

# **Transformative Technologies: New Disruptions for Global Governance**

by

**Mehri Madarshahi**

Visiting Professor, South China University for Technology  
madarshahi2002@yahoo.com

Rarely a day passes without a story on an exciting, or perhaps terrifying, advancement or innovation in emerging technologies, be it in quantum computing, biotechnology, additive robotics, 3D printing, and artificial intelligence (AI) which are almost beyond belief.

The rapid spread of Internet is radically altering people's lives across the globe. How we live, work, play, and learn in various countries, regions, and cities, communities all are impacted by the transformative power of networking. Soon after the Internet of links making information and data search possible, the emergence of "internet of data" greatly expanded the variety and volume of data on the network. This was followed by "internet of people", enabled by social and collaborative software labeled as web 2.0.

This period of change engenders a potential restructuring of power relations and the development of new forms of inequality in the world creating major concerns for the societal thinkers about the transformative effects of these innovations on society and world affairs.

We are now entering the era of the "Internet of Things" where every device – be it commercial, scientific, cultural or social – can get connected creating a vast quantity of rich and revealing data.

Klaus Schwab, among others, has called the emerging technologies' the "Fourth Industrial Revolution". Ethicist Wendell Wallach preferred the term "Techstorm". Former U.S. Secretary of the Navy Richard Danzig offered the alarming term

“technology tsunami”. And Yuval Noah Harari, historian and author, in an article in the Economist classified this trend as “technological disruption”. He wrote and I quote “like it or not, humankind today faces three common problems that make a mockery of all national borders. These are nuclear war, climate change and technological disruption”. He further mentioned that “You cannot build a wall against nuclear winter or against global warming, and no nation can regulate artificial intelligence or bioengineering, single-handedly. This emerging situation is becoming particularly of concern since governments lack adequate resources and expertise to come to grips with the risks associated with new and emerging technologies”.

Ladies and Gentlemen,

For several generations the world has been governed by what we call “the global liberal order”. Behind these words lies the idea that all humans are equal and mainly share similar core experiences, values and interests. They should work together to protect their common values and advance their common interests. Every member must foster co-operation to ease the movement of ideas, goods, money and people across the globe.

Despite its proven superiority to all other alternatives, we are observing lately that the global liberal order is undergoing a historic transformation. Nationalist and populist movements have grown in power across the global north, including in the United States, the Brazil, the United Kingdom, the Netherlands, Hungary, Poland and Italy and have become disruptive forces in France, Germany and Spain despite the fact most these countries were the architects and proponents of the neoliberal economic order, working together and sometimes alone to lower barriers to trade, promote economic development, and increase access to markets for their businesses and consumers. They also led in setting and promoting the rules of the game, including anticorruption and human rights.

Today we are witnessing the weakening of the global liberal order and the now-rising right which is trying to reshape the discourse. This new movement is marked by a feeling among people of being left behind by forces outside their control including elimination of industries by technology, innovation, and off-shoring. These people sense that their jobs are threatened and the middle class has become afloat.

The rising political right and a number of national leaders now are intent on reasserting national sovereignty and questioning the value of global governance institutions. Although the populist and nationalist backlash against globalization and existing global governance institutions should not be overstated, a clear shift in U.S. policy appears to be underway. Whatever the future of its presidency and the coalition represents, the effects on other political actors could persist. Overall, the disruptive effects of nationalists or sovereignists' influence on global governance appear greater and more immediate than meets the eyes.

In addition, the other underlying reasons for the demise of the liberal democracy and governance in the world could be attributed to:

A- The private sector control of markets and companies that were traditionally run by governments. Increasingly, these companies relocate to satisfy tax obligations, adopt new technologies and shrink labor their forces, meet their obligations to their share holders by reducing sizes and organizational arrangements etc.. Helplessness of the workers leading into hopelessness could cause many undesirable consequences including rejection of the authorities and mostly rule of law and cooperation.

B- The impact of emerging technologies that now form the infrastructure of the global digitized society is affecting governance in all forms and shapes. The digital technology has facilitated a dramatic expansion of the freedom of expression, association, and

assembly globally; It has also created dramatic security vulnerabilities and threats to liberty.

Owing to its global, trans-border mode of operation, the Internet provides instantaneous connectivity and extraterritorial reach to governments and non-state actors alike. This feature presents new security threats and challenges to governance. The constant trans-border flow of information and data is creating confusion over who has jurisdiction over this data flow and on what basis. This could present a variety of vulnerabilities and challenges to democratic governance and to the enjoyment of human rights.

As digital technology infiltrates all dimensions of society, a corresponding trend toward privatization of governance could emerge. This may lead to relocating traditional governance responsibilities for security and liberty to private sector actors. As we witness, private sector actors currently own, operate, and secure most of the critical civilian infrastructure and mine the data of citizens and consumers. (Facebook's recent commitments to take on information operations provide a vivid example.) This change of role has led to a disruption of the notion of democratic social contracts between governments and the people.

