

Artificial Intelligence & New World Order



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Abstract: *Artificial intelligence (AI) is an unusual affair, as opposed to usual concerns of a strategist. Any serious quest is focused on the ascent of AI shifting the path of history. It is an era marked by an epochal transformation centered on the logic of machines and beyond. And beyond is scary, for if AI takes over, there is nothing to override it. Though hinted at but never admitted to, this is the dilemma. The transformative impact of AI is transforming societies, choices, art, culture, education, politics, economics, finance, industry, foreign policy, strategy, weapon systems, warfare, lawfare, besides, information and disinformation. Plus, an altered perception, thought, identity and reality, not to mention decision-making and life itself. AI is a pervasive influence that acquires and grows too, though devoid of inquisitiveness, camaraderie, compassion and soul. It is a disruptive force forcing governments and corporations to scramble for an AI adaptation and to win its steeplechase. An enabler and not a sphere, AI can be tailored-cut to reach a goal which is beyond the cognitive capacities of human mind. And mankind is on the cusp of yet another transcendence, compared to earlier transformations. Still, there is something out of joint in an evolving AI New-World-Order (NWO). It is an abstract and Kafkaesque undertaking. The momentum for an AI driven world is operational. Machine-learning is central to it. The race for a strategic AI advantage has commenced with a subtle political aim. The old paradigm is as good as gone. To recoil from exploring the strategic-frontiers of an AI based NWO is not an option. A cognitive-reappraisal is required to reset the set. The restyling of NWO with AI is as momentous as was the arrival of nuclear weapons. And the AI fame is already trading the prestige of chess.*

Keywords: Chess, Artificial Intelligence, Machine-Logic, Decision-Making, New World Order.

Introduction

Historically, the game of chess symbolizes power, power-politics and empires. The same is true for the ascendancy of Western colonial and neo-colonial empires. The Western creativity conclusively impacted the game of chess five hundred years ago, once, 'Muslim Vizier' was replaced with powerful 'Queen', as all-powerful queens ruled Europe. This was a structural change impacting the game geo-politically and

geo-strategically. It gave queen a strategic-flexibility, an in-depth reach and a long-range grasp. The Western naval-power manifested. The Queen now embraced the entire chess-board, as opposed to castrated Muslim Vizier. Intriguingly, an arrival of a chess grandmaster and the birth of an empire are lockstep in history e.g., Roy Lopez becoming a grandmaster and the rise of 16th century Spanish Empire coincided. And a coincidence is a mixture of several things.

The correlation did not end with Spaniards. In the late 2017, a quiet revolution occurred when AlphaZero, an AI program developed by Google DeepMind, defeated Stockfish decisively—until then, the most powerful chess program in the world (Kissinger et.al, 2021, p.7). This was the dawn of a new era and the beginning of a contest for an AI-Empire.

AI performing human-functions is a meaningful reality. More interesting is the fact that time taken by an AI machine to learn and develop capacity for an application is much briefer compared to humans. The application of AI machines in the fields of pharmaceuticals, environment, transport, policing, defense, warfare and other sectors is an empirical fact. The AI penetration of new disciplines endures. Computer scientists and engineers have developed technologies, particularly Machine-learning methods using “deep neural networks”, capable of producing insights and innovations that have long eluded human thinkers and of generating text, images, and video that appear to have been created by humans (Kissinger et.al, 2021, p.14). The knowledge required for AI operations is beyond five-sensory experience and empiricism. For an AI machine is a mechanism to organize reality seen from an angle not common to humans. It not only approaches reality differently, but is expected to increasingly explore the dissimilar aspects of reality too. All the functional indicators of AI machines point towards perfection and essence of non-human logic. Though, there are performances as also short-comings at this point of time in history. AI is always complex and at times unpredictable and uneven also. It has a capacity to surprise trainers in the processes of Machine-learning; later also.

