

# Science Serves Society, Progress in Human Dignity

## Dialogue

By LONG Yun & TIAN Nianping

"When the value created by a product stays where it's made through jobs, skills, and fair wages...that's what I mean by shared prosperity," said Shahbaz Khan, director and UNESCO representative to the Regional Office for East Asia, holding up his smartphone during a lecture at the China Academy of Science and Technology for Development (CASTED).

The device was a Realme, a brand born in China but assembled by young workers in Lahore, Pakistan. "I bought it there because I needed a phone that works in Pakistan," he said with a knowing smile. "But more importantly, local people are employed, trained and earning. That's not extraction. That's partnership."

In an interview following his lecture, Khan gave his version of the China story with his personal observation.

*From catching up to setting the pace*

"I've been coming to China since 1999," Khan began, recalling his early work on water-saving technologies and irrigation systems. "At that time, China was still catching up with the rest of the world." Back then, scientific infrastructure was developing, research output was modest, and innovation was largely reactive.

Today, the landscape is unrecognizable. "Now, the world is trying to catch up with China," he said.

He pointed to the scale of transformation: massive R&D investment, hundreds of young scientists collaborating in institutions like the Chinese Academy of Sciences, and universities in Wuhan, Beijing and Shenyang operating like "engines of discovery."



Professor Shahbaz Khan is reading the English Edition of Science and Technology Daily. (PHOTO: Science and Technology Daily)

The quality of research, publications, and technological output has surged across fields from solar energy and electric vehicles to robotics, nanotechnology, medical sciences and quantum computing.

But what distinguishes China's rise, Khan emphasized, is its integration of sustainability and inclusivity. "It's not just about building high-tech hubs. It's about cleaning polluted rivers, restoring lakes, improving air quality, and shifting entire industries toward ecological sustainability."

Equally important is how China has diffused the benefits of innovation beyond megacities. "Science and technology are reaching rural villages, small towns and remote provinces, lifting 800 million people out of poverty through systemic, tech-enabled development."

He cited Taobao as a quiet revolution in inclusive economics. "I use it for almost every purchase," he said. "Order a computer part from Shenzhen, and within days it arrives at my door in Beijing."

Behind that convenience lies a deeply integrated digital ecosystem: manufacturers, logistics networks, payment platforms, and last-mile delivery riders connected through information and communication technologies. "And it links consumers directly to primary producers," he added.

*Shared prosperity, not zero-sum competition*

Does China's rapid technological ascent pose a threat to other countries? "Not really. China's science and technology is not a threat because China is promoting shared prosperity."

He returned to the Realme example. "The same model appears in solar panel factories in Kenya, electric vehicle supply chains in Thailand, and vocational training centers across Africa supported by Chinese partnerships." Students from the Global South come to China, acquire engineering or AI expertise, and return home to contribute to joint ventures. "These aren't extractive relationships. Knowledge, jobs and profits stay where they're created."

China's industrial scale has driven down global prices, creating competitive pressure, but "competition isn't the same as threat. What matters is intent. And China's intent, as I've observed it over the years, is cooperation."

Given China's size, its environmental progress benefits the entire planet. "Global challenges, like climate change, water scarcity and AI ethics, do not respect borders. They require political goodwill and concrete action. In that context, China's contributions through South-South cooperation, UNESCO programs, and institutions like CASTED are invaluable."

*Where ancient heritage meets quantum ambition*

Even after more than two decades of close engagement, China continues to surprise him. "What still amazes me is the consistency of effort," he said. "People work hard and they also cherish family, tradition and festivals. During Spring Festival, you see red packets, fireworks and reunions. There's a balance between ambition and humanity."

Equally striking is how China harmonizes deep cultural roots with frontier innovation. "Take Zhejiang province as an example, it is home to Liangzhu, a World Heritage site over 5,000 years old, representing one of the world's earliest hydraulic civilizations, jade craftsmanship and social complexity. And it's also where DeepSeek, a leading AI company, is headquartered."

"How can a civilization honor Liangzhu while racing ahead in quantum computing, microchips and AI? That co-existence of memory and momentum is uniquely Chinese. It never stops amazing me," he said.

For Khan, China is a living model where science serves society, innovation lifts communities, and progress is measured not just in patents or GDP, but in human dignity. "That's the beauty of China," he said.

## Tech+Culture

# Reawakening Innovative Spirit of China's Traditional Culture

By Staff Reporters

blending arithmetic, algebra and geometry with a distinctive combination of logical and intuitive reasoning.

*Wisdom rooted in people and government*

Zhu highlighted that Chinese innovation has always been characterized by pragmatism, a people-centered orientation, and integrative synthesis.

