

Making Science Coherent to Wider Audiences

Dialogue

By LONG Yun & BI Weizi

Recently, an Indonesian expert on scientific assessment and policy, Yoslan Nur, also an officer of the United Nations Educational, Scientific and Cultural Organization (UNESCO), visited Beijing for the 2023 International Symposium on the Development of Natural Science Museums under the Belt and Road Initiative (BRI).

During the symposium, he called for more initiatives to utilize the science museums and centers to "make science more engaging and accessible to a broader audience."

Establishing platforms for knowledge communication

Nur embarked on his journey with UNESCO in 1999, laying a solid foundation for a remarkable career devoted to promoting a culture of innovation and science communication for sustainable development. He has played a pivotal role in advancing the development of science centers and museums around the world, especially in Africa.

According to Nur, science centers and museums serve as vital platforms for knowledge exchange, providing an enjoyable way for children to gain knowledge in the sci-tech field.

Moreover, these facilities are quite important in enhancing public awareness regarding sustainable development. To some extent, they can encourage individuals and groups to reflect on their actions, contributing to the collective effort in addressing global issues like climate change and the loss of biodiversity.

From Nur's perspective, the development of the natural science museums under the BRI holds immense value in



Dr. Yoslan Nur speaks at the symposium. (COURTESY PHOTO)

fostering cultural exchange and driving technological innovation through education and awareness initiatives.

However, the process has not been without its challenges. Nur acknowledged the limited presence of science centers in Africa in general. Currently, science centers in Africa are primarily concentrated in the southern or northern regions. He advised that initiatives, like promoting "scientific tourism," could make technology more present on the continent.

Working together for science outreach

As the saying goes, "If you want to go fast, go alone; if you want to go far, go together." Nur said UNESCO does not improve public understanding in the sci-tech field alone, rather reaching out to form a cooperative network to make collective efforts. He applauded China's role in enhancing global science outreach activities at different levels.

In 2018, the Chinese Association of Natural Science Museums (CANSM) and UNESCO agreed to work together on new activities to unleash the potential

of science-oriented museums to promote the United Nations Sustainable Development Goals.

For instance, CANSM has actively supported UNESCO's work, fostering collaborative efforts to promote science popularization under the BRI framework, which includes capacity-building programs for science museums and contributions to science popularization policy-making.

At the same time, Nur mentioned the China-aided science museum in Addis Ababa, the Ethiopian capital, which is said to be Africa's first-ever museum solely dedicated to science.

He said it has become a crucial asset, fostering scientific awareness and education among the local people. These efforts by the Chinese government have had a profoundly positive impact on the region, creating a substantial influence.

Recognizing the success of the science museum in Ethiopia, there is hope for similar initiatives in Kenya or Rwanda. The establishment of science centers

in these regions could further improve public understanding of science and contribute to local development.

Fueling sci-tech innovation

Nur is quite familiar with China's journey towards becoming a sci-tech powerhouse. He never hesitates to share his thoughts to help the public understand China's sci-tech policies.

In the dynamic landscape of global scientific advancement, China has emerged as a powerhouse, attracting attention for its efforts to foster international cooperation in the scientific field.

"He is an old friend to Chinