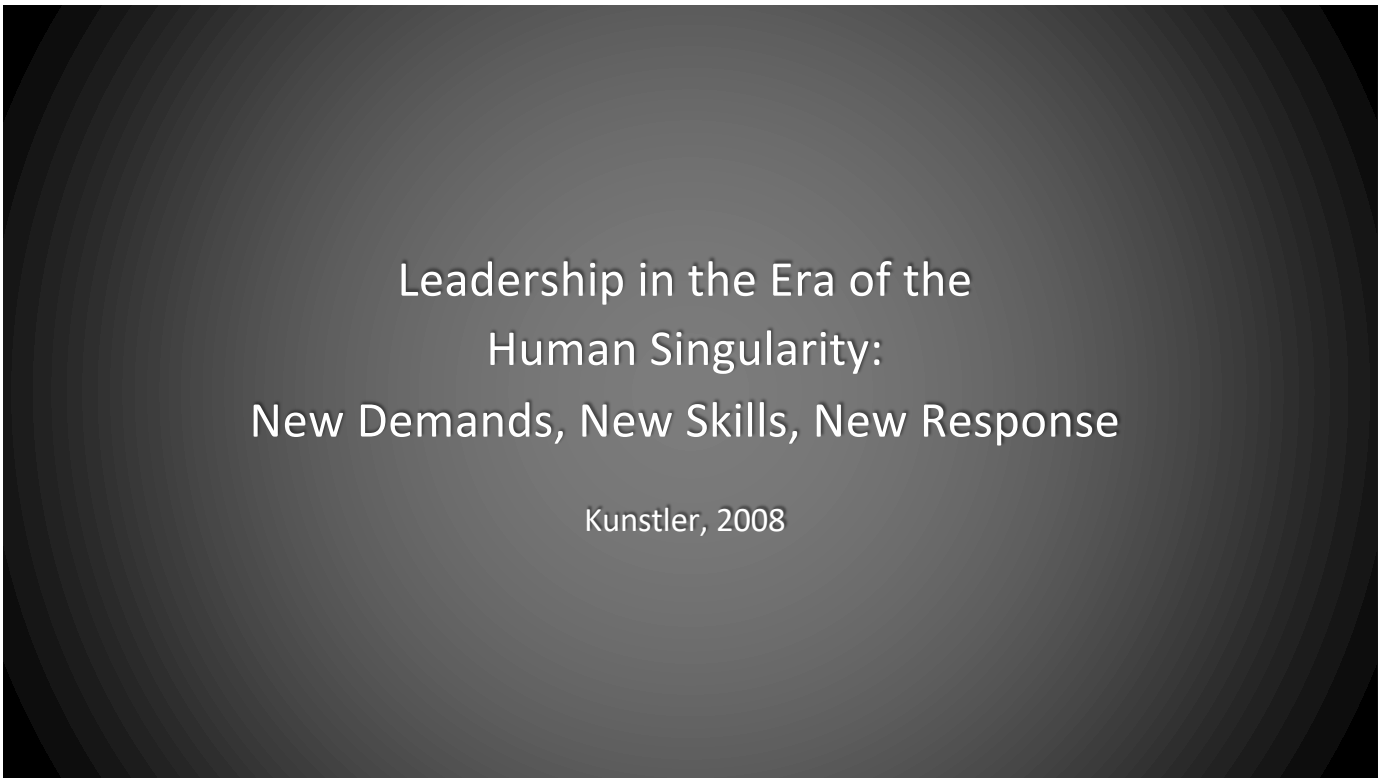
Reference

[70] House of Representatives. 2016. *National Defense Authorization Act for Fiscal Year 2017: Conference Report to Accompany S.2943*. Washington. US Government Publishing Office, p.1130. [Website]

Okay but that's just the military.
Super-soldiers and 'cyborg warriors'
are one thing.
The civilian sphere is different.

Civilian Transhumanist Futures

Cyborg Societies



This document opened by noting:

"The "human singularity" refers to the integration of technology into the human body so that levels of mental acuity and physical ability eclipse all previous known levels … A broad front of converging core technologies, such as nanotechnology, bioengineering, supercomputing, materials development, and robotics, may make such individuals commonplace by 2030; indeed, significant steps have already been taken to achieve this goal, and the singularity could arrive earlier.

The rise of the singularity and the resulting Enhanced Singular Individuals (henceforth referred to as 'ESIs'), capable of outsized mental and physical performance, will have a major impact on the practice of leadership, a major factor in determining whether a society succeeds or fails … In fact, the singularity will override the parameters that traditionally define human performance, changing society in complex and subtle ways."

From transhumanism series **Part 2**

Reference

Kunstler, B. 2008. Leadership in the era of the human singularity: New demands, new skills, new response. *The Proteus Monograph Series, Vol. 2, Issue 1,* cover page. [Website]

The paper stresses that in future decades "enhanced" individuals "will represent a growing portion of the population, not simply a small fraction … [which] will transform society".

Building upon this projection, the bulk of the document concerns itself with the direction that such societal transformation is expected to take, focussing on leadership challenges associated with the anticipated emergence of three strata of 'beings': 'Tweaked', 'Freaked', and 'Geeked' classes. The document explains:

"The Tweaked's abilities result from the integration of singularity technologies with individuals' biological systems … [These individuals] represent the mainstream of ESIs, those who benefit from that broad front of technologies applied in as many ways as scientists can devise."

From transhumanism series **Part 2**

Reference

Kunstler, B. 2008. Leadership in the era of the human singularity: New demands, new skills, new response. *The Proteus Monograph Series, Vol. 2, Issue 1,* cover page. [Website]

"The Freaked are new creations: cyborgs or humans with significant mechanized parts; A.I.-guided robots, clones designed for single functions or operations, group minds operating through an open source mental system via embedded quantum- or protein-based chips, robots with animal or human brains, and even animals with human intelligence or humans with animal traits … As fantastic as these possibilities seem, all are based on technologies that are well along in development or are in the prototype stage."

From transhumanism series **Part 2**

Reference

Kunstler, B. 2008. Leadership in the era of the human singularity: New demands, new skills, new response. *The Proteus Monograph Series, Vol. 2, Issue 1,* cover page. [Website]

"The Geeked are un-enhanced individuals (henceforth referred to as 'Norms') who depend on external devices to achieve competitive advantage: access to super-computing; control of virtual worlds leveraged into 'real-world' advantage; and gatekeepers who exercise control over energy, resources, and the technologies of crowd control and manipulation. The Geeked, of course, are already among us in the high tech industry"

From transhumanism series **Part 2**

Reference

Kunstler, B. 2008. Leadership in the era of the human singularity: New demands, new skills, new response. *The Proteus Monograph Series, Vol. 2, Issue 1,* cover page. [Website]

"The first waves of ESIs will likely emerge from military and corporate research labs."

"Many ESIs, especially the Freaked, will start out pretty much as servants or curiosities, as will simulacra such as holographic entities, cyborgs, and clones.

"The Tweaked, on the contrary, will leverage power from the beginning. Conflicts will flare in regard to recognition and compensation: do ESIs or their designers, owners, and/or handlers receive credit and rewards for a job well done? What fate lies in store for ESIs rendered obsolete by improved technology?

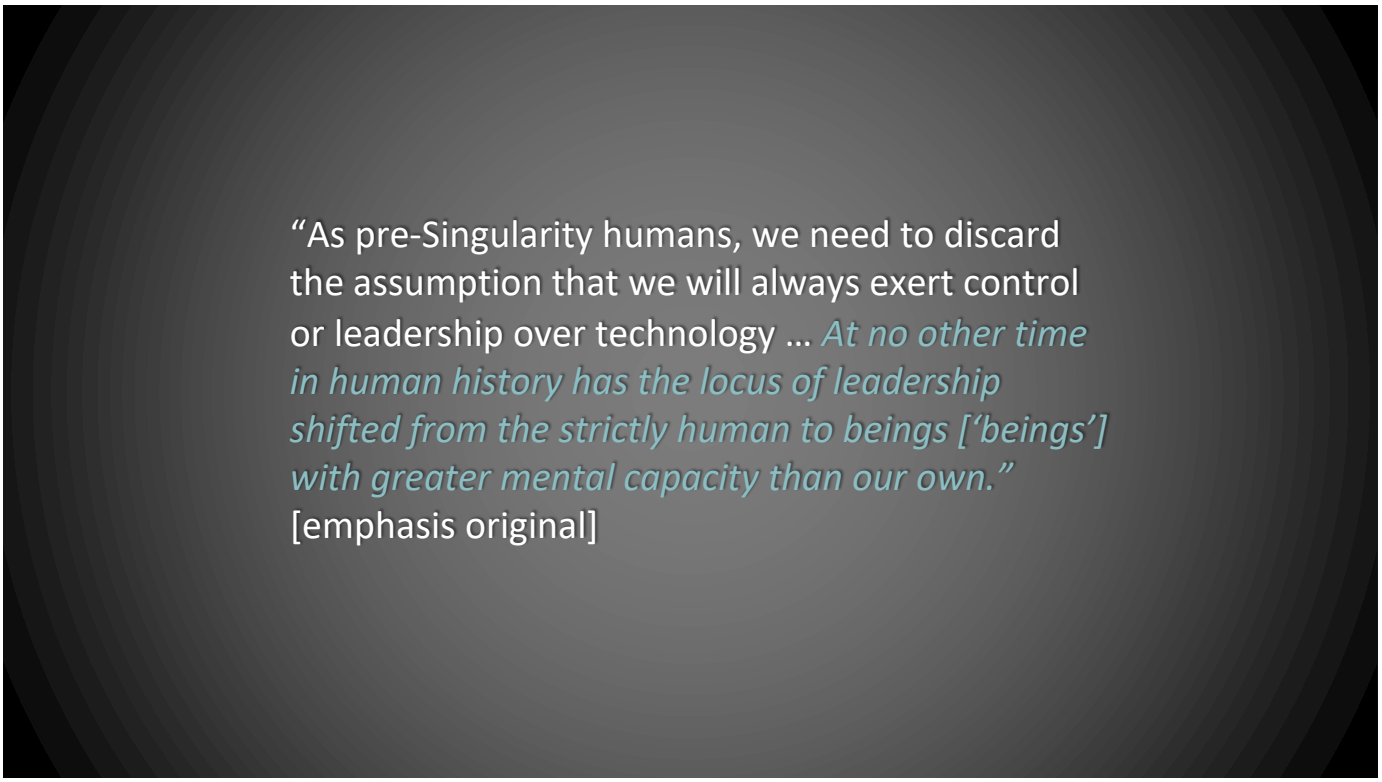
"Norms will not necessarily be loyal to their 'own'; many may align with ESIs, and Norm leaders who can work well with ESIs will flourish."