The use of new mixtures of algorithms and evolving computing power to train machines is widespread in the context of Machine-learning. It augments human capacities. In 2020, American AI start-ups raised almost \$38 billion, their Asian counterparts raised \$25 billion and Europeans raised \$8 billion (Kissinger et.al, 2021, p.4). AI is impacting perception, cognition and human-collaboration. In the due course, it will influence cultures as well i.e., the way we

live and think. The changes and revisions in the perception of reality will be experienced at a level not known to humans since the onset of modernity. The reality and its various aspects measured by ‘reason’ and its ‘logic’ since centuries now has an equivalent. The pride of being the only reasoning-being is dented. Now the partial end of the postulated superiority of human reason, together with the proliferation of machines that can match or surpass human intelligence, promises transformations potentially more profound than even those of the Enlightenment (Kissinger et.al, 2021, p.19). AI will draw conclusions and make decisions for itself and humans e.g., Israel’s conduct of war on Gaza with the help of Lavender and Gospel software. It has a non-human logic that explores aspects not known to or will never be identified by humans. There are new software processes with AI that comprehend, shape and also learn from human actions and movements. The challenges and openings unleashed by AI need to be grasped in the right context, before it is late. How societies and world have been organized over centuries is faced with an AI challenge. Besides, reorganizing and reordering societies and world with AI systems is a challenge plus.

Other than the understanding of deeper mathematics and the complete reality of universe, the deployment of AI systems is a political and strategic task too. A mixture of big-data and AI machines is already managing various features of politics that generally includes designing and tailoring of political messages distributed in various communities, a mixture of crafty divisive information and operational algorithms to detect such discordant data, plus, locating and countering of disinformation. The political-truth is that AI systems will impact values, structures of politics and social-contracts of nations around the world, not to mention the conduct of warfare. This will have profound societal implications. Similarly, security establishments too all over the world are faced with an AI evolution no less arcane. It will impact the existing conventional warfare concepts like defense and deterrence. And with deployed intelligent-weapons, it will be difficult

for any side to calculate balance of power and correlation of forces. Also, the delegation of 'autonomous targeting decisions' to AI-Machines will be a political decision. The Israelis did the same in Gaza in the conduct of warfare. And the evolving intelligent-weapons with processing speed faster than diplomacy are at the heart of New Cold War. What an AI-NWO will be like thirty years from now?

Historically, security has been and remains a minimum to be achieved by an orderly society. The search for security results in technological advances and then these are operationalized to be prepared to counter internal and external threats, besides, influencing developments and decisions within and without borders. The technological innovations by pre-modern societies in metallurgy, forts, ships and horsepower often proved critical, whereas, early modern societies focused on modernizations of guns, cannons, ships and navigation instruments along with methodology and techniques. Force, to counter opposing force, equips itself with the inventions of art and science (Clausewitz, 1989, p.75). The scientific improvements have been threefold i.e., conventional defensive and offensive capabilities, plus, long-range projection of trans-oceanic naval power on the chessboard. And speed, time-taken and fire-power improved with advances in technology. In 19th century, machines appeared on the battlefields of American Civil War and Franco-Prussian War. Likewise, industrialized production of arms and ammunition, telegraphy and the use of railways made these conflicts total wars. Besides, with every hi-tech revolution in warfare; great powers conducted assessment of correlation of forces, especially in time and space dimensions. Additional variables in the assessment included risks and losses in the context of prevailing and an additional opponent and its arsenal. In 20th century, employment of resources to achieve certain ends in strategy faced problems. Strategic calculations could not keep pace with the technological developments. The connection between capabilities, objectives and strategy was not harmonious. The impact of AI on strategy, cyber warfare and strategic thinking is not congruent too.

AI-NWO & beyond

All great and regional powers have capabilities in the opaque and deniable cyberspace. The cyberspace strategies have doctrines, but with a meaningful silence. The operational mixture includes disinformation, deception, intelligence gathering, sabotage, conventional and sub-conventional conflicts. No economy of national-security can afford to ignore AI's strategic and security dimensions (Kai-Fu-Lee, 2018), including cyberspace. New scientific breakthroughs have new risks. AI linked risks complicate strategy unintentionally. The hypothesis that AI augmenting conventional, nuclear and cyber warfare capabilities makes strategic competition more unpredictable is inductively true, let alone the spread of conflict itself. A race for strategic AI advantage is already taking place, particularly between the United States and China and to some extent Russia (Kanaan, 2020). The trilateral AI competition between great powers is proliferating AI arsenals e.g., Indo-US cooperation in cyberspace. The truth is that designing and creating an AI-system requires a sophisticated computing power, but not operations or proliferation. The nuclear, cyber and AI technologies are impacting strategies and doctrines of great powers. A new balance of power is being shaped. The transformations involve solicit AI-doctrines and detailed studies of *others*. Arms-control will emerge in the due course to limit AI technologies. American AI reality revolves around the question that 'do we really want pure free trade in artificial intelligence technology today, knowing that the industry could someday be completely dominated by China or Russia' (Prestowitz, 2021, p.181). Is the big question not where decoupling starts, but where it is likely to stop? (Prestowitz, 2021, p.246). As opposed to this, AI sits well with China's global expansion. Massive overseas investment fits with China's ambition to boost key technologies in artificial intelligence, big data, smart cities, the industrial internet and cloud computing (Macaes, 2018, p.44). Still, there are other players and Germany is one, let alone the negative impact of Ukraine war on the EU-China relations. The strategic

