THE OPPORTUNITY IN THE STORM

We owe a debt truly wondrous to the scientists and scholars who have brought even into casual conversation a subject that has commanded the most arduous, even arcane, research and investigation. Collectively, they have been responsible for what I would call a democratization of a highly specialized subject, a democratization essential to ensure the participation in the conversation by those whom the promise of artificial intelligence (AI) is intended to serve and by those whom we seek to protect from its perils, those for whom it can be a valued facilitator and freer of natural intelligence (NI).

The co-founder of the Boston Global Forum, Nguyen Anh Tuan, has written about a humane, peaceful and secure world ushering in an age of global enlightenment, three attributes which may, at first glance, seem to overlap but which are, in fact, unique and distinct. We have seen societies secure and peaceful on their surface which are not humane; we have seen humane and peaceful societies that are not secure, and we have seen societies that are humane and secure whose inner churnings militate against their being peaceful. Rarely has this been articulated more eloquently at the United Nations, than as General Secretary and President of Vietnam To Lam, did at the UN Summit of the Future in September 2024 when he said:

> *"Human intelligence has transformed the world, making human life better, more developed and more perfect in all aspects. However, it is also humans who are also the cause of difficulties and challenges that the humanity is facing. Scientific and technological achievements must serve social progress, focus on humanity, liberate and develop humanity in a comprehensive manner, constantly improve life, for the benefits and happiness of humanity and for future generations."*

I would like to focus on that one phrase, the reference to “liberating humanity.” In a sense, it was affirmation of what the United Nations Charter said, much more portentously, eighty years ago, of the Organization’s mission “to promote social progress and better standards of life in larger freedom”. The Charter could not, in its original iteration, speak of “liberating humanity” without suggesting a call to end colonialism, a call which would have kept many colonial founding members of the United Nations away from its creation. Vietnam should, in historical right and fairness, have been a founding member, but political subjugation and denial of self-determination augured otherwise. When it did assume its rightful place in the international community of nations in 1977, its policy and perspectives sought an extension of political liberation to the affirmation it made then that “progressive mankind will find proper solutions for the major problems of our time.”

The many possible applications, and benefits, of AI have been addressed by minds far more knowledgeable than myself; I would like to reflect on its relevance and potential for the institution with which I am most familiar, the United Nations and then suggest one possible avenue through which it can best be channeled. I propose to focus on two specific areas of international cooperation which the United Nations has supported, or which it can support, and where the combination of natural and artificial intelligence can help attain results far beyond the reach of either alone.

Take humanitarian action and disaster preparedness. We observed the twentieth anniversary of the South Asian Tsunami in December 2024; the very year after its occurrence, the United Nations summoned global reserves of natural intelligence to create the “Hyogo Framework for Action” which aims to make the world safer from natural hazards by building the resilience of nations and communities, including by enhancing early warning systems. It is interesting to note that the Hyogo prefecture in Japan is home to both this political framework for action and the “Bokomi” model of disaster risk reduction which is a remarkable instance of NI being augmented by AI. Initially, Bokomi was seen as a community-based disaster risk reduction model,

promoting the idea of “self-help” in which residents protect themselves with their own effort, carrying out disaster risk reduction drills and the idea of “mutual help” in which residents protect their town in cooperation with others similarly affected. This NI was soon enhanced by AI which utilized its technologies to enhance capabilities to anticipate, and prepare for, potential natural disasters by analyzing large datasets from sources such as satellite imagery and sensor networks, providing timely alerts, optimizing resource allocation and supporting long-term recovery and resilience by analyzing past events to improve infrastructure and emergency plans.

Ten years after Hyogo, in conjunction with the launch of the United Nations Sustainable Development Goals, the “Sendai Framework for Disaster Risk Reduction (2015-2030)” emerged as a global agreement to substantially reduce disaster risk and losses in lives, livelihoods, health, and economic, social, cultural, and environmental assets. The framework emphasizes understanding disaster risk, strengthening governance, investing in resilience, and enhancing preparedness to “Build Back Better” during recovery. Today, it utilizes artificial intelligence to improve decision-making across all stages, from early warning to recovery, analyzing vast data sets to predict weather events, assess damage, and allocate resources effectively, thus supporting the framework’s goals of reducing disaster risk and losses. It does so through at least four critical stages: predictive analytics, which cohere an immense terrain of data AI from satellites, sensors, and weather stations to identify patterns that can help predict potential disasters; “Early Warning Systems” to alert at-risk communities, enabling preventive measures and evacuations; simulation and modeling which create complex simulations of disaster scenarios, pointing to potential outcomes and facilitating the planning of responses and , finally, damage assessment using satellite imagery to swiftly and comprehensively assess damage from a disaster, aiding in efficient resource allocation and recovery efforts.

This said, even as the enormous potential of its application in the disaster preparedness space has been realized, awareness has also emerged that the integration of AI into disaster risk reduction must be inclusive, addressing potential biases and ensuring marginalized groups are considered so that the immense benefits of this new technology do not perpetuate or deepen old inequities.