Questions that are expected to arise include, "when can an ESI own property? When does a cyborg receive a paycheck?" Meanwhile, "geeked leaders who control singularity technologies will eventually yield leadership to the Tweaked and Freaked as the latter groups gain confidence and independence".

From transhumanism series **Part 2**

Reference

Kunstler, B. 2008. Leadership in the era of the human singularity: New demands, new skills, new response. *The Proteus Monograph Series, Vol. 2, Issue 1,* cover page. [Website]



Reference

Kunstler, B. 2008. Leadership in the era of the human singularity: New demands, new skills, new response. *The Proteus Monograph Series, Vol. 2, Issue 1,* cover page. [Website]

Mini Quiz

Was this document published by:

a) A service member experimenting with psychotropic drugs
b) NASA
c) DARPA
d) An international consortium under the aegis of the Office of the Director of National Intelligence (ODNI), including the US Army War College Center for Strategic Leadership (CSL), the National Intelligence University (NIU), the Intelligence Advanced Research Projects Agency (IARPA), National Security Agency (NSA), Defense Intelligence Agency (DIA), US Joint Forces Command (USJFC), US Marine Corps (USMC), US Navy and others, with numerous universities, international bodies such as Canadian, Israeli, British, Australian, Italian, French and Swiss military-intelligence bodies and institutions, the UN, and private corporations including Lockheed Martin?

Answer

d)

i.e. Proteus: Apx 30 military / intelligence bodies across 11 nations in conjunction with numerous universities, the UN, and the private sector. Under the aegis of the ODNI, which feeds its advice directly into the White House and the US intelligence community, via the Director of National Intelligence.

Whose aim was to address "new and emerging 'futures' concepts", with the "overarching goal" of "assist[ing] strategic and high-operational level decision makers" in their "critical analysis of national, military and intelligence issues within the Joint, Interagency, Intergovernmental, and Multinational (JIIM) environment."

Proteus' Cyborg Societies

"The singularity will change our ideas of humanness… With the singularity, humanity will be heading into uncharted territory whose highly-talented denizens raise the specter that human beings will be rendered obsolete".

Reference

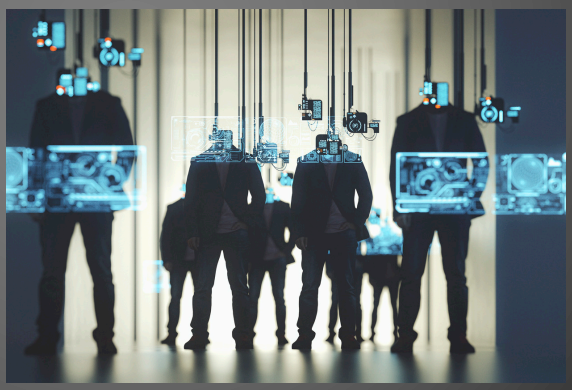
Kunstler, B. 2008. Leadership in the era of the human singularity: New demands, new skills, new response. *The Proteus Monograph Series, Vol. 2, Issue 1,* cover page. [Website]

Not Just Proteus

Military-Intelligence 'cyborg soldier' documents are peppered with civilian futures, along with policy recommendations.

Human-machine hybrids are cast as serving not only national security purposes, but also commercial interests.

- 'economic prosperity'
- 'wealth'
- 'competitiveness'
- 'e-business'
- 'the nation's productivity'
- 'work efficiency'
- 'the entertainment industry'
- 'the tourist industry'
- 'new products and services'
- etc



Ultimately, the human-machine hybrids of the future in military-intelligence and government documents are cast as serving not only national security purposes, but also commercial interests (described variously as 'economic prosperity', 'wealth', 'competitiveness', 'e-business', 'the nation's productivity', 'work efficiency', 'the entertainment industry', 'the tourist industry', 'new products and services' and so-on), as well as medical and IT industries, and a perceived, unquestioned imperative for nations to pursue "technological superiority".[33]

Accordingly, via government, commercial, medical and educational avenues, the NBIC project and a plethora of subsequent-military intelligence reports foresaw for everyday citizens the same transhumanist "enhancements" slated for soldiers. These include genetic engineering, brain implants, brain-to-machine and brain-to-brain interfaces, engineered tissue, synthetic organs and cells, nano implants, and bio-nano electronics / molecular electronics. All of which enable virtual environments that could, with the help of bio-nanotechnology, "transcend the biological limitations of human senses and create a new human relationship to the physical environment".[34]

In '*Human Augmentation: The Dawn of a New Paradigm'* (2021), for instance, the UK Ministry of Defence writes that human augmentation, which conceptualises "the person as a platform…a human platform … is relevant across society and Defence … Designer babies", it says, may be "likely within the next 30 years".[35]

From transhumanism series **Part 3**

References

[33] Roco, M.C. and Bainbridge, W., Eds. 2002. *Converging Technologies for Improving Human Performance: Nanotechnology, Biotechnology, Information Technology and Cognitive Science*. Arlington, VA: National Science Foundation, p.12. [Website]

[34] *ibid.*, p.161. [Website]

[35] UK Ministry of Defence Development, Concepts and Doctrine Centre (DCDC). 2021. *Human Augmentation – The Dawn of a New Paradigm: A strategic implications project*, in partnership with the German Ministry of Defence Bundeswehr Office for Defence Planning (BODP), pp.11, 19 and 59. [Website]

Like the Proteus monograph of 2008, for instance, the 2021 MoD document foresees the emergence of social classes stratified by their 'enhancement' status. It says that:

"Human augmentation is likely to exacerbate inequality, and could lead to societal tensions. The wealthy are expected to be early adopters of human augmentation, and they could use their acquired superior abilities to entrench their status. In time this could lead to an elite overclass that could become genetically distinct from the rest of humanity, and leave an unaugmented underclass as relatively disadvantaged as the illiterate are in today's societies". Those who reject technological adulteration, moreover, "could be marginalised, or even persecuted".[36]

Nevertheless, the MoD report argues that "there may be a moral obligation to augment people" on certain grounds, such as in the name of "wellbeing" or protection from "novel threats". (See **Part 1** for discussion of the euphemistic linguistic shell game involving sanitising and eulogising language — such as 'wellbeing' or 'protection' — within which questionable transhumanist agendas can hide.)

Simliarly, in *Cyborg Soldier 2050: Human/Machine Fusion and the Implications for the Future of the DOD* (2019), The US Army DEVCOM and its co-authors write:

"Introduction of augmented human beings into the general population … will accelerate in the years following 2050 and will lead to imbalances, inequalities, and inequities in established legal, security, and ethical frameworks. Each of these technologies will purportedly afford some level of performance improvement to end users, which will widen the performance gap between enhanced and unenhanced individuals and teams."

Nevertheless, such technologies should be backed by a “whole-of-nation” approach, the report recommends, while negative narratives around them are to be countered.[46]

The UK MoD adds that, “The future of human augmentation should not, however, be decided by ethicists or public opinion … rather, governments will need to develop a clear policy position that maximises the use of human augmentation”.[37]

From transhumanism series **Part 3**

References

[36] UK Ministry of Defence Development, Concepts and Doctrine Centre (DCDC). 2021. *Human Augmentation – The Dawn of a New Paradigm: A strategic implications project*, in partnership with the German Ministry of Defence Bundeswehr Office for Defence Planning (BODP), pp.11, 19, and 59. [Website]

[46] Emanuel, P., Walper, S., DiEuliis, D., Klein, N., Petro, J.B., and Giordano, J. 2019. *Cyborg Soldier 2050: Human/Machine Fusion and the Implications for the Future of the DOD*. Aberdeen, MD: U.S. Army Combat Capabilities Development Command Chemical Biological Center, pp. vi and vii. [Website]

[37] UK Ministry of Defence Development, Concepts and Doctrine Centre (DCDC). 2021. *op. cit.,* p.13. [Website]

Sure, but those are just recommendations.
That doesn't mean that governments
are doing anything about it.


2. Policy

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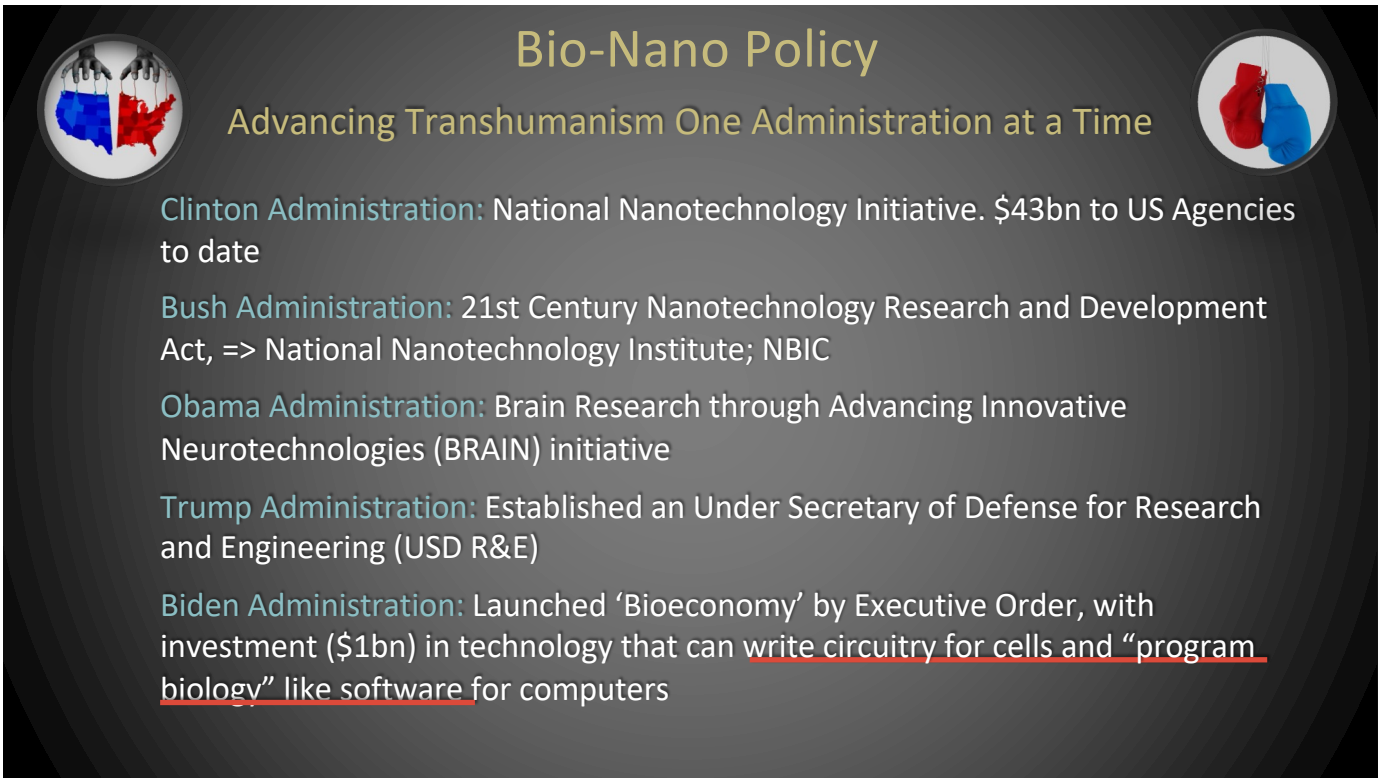


To name just a few trans-administration examples, the **Clinton Administration** launched the National Nanotechnology Initiative (NNI) in 2000[105] on the advice of the lead author of the landmark DoD-backed NBIC report[106]. The NNI continues to this day.[107]

Shortly thereafter, in December 2003, **President George W. Bush** signed the 21st Century Nanotechnology Research and Development Act, or Public Law 108-153,[108] to create a National Nanotechnology Institute or National Nanotechnology Coordination Centre [109].

