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AI AND BIOTECH : A DISMANTLING OF THE WORLD ORDER

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Exercise Solo Flight

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STEADY AS SHE GOES...

At present, there is no clear danger, no obviously pressing threat to disrupt the Long Peace that has been in existence since 1945. On the whole, international relations are at their rosiest, most nations abide by more or less the same rules, political structures, and social institutions. They also exhibit growingly similar practices and beliefs. The most recent memorable threat, the nuclear bomb, made its initial splash in the 40's never to be seen again (apart for the chance sighting of them as ridiculously enormous phallic symbols in some glorious leader's ceremonial parade). Safe to say that there hasn't been a classic interstate war since the 1967 six day skirmish between Egypt and Israel. The one war that was anticipated (between the US and the USSR) was diffused in the late 80's early 90's. Global death rates due to violence have been on a steady decline since the beginning of the 20th century.¹ Some might say: Not so fast. What of terrorism? It's a global danger and a threat to humanity. Aren't things horrible because of terrorism? In fact, on the grand scheme of things, terrorist groups and the phenomena of terrorism is but a blip on the onward march of the Long Peace humanity is currently enjoying. The numbers show that globally an individual is nearly ten times more likely to die from a road incident than from violent conflict whether terrorist in nature or otherwise.² If the lessening of violent deaths is to be a chosen metric and constant yardstick indicator of peace, then body counts don't lie — only people do. Admittedly horrifying in its own right, putting the distraction that is the terrorism blip phenomenon aside for the moment, it would seem that humankind is in the clear; that overall

¹ Roser, Max. *War and Peace*. Our World In Data, 2019.

² Ibid.

prosperity is on the rise and human suffering on the decline. It would appear that no more classical threats to our way of life exist — yet.

Enter AI and biotechnology. These relatively obscure twin technological developments have the potential to unequivocally alter not only the way in which individuals interact with one and other, but also behaviour between states, and the very nature of the entire system within which they coexist. This essay will argue that these impending evolutions will radically morph the global system as it is known. From its current perceived legitimacy of states, its value of human life, the widespread ideology that is humanism and its righteous veneration of human rights. The Westphalian world is on the brink of a historical event horizon of sorts — beyond which escape is impossible. Without drastic remodeling, the global construct and its systems will be ill-equipped and maladapted to survive the imminent AI and biotech disruptions. It will become increasingly irrelevant, and in so doing will be relegated to die an inevitable Darwinian death mired with uncertainty, confusion — and high probability of conflict.

LOSS OF AGENCY — WHO IS IN CONTROL?

“The easiest people to manipulate are the people that believe in free will, because they think they cannot be manipulated.”

– Yuval Noah Harari (historian)

Nowadays, the sovereignty of states and the right to govern as they fit within their borders are somewhat taken as given, a relative willfully optimistic assumption that the entire globe operates “as it should” according to Westphalian norms. Such norms are anchored in other sets of norms (or values), chiefly that of the “sovereignty” of the individual and the sanctity of their

right to choose freely. In other words: their right to exercise free will. But it has become increasingly apparent that free will, as it is commonly understood, is anything but. From researched based commercials, tailored to encourage or even generate needs, wants, and desires in consumers, to the more highly sophisticated machine-learning algorithms that power modern-day marketing and social media platforms, free will has never been more in doubt.³ The threat of AI is caused in large part due to the fact that its development is heavily guided by commercial and financial interests. Its ultimate goal being to maximize profits, it is somewhat detached from the humanistic notions of autonomy and privacy of the individual, unless of course they affect the bottom-line. As such, current trends indicate that AI research is very much focused on shaping human consumerists' behaviour.⁴ By collecting large amounts of data on individuals, programmers (ironically now themselves often replaced by more efficient algorithms) feed data to the programs that are then able to produce increasingly better results. Better results in the sense that the program (or AI) can more accurately compute statistical probabilities of different outcomes based on a wider range of data points.⁵ In plain English: better predict cause and effect, stimulus and behaviour in humans.

