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**“The Belt & Road is the Only Way
‘to Format Human Society’ in the Lead of
the Developing World”**



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“Currently, the productive forces and relations of production, along with the economic base and social superstructure, have transitioned into a new historical phase of transformation that significantly surpasses the intensity of the Europe-centered industrial revolution. The globe is undergoing a comprehensive transformation of the superstructure and economic foundation, characterized by fragmentation and reorganization. As the superstructures of nations undergo transformation, an exceptionally vigorous formatting process has commenced, particularly regarding the material foundations underlying economic conditions and social structures. Following an extensive developmental phase, human society has arrived at a novel historical juncture and is commencing an unparalleled self-revolution. I refer to this as the process of ‘formatting human society.’ The BRI is the only way to build a ‘process of formatting human society’ led by developing countries. The scientific and technological cooperation issues of the BRI can undoubtedly only be realized under the premise of ‘formatting human society.’ To this end, the developing countries along the BRI must become an organically integrated whole in terms of science and technology. We must proactively identify global subjects in science and technology innovation and robustly promote enhanced international exchanges among universities and research institutes, cultivating an environment that values knowledge and creativity.”

**Li Guitao from Tsinghua University answered
Necati Demircan's questions.**

What are the driving forces behind science and technology policy in our era?

Prof. Dr. Li Guitao: From the early stages of primitive productivity to the fishing and hunting civilization, the nomadic civilization, the agricultural civilization, and so forth, human civilization progressively changed over time, according

to the history of human growth. In every era, the development of science and technology has been guaranteed by the ongoing increase in productivity. Productivity and the scientific and technical revolution have bolstered one another in contemporary times. Cultural mingling and economic globalization have emerged as recent historical phenomena.

The most profound changes in human society's material existence have occurred throughout the past 200 years. Humans' unrelenting ability to modify the physical cosmos and their unchecked ability to transform themselves are the two distinct material forces responsible for these developments. If we look at it negatively, we may see that these two powers have the ability to harm the biosphere and progress in their attempts to subjugate one another.

The economic globalization spearheaded by developed nations has resulted in numerous issues rather than fostering inclusive development, exacerbating wealth disparities by enriching the affluent and impoverishing the destitute, thereby widening the chasm between developed nations and developing countries, as well as the divide between the wealthy and the impoverished within developed nations.

Beginning in the 1990s, the swift advancement of industrial, commercial, and cultural globalization enabled substantial trade and investment, broad human migration, and the widespread dissemination of technology, hence accelerating global progress. Nonetheless, the economic globalization spearheaded by developed nations has resulted in numerous issues rather than fostering inclusive development, exacerbating wealth disparities by enriching the

affluent and impoverishing the destitute, thereby widening the chasm between developed nations and developing countries, as well as the divide between the wealthy and the impoverished within developed nations. For the first time in history, humanity confronts a decision between existence and non-existence, necessitating a thorough historical analysis of this pivotal moment.

Currently, the productive forces and relations of production, along with the economic base and social superstructure, have transitioned into a new historical phase of transformation that significantly surpasses the intensity of the Europe-centered industrial revolution. The globe is undergoing a comprehensive transformation of the superstructure and economic foundation, characterized by fragmentation and reorganization. As the superstructures of nations undergo transformation, an exceptionally vigorous formatting process has commenced, particularly regarding the material foundations underlying economic conditions and social structures. This technique involves deconstructing and recreating the attributes of individuals and the foundational structures of their civilizations from the ground up. The essential material conditions for human survival, including resource ownership, subsistence means, health assurances, and production capabilities, have become increasingly monopolized, resulting in a predetermined routine dictated by a limited number of brands and styles throughout individuals' lives. The dietary habits, attire, possessions, visual experiences, auditory perceptions, and cognitive processes of individuals in each country and location are solely for the purpose of working on and executing the business plan.

Strategic science and technology refers to innovations that can significantly influence

productivity and production dynamics across all sectors of society. For instance, information technology, semiconductor technology, global positioning system technology, railway construction technology, and thermal power plant technology. This strategic science and technology can offer universal support for all productive forces or the system of relations of production inside society, enhancing the advancement and development of the entire society. The capacity to influence societal structure on a grand scale signifies, primarily, that the prevailing irrational social framework can be entirely dismantled, while concurrently, a new overarching framework can be established to benefit the majority of individuals.