Internationally, similar activity has been taking place around the world, in Europe, China, Iran, India, South Korea and Saudi Arabia, to name just the most active regions.[110, 111]

Also spawned by the NBIC initiative was the European Union 2014-2020 'Horizon 2020' research and innovation program[112], which saw the 2018 launch of the "Horizon 2020 Graphene Flagship" project, Europe's largest ever research initiative,[113] aimed, according to its website, at integrating the expertise of 170 academic and industry partners[114] to "bring graphene innovation out of the lab and into commercial applications",[115] … "accelerating the timeline for industry acceptance of graphene technologies".[116]

Building upon this growing international nanotechnology base, in 2013 the **Obama Administration** launched its Brain Research through Advancing Innovative Neurotechnologies (BRAIN) initiative, a public-private partnership that runs to 2025, involving DARPA, IARPA, the NIH, the FDA, and the Military Services among other

government agencies.[117] Its projects include those in nanoscience, brain-machine interfaces and bioengineering.[118, 119]

A few years later, in 2016 under the **Trump Administration**, Congress established an Under Secretary of Defense for Research and Engineering (USD R&E) as part of the 2017 *National Defense Authorization Act*. The new Under Secretary "would take risks, press the technology envelope, test and experiment, and have the latitude to fail, as appropriate".[120] The following year, on December 18, 2017, the Trump Administration released its National Security Strategy, declaring that "the United States will prioritize emerging technologies critical to economic growth and security, such as data science, encryption, autonomous technologies, gene editing, new materials, nanotechnology, advanced computing technologies, and artificial intelligence".[121]

More recently, in February 2022, during the **Biden Administration**, the Under Secretary of Defense for Research and Engineering, created under Trump, announced that her office would "spearhead a National Defense Science and Technology strategy for the Department of Defense (DoD)"[122] which sought "success through policies that encourage innovation and risk taking".[123] The "Critical Technology Areas" of interest included human machine interfaces, advanced materials, future generation wireless, and AI. Next, in September 2022 Biden's Whitehouse issued an executive order announcing the funding of a new "bioeconomy", under which the United States would invest in and "develop engineering technologies and techniques to be able to write circuitry for cells and predictably program biology in the same way we write software and program computers".[124]

From transhumanism series **Part 3**

References

[105] National Science and Technology Council. 2000. *National Nanotechnology Initiative: The Initiative and its Implementation Plan*. National Science and Technology Council Committee on Technology, Subcommittee on Nanoscale Science, Engineering and Technology. [Website]

[106] National Academy of Engineering. 2024. *Mihail Roco, National Science Foundation*. National Academies: Sciences, Engineering, Medicine. [Website]

[107] The White House. 2023. *Celebrating the 20-Year Anniversary of the Authorization of the National Nanotechnology Initiative*. White House Office of Science and Technology Policy. [Website]

[108] US Congress. 2023. 21st Century Nanotechnology Research and Development Act. 15 USC 7501. [Website]

[109] Hauth, C.P. 2010. *op. cit.* [Website]

[110] *ibid*. [Website]

[111] Garshasbi, M. 2021. Iran Among Five Pioneers of Nanotechnology. *Modern Diplomacy*. [Website]

[112] Roco, M.C., et al., Eds. 2013. *op. cit.,* p.2. [Website]

[113] Graphene Flagship. no date. *The Graphene Flagship*. European Commission Horizon Europe research and innovation programme. [Website]

[114] Graphene Flagship. no date. *Graphene Flagship Partners*. European Commission Horizon Europe research and innovation programme. [Website]

[115] Graphene Flagship. no date. *Industrialisation*. European Commission Horizon Europe research and innovation programme. [Website]

[116] European Commission. 2022. Graphene Flagship. [Website]

[117] Gramm, J.D. and Branagan, B.A. 2021. *Neurowar is Here!* Thesis from the Naval Postgraduate School. [Website]

[118] Kavli Foundation. 2013. The Kavli Foundation and University Partners commit $100 million to Brain Research. *Kavli Institute for Brain Science*. [Website]

[119] Kavli foundation. 2014. Brain Initiative Press Conference. [Website]

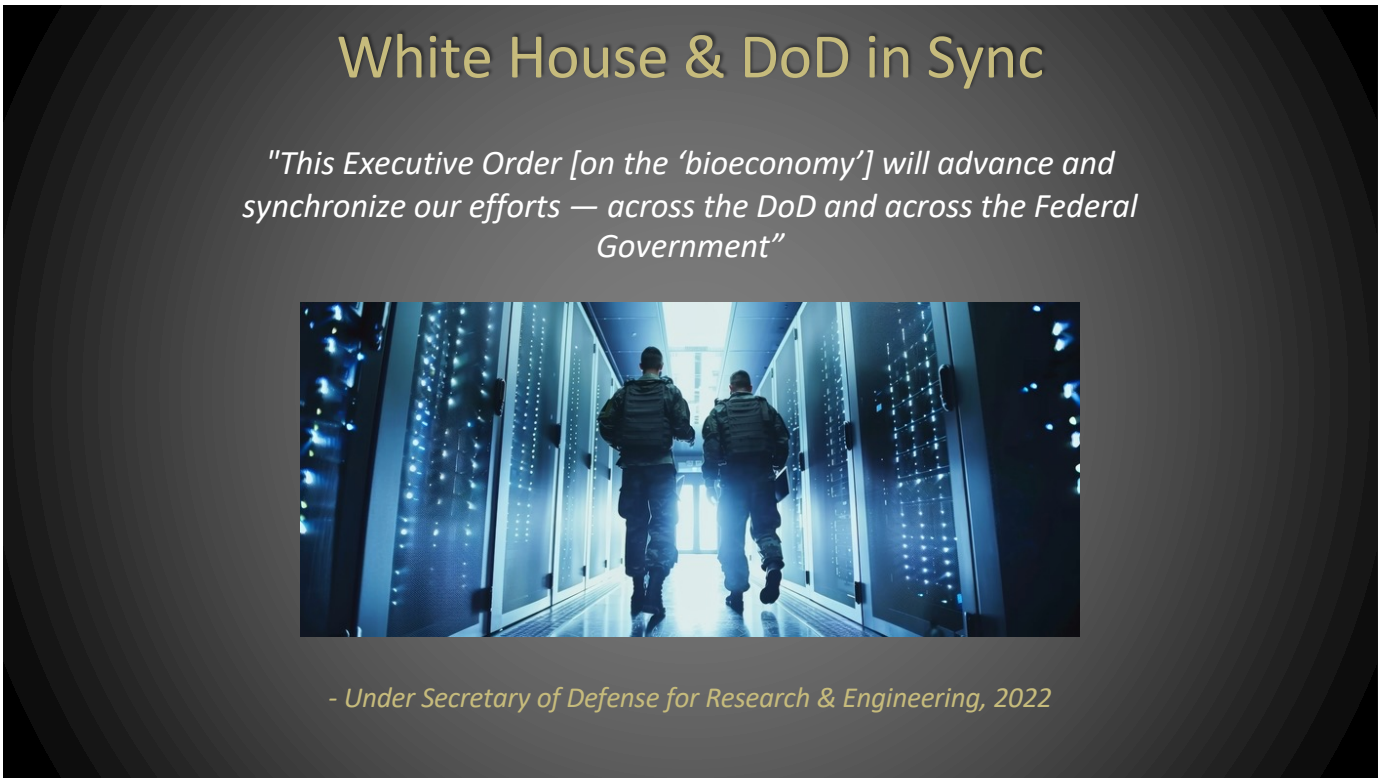
[120] Congressional Research Service (CRS). 2020. *Defense Advanced Research Projects Agency: Overview and Issues for Congress*. CRS report prepared for members and committees of congress, p.19. [Website]

[121] The White House. 2017. *National Security Strategy of the United States of America*, p. 20. Washington, DC. [Website]

[122] Department of Defense. 2022. *Department of Defense Technology Vision for an Era of Competition*. Media release, US Department of Defense. [Website]

[123] Under Secretary of Defense. 2022. *USD(R&E) Technology Vision for an Era of Competition*. Memo, US Department of Defense Research and Engineering, pp. 1 and 2. [Website]

[124] Biden, J.R. 2022. *Executive Order on Advancing Biotechnology and Biomanufacturing Innovation for a Sustainable, Safe, and Secure American Bioeconomy*. The White House. [Website]



With its problematic casting of biology as technology, to be manipulated like a computer program in the name of the "economy",[125] Biden's Executive Order is noteworthy in that, like the Trump Administration's creation of the USD(R&E), the order was undertaken in lockstep with the US military.

Days after the Biden Executive Order was issued, the same DoD Research and Engineering Under Secretary created by Trump, who is also the Pentagon's Chief Technology officer[126] and oversees the activities of DARPA,[127] said, "This Executive Order will advance and synchronize our efforts — across the DoD and across the Federal Government".[128] Prior to her political and military appointments,[129] the Under Secretary spent much of her career at Raytheon.[130]

And so it is that while populations have been dazzled, decoyed and distracted by the theatre of electoral politics, governments and the US military have quietly laid the conceptual, structural and technological foundations for transhumanist societies — administration after administration. The 2024 election, we wager, will be no exception.