Such a technology is the stuff of dreams for marketers, but that of nightmares for those believing in free will. What is true for marketing is also true for the political sphere — and this is where tensions are bound to arise on the international stage.⁶ For the unspoken reality of the matter is that as AI algorithms become more efficient and precise at predicting human behaviour patterns, there will be a point at which they will cross a threshold of knowing humans better that

³ Harari, Yuval Noah. *Homo Deus: A brief history of tomorrow*. New York: Signal Books, 2015.

⁴ Bostrom, Nick. *Superintelligence: Paths, Dangers, and Strategies*. Oxford: Oxford University Press, 2016.

⁵ Harari, Yuval Noah. *21 Lessons for the 21st Century*. New York: McClelland & Stewart, 2018.

⁶ Brooking, Emerson T. & Singer, P. W. *LikeWar: The Weaponization of Social Media*. Eamon Dolan/Houghton Mifflin Harcourt, 2018.

they know themselves — know things about them before they can. As in nearly all advancements in technology throughout history, an intellectual edge inevitably leads to the use of it by one to subjugate another. In other words, as AI improves in the coming decades, is able to collect, study, learn, predict, and therefore shape human behaviour, it would have essentially “hacked” humans.⁷ Fairly harmless one could argue when applied to consumerism, after all a milder form of this has been done for generations already. But perfecting it in the form of super algorithms and applying it to the world of politics is a potentially far different a more sinister proposition. Such actions would undoubtedly be frowned upon, could lead to conflict, and even instigate wars. At the very least, it would raise serious concerns, as typical AI debates and controversy normally surround the common fears of AI “stealing our jobs” or of humans becoming overly reliant on AI “à la” Google Maps.⁸

However, the seemingly more realistic threat to the international order as we know it will stem from actors utilizing this technology to effectively manipulate humans to their advantage. A population manipulated for example into “freely” wanting something that would be otherwise to their detriment isn’t something new, but when executed by ruthlessly efficient algorithms, the question now surfaces: What of human free will? Again, returning to the original premise upon which the entire Westphalian system and current world order is built upon: the sovereignty of states (and more recently the free will of individuals within them), it is clear that AI threatens the foundations upon which the current is predicated. In a world already ripe with collusion, mistrust, and competing national interests, the mere allegation or suggestion that such a technology is being used “against” another nation would undoubtedly spiral into conflict. Difficult to prove

⁷ Harari, Yuval Noah. *Homo Deus: A brief history of tomorrow*. New York: Signal Books, 2015.

⁸ Bostrom, Nick. *What happens when computers get smarter than we are?* TED Talks, 2015.

due to the inherent inability to differentiate between truly free willed decisions and influenced ones, the looming loss of agency of individuals to AI puts relations in the international community at risk.

OF ALL THE RACES, THIS ISN'T THE ONE YOU WANT TO LOSE

In the past, the goal of medicine was to raise out of sickness those that were ill. This healing of the ill “was an egalitarian project because it assumed [...] a normative standard of physical and mental health that everyone can and should enjoy. [Nowadays however], medicine is increasingly aiming to upgrade the healthy.”⁹ The latter is a far different proposition, one that is starkly at odds with its humanitarian origins. Analyzing this seemingly altruistic original intent, one can reveal the calculated reasoning behind its existence; as previously, “[...] medicine benefited the masses because [Westphalian] armies needed millions of healthy soldiers, and [Westphalian] economies needed millions of healthy workers.”¹⁰ As such, public health *of the nation* became of vital concern and so was born the notion that it was in the state’s best interest to maintain its population healthy with the help of sewage systems, the establishment of hospitals, mass production of vaccines, and the like. If states were to be strong, they needed strong militaries and economies, and in turn strong soldiers and workers. Essentially, public health was good for business.