The monopolistic influence of industrialized nations changes individuals and their societies, tailoring the emerging social ecology to align with their goals. Regardless of whatever faction possesses the authority to implement restructuring today, it will necessitate a comprehensive transformation of the social and natural attributes of individuals. The rationale for this is that the advancement of productive forces has attained a historical inflection point, necessitating humanity's acceptance of a novel and unparalleled epoch. Despite the capacity of productive forces to secure basic rights for all individuals globally, a significant portion of the population is experiencing a decline in rights and guarantees, including education, reproductive rights, survival, healthcare, housing, and the right to perpetuate future generations. Our generation is tasked with establishing production and infrastructure relations that align with the existing economic framework and productivity levels to guarantee that all individuals are afforded the rights to survival, dignity, and freedom. Consequ-

ently, the present endeavor for the right to social reconstruction is imperative; it is a fight for the right to exist in the future.

We are in an era characterized by the formation of social organizations. Monopolistic entities have usurped the authority to influence human society and have transformed all of humanity. The endeavor to control the formation of individuals and society is an unparalleled economic policy objective and strategy. Simultaneously, it represents the pinnacle of humanity's contemporary political, economic, and technical challenges.

A New Era of Historical Change and Social Formation

What model and collaborative framework are being delineated within the context of the Belt and Road Initiative concerning science, technology, and innovation policies?

Prof. Dr. Li Guitao: To address this inquiry, it is essential to comprehend the “Community of Shared Future for Mankind” and the extensive historical context of the Belt and Road Initiative (BRI) introduced by Xi Jinping. What are the historical antecedents to the “Community of Common Destiny for Mankind” and the “Belt and Road Initiative”?

Comprehending the historical relevance of the BRI will inherently elucidate the shared historical mission of all pertinent nations. The BRI is the only way to build a “process of formatting human society” led by developing countries. The scientific and technological cooperation issues of the BRI can undoubtedly only be realized under the premise of “formatting human society.” To this end, the developing countries along the BRI must become organically integrated whole in terms of science and technology.

Such a unity would not only enable each country to fully realize its own strategic goals of scientific and technological development but could also build a common international environment that would benefit all countries.

Diverse shopping, social media, cultural, artificial intelligence, material production chains, communication, and logistics platforms have transcended traditional industry boundaries, reshaping the organizational and material structure of society into a novel form of integrated and globalized power.

Following an extensive developmental phase, human society has arrived at a novel historical juncture and is commencing an unparalleled self-revolution. I refer to this as the process of “formatting human society.” The phrase “generalized formatting of society” denotes the process whereby a particular social group, driven by its immediate interests, coercively and thoroughly alters a specific societal category, obliterating its inherent structure and organization, stripping it of its original operational mechanisms, functions, and even the essence of its existence and developmental significance. Developing an altogether novel composition, structure, and operational mechanism for these, ultimately ensuring that their purpose and developmental significance fully benefit the social group. The extensive creation of society markedly differs from prior social change and transformation efforts. The scale is delineated as follows: The focus of its trans-

formation encompasses a complete region, an entire nation, or even a particular section of the globe. The organizational characteristic is as follows: It is significantly monopolized, governing the defining element of a certain platform or a single private authority. The functional characteristic is as follows: Once formed, a specific type of social entity will serve the social group that possesses the authority to develop it. The ecological characteristics are as follows: Internal resources and external conditions have been restructured cohesively.

In the current historical epoch, the conventional attributes of many organizational structures are undergoing swift transformation. Diverse shopping, social media, cultural, artificial intelligence, material production chains, communication, and logistics platforms have transcended traditional industry boundaries, reshaping the organizational and material structure of society into a novel form of integrated and globalized power.

Since the advent of industrial civilization, humanity has emerged as a geological force influencing worldwide topography and Earth’s evolution. The influence of human endeavors on the Earth’s surface, atmosphere, and near-space environment parallels that of natural phenomena. Scientists are converging on the notion that a new geological epoch, termed the “Anthropocene,” may soon be incorporated into the official geological time scale. The evolution of human society has transformed the natural world and humanity in an unparalleled manner.

Generally, the concept of the science and technology system, its behavior, and its primary structure will inherently “evolve.” All associations and extensions of the science and technology system are being irrevocably reshaped by historical currents, whether consciously or unconsciously. This alteration represents an unparalleled metamorphosis in



“Developing countries along the BRI must become organically integrated whole in terms of science and technology”
(Illustration: China Daily, 2024).

the annals of human research and technology, marked by the emergence of internal contradictions in reaction to abrupt external shifts, a quantitative surge coupled with a qualitative advancement. Consequently, it will redefine the power dynamics for the forthcoming generation of society. This conflict pertains not to particular technological advancements, ingenuity, or financial matters but rather to the allocation of authority in redefining future society between developed and developing nations, the possession of pioneering scientific and technological innovation, and consequently, the determination of the beneficiaries of science and

technology. The system dictates the character of the struggle to redefine power, therefore influencing the outcome and long-term ramifications of this conflict, as well as the extent to which society is transformed for the benefit of the majority.