From transhumanism series **Part 3**

References

[125] Biden, J.R. 2022. *Executive Order on Advancing Biotechnology and Biomanufacturing Innovation for a Sustainable, Safe, and Secure American Bioeconomy*. The White House. [Website]

[126] McCormick. 2022. DOD tech chief Heidi Shyu receives 2nd Wash100 award

from Executive Mosaic CEO Jim Garrettson. *GovConWire.* [Website]

[127] US Department of Defense. no date. *Heidi Shyu: Under Secretary of Defense for Research and Engineering (OUSD(R&E)).* [Website]

[128] Edwards, J. 2022. DOD to invest $1.2B in biomanufacturing; Heidi Shyu quoted. *GovCon Wire*. [Website]

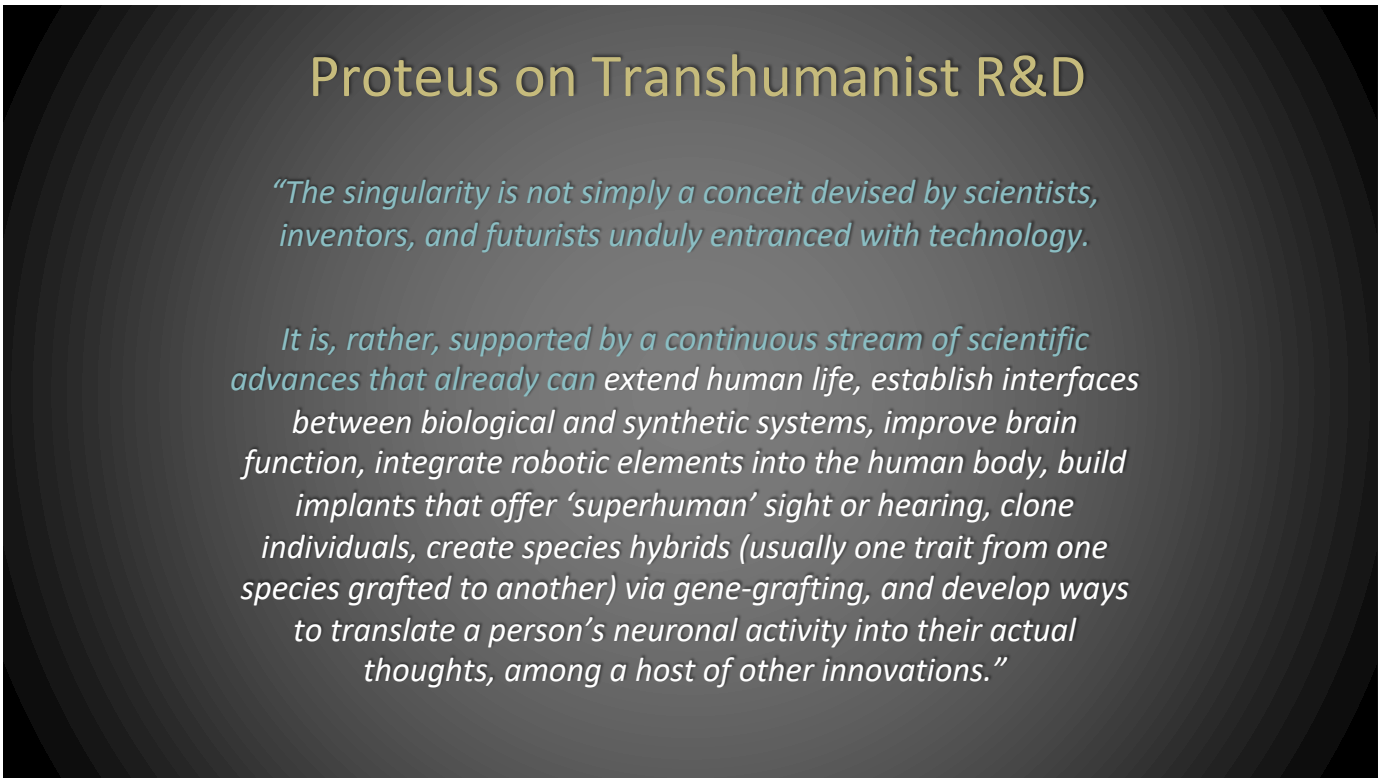
[129] Wikipedia. 2024. Heidi Shyu. *Wikipedia the Free Encyclopedia*. [Website]

[130] US Army. no date. *The Honorable Heidi Shyu, Assistant Secretary of the Army (Acquisition, Logistics &Technology) and Army Acquisition Executive*. [Website]

Yes but those are just policy positions.
Where is the tangible R&D?

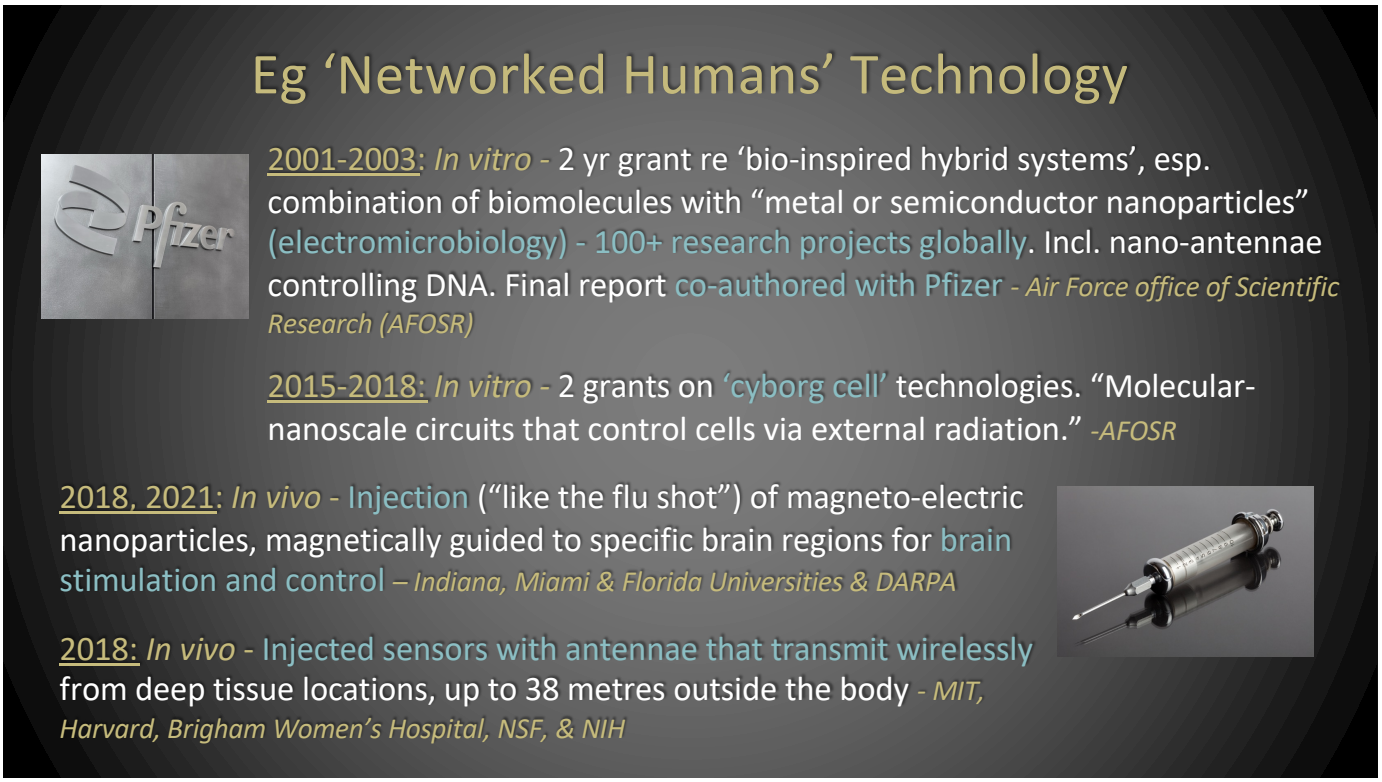
3. Enabling Technological R&D

The Civilian Face of Military Technologies



Reference

Kunstler, B. 2008. Leadership in the era of the human singularity: New demands, new skills, new response. *The Proteus Monograph Series, Vol. 2, Issue 1,* cover page. [Website]



Bio-Inspired Nanoscale Hybrid Systems (2003): Final Technical Report sponsored by the US Air Force Office of Scientific Research, co-authored with Pfizer. The report describes the technical output of over 100 research projects at universities and research institutes around the world, on "the combination of natural nano-systems (biomolecules) and artificial nano sized species such as metal or semiconductor nanoparticles".[34] Two examples of the 100+ technologies described include the use of metal nanocrystals as antennas for controlling the activity of DNA, under the influence of external magnetic fields; and the integration of functionalized nanoparticles and nanotubes with biomaterials, including DNA, for bioelectronic applications.

CyborgCell: Intracellular Delivery of Molecular and Supramolecular Ionic Circuits for Cyborg Tissue (2018): Final Performance Report of a three year grant sponsored by the Air Force Office of Scientific Research, from 2015-2018, focussed on "programming cells and systems". The project generated 9 publications, including on bioelectronics, synthetic tissue and "electrically driven microengineered bio-inspired soft robots".[37]

Cyborgcell: Molecular-Nanoscale Circuits for Active Control of Cells (2018): Final Performance Report of a three year grant sponsored by the Air Force Office of Scientific Research, from 2015-2018. The aim of the project was to "develop molecular-nanoscale circuits that control cells via external radiation".[38]

A team had already developed magnetoelectric nanoparticles in 2018 capable of being injected into the bloodstream, "like the flu shot" (or ingested), and wirelessly guided to the brain. In animal studies, the magnetoelectric nanoparticles could be wirelessly

manoeuvred to brain areas with single-neuron precision, and brought back out into the bloodstream once their mission was complete. In a talk on the technology and the emerging field of "technobiology" Professor of Electrical Engineering and Cellular Biology at Florida International University, said, "every day we are getting closer to the ultimate goal to use [this technology] on people. And we hope within a couple of years we can do that". The accompanying graphic read, 'NANOPARTICLE – Unlimited Possibilities'.

Earlier in his career, when he was a straight-up electrical engineer and physicist, prior to his incarnation as a "technobiologist", the Professor had conducted research funded by the Air Force Office of Scientific Research, the Army Research Office, the Office of Naval Research, and DARPA.