industries where China wants to become a dominant global player are just those that Germany chose for its own industrial plans: robotics, automated vehicles, aerospace and artificial intelligence (Macaes, 2018, p.88). The race for an AI-NWO is operational plus. The battlefields of Gaza and Ukraine are the AI testing grounds.

In earlier times, integration of new weapon systems and the concomitant doctrines developed by strategists had political ends in the crosshairs. The ultimate equalizer broke this connection. A debate ensued over moral and strategic implications of nuclear weapons. The considerations included absence of a principle, inability to evolve nuclear doctrines, no reconciliation between the use of nuclear weapons and political objectives, plus, total war, mutual destruction and a calibrated use of tactical nuclear weapons. The only inference that emerged from the debate was an ambiguity that failed to give a principle or a doctrine to use nuclear weapons. It simply could not be inferred as to what would follow the use of nuclear weapons. However, the idea of ‘deterrence’ emerged in the context of ensuing Cold War. Deterrence was a strategic-psychology of willingness to use operationally deployed nuclear weapons. The shaping of others’ mind became central to it, especially of an aggressor. For a bluff taken seriously is a good deterrent, as opposed to an ignored authentic threat. There is no deterrent like a suicidal-instinct. Aside these contradictions, nuclear weapons were integrated in the theories and concepts of World-Order. It deterred large scale conventional attacks on possessors. In response, some strategists proposed doctrines that would permit the use of tactical nuclear weapons in a limited nuclear war (Kissinger, 1957, pp.281-282). This brought-in the concepts of ‘escalation’ and ‘limits’ into debate turning ideas of massive retaliation and mutual assured destruction (MAD) not valid. Still, the US and Soviets deployed a global nuclear triad each. And Soviets reportedly studied the use of a system intended to be capable of, once switched on by humans, of spotting an incoming nuclear strike and issuing launch orders for a counterattack without further

intervention—an early exploration of the concept of semi-automated warfare involving delegation of certain command functions to a machine (Hoffman, 2009).

Geo-political influence of an actor is in proportion to its capacity to inflict damage on others. It involves assessment of correlation of conventional-forces and nuclear weapons. The other strategic-frontier that has emerged is cyberwarfare. In the context, dual-use technologies add an operational ambiguity to calculations. Conventional and nuclear arsenals belong to physical spheres where perceptions and calculations can be worked out. However, the strength of cyber weapons is the opaque and obscure nature of cyberspace. Cyber weapons affect large swathes of societies, not just specific targets on a battlefield (Solarium Commission, 2020). This makes a tech-giant as good a geopolitical actor as nation-states. It is time to start thinking of the biggest technology companies as similar to states and these companies exercise a form of sovereignty over a rapidly expanding realm that extends beyond the reach of regulators: digital space (Bremmer, 2021, p.113). The complexity of cyberspace makes it difficult to devise a successful cyber-strategy. The psychological aspect of cyber warfare targeting trust between states and populace is a dangerous phenomenon. And the cyber conflict major countries are involved in is without a clearly defined nature or scope (Greenberg, 2019). Like all realms of conflict, the domain of cyberspace is shaped not by a binary between war and peace but by a spectrum between these two poles—and most cyber attacks fall somewhere in that murky space (Gordon & Rosenbach, 2022, p.10). Compounded by leakers and saboteurs who can neutralize substantial portions of a state’s cyber capability or roil its domestic political landscape, the speed and unpredictability of the cyber realm and the variety of actors it contains may tempt policy makers into preemptive action in order to prevent a stunner blow (Clarke & Knake, 2019). The strategies and doctrines of cyberspace belong to a shadowy realm and capacities and capabilities of various actors are generally not known. More importantly, the

speed and ambiguity of the cyber realm have favored offense—and encouraged concepts of “active defense” and “defending forward”, which seek to disrupt and preclude attacks (Department of Defense, 2018). A cyber-riposte is all the more probable.