If wealthy nations and huge corporations are permitted to acquire supreme control in science and technology, they will prioritize these fields above all else, relegating the societies of developing countries to mere economic considerations. Monopolistic power influences individuals and the society they establish, creating a new social ecology aligned with its own goals.

Upon their success, “impoverished individuals” will be compelled to comply. The biological and social importance of the majority of individuals’ existence comprises “sub-organisms” within the “metacosmic zoo,” governed by monopolistic forces, akin to the manner in which European invaders formerly confined individuals of different races for amusement. This aptly illustrates the adage, “The greatest wealth of the affluent is the impoverished.” Regardless of which faction acquires the authority to reconstruct in the contemporary world, they must entirely restore the social and natural attributes of the populace. Advanced productivity has achieved a historical milestone, necessitating that individuals embrace an extraordinary new era.

The dominance of global monopolistic forces over humanity has surpassed conventional territorial boundaries, religious rights, cultural obstacles, and biological characteristics.

The future encompasses an epoch of parallel universes in which individuals and their data are concurrently assimilated into both the physical and digital realms. Simultaneously, human society and the natural environment have been amalgamated into a cohesive entity. The integration of human social productivity, relations of production, the economic basis and superstructure, social rights, and political power has formed a cohesive entity. In conclusion, all facets of human society, including politics, economy, law, culture, military, agriculture, and industry, have been amalgamated into a cohesive entity. The dominance of global monopolistic forces over humanity has surpassed conventional territorial boundaries,

religious rights, cultural obstacles, and biological characteristics. Monopolistic oligarchs exert direct influence over various aspects of individuals’ lives, including genetics, sleep duration, dietary options, lifestyles, familial wealth, reproduction, and values. Monopolistic entities have appropriated humanity’s scientific and technological advancements, thereby infiltrating the relations of production, social dynamics, and ideologies of the oligarchs into the lives of all individuals and the fabric of human social interactions.

The swift integration of human society is propelled by science and technology. Initially, disparate domains have identical mathematical logic and structural composition. Similar to numerous general-purpose chips, there may exist only one or two manufacturers, and diverse software operating systems must likewise select from the few remaining monopolistic goods. In the domain of the internet, only a limited number of social platforms persist. In every location, there exist only a limited number of communication producers, with merely two or three companies supplying seeds for each grain kind. Simultaneously, the essential forces governing social ideology and the superstructure are converging. Essential information and foundational historical facts are being reconfigured, resulting in catastrophic outcomes. Individuals are compelled to utilize the identical search engine, the same problem analysis software, the same information assistance, and the same fundamental educational materials, logic, and concepts. The values of a minuscule number of powers have entirely captivated the thoughts of individuals globally. Consequently, it is evident that the populations of developing nations and the impoverished in industrialized countries must assert their entitlement to redefine human society, securing their right to continue their existence and foster development.

General Framework of Science and Technology Cooperation in the Belt&Road

What should be the overarching framework of a science and technology system that addresses the collective interests of developing nations?

Prof. Dr. Li Guitao: Initially, the design and construction of the Global South's science and technology system should promote and implement the principles of open, equitable, transparent, and non-discriminatory international scientific and technological collaboration. They must adhere to the principle that "science knows no boundaries and benefits all humanity" and collaborate to establish a global community of science and technology by upholding specific tenets such as promoting science, fostering innovative development, encouraging open collaboration, ensuring equality and inclusivity, and facilitating solidarity, cooperation, and mutually beneficial partnerships.

Within the context of the collective science and technology framework for emerging nations, the subsequent components ought to be incorporated:

The primary concept is the ownership of the rights to the shared technological system. The authority to design, construct, and utilize the system should no longer reside with multinational monopolies; it ought to revert to developing nations.

2. In the production and residential sectors of the emerging world, it is imperative to maintain the cohesive design and distribution of the scientific and technological formatting process, thereby establishing a common technological framework for the production, living facilities, and resources across diverse nations.

Developed nations introduced ideological conflicts into science and technology, advocating for the establishment of "high-walled small cour-

tyards," which significantly impede international exchanges and cooperation in these fields, as well as the movement of innovative resources, thereby exacerbating the global development and innovation disparities. To counter the monopoly of science and technology in industrialized nations, strategies must be devised to structure the science and technology system via a coordinated division of labor among countries. China has released the "International Science and Technology Cooperation Initiative," advocating for the establishment of a global science and technology community through international collaboration.