See also In Vivo Wireless Brain Stimulation via Non-invasive and Targeted Delivery of Magnetoelectric Nanoparticles', published in the journal '*Neurotherapeutics*'. The paper describes intravenous injection of magneto-electric nanoparticles which cross the blood brain barrier (BBB) and are magnetically guided to target brain regions for stimulation, with applications in Epilepsy, Alzheimer's and Parkinson's diseases. The paper notes that the technology, "could potentially open a door to a more robust and precise brain control that currently is not possible".[44]

And finally the paper '*Enabling Deep-Tissue Networking for Miniature Medical Devices*'[48] which describes the *in vivo* testing of a networking system in which injected sensors with antennae transmit wirelessly from deep tissue locations up to 38 metres outside the body, or far enough to reach most people's cell phones most of the time, which act as 'gateways' connecting intrabody networks to the internet in IoB schemes.[49]

From transhumanism series **Part 1** *and* **Part 4**

References

[34] Schmid, G., Simon, U., Strranick, S.J., and Arrivo, S.M. 2003. *Symposium C: Bio-Inspired Nanoscale Hybrid Systems*. Final technical report of a project sponsored by the Air Force Office of Scientific Research, p.7. [Website]

[37] Luscombe, C. 2019. *CyborgCell: Intracellular Delivery of Molecular and Supramolecular Ionic Circuits for CyborgTissue*. Final performance report of a project sponsored by the Air Force Office of Scientific Resarch, pp. 2 and 34. [Website]

[38] Lieber, C. 2018. Cyborgcell: Molecular-Nanoscale Circuits for Active Control of Cells. Final report of a project sponsored by the Air Force Office of Scientific Research, p. 2. [Website]

[44] Nguyen, T., Gao, J., Wang, P., Nagesetti, A., Andrews, P., Masood, S., Vriesman, Z., Liang, P., Khizroev, S., and Jin, X. 2021. In vivo wireless brain stimulation via non-invasive and targeted delivery of magnetoelectric nanoparticles. *Neurotherapeutics, Vol. 18*, pp. 2091–2106, p. 2100. [Journal]

[48] Ma, Y., Luo, Z., Steiger, C., Traverso, G., and Adib, F. 2018. Enabling deep-tissue networking for miniature medical devices. *SIGCOMM '18: Proceedings of the 2018 Conference of the ACM [Association for Computing Machinery] Special Interest Group on Data Communication*. August 2018, Budapest, Hungary, pp. 417–431. [Website]

[49] Kyrie, V., and Broudy, D. 2022. Cyborgs R Us: The Bio-Nano Panopticon of Injected Bodies? International Journal of Vaccine Theory Practice and Research, Vol. 2, No. 2. pp.355-383. [Journal]

To realise its Science and Technology aims, the military intelligence community not only funds its own research projects but relies upon the civilian sector. For instance, under the heading 'Dual Use', in 1996 the DoD wrote of technologies such as biomimetics (the mimicking of biology) and microelectrical-mechanical systems (or MEMS, which are used in smart dust and other bio-nano technologies):

"If DoD is to develop, field and sustain superior materiel, we must rely increasingly on the same industrial base that builds commercial products … The S&T program will contribute to building a common industrial base by utilizing commercial practices, processes, and products, and by developing, where possible, technology that can be the base for both military and commercial products and applications."[41]

Where merging bodies with technology and wireless networks is concerned, the medical/pharmaceutical establishment is a key military partner, as is the electrical engineering/Internet of Things(IoT)/Internet of Bodies (IoB) industry.

From transhumanism series **Part 4**

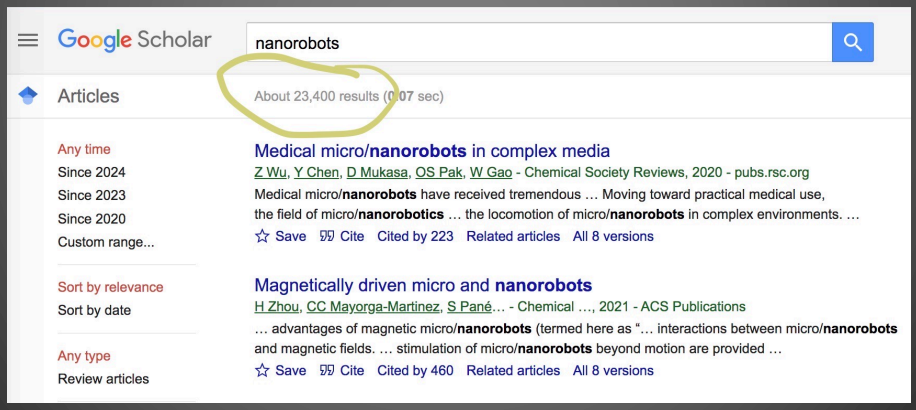
Reference

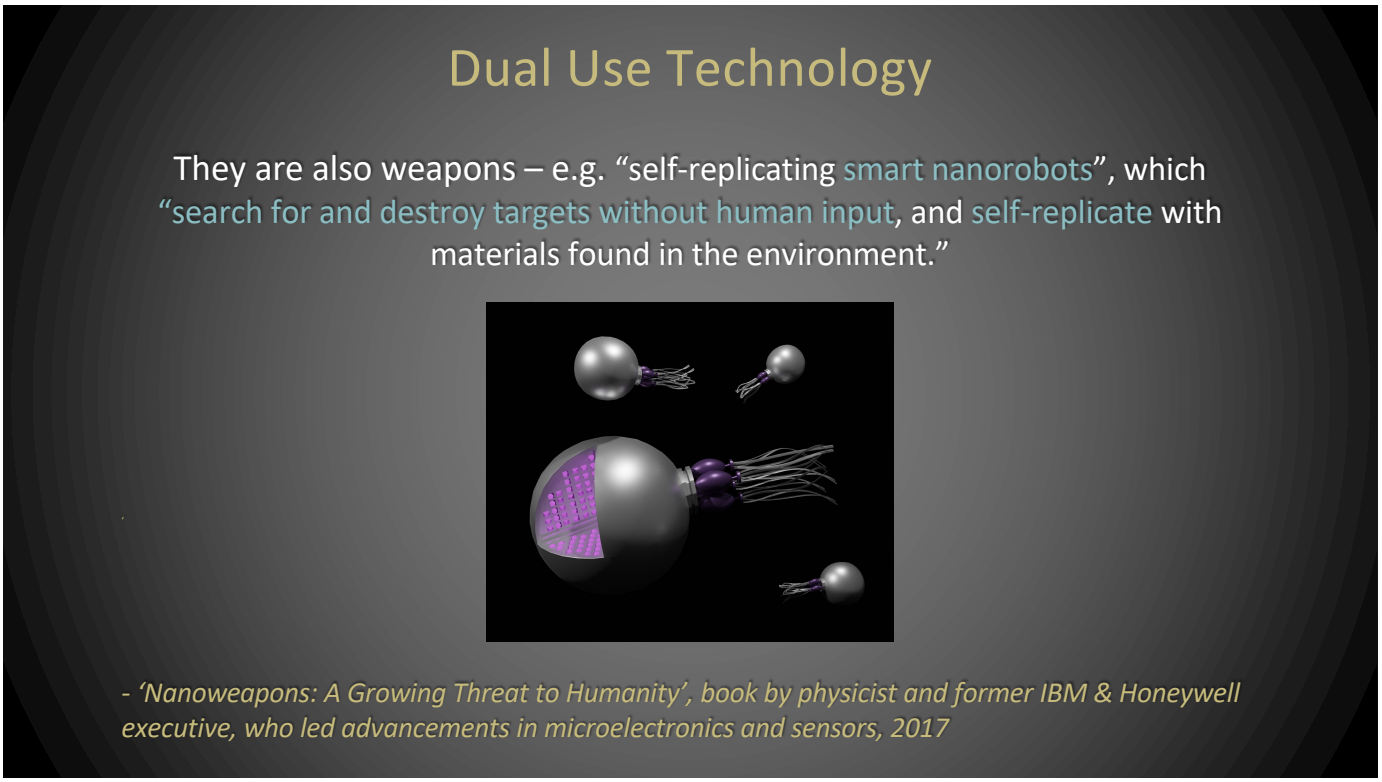
[41] Director, Defense Research and Engineering, Department of Defense. 1996. *Defense Science and Technology Strategy*. Department of Defense, p.12. [Website]

Dual Use Technology

Nanorobots

Nanorobots are of interest in precision medicine, for surgery, drug delivery, sensing, monitoring, tumour destruction, brain recording, stimulation & control, etc.





In the book '*Nanoweapons: A Threat to Humanity*', a physicist and former IBM and Honeywell executive, who led advancements in microelectronics and sensors (such as smart dust), warns of existential threats from weaponisable nanotechnologies "previously relegated to fantasy". The technologies he describes include "self-replicating smart nanorobots", which "search for and destroy targets without human input, and self-replicate with materials found in the environment".[100]

Similarly, in 2001, along with smart dust, NASA Langley described, "Micro Dust Weaponry" or "Micron sized mechanized 'dust' which is distributed as an aerosol and inhaled into the lungs. Dust mechanically bores into lung tissue and executes various 'Pathological Missions.' A Wholly 'New' class of Weaponry which is legal".[101]

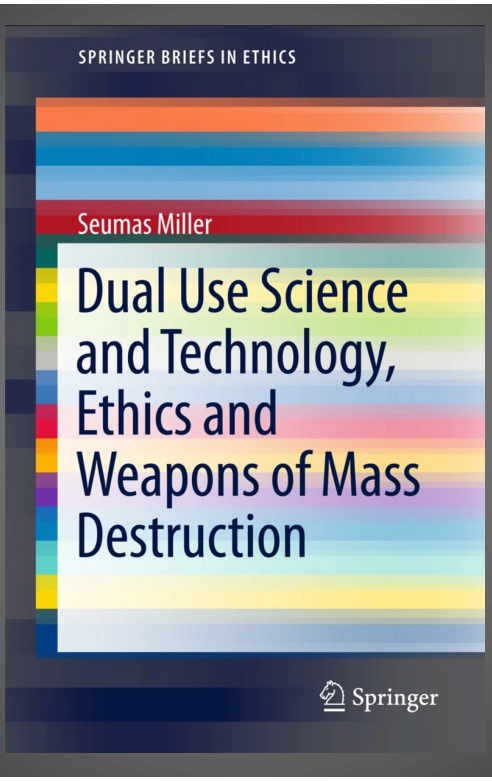
From transhumanism series **Part 3**

References

[100] Millott, P.M. 2019. Review of *Nanoweapons: A Growing Threat to Humanity by Louis A. Del Monte. Potomac Books, 2017, 244 pp. Air University Press. [Website]

[101] Bushnell, D. 2001. *Future Strategic Issues/Future Warfare [Circa 2025]*. Presentation to The 4th Annual Testing and Training for Readiness Symposium & Exhibition: Emerging Challenges, Opportunities and Requirements, National Defense Industrial Association (NDIA), 13-16 August 2001. NASA Langley Research Center, p. 43. [Website]