The two realms of nuclear and cyber weapons now have an equivalence in AI-weapons. Plus, nations have developed and deployed AI-systems as enablers enabling strategic-functions across the entire spectrum of military chessboard with an impact on policy (Brose, 2020). Also, the integration of non-human logic into weapon systems and processes is transforming strategy and policy. The insightful influence of AI has an element of surprise which at times is disturbing. After the delegation of control, AI carries out functions fast and easily which humans perform after huge difficulties. The unconventional way of targeting by an AI-enabled conventional weapon is precise down to the targeting of individuals and objects, as opposed to locations (Cooke, 2019). AI can operate planes and radar systems. AI with its non-human logic can be autonomous and not calculable. The pre-AI strategy dealt with an uncertain strategic-environment requiring a strategy to deal with an uncertainty. Conventional strategy and tactics evolved out of human experience, wisdom, decision making and an objective framework. However, AI-system has a non-human logic of its own which it follows. Besides, processing speed is faster than human mind and thought. AI is a different ballgame. It entails *gestalt* thinking. It requires an integration into strategy. It will impact diplomacy, warfare and NWO. And integration of trained AI flying planes and making independent targeting decisions impacts tactics and strategy including nuclear weapons. The trans-reason nature of AI asks for ‘restraint’ and ‘override’.

Today, an opaque test faced by strategists is their inability to make it to the ‘conceptual’ and ‘analytical’ domains of AI-operations. AI assisted awareness of hidden-forms of reality, may help in understanding of enemy, but this will relinquish decision making to AI-machines e.g., as in Gaza. Pope Francis while addressing

the Group of Seven summit on 14 June, 2024 said, “No machine should ever choose to take the life of a human being”. Though, there will be societal variations in entrusting decision making and control. The Israeli software are target generating factories. The ongoing AI evolution has implications for NWO. The digital-battlefield is global. The strategic-environment is much broader compared to the past, and clash between intelligent-systems needs to be understood, before AI weapon-systems are deployed. Nuclear have-nots now have a choice to develop a formidable AI arsenal. Because, beyond AI-enabled defense systems lies the most puzzling potentials—autonomous weapons systems—usually systems which once initiated, can select and engage targets without further human intervention (Department of Defense, 2017). It suits technologically advanced countries to enforce a verifiable restraint while continuing to develop AI defensive and offensive weapons. A trust deficit will remain even after agreements. Still, restraint and override in the form of human intervention is critical in the context of AI products.

The choice is between an AI-enabled warfare conducted by humans, and AI-machines conducting warfare autonomous of humans. Imagination is critical to anticipate what is coming. The AI-driven Israeli campaign in Gaza is an example. The Israel Defense Forces (IDF) bombing of Gaza is a product of Habsora, Lavender, and Gospel AI-software systems, especially the capacity to produce 100s of targets daily. The new mixture of conventional, nuclear, cyber and AI has unleashed new strategic transformations that need to be harnessed. Global and national conversations are central to an AI driven emerging NWO. Restraint is now metaphysical. For AI is a technology that has the potential to enforce consequential outcomes, both in the sense and meaning of things to come in the context of AI-NWO. The development of intelligent-weapons continues by great and regional powers in order to gain strategic advantage in the emerging order of things. The dual-use aspect makes it deadly. The less said about the murkiness, the better it is. The crisis of identity too will emerge in the

due course as AI engulfs the world. AI is mimicking its way towards an expanded new reality. It is an aide-de-camp to human perception altering it in unknown ways based on not known aspects, not to mention the human-tasks entrusted to it. The efficiency displayed is frictionless, also, occasionally superior to human intelligence. And AI performance impacts human perception of itself raising philosophical questions with regard to human identity based on 'faith' and 'reason'. It is a challenge to a perception of oneself as a human-being. Nonetheless, the Israeli war doctrine and Iron Dome failed and the AI driven surveillance came to nothing, let alone the cognitive complacency. The entrusting of decision making to AI was a strategic error, and to say nothing of AI conducting autonomous border security operations, warfare and target selection with Habsora system.

AI adoption and Pakistan

In the emerging AI-NWO where great powers competition for AI technologies and strategic advantage is already taking place, other states are also jostling over AI adoption to position themselves competitively in this global race. European Union's "Digital Europe Program" has allocated 8.2 billion Euros between 2021 and 2027 to improve digital capabilities (Nazir, 2023). Likewise, Global AI market is expected to reach 184 billion dollars in 2024 (Statista, 2024). Pakistan too has resorted to AI adoption but the lack of national commitment is making it difficult to develop local AI capabilities. Nevertheless, Pakistan has established, Centre for Artificial Intelligence and Computing (CENTAIC) under the Pakistan Air Force (PAF) "to increase the usage of AI in warfare"; the National Centre of Artificial Intelligence (NCAI) by the Higher Education Commission of Pakistan (HEC) operating across six universities in Pakistan; and Sino-Pak Centre for Artificial Intelligence (SPCAI) operational at the Pak-Austria Fachhochschule Institute of Applied Sciences and Technology (PAF-IASST) Haripur, to boost AI research and development. Still, Pakistan faces a Catch-22 situation in terms of an ill-equipped workforce and is increasingly dependent on foreign AI solutions (Attarwala,

2024). This dependency not only incurs higher costs but could also place critical infrastructure and systems under the control of foreign entities, creating potential economic and security vulnerabilities (Attarwala, 2024). The release of the draft National Artificial Intelligence Policy in May 2023 that provides a structural framework for the integration of AI technologies in Pakistan represents the country strategy for AI adoption. However, the policy is still un-adopted.

CONCLUSION

Currently, AI-technology is impacting knowledge-construction and processes which discover knowledge, plus, altering human-interactions and induction based inductive thought too. AI has introduced new process of reasoning in analysis from an angle not known earlier. The AI-discoveries are astounding and its performance in various sectors is eclipsing reason as centuries old center of gravity. Reason now has a rival in AI-intelligence. Its algorithmic capacity to discover patterns in mass-data is revolutionary. The modern idea of skepticism at the heart of discovering knowledge has been displaced by an assumption that reality is more complex and can be known in unlikely ways. The complexity and refinement of AI has an invisible non-human logic which is technically sound and strategically insightful, let alone its strategic-management of complex mega systems. The sophistication of AI navigational power is an effective one in the digital-realm, as opposed to an understanding by human reason alone. The idea of testable hypothesis to know has been replaced by a human-machine mixture. As AI processes expand and advance further, human reason making sense and meaning of things is diminishing, as also getting augmented at the same time. An intellectual backlash in the due course is probable. An AI-ethic is of vital importance. It involves meaning, shaping, development, limits and deployment of AI-technologies. What would be world like when a mixture of human&machine makes it to the highest geo-political, geo-strategic and geo-economic levels?

Moreover, central issue is the perception of

reality i.e., whether AI and human are perceiving same reality from complementing angles? Or is it a different reality we are made aware of by an AI-machine and its algorithms? If so, then this is a realm beyond human mind driven by concepts at a certain pace, as opposed to processing speed, range and depth of algorithms. AI is distinguished for results and answers it provides. The human quest to know now has an enabler to ends not imaginable earlier. Take for example, Artificial General Intelligence (AGI) with an enormous computing power executing a wide array of tasks done by humans earlier. Resultantly, the competition for a deployed AGI to gain advantage in the race is in advanced stages. As physical and social spheres are increasingly organized and reorganized by an automation of AI machines, gaining an advantage is the game in the town. Though, machines with restricted access and selective control running affairs will have political implications, besides, on governance as well. Still, it will be a great mixture of 'intellectual, scientific and strategic' feat.