Humanitarian action is the knife's edge of the immediate; clearly the United Nations must also focus on the longer term, the seemingly distant. Increasingly, the dangers it needs to avert on the horizon, and the opportunities it needs to seize, coalesce; an instance that comes to ready mind is that of climate change, on the one hand, and clean energy requirements on the other. Weather patterns which veer to both the extreme and the unforeseeable escalate the demand for the minerals critical for clean energy technologies. The International Energy Agency estimates that global demand for minerals—such as lithium for electric vehicles, or selenium for solar cells—is expected to triple by 2030 and quadruple by 2040.

As the Secretary – General of UN Trade and Development has noted, "developing countries play a crucial role in the global supply chain for transition minerals and metals, but they face the challenge of lacking the financing and quality investment capabilities needed to add value. For example, Africa holds over a fifth of the world's reserves for a dozen metals essential to the energy transition and the production of electric vehicles, solar panels and batteries. Currently, African countries only have 1 per cent of the global installed photovoltaic capacity and are estimated to generate only about 40 per cent of the revenue they could potentially collect from critical minerals."

AI's ability to widen the exploration and efficiency of mining can help nations exploit their reserves of transition minerals and metals. by enhancing exploration and mining efficiency. Advanced data analytics and autonomous machinery can energize mine planning and enhance mineral recovery while reducing operational costs and

environmental impact. Location of critical minerals can be fine-tuned with AI-driven modeling systems using gravity and magnetic data, even as AI itself furthers sustainable development by lowering the costs of clean energy transitions and streamlining effective resource management across the mineral lifecycle.

Let's take a specific example. The Syama mine in Mali has been cited by the Brookings Institute as an example of a site that has benefited from digitalization. In 2015, it was transformed into the world's first purpose-built automated mine. Employees use a fiber-optic network connected to above-ground control centers to manage and monitor all activities, from the clearing of the drill point to extraction, loading, and hauling. Although the first investment was steep, the changes are expected to cut mining costs by 30 percent and improve overall efficiency. The machines can operate 22 hours a day, and there is no time lost due to shift changes.

I have attempted to share specific instances of the vast reality and immense potential of the relationship between AI and the objectives and mission of the UN. AI will always be "relatively new" to the many older institutions it serves, and the United Nations is no exception. What we need to consider now is how optimally to bring AI, its creators and actors, into a continuous, dynamic relationship with the United Nations, rather than relying on the admittedly effective but clearly episodic instances shared so far.

The United Nations came into being as a cerebral, as much as political, innovation, the very first resolution of its General Assembly, in the January of 1946, was on the "problems arising from the discovery of atomic energy." The immediate response to those problems was the creation of an International Atomic Energy Agency (IAEA), rooted in the conviction of the still new international organization that it must shape a world governed by international law and the exercise of international as much as individual, and, indeed, intellectual, responsibility. It would allow the creativity and innovation of the human

person help shape a world worthy of our times just as surely as that world works to foster and further, in the phrase of our Charter, the “dignity and worth “of that human person.

However, what made the creation of the IAEA relatively easy was that the subject with which it dealt—atomic energy—was exclusively within the realm of governments and an inter-governmental agency would be able to address the “problems arising from its discovery”. AI is clearly different; to create an intergovernmental “International Artificial Intelligence Agency” would require the critical role of players other than governments; as one senior United Nations official remarked, the major technology companies are like the permanent members of the Security Council when it comes to AI. (It bears recollection that, when the Security Council discussed counter terrorism in May 2016, it invited the Vice President of Microsoft to make a presentation.)

So how do we create a viable UN role in augmenting the vast resources of natural intelligence at its collective command with the promise of artificial intelligence while being alert to, and seeking to effectively limit, its dangers? Allow me to suggest one possibility.

Among the most impressive characteristics of the United Nations Charter is its ability to harmonize lofty lyricism with precision of point. Take Article 85, for instance, which reads:

> *“1. The functions of the United Nations with regard to trusteeship agreements for all areas not designated as strategic, including the approval of the terms of the trusteeship agreements and of their alteration or amendment, shall be exercised by the General Assembly.*
>
> *2. The Trusteeship Council, operating under the authority of the General Assembly, shall assist the General Assembly in carrying out these functions.”*

It carried them out very effectively and, with the last of the Trust Territories gaining independence, the Council suspended operations in 1994. Can we now think of its being

revived as a wholly new sector of imagination and endeavor? It is a sector whose possibilities UN Secretary-General António Guterres seized in his September 2021 report "Our Common Agenda" where he suggested that the Council be repurposed to an inter-governmental body for intergenerational issues, writing "previous commissions and secretaries-general, along with some Member States, have proposed a repurposing of the Council to enhance the governance of the global commons. Building on these ideas, and as part of the follow-up to Our Common Agenda, I invite States to consider making the Council available as a multi-stakeholder body to tackle emerging challenges and, especially, to serve as a deliberative forum to act on behalf of succeeding generations. Among other tasks, it could issue advice and guidance with respect to long-term governance of the global commons, delivery of global public goods and managing global public risks."