Now fast forward to today and increasing amounts of resources are spent on augmenting those already in good health. Such a situation only serves to amplify pre-existing inequalities and widens the proverbial gaps in societies and by extension between states too. As economic means

⁹ Harari, Yuval Noah. *21 Lessons for the 21st Century*. New York: McClelland & Stewart, 2018.

¹⁰ *Ibid.*

increasingly determine access to goods and services, so too is the case with healthcare and access to cutting-edge biotechnologies. Already biotech corporations are investing in research that boosts the human immune system, augments the senses, and enables seamless human-machine interfacing.¹¹ The advantages gained by such advancements will drastically change the landscape of interactions on the individual and collective levels as well as between states. Similar to the nuclear arms race initiated during the Cold War, those states that achieve successful mastery of the technology will undoubtedly have the edge and use it to their benefit. The splitting or potential segregation of the haves and have-nots in the biotech realm will stress international relations in its own right.¹² If the race for nuclear weapons serves as the example, the winners reap the rewards: hard power, economic power, and the ability to shape international relations — in a nutshell: global hegemony.

However, when referring to biotech, the nature of the change and distinguishing feature of states is much more insidious. Contrary to the mastery of a single weapon, the effects of mastering biotech are far more reaching than one can initially imagine. Experts estimate that if trends continue, humanity is less than a decade away from seeing the emergence of the first cyborg.¹³ Already, rudimentary merging of man and machine has proven successful.¹⁴ What to do when a given country's economic power and technological savvy gives rise to humans enhanced by biotech? Again, one could argue that the mere access to already existing information-technologies such as present day computing power and the Internet constitutes an “unfair” advantage to certain peoples and states of the world. Although in those instances, the physical separation of human and machine can arguably be used to dispel any claims of unjustly having a *biological* upper

¹¹ Urban, Tim. *The AI Revolution: Our Immortality or Extinction*. Wait But Why, 27 January 2015.

¹² Harari, Yuval Noah. *21 Lessons for the 21st Century*. New York: McClelland & Stewart, 2018.

¹³ Donahue, Michelle Z. *How a Color-Blind Artist Became The World's First Cyborg*. National Geographic, 2017.

¹⁴ *Ibid.*

hand. However, an effective symbiotic relationship between human and machine (biotech) would at the very least blur the lines and be cause for concern. What will be of the population of those countries left behind by the biotech revolution? If the industrial revolution can serve as indication, the outlook is grim for those who “lose” the race. Getting left behind would not only represent states and entire populations rendered powerless, but inherit a status far worse: one of potential political and economic irrelevance.¹⁵ Those subjugated matter only in so much as they are required by those who do the subjugating; but to be of no relevance at all is a most unenviable plight. If history teaches anything, it is that when a population is deemed by another as irrelevant or a nuisance, it opens the doors on the committing of unspeakable atrocities. As such, the resulting inequalities stemming from biotech will not only pit the technologically advanced states of the world against their lesser advance brethren, but also against some of the founding values of their humanistic ideology. The table will be set for both intra and interstate conflict as states clumsily dabble their way through ground-breaking tech developments, attempt to adapt legislation, all the while wrestling with the inevitable cognitive dissonance between the progresses that the march of technological better represents and the aspirations of humanism.

ONE _____ TO RULE THEM ALL?

As has been shown in the previous two sections, AI and biotech are technical disruption that will severely alter our reality. Just as the Westphalian model was instituted to deal with the issues of the day, similarly will a new model have to come into being to accommodate for these disruptions. Initially heavily tied to the corporate world, the fact that these technologies may

¹⁵ Harari, Yuval Noah. *Sapiens: A Brief History of Humankind*. HarperCollins, 2015.

seem confined to state borders for the time being is merely an illusion.¹⁶ The very nature of many corporations is transnational, making legislation of nascent technologies even more of a challenge. The overly used phrase: *Global problems call for global solutions* is often uttered when contemplating these issues. Clearly, when pertaining to these budding domains, states are not likely to accept being under the guise of a higher authority for fear that national interests would suffer in turn. Yet, preventing the *improper* use of such technologies should arguably be a top priority for states professing allegiance to the humanistic ideology.¹⁷ However, humans' irrational psychological traits having often prevailed over rational decision-making; when the time comes fear is likely going to win over reason and lead to an everyone-for-themselves mentality.