"Contrary to popular opinion, there ought to be a degree of *collective scientific ignorance* [emphasis ooriginal]…



at least among members of the general population."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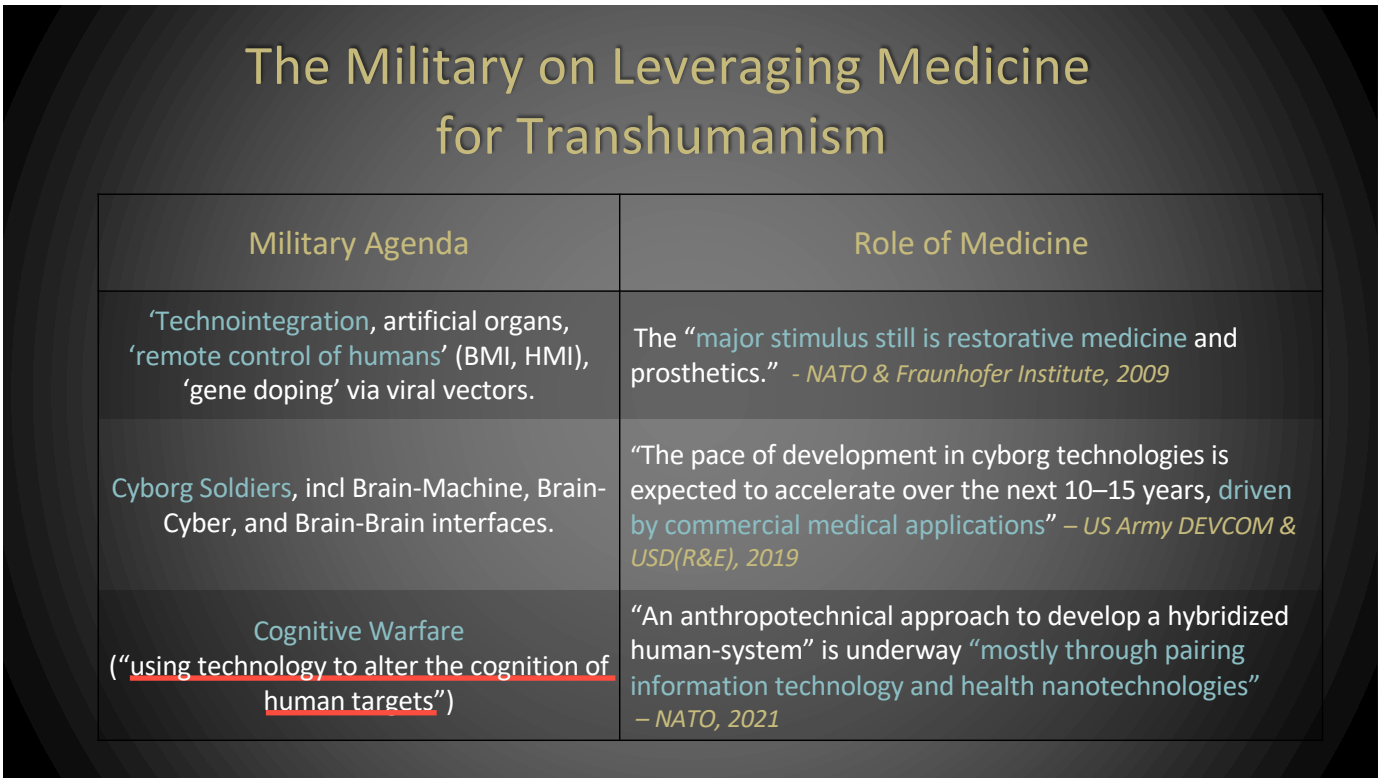


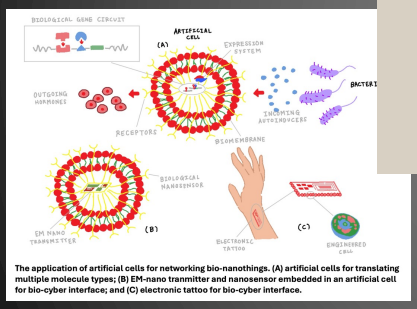
References in order of appearance above

Reschke, S., van Erp, J.B.F., Brouwer, A.M., and Grootjen, M. 2009. *Neural and Biological Soldier Enhancement-From SciFi to Deployment*. Fraunhofer Institute for Technological Trend Analysis and NATO. [Website]

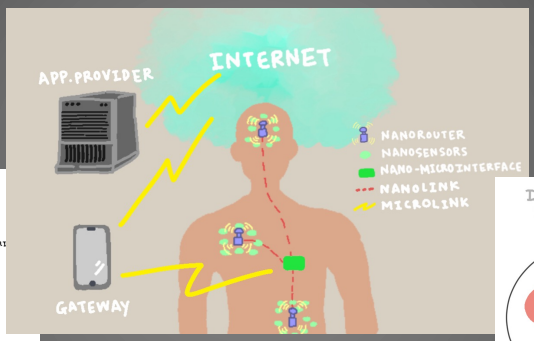
Emanuel, P., Walper, S., DiEuliis, D., Klein, N., Petro, J.B., and Giordano, J. 2019. *Cyborg Soldier 2050: Human/Machine Fusion and the Implication for the Future of the DoD*. Aberdeen Proving Ground, MD: U.S. Army Combat Capabilities Development Command (DEVCOM) Chemical Biological Center, sponsored by the Office of the Under Secretary of Defense for Research and Engineering. [Website]

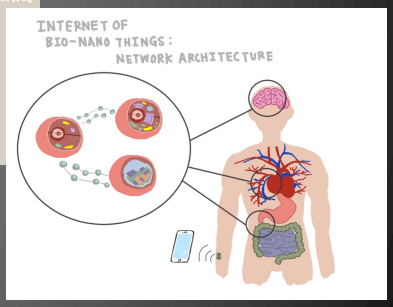
Claverie, B., and Du Cluzel, F. 2021. "Cognitive Warfare": The Advent of the Concept of "Cognitics" in the Field of Warfare. In B. Claverie, B. Prébot, N. Buchler, and F. du Cluzel, Eds. *Cognitive Warfare: The Future of Cognitive Dominance*. NATO Collaboration Support Office. [Website]

Networked Humans: Military, Medical & Lifestyle IoB and IoBNT



The application of artificial cells for networking bio-nanothings. (A) artificial cells for translating multiple molecule types; (B) EM-nano tranmitter and nanosensor embedded in an artificial cell for bio-cyber interface; and (C) electronic tattoo for bio-cyber interface.





See also 'Cyborgs R Us', *International Journal of Vaccine Theory Practice and Research*, and Part 4 of our transhumanism series - links below.

Centre image: Copyright Yena_B, 2024, Artist's impression of The Internet of Nano-Things architecture in the healthcare system. From A. O. Balghusoon and S. Mahfoudh, 2020, *IEEE Access 8*, 200724-200748 [Website]

Right hand image: Copyright Yena-B, 2024, Artist's impression of slide 33 from a presentation to the Visions for Future Communications Summit, October 23 2017, University Institute of Lisbon, Portugal. Organised by Networld2020 with the support of the 5G Infrastructure Association, the European Commission, IEEE and the National Science Foundation. Akyildiz, I.F. 2017. *Internet of Nanothings & Bio-Nanothings*.[Website]

Left hand image: Copyright Yena-B, Artist's impression of Figure 5 from Akyildiz et al. 2015. The Internet of Bio-Nano Things. *IEEE Communications Magazine, Vol 53, No. 3,* p.39.

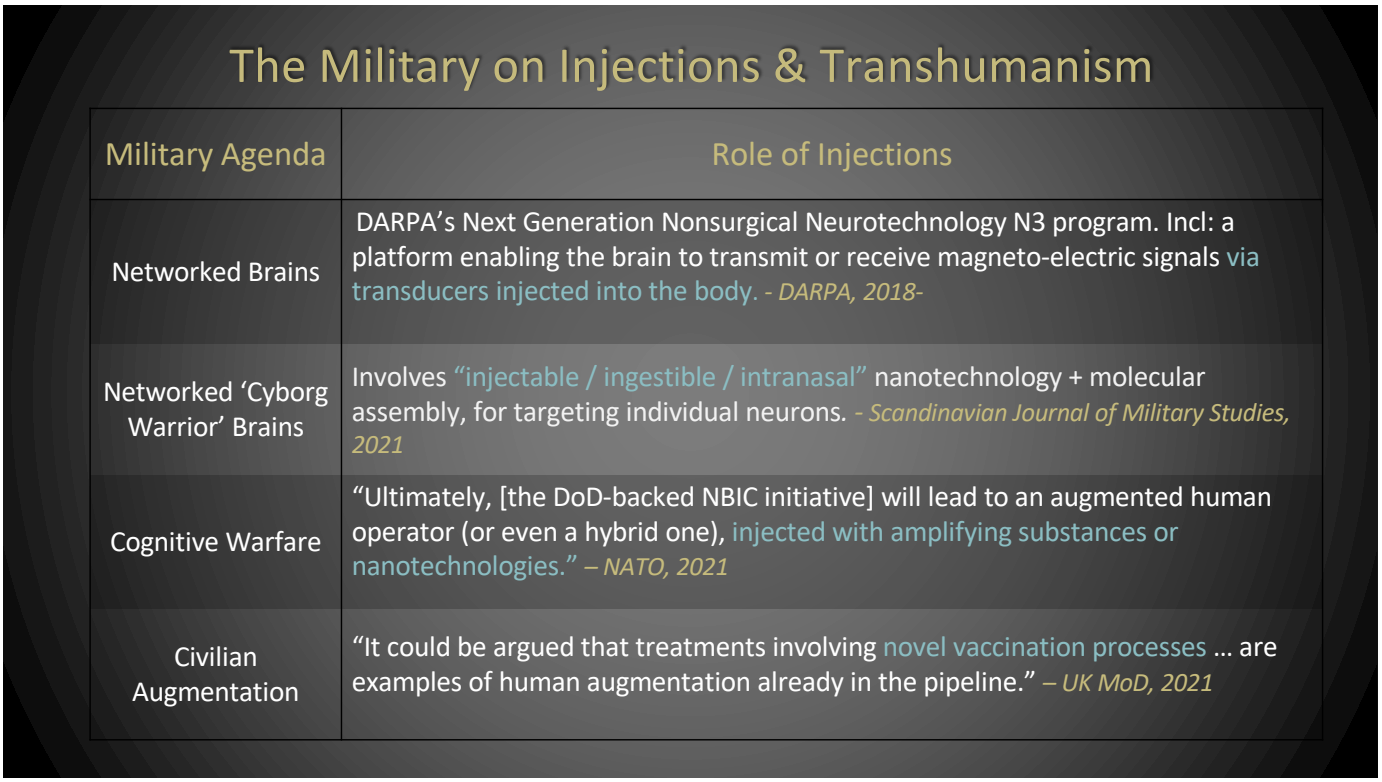
The seminal 2015 paper from which the image was drawn introduced the Internet of Bio-Nano Things (IoBNT), whose aim is "to integrate living things, or "biological environment[s]" with the electrical domain of the IoT and IoNT. This integration is to be achieved using synthetic biology as the "substrate" inside living things, including not only artificial cells but engineered DNA, DNA plasmids, and proteins, recasting cells as "biological embedded computing devices". Through the re-engineering of biological cells and sub-cellular components, the IoBNT seeks to create "bio-cyber interfaces" which "translate information from the biochemical domain of Bio-Nano Thing networks [inside the body] to the Internet cyber-domain" and *vice versa*.