The future objectives in the context of AI include new technical discoveries, fresh financial and economic efficiencies, plus, an altered security and new-fangled extents of societal-monitoring and control. A New Age of Surveillance driven by AI is already taking place. It has an algorithmic invasiveness that permeates into realms not accessible to human mind and its reason. The existing principles of running affairs of states and societies are increasingly irrelevant e.g., 'causality' and 'intention' in the context of law. The same is true for digital-platforms through which most of political debate and social dialogue takes place. The AI regulations governing digital-platforms and role of regulators is critical, whereas, framers and framing of regulations is critical plus. For how AI responds to and further shapes cognitive preferences and biases in digital-spaces is politically and socially vital. The result so far is not encouraging keeping in view the damaging impact of deliberate disinformation. What has emerged since sometime is a proliferating post-truth era. The globalized world with an AI enabler is heading in a

direction that is alarming at best, because, what one values is at stake. The cyber and security threats are now same.

Though of a gestalt and Kafkaesque nature, AI still has no philosophical basis that rationalizes its operationalization. There are more unanswered questions than answered answers in the context of an AI driven world of digital-platforms. The shortcomings of human reason persist, despite stretching it to the maximum. Human reason has the peculiar fate in one species of its cognitions that it is burdened with questions which it cannot dismiss, since they are given to it as problems by the nature of reason itself, but which it also cannot answer, since they transcend every capacity of human reason (Kant, 1998, p.99). Human inadequacies remain but self-denial is not an option in the context of an AI-NWO. For geographic spaces and languages stand dissolved in digital-spaces. The digital-world is now a trans-continental space. It is global in the sense and meaning of computing power. The regulation of digital-platforms has security implications. The dent in the idea of sovereignty is obvious. The human-AI partnership is a complicated phenomenon. Ransomware attacks, election interference, corporate espionage, threats to the electric grid: based on the drumbeat of current headlines, there seems to be little hope of bringing a measure of order to the anarchy of cyberspace (Nye, 2022, p.32). What if there is a political and operational dissent?

A deliberate contemplation of functions delegated to AI machines and ensuing NWO reveals a strange cultural and strategic world. It will be a world of an altered culture and transformed strategies. Today, governments, businesses and citizens alike face pervasive and unrelenting cyber-threats that would have been hard to imagine few years back, adding layers of risk and complexity to already fraught problems of security, politics, and governance (Pehlan, 2022, p.8). Still, the AI-polar-NWO in gestation is an awe and an unavoidable reality. Moreover, two adversaries with deployed AI-weapons including nuclear weapons against each other is a new strategic development. It impacts courses of actions adopted in cyberspace. As early as

2001, James Adams, a co-founder of the cyber-security firm iDefense, warned that cyberspace was a “new international battlefield”, where future military campaigns would be won or lost, not to mention the trust that undergirds well-functioning economies, effective governments, and stable international relations (Schneider, 2002, p.22). And the history of international order provides little reason for confidence in top-down cooperative solutions, because, modern World-Orders were not inclusive organizations working for the greater good of humanity, rather, they were alliances built by great powers to wage security competition against their main rivals (Beckley, 2022, p.68).

Cyberspace is a geo-political, geo-strategic and geo-economic space. The elusive AI reality demands geo-political and geo-strategic solutions, as opposed to software reductionism. Learning on the job remains part of reality for policy and decision makers. In the context, it is human-imperfection vs. super-human-AI. In a strategic framework, preemption and riposte against AI-weapons with AI-weapons is now decisive. If nuclear weapons ever achieved an iota of stability, it is not so in case of AI-weapons. There is no AI-framework as is for nuclear weapons. A destabilized world is in the offing until stabilized by AI-agreements. The existing regional and global balance of powers is an altered one. An armed AI needs lots of attention. It is a multi-domain tasking. While AI arms-control will emerge in the due course of time, however, tackling the broad range of AI usage is a regulatory and an arms-control challenge. A mixture of AI and quantum computing is instructive of a reality not known earlier by human perception. A broad realignment will force itself in the decades ahead. New societal norms and a new balance of power is on the horizon. Future advances in technology will certainly reveal limits of even AI-technology. For every epoch has a shelf life. And as a new one begins, absence of capacity to override an AI-machine is the Now Moment.

REFERENCES

Attarwala, S. Fatima. (2024). “Need to Cut Reliance on Foreign AI Solutions”, *Dawn*,

https://www.dawn.com/news/1835728?fclid=IwZXh0bgNhZW0CMTAAR3Ej1qtEY6sX--k4FVDSZPqX9pTSYctRe7BBE69NhejIEC-3PKScDB5SEg_aem_AYb1yl2wRuxSOjwww5SXI_jKZ2i2eV04yrMOOziEYk08JN13xffqLocNRB3pgsmabs6BLx49jG3XQIhe6aYwqEJT (accessed on 19 June, 2024).

