Short Statement on Three Issues

The Systemic Impact of the Twin Digital and Green Tech Revolutions in the Indo-Pacific:
Toward a New Industrial Policy Race?

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Please note that this short statement aims to share my rough and wild ideas related to the workshop's main theme on the twin revolution in the Indo-Pacific from a bird-eye's view. They are 'dual security convergence,' 'digital revolution (AI+) and defense industry,' and 'politics of forest.'

1. An Emerging Phenomenon of Dual Security Convergence

The two convergences are happening in global strategic landscape/structure.

Multi-Security Convergence
- Started with a transformation from 'separation' to 'amalgamation' between politics and economy/technology.
- The core dimensions of security—economic, military, technological, environmental, and political regime—converge. More widely accepted among the great and regional powers
- To the extent that a conceptualization of individual and collective securities emerges as an urgent task for strategic community across the globe.

Regional Convergence
- Indo-Pacific region and Euro-Atlantic region become more connected and intertwined in strategic perspectives.
- Led by the US with its 'Western' allies and accelerated by the ongoing Ukraine-Russia war with China's assertive offensives, but many concern and resist this structural change.
- Demonstrated by the emerging tandem of IPEF-TTC as well as NATO-AP4 that incorporate all the security dimensions as well as ongoing Korea-Poland defense industrial cooperation.

Spiral Interactions
- This tandem also plays a significant role in accelerating the converging process in security realm.
- This set of structural changes will significantly influence all the major actors' payoff structure and behaviors for their respective self- and collective interests across the globe.

Causes and Consequences
- Partial de-globalization, compromised liberal international economic order and WTO, and disruption of supply chain, ensuing trade, and technology transfer
- Interdependence, overdependence, and their weaponization of economic, technological, and environmental security; Soaring use of economic statecraft by any capable actors
- Private technology actors into war; change of dual-tech industry
- Two-layered economic security: High and General technologies
- The emergence of economic and technological security along with environmental security

2. Digital Revolution and Defense Industry: AI Transforming Human Nature

- Two-layered economic security: High and General technologies
- AI transforms the thousands-year long philosophical foundation of human nature. AI and intertwined digital revolution are more likely transform humans (as it is, natural entity) into AI-human-robotics hybrid, which will fundamentally challenge the ontological and epistemological understanding of human beings.

- A level of AI-equipment or -combination would decide individual and collective competitiveness in human society as we start to see growing influence of Chat-GPT (a chatbot Generative-Pre-trained Transformer of Large Language Models by Open AI; Version 4.0) last year or so. Another dimension of political economy would emerge, that is, one with a human-AI(-robotics) hybrid as a unit.
- The AI-human hybrid transformation is witnessed in defense industry, too. The entire weapons system has been fully taking advantage of digital revolution and entering another stage with AI technological advancement. The most advanced countries heads to man-unman hybrid system.
- Army, Air Force, Navy, and Space defense industries buy from private sector as well as invest in AI/Data defense technology, drones/unmanned vehicles. They rapidly weaponize AI to the extent that the conventional dual technology (military and private purpose) ecosystem might also be changing.
- The nature of hybrid war, as clearly witnessed in the Ukraine-Russia War, might expand the realm of defense industry and result in more amalgamation between private and military technologies
- Those key countries, which are capable of such tasks, are mostly located in the Indo-Pacific and Euro-Atlantic regions. It is linked to the dual security convergence phenomenon, too.
- Human security, which has not gained much momentum in the last decade or so, might have more potential to be a useful analytical conceptualization in this context. The security dimension that revolves around AI-human hybrid transformation accelerates a comprehensive securitization of human society.

3. Forest as a Strategic Asset, Politics of Forest, Forest Diplomacy

- Forest as a strategic asset: in the last couple of decades, the value of forests has been soaring to the extent that we might be able to label it a 'strategic asset' to face a crisis of carbon-related climate change across the globe. Countries with forests and others with virtual territories will occupy a superior position in international political economy as well as converging security arenas. Forest has become growingly scarce resources and abruptly securitized to justify the emergence of environmental security to be matched to and combined with other security realms.
- Mapping and Conceptualizing Politics of Forest in Korea and Elsewhere: Yonsei Politics of Forest Lab focuses on developing a conceptual toolkit and theoretical framework for mapping the forest politics in a single country by first conducting a political economy and stakeholder analysis of Korea's forest politics and then refining our conceptual and theoretical basics based on this applied research. By first systematically tallying the explicit and hidden economic value of Korea's forests, what exactly was at stake in the country's forest politics is analyzed. By identifying and analyzing key forest politics actors, and then analyzing the various dynamics and relationships between them, a network of forest politics agents is drawn. By then focusing on some issues, we showed our framework's salience. Now that the mapping of Korea's forest politics nears its first stage of completion, mapping the politics of forest would be applied to other key forest nations.
- REDD+ and Global POF: We have begun mapping the key actors and issues in global forest politics. Our current focus largely rests with the REDD+ (Reducing Emissions from Deforestation and forest Degradation in developing countries. The '+' stands for additional forest-related activities that protect the climate, namely sustainable management of forests and the conservation and enhancement of forest carbon stocks.) scheme and its potential to become a "scramble for forests" by rich countries seeking to meet their NDCs without the politically and economically costly alternative of full green energy transition.
- Forest Diplomacy, Public Diplomacy, and Soft Power: As a matter of policy, how forests can be utilized as part of a concrete diplomatic strategy is another subject to explore. In particular, how diplomacy for, though, and by forests can integrate a country's national interests as carbon emitter, timber importer, ODA provider, etc. under a comprehensive diplomatic approach that enhances its soft power.