Simultaneously, the select few corporations whose survival will be inextricably linked to the production of said AI and biotech will increasingly be under pressure from societies and state governments alike.¹⁸ On the one hand, they will be expected to stay true to shareholders and corporate owners, on the other they will be held to account by the societies within which they exist. Further illustrating the clash of ideologies stemming from the dissimilar root motivations of all parties involved, confirming that the state-based model of the world structure is ill-adapted to handling the complexities of the increasingly interconnectedness of humanity. As levels of connectivity of all sorts are on the rise, from social webs to corporate mergers and interstate linkages, it can be argued that in some areas of the globe, the physical separation of state territories with borders is somewhat of an obsolete concept. What's becoming apparent is that, agreements will be needed at in order to transition into a world where AI and biotech are envisioned playing a role. For if the transition is to be a smooth one, no one entity can unilaterally operate in these

¹⁶ Urban, Tim. *The AI Revolution: Our Immortality or Extinction*. Wait But Why, 27 January 2015.

¹⁷ Harari, Yuval Noah. *Homo Deus: A brief history of tomorrow*. New York: Signal Books, 2015.

¹⁸ Brooking, Emerson T. & Singer, P. W. *LikeWar: The Weaponization of Social Media*. Eamon Dolan/Houghton Mifflin Harcourt, 2018.

realms. This in turn begs the question: How can a smooth transition occur in a world divided by national laws and national politics? The answer: It can't. What structure will follow the Westphalian one is unclear. What is clear however is that a change is going to come — resistance is futile.

STOKING NATIONAL FERVORS: GOING FAST — NOWHERE

Historically, humans have been slow to adapt to their evolving environment, in part because said the changes themselves were slow and gradual. That being the case, humans could afford a trial and error approach to problem solving. As such, we have grown accustomed to being able to apply yesterday's solution to today's problem and having it work out. However, in the 21st century, that is no longer the case. No longer can we solve today's, or worse yet tomorrow's problems with yesterday's solutions. Such intellectual laziness and narrow mindedness leads to bizarrely ironic and out-of-touch political and legislative outcomes, often times proposing that the use of outdated solutions. In an ever evolving world, with a global financial system, global economic system, global environmental issues, and now global technological challenges; it is quite telling that many state leaders still attempt to evoke nationalist fervors. Current day political discourse sees a re-emergence of stone walls as a hot topic. Considering that the world has now seen the likes of global transportation, voyages into outer-space, wireless communications, and virtual realities, it is dangerously worrisome something that something such as the building of stone walls (the most low-tech idea imaginable) is even considered as a viable solution and somehow suitable to modern day problems. Humanity ought to ask itself: What significance do the erecting of walls have when in the midst of contemporary world that is increasingly interconnected?

Unfortunately, in typical fashion the current Westphalian world and its legacy structures are all too predictable in dealing with such issues. “When it comes to formulating ethical guidelines [or legislation, it] suffers above all from a failure of the imagination.”¹⁹ Thinking in terms of conflict that last a few decades and that revolve around borders or over a set of resources needed for the survival of current states or other geographical based entities is sadly off the mark. AI and biotech need to be understood on a much longer time scale, for they will truly usher in a new era in human evolution; one that may see the gradual vanishing of human agency and the merger of humans and machine. Simply put, the insistence on the building of stone walls and humanity’s persistence with respect to *abiding* by the Westphalian model will be woefully inadequate responses to the game-changers that are AI and biotech.

¹⁹ Harari, Yuval Noah. *21 Lessons for the 21th Century*. New York: McClelland & Stewart, 2018.

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