The establishment of the science and technology framework for the Global South, or emerging nations, must be approached appropriately by considering the prevailing national, religious, cultural, regional, economic, and resource-related interests of these countries.

We must develop a talent training system that aligns with future requirements, nurture our own qualified scientific and technical teams, and genuinely establish a collective scientific and technological capability that belongs to the citizens of these nations. The pertinent strategic issues to be addressed include: the dissemination of information acquired from electromagnetic spectrum observatories in Earth's orbit; the exchange of global navigation, timing, and positioning services; the international system for sharing agricultural animal and plant species; the global media resource sharing framework; the worldwide system for sharing traditional cultural heritage and development; the global social communication and interaction sharing network; the international energy sharing system; the global environmental monitoring and protection sharing framework; the global health system sharing network; and the global transportation and logistics sharing system.

In accordance with the objectives delineated in the Belt and Road Action Plan on Science, Technology, and Innovation released by China in May 2017, China and the founding partner nations will establish international science and technology standards, co-own intellectual property rights, and construct joint laboratories along the Belt and Road to execute the principle of collaborative strategy and develop a cohesive framework for science and technology. Collaboration in industrial development will enhance cooperation and showcase multidisciplinary technology transfer within collaboratively constructed science and technology parks; China will establish transnational technology transfer centers for ASEAN, Arab nations, Africa, and other regions, thereby creating a comprehensive technology transfer network with various countries to support the industrial advancement of each nation.

By establishing cooperative mechanisms, the pertinent entities of nations involved in the construction of China and the BRI countries will collaborate to facilitate infrastructure development through interdisciplinary scientific research, enhance the integration of diverse civilizations, safeguard and cultivate human-inhabited territories, preserve and augment civilizational achievements, and ensure the protection of cultural heritage and biodiversity.

The Belt and Road Initiative is congruent with the United Nations (UN) 2030 Agenda for Sustain-

able Development. It adheres to the trajectory of synchronized advancement of the economy, society, and environment. It seeks to eradicate the underlying causes and barriers that impede progress. The program enhances the internal impetus for the autonomous development of partner nations and fosters sustainable and inclusive economic growth across all countries. It incorporates the principle of sustainable development into all facets, including project selection, execution, administration, and related domains. It seeks to conform to advanced international regulations and standards, establish a high-caliber free trade zone, enact policies for enhanced trade and investment liberalization and facilitation, guarantee the seamless, secure, and orderly movement of individuals, goods, capital, and data, attain elevated connectivity, and foster deeper exchange and cooperation. By establishing cooperative mechanisms, the pertinent entities of nations involved in the construction of China and the BRI countries will collaborate to facilitate infrastructure development through interdisciplinary scientific research, enhance the integration of diverse civilizations, safeguard and cultivate human-inhabited territories, preserve and augment civilizational achievements, and ensure the protection of cultural heritage and biodiversity.

Furthermore, according to the overarching framework, the subsequent objectives can be delineated: “To establish a comprehensive industrial chain that underpins the science and technology system, and to collaboratively develop innovation hubs through corporate partnerships, pilot technology development and transfer centers, and joint product trial production facilities across diverse fields and sectors.

“Concentrating on prevalent challenges like climate change and public health while enhancing collaborative scientific and technological rese-



“Enhancing global science and technology governance is essential for the betterment of humanity’s welfare” (Illustration: CGTN, 2018).

arch and development among enterprises across different nations. To assess opportunities for new scientific and technological revolutions and industrial transformations, to broaden cooperation in fields such as artificial intelligence, life sciences, green energy, and advanced manufacturing, and to advance the development of big data, cloud computing, and smart cities, thereby facilitating the transformation and enhancement of industries across various nations. In the collaborative development of the Belt and Road Initiative, regulations and standards endorsed by all stakeholders are being implemented for project conception, operation, procurement, bidding, and other components, while high-standard cooperation is being fostered across multiple domains.

“By comprehensively leveraging the scientific and technological academic resources and institu-

tional capabilities of each nation and by offering coordinated resources and assistance, to establish a standardized system for scientific and technological academic innovation and exchange.”

Enhancing global science and technology governance is essential for the betterment of humanity’s welfare. We must earnestly endorse multilateralism, advocate for the creation of regulations founded on comprehensive involvement and consensus, enhance intellectual property protection, and resist information blockades and the contrived expansion of the science and technology divide. We must proactively identify global subjects in science and technology innovation and robustly promote enhanced international exchanges among universities and research institutes, cultivating an environment that values knowledge and creativity. 🌸