- Beckley, M. (2022). *Enemies of My Enemy: How Fear of China Is Forging a New World Order*, Foreign Affairs, 101, (2).
- Bremmer, I. (2021). ‘The Technopolar Moment’, *Foreign Affairs*. 100 (6).
- Brose, C. (2020). *The Kill Chain: Defending America in the Future of High-Tech Warfare*. New York: Hachette Books.
- Clarke, R. & Knake, R. (2019). *The Fifth Domain: Defending Our Country, Our Companies, and Ourselves in the Age of Cyber Threats*. New York: Penguin Press.
- Clausewitz, C. (1989). *On War*. eds. and trans. Michael Howard & Peter Paret. Princeton: Princeton University Press.
- Cooke, G. (2019). “Magic Bullets: The Future of Artificial Intelligence in Weapons Systems”, *Army AL&T*, June 2019, https://www.army.mil/article/223026/magic_bullets_the_future_of_artificial_intelligence_in_weapon_systems (accessed on 5April 2022).
- Department of Defense Directive 3000.09. (2017). “Autonomy in Weapon Systems”, 8 May 2017, <http://www.esd.whs.mil/portals/54/documents/dd/issuance/dodd/300009p.pdf>. (accessed on 6 April ,2022).
- Department of Defense. (2018). *Summary: Department of Defense Cyber Strategy 2018*, http://media.defense.gov/2018/Sep/18/202041658/-1/-1-/1/CYBER_STRATEGY_FINAL.PDF. (accessed on 4April 2022).
- Gordon, S. & Rosenbach, E. (2022). *America’s*

- Cyber-Reckoning: How to Fix a Failing Strategy*. *Foreign Affairs* 101 (1).
- Greenberg, A. (2019). *Sandworm: A New Era of Cyberwar and the Hunt for the Kremlin's Most Dangerous Hackers*. New York: Doubleday.
- Hoffman, D. (2009). *The Dead Hand: The Untold Story of the Cold War Arms Race and Its Dangerous Legacy*. New York: Doubleday.
- Kai-Fu-Lee, (2018). *AI Superpower: China, Silicon Valley, and the New World Order*. New York: Houghton Mifflin Harcourt.
- Kanaan, M. (2020). *T-Minus AI: Humanity's Countdown to Artificial Intelligence and the New Pursuit of Global Power*. Dallas: BenBella Books.
- Kant, I. (1998). *Critique of Pure Reason*, trans. Paul Guyer and Allen W. Wood. Cambridge: Cambridge University Press.
- Kissinger, H. (1957). *Nuclear Weapons and Foreign Policy*. New York: Harper & Brothers.
- Kissinger, H. Schmidt, E & Huttenlocher, D. (2021). *The Age of AI and our Human Future*. New York: Little, Brown and Company.
- Macaes, B. (2018). *Belt and Road: A Chinese World Order*. London: Hurst & Company.
- Nazir, S. (2023). Unleashing the Potential AI in Pakistan's Public Sector", *The Diplomat*, <https://thediplomat.com/2023/11/unleashing-the-potential-of-ai-in-pakistans-public-sector/> (accessed on 19 June, 2024).
- Nye, J. (2022). *The End of Cyber-Anarchy?* *Foreign Affairs* 101, (1).
- Phelan, D. (2022). *Digital Disorder*, *Foreign Affairs*, 101 (1).
- Prestowitz, C. (2021). *The World Turned Upside Down*. New Haven: Yale University Press.
- Schneider, J. (2022). *A World Without Trust*, *Foreign Affairs*, 101, (1).
- Solarium Commission Report. (2020). *Report of the United States Cyberspace Solarium Commission*. https://drive.google.com/file/d/1ryMCIL_dz30QyjFkkf10MxIXJGT4yv/view (accessed on 4 April 2022).
- Statista. (2024). *Artificial Intelligence - Worldwide*, <https://www.statista.com/outlook/tmo/artificial-intelligence/worldwide> (accessed on 19 June, 2024).