One tool for achieving this is the electromagnetic nano-transmitter depicted in Figure

5b, which, encapsulated within an artificial cell, “would wirelessly communicate with electrical devices outside the biological environment”.

See also Kyrie, V., and Broudy, D. 2022. Cyborgs R Us: The Bio-Nano Panopticon of Injected Bodies? *International Journal of Vaccine Theory Practice and Research*, *Vol. 2, No. 2*. pp.355-383. [Journal]

From transhumanism series **Part 4**



References in order of appearance above

DARPA. 2019. *Six Paths to the Nonsurgical Future of Brain-Machine Interfaces*. Media Release. [Website]

Rivers, B.M. 2019. Battelle awarded contract by DARPA to develop non-surgical neurotech. *Executive Biz – Latest Federal & Government Contracting Companies' News Coverage*. [Website]

Nørgaard, K., and Linden-Vørnle, M. 2021. Cyborgs, neuroweapons, and network command. *Scandinavian Journal of Military Studies*, Vol. *4, No.* 1, pp. 94-107 [Journal]

Claverie, B., and Du Cluzel, F. 2021. "Cognitive Warfare": The Advent of the Concept of "Cognitics" in the Field of Warfare. In B. Claverie, B. Prébot, N. Buchler, and F. du Cluzel, Eds. *Cognitive Warfare: The Future of Cognitive Dominance*. NATO Collaboration Support Office. [Website]

UK Ministry of Defence Development, Concepts and Doctrine Centre (DCDC). 2021. *Human Augmentation – The Dawn of a New Paradigm: A strategic implications project*, in partnership with the German Ministry of Defence Bundeswehr Office for Defence Planning (BODP). [Website]

Covid-19 as a Supporting Psychological Operation?

For social engineering,
societal infrastructure
and technological deployment?

Covid Era

Social Engineering & Societal Infrastructure

- Normalisation of compulsory, government-led, injected Bio-Nano 'enhancement' (ostensibly of the human immune system)
- Merger of 'medicine' & the state
- Inversion of 'Science' (= official diktat)
- State responses coordinated by military-intelligence bodies in US & Australia
- cf Proteus 'Insights from 2020': Futures scenarios, incl. authoritarian viral dystopia by 2020

See Parts 2, 3 and 4 of our Transhumanism series. Links below.

For information on the role of military-intelligence bodies in Australia's Covid response, see: Johnson, L. 2024. The People's Terms of Reference, Answers to Questions on Notice, Document 12, Terms E and N, pp.87-139, and 217-231. Senate Legal and Constitutional Affairs Committee, Parliament of Australia. [Website]

For information on Proteus' viral dystopia scenario, see **Part 2** under the heading, '*Proteus Insights From 2020, Circa 2000*'**.**

From Transhumanism series, **Part 2**, **Part 3** *and* **Part 4**

IoBNT and Covid Injections

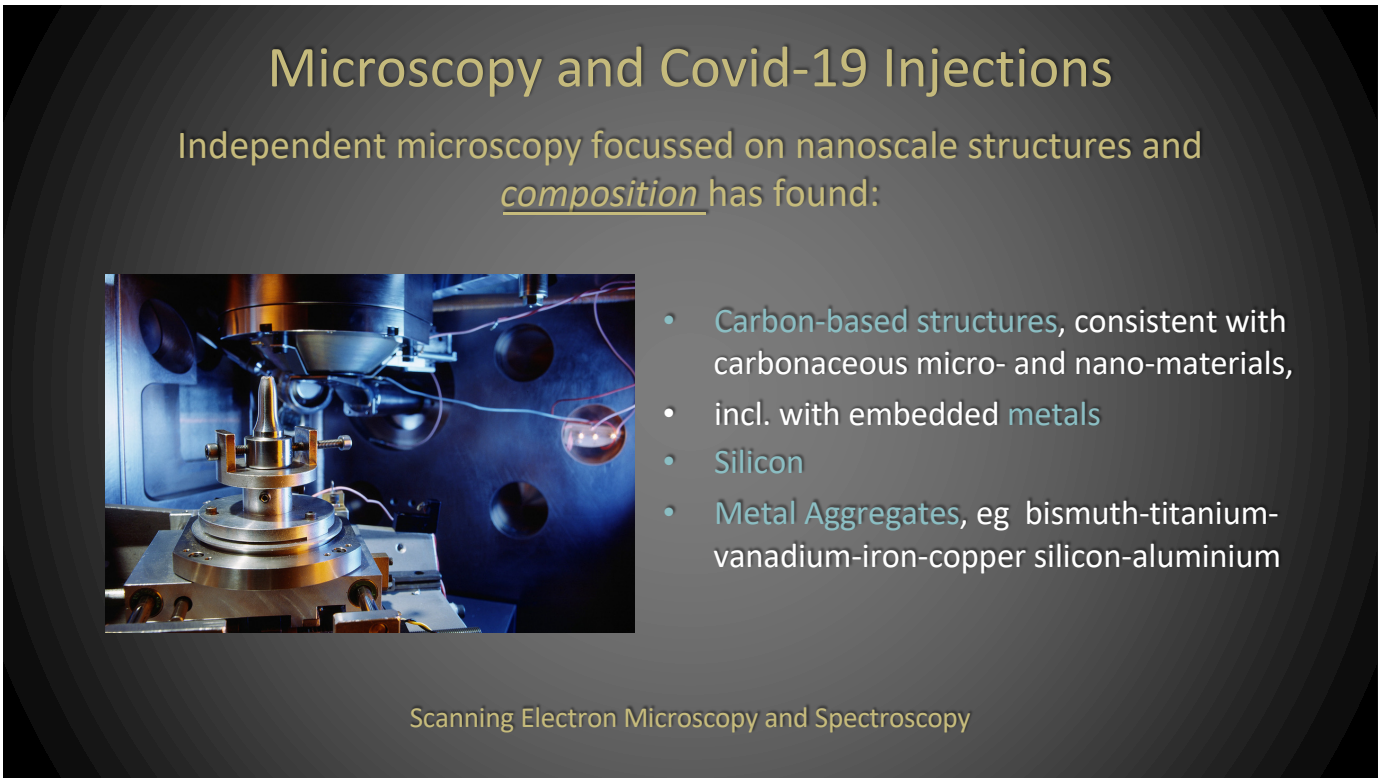
"The Bio-nanoscale machines [behind the IoBNT] are for injecting into the body … And that is going really well with these Covid vaccines. It's going that direction. These mRNAs are nothing [other] than small scale, nano-scale machines. They are programmed and they are injected."

- Prof. Ian Akyildiz at an Advanced Technology Symposium on the progress of the IoBNT, 2023

Reference

Akyildiz, I. F. 2023. *TeraHertz Band Communication: An Old Problem Revisited & Research Directions for the Next Decade*. ARRC Seminar Series, Technology Innovation Institute, Advanced Technology Research Council (ATRC), *YouTube*. [Website]

From Transhumanism Series, **Part 4**



Findings of undisclosed and unidentified structures and materials in Covid 'vaccines', swabs, and recipients' blood, from independent investigators around the world have involved: Optical Microscopy[59, 60]; Darkfield Microscopy [61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73]; Brightfield Microscopy[74, 75, 76, 77, 78]; Compound Optical Microscopy with a combination of Brightfield, Darkfield and Phase Contrast [79]; Stereomicroscopy[80]; Scanning Electron Microscopy with X-ray Diffraction Spectroscopy[81, 82]; Electron Microscopy with Energy Dispersive X-ray Spectroscopy[83, 84]; Micro-Raman Spectroscopy[85]; Raman Spectroscopy[86]; a combination of Optical Microscopy, Darkfield Microscopy, UV Absorbance and Fluorescence Spectroscopy, Scanning Electron Microscopy, Transmission Electron Microscopy, Energy Dispersive Spectroscopy, X-ray Diffraction, and Nuclear Magnetic Resonance Spectroscopy [87]; and, Scanning Electron Microscopy, Energy Dispersive X-ray Spectroscopy, Mass Spectroscopy, Inductively Coupled Plasma Analysis, Bright Field Microscopy and Dark Field Microscopy,[88] all yielding compatible findings.

Those using electron microscopes and spectroscopy have found carbon-based structures consistent with graphene and/or other carbonaceous micro- and nano-materials [109-116], including growing, non-biological structures,[117, 118] and silicon and metals,[119-125] many of which have been embedded in the carbon-based assemblies.[126-132] Those metals and other elements have included aggregates of iron-chromium-nickel nanoparticles (ie stainless steel), bismuth-titanium-vanadium-iron-copper silicon-aluminium[133], aluminium and thalium [134, 135], iron oxide[136], caesium, barium, iron, chromium, titanium, cerium, gadolinium, aluminium,[137] tin, magnesium, aluminium[138, 139] and more.

PCR swabs from a range of manufacturers, moreover, have been found, using a Field

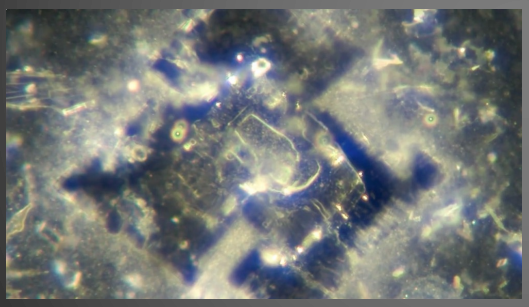
Emission Gun Environmental Scanning Electron Microscope with Energy Dispersive System, to host several unidentified structures, along with dust (whether common dust or smart dust), containing silicon, carbon, aluminium, potassium, oxygen, magnesium, titanium, iron and sulphur.[140]

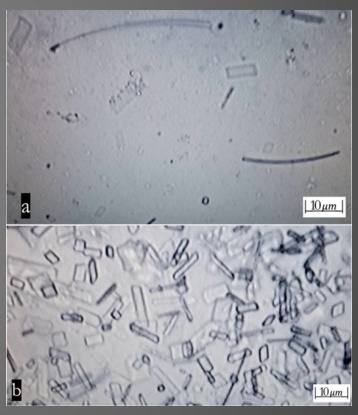
From Transhumanism Series, **Part 4**

Microscopy and Covid-19 Injections

Independent microscopy focussed on *morphology and behaviour* has found:

- Assembling, disassembling and growing structures, with unexplained complexity and behaviour
- Including responsiveness to EMF





=> Relevance to findings of Bluetooth signals emanating from Covid injected & swabbed?