With digitization of everything, digital security runs through every form of security from national to international to consumer protection, to economic, infrastructure and most recent a trend on freethinking and even voting rights. As a result, today the combination of digitization and the inherently trans border mode of internet operations present extreme challenges for global governance, as criminals, terrorists, hackers, and adversaries anywhere now have instantaneous extraterritorial digital reach to affect the security of people anywhere else.

Threats to global governance become more serious when the use of cyber attack or uses of offensive drones become routine practice by Governments and private sector alike. Recent cyber to kinetic attacks on critical infrastructure or weapons systems, hacking of democratic discourse and election processes, global

ransom attacks on businesses or hospitals, and undermining the integrity of widely reliable data have given further rise to a general sense of the powerlessness of governments to protect citizens against these threats.

These uncontrolled challenges are disruptive to global Governance and have created major preoccupations for societal planners. Should they forgo beneficial innovation by curbing their further developments? Or, should they respect the principles of freedom of advancement by granting freedom to innovators?

Nevertheless, it is essential that Governments make (or defer) decisions in situations of radical uncertainty and be prepared to adjust those rules as the impacts of innovation become more apparent and circumstances change, this is irrespective of the fact that a blistering pace of breakthroughs has left domestic regulation - to say nothing of global governance - in the dust.

At the conclusion I must add that,

Although technology has the potential to dramatically improve the quality of life for the world's population, there are no guarantees it will. Increasingly concerns about the growing digital divide risks could leave large segment of society - and the world - behind. The security of data and its potential weaponization, persist and call for answer and actions by decision-makers.

More urgent than these is the dilemma on how to figure out and ensure an effective Internet governance system, which could be responsive to the challenges ahead.

In the past few years attempts to address these concerns by the UN and others including WSIS working group had led to advancing multi-stakeholderism. In this context, Internet governance is considered the development and application by Governments, the private sector and civil society, in their respective roles, sharing principles, norms, rules, decision-making procedures, and

programs that could shape the evolution and use of the Internet. With this in mind, the Working Group on Internet Governance convened a number of experts panels comprising governments, civil society, academics, technology experts and the private sector to develop norms and standards around emerging technologies. However, with a few decants and a political shifts that took place in the US in 2016, multi-stakeholderism fell short of consensus in figuring out how to evolve an effective and legitimate internet's governance

The UN panels, nevertheless, identified several values that should guide the development of tech policy. These include commitment to inclusiveness; respect for human rights, human dignity and privacy; and above all, ensuring that humans remain the ultimate arbiters of social and public policies. . Keeping the importance of the issue in mind, the UN Secretary General Antonio Gutteres has named the governance of emerging technologies as one of his top five priorities for 2019..

Several existing strands of work related to cyber security governance call also for reinforcement. These include development of state norms restraining offensive use of cyber weapons and public education on digital security. Interestingly, several private sector actors such as the Microsoft CEO have called for a digital convention to restrain state-sponsored hacking of civilians. Apple's CEO Tim Cook called for a massive public education campaign on fake news and urged governments, private sector actors, and citizens to be more forceful in preventing disinformation from disrupting democratic discourse.

In the face of rapid development of emerging technologies, we cannot afford to remain passive observers. The decision we take—or fail to take—today may take us into trajectories that we cannot correct tomorrow. To mitigate risks, national governments and

non-state actors must adopt a global perspective and pursue international cooperation.

## **References**

1- Towards a distributed internet Governance Eco system by Stefaan G Verhulst, Beth S Noveck, Jillian Raines and Antony Declercq ; CIGI and Chatham House

2. Bertrand de La Chapelle and Paul Fehlinger, “What Do We All Mean by ‘Roadmap to Further Evolve the Multistakeholder Internet Governance Ecosystem?’”

<http://content.netmundial.br/contribution/what-do-we-all-mean-by-roadmap-to-further-evolve-the-multistakeholder-internet-governance-ecosystem/250>.

3. Paul Hoffman, ed., “The Tao of IETF: A Novice’s Guide to the Internet Engineering Task Force,” 2012, <http://ietf.org/tao.html>.

4-Innovations in Global Governance -- “Peace-Building, Human Rights, Internet Governance and Cyber security, and Climate Change” Deborah Avant, Susanna P. Campbell, Eileen Donahoe, Karen Florini, Miles Kahler, Mark P. Lagon, Tim Maurer, Amol Mehra, Robert C. Orr, Jason Pielemeier, and Sarah Sewall

5- “The Promise and Perils of Technology in International Affairs” World Politics Review, 1 July 2019

6- Innovations in Global Governance, IFA, Sept 2017