Artificial intelligence, surely, is has emerged as a terrain of the global commons, a creator of global public goods and a means to anticipate, avert and address global public risks. Can a renewed Trusteeship Council be their trustee?

Let's return to a phrase from the United Nations Charter. It should be "a center for harmonizing the actions of nations in the attainment of… common ends." A repurposed Trusteeship Council's focus should be on global action, not deliberation. The United Nations, and its General Assembly in particular, have been the fount of decisive global resolution, but less so of concerted action. This would be an opportunity to demarcate the terrain of the two principal organs between the articulation of ideas and the framing of policy.

Second, the Council should be a receptor for the stimulus of evidence-based documentation upon which such action can be premised. Instances of success of AI in specific sectors could lead to their conscious replication elsewhere. The Council could take advantage of the work of a number of existing academic networks which address AI and

invite them to offer dispassionate fact and analysis. The Intergovernmental Panel on Climate Change (IPCC) is an example of a source of fact without prescription of policy. What the IPCC has done in the environmental and meteorological field over the past third of a century could be enhanced by other convening alliances, notably the Boston Global Forum. These alliances could gather, collate, and make coherent the data on the specific concerns that require global action, leaving the initiation of such action to the Council. In this way, the Council would not have to devote time and responsibility to listen to individual experts or organizations yet would retain the immense benefit of the experts' wisdom distilled in a manageable manner.

Third, the Council should build upon the universality of national objectives manifest in the Sustainable Development Goals, and the implicit universality of new and innovative means to their realization. Just as no risk from AI is individual to a particular nation, so too should no nation exempt itself from agreed global action in the conduct of its domestic policies, including the initiation of necessary regulatory measures.

Fourth, it should build a robust consultative mechanism with international financial institutions and sources of private funding to address some of the immediate economic hardships that particular countries may face in their joining such global action. The dependence of robust AI systems on natural resources such as water, scarce in so many parts of the world, is a case in point.

And fifth, in the spirit of Our Common Agenda, the Council should act also as a trustee of the future. Here, global action will need to be preventive rather than corrective and, to that extent, more difficult to win agreement on. But if the Council were to emerge as a body to which scientifically sustained projections on future areas of human achievement and vulnerability can be presented and acted upon, through a humane, honest and reasoned assessment of the application of AI, it can truly go from being a forum to a force.

It will be a force that summons the energies of the range of UN agencies and offices engaged in global risk management and harmonizes the possibilities and promise of AI in their regard. On climate alone we have the World Meteorological Organization in Geneva, the UN Environment Program in Nairobi, the secretariat of the UN Framework Convention on Climate Change in Bonn, the secretariat of the UN Convention on Biological Diversity in Montreal, and the UN Development Program in New York. Then there are the many other agencies, including those dedicated to food and health, whose work can be made more agile with AI. There are other principal United Nations organs, such as the Economic and Social Council with its charter mandate that it "may make or initiate studies and reports with respect to international economic, social, cultural, educational, health, and related matters and may make recommendations with respect to any such matters to the General Assembly to the Members of the United Nations, and to the specialized agencies concerned." And there is the vast aggregate of scholarship, civil society advocacy, and affected business enterprise that commands a compelling constituency, where research built upon research and experience upon experience will allow hope built upon hope to reach fruition.

Thirty years ago, as Vietnam celebrated both the United Nations 50th Anniversary and the 50th Anniversary of Vietnam's Independence Day. President Le Duc Anh presented a gift to the United Nations. Today, when you go to the floor of the United Nations where its principal organs meet—the General Assembly, the Security Council and Trusteeship Council among them —you will see the Ngoc Lu Bronze Drum, an important artifact of the Dong Son culture of the Bronze Age, a civilization that flourished in first millennium B.C. in the Red River Delta of Vietnam. Historians and archaeologists highly value the drum because of its well-preserved and richly decorated nature, a demonstration of the advanced bronze metallurgy skills of the ancient Vietnamese people. Every delegate, every official, every visitor who stops in its light pauses to reflect on the marvels of human creativity, human imagination and the human mind. Art and

beauty could not have been immediate preoccupations in the first millennium BC; sheer survival would have been. And yet human beings of the age found the time and made the effort to create something wondrous and beautiful. We can only hope, three thousand years from now, that the world will look back on our times as one where human daring flourished, allowing its natural intelligence to shape the artificial, and allowing that union to help us be worthy of our times.

"Remember," Ho Chi Minh reminded us, "the storm is a good opportunity for the pine and the cypress to show their strength and their stability." The soaring trees of human possibility lie vulnerable to storms not of their making and, equally, stand empowered to seize from its currents the realization of their opportunities.