Regarding the reception of such findings, as one of us writes in the book, *"Covid-19" Psychological Operations and the War for Technocracy*:

"Especially in the context of the IT/Bio/Nano era (see Chap. 8), this is a lot of empirical evidence to write off, yet commentators hesitate to entertain the possibility of undisclosed technologies in the "Covid-19 vaccines" for several reasons. For starters, it sounds preposterous — the stuff of sci-fi — and falls too far outside the spectrum of socially acceptable opinion. This, however, merely reflects the limitations of human psychology and groupthink; it is not evidence-based science. Military-grade propaganda means that the public's perceptual parameters remain limited to the virus, the spike protein, mRNA/DNA, and dangers deriving from the disclosed "vaccine" ingredients. Most doctors, virologists, microbiologists, etc., know very little about bio-nanotechnology, so are unqualified to comment and understandably prefer to stick to their fields of expertise. Fear of reprisal (e.g. hit pieces by the media, attacks by colleagues, withdrawal of medical licenses, harassment, and threats to (life) disincentivise scientists/doctors from publicly challenging orthodoxy."[141]

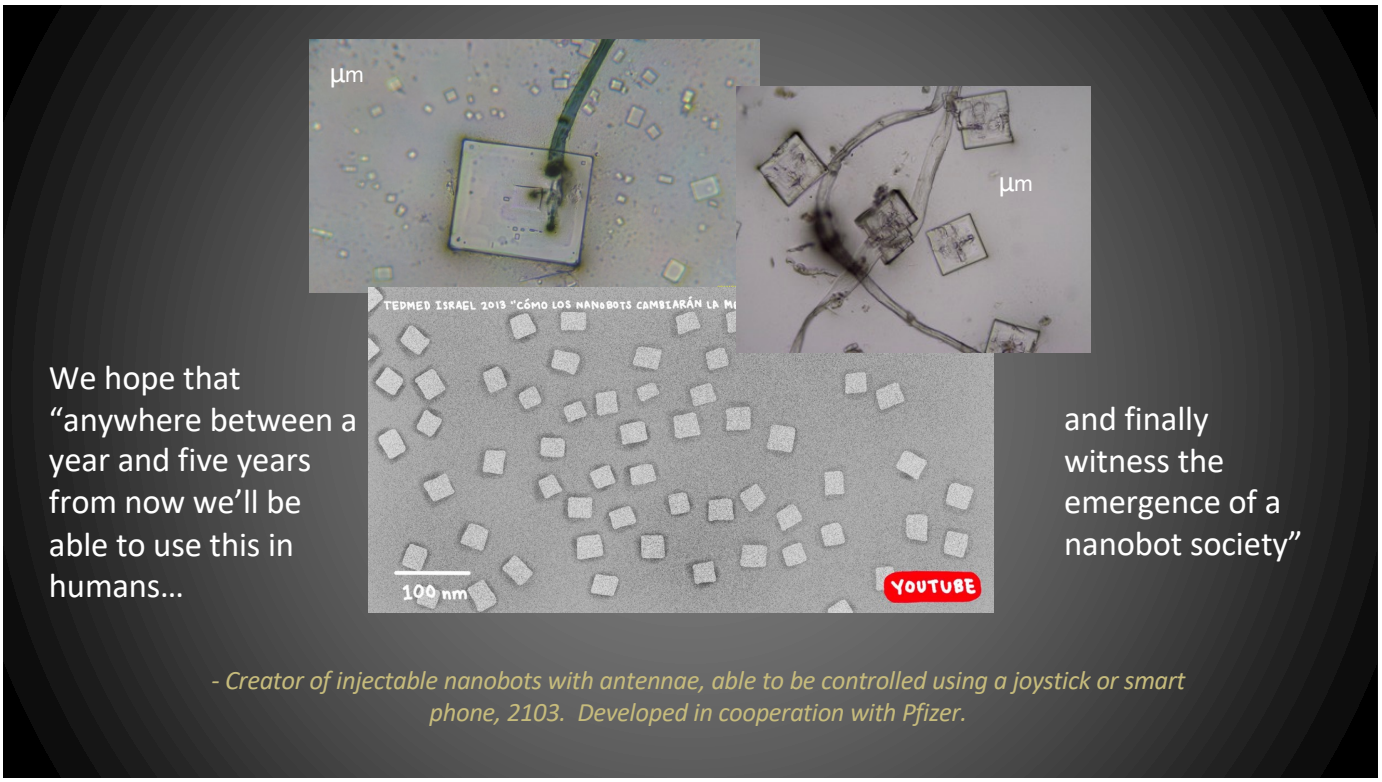
Nevertheless, contrary to cursory dismissals that the unidentified structures and undeclared materials found around the world in Covid 'vaccines' and recipients' blood could only reflect salt and cholesterol, a vast array of candidate bio-nano technologies and materials exist in the open literatures.[142, 143, 144, 145, 146, 147, 148, 149, 150; 151, 152] Moreover, aside from compositional and morphological differences, investigators report that the structures observed in Covid 'vaccines' behave differently from simple salt or cholesterol crystals, for instance by forming a perimeter before filling in internal details[153], and in the complexity of those details.[154] Similarly, the structures have demonstrated responsiveness to electromagnetic frequencies, such as

by assembling when a nearby router is turned on and disassembling when the router is turned off, or failing to assemble inside a faraday bag, including structures from the same sample as the top left image.[155, 156]

Top left image: Captured image from video montage of Pfizer/BioNTech Covid ‘vaccine’, containing structural anomalies appearing to self-assemble and disassemble while submerged in the injectable liquid medium. Nixon, D. 2022a. Construction Video 1. DrDavidNixon.com. [Website] Permission granted to reproduce image by Dr. David Nixon.

Top right images, see: Lee, Y. and Broudy, D. 2024. Response to Critics of Lee & Broudy (2024) on the Toxicity and Self-Assembling Technology in Incubated Samples of Injectable mRNA Materials. *International Journal of Vaccine Theory, Practice, and Research, Vol. 3, No. 2.* pp. 1244.20-1244.29 [Journal]

Lee, Y. M., and Broudy, D. 2024. Real-time self-assembly of stereomicroscopically visible artificial constructions in incubated specimens ofmRNA products mainly from Pfizer and Moderna: A comprehensive longitudinal study. International Journal of Vaccine Theory, Practice, and Research, Vol. 3, No. 2, pp.1180–1244. [Journal]



Top left image: Brightfield image of Pfizer/BioNTech Covid "vaccine" structures, with detail of the point at which a wire-like structure appeared to make contact with a rectangular structure. Nixon, D. 2023b. *Nixonlab*. Substack. [Website] Permission granted to reproduce image by Dr. David Nixon.

Top right image: Brightfield image of Pfizer/BioNTech Covid "vaccine" showing fibrous structures that are coincident with rectangular structures but not appearing to be connected *per se.* Taylor, M. 2022. Uncensored: Graphene Ribbons Connecting Nanotech Inside Injections – Shimon Yanowitz & Matt Taylor. Interview with Maria Zeee. *Zeee Media*. [Website] Permission granted to reproduce image by Shimon Yanowitz and Matt Taylor.

On the issue of whether injectable nanotechnologies capable of emitting signals exist:

In the electrical engineering IoBNT / IoBNT literatures, nano-routers are a leading exemplar. Nanorouters aggregate information from intra-body nano-nodes (e.g. sensors) throughout the body, sending that information to "gateways" outside the body, such as mobile phones[209]. In terms of relevant R&D, a pioneer of medical nanorobots with expertise in synthetic biology and human-machine interfaces, Professor Ido Bachelet, received a 2013-2017 European Commission grant through his company Augmanity Nano to work on "DNA nano-routers".[210] In general terms, routers connect networks (for instance on-body and off-body networks) to one another, and possess their own unique MAC addresses.

During the DNA nano-router grant period, Bachelet collaborated with Pfizer[211] on a project involving DNA robots capable of harbouring miniature antennae, sending

information to other DNA robots, and responding to external signals. In 2013, he gave a talk to TedMed Israel on the technology, explaining that a single hypodermic syringe contains a thousand billion such robots, which his team had equipped with antennae made from metal nanoparticles. He told the audience that the antennae enabled the nanobots to carry their own IP address, and to respond to external electromagnetic fields, facilitating access and control by the likes of an X-box joystick, or a smartphone.

Bachelet closed by sharing his hopes that, "anywhere between a year and five years from now [2013] we'll be able to use this in humans and finally witness the emergence of a nanobot society".[212]

From Transhumanism Series, **Part 4**

References

[209] Kyrie, V., and Broudy, D. 2022. Cyborgs R Us: The Bio-Nano Panopticon of Injected Bodies? International Journal of Vaccine Theory Practice and Research, Vol. 2, No. 2. pp.355-383. [Journal]

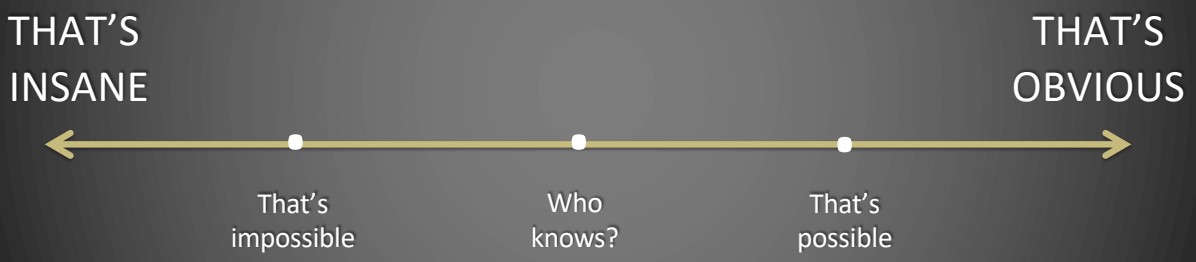
[210] European Commission. Logical re-routing of cellular communication networks by DNA origami nanorobot. DNA Nano-Routers Grant agreement ID: 321772. Cordis, EU Research Results. [Website]

[211] Weinreb, G. 2015. Pfizer to collaborate on Bar-Ilan DNA robots. *Globes.* [Website]

[212] Bachelet, I. 2013. The emergence of nanobot society. TedMed Israel. [Website]

Disparate Perceptual Worlds

Transhumanism as a Military-Intelligence operation
with Covid-19 as a supporting psychological operation



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