Zhu explained that throughout history, major reforms were all driven by the need to address concrete governance challenges.

Also, technological innovation served public welfare: The Dujiangyan irrigation system, constructed over two millennia ago by legendary engineer Li Bing and his son during the Warring States period (475-221 BC), transformed agriculture and ecology in Sichuan province in southwest China. It continues to benefit local communities today, embodying the principle of "enriching the people and nurturing life."

Moreover, China's civilizational continuity was sustained through large-scale knowledge integration, as seen in encyclopedic works such as Yongle Dadi and Siku Quanshu, which systematically preserved and reinterpreted cultural heritage across generations.

*Cultivating a 'Chinese heart' for modern science*

Looking to the future, Zou Guan-gwen, professor at Tsinghua University's School of Marxism, argued that China's fine traditional culture is not a relic of the past but a living reservoir of values and wisdom essential for navigating contemporary challenges.

Core traditional concepts such as "the people as the foundation of the state," "virtue sustains all things," and "harmony between humanity and nature" offer ethical guidance for addressing modern dilemmas like AI ethics, digital inequality and ecological crisis.

He proposed leveraging modern technology to bridge tradition and innovation: using big data and AI-driven semantic analysis to systematically extract principles like "discard the old, establish the new" from classical texts, building dynamic databases of traditional innovation concepts, and employing VR, AR and virtual avatars to reconstruct historical workshops and interpret canonical works in engaging ways.

However, he also stressed the need to "discard the dross and retain the essence" by reinterpreting tradition through a modern, scientific lens.

Sun Xiaochun, professor at the School of Humanities, University of Chinese Academy of Sciences, challenged the persistent misconception that ancient China lacked science and therefore had no foundation for innovation.

He contended that while modern experimental science emerged in Europe, ancient China cultivated its own robust scientific culture grounded in empirical observation, practical problem-solving and logical reasoning.

For example, *The Nine Chapters on the Mathematical Art*, compiled during the Western Han Dynasty (202 BC-25 AD), addressed real-world problems and established a mathematical framework

# LIFE IN CHINA

## Traditional Eastern Wisdom

By BI Weizi

*Qimin Yaoshu (Essential Techniques for the Welfare of the People)* is the most complete ancient Chinese agricultural text, written by Jia Sixie during the



A copy of Qimin Yaoshu is exhibited at the China Agricultural Museum, Beijing. (PHOTO: VCG)

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Now, the joint lab has established facilities totaling 650 square meters on the Chinese side and 100 square meters on the Greek side.

It has formed a complete innovation chain spanning scientific research, equipment, standards and applications, achieving significant progress in multiple areas, such as laser cleaning, laser holographic speckle interferometry, non-destructive testing, and digital technologies.

Laser cleaning is one of the key areas of collaborative R&D. The conservation of Lingzao Xuan provides an excellent opportunity for in-depth cooperation. Primarily constructed of masonry and metal, Lingzao Xuan, one of the few Western-style buildings in the For-

## A Tale of Two Museums

bidden City, stands out distinctively amid the red walls and yellow tiles.

"Lingzao Xuan is not only a witness to historical exchanges between Eastern and Western building materials and cultures, but also a calling card for today's international cooperation in stone cultural relic conservation technologies," said Duan Hongying, section leader of the Material Science Group, Department of Architectural Heritage at the Palace Museum. Currently, the joint lab is making advances in the R&D of a new laser cleaning equipment tailored for on-site operation at the Palace Mu-

seum.

Through the collaboration, the

Chinese and Greek sides have established a solid foundation of mutual trust, achieved remarkable results, and fostered deep friendship.

In the view of Paraskevi Pouli, senior application scientist at the IESL and Greek head of the joint lab, the joint lab is not only an interdisciplinary international collaboration platform, but also a bridge for the exchange and mutual learning among diverse civilizations.

To date, the joint lab has established two workstations in China and expanded its collaborative research institutions to 12 units across China and Greece.

"In the future, the joint lab will continue to deepen international cooperation. It has already collaborated with the UAE on archaeological excavations and plans to establish a workstation in Malta to jointly conduct research and conservation of local sites, ancient architecture, and murals," said Qu Liang, director of the Palace Museum's Conservation Standard Department and executive deputy director of the joint lab.

"The joint lab aims not only to benefit the Chinese and Greek partners but also to become an exchange and cooperation platform across China, Europe and beyond, making more contributions to international cooperation in cultural heritage conservation technology and the mutual learning among global civilizations," Qu added.



The headquarters of the National Archives of Publications and Culture in Beijing. (PHOTO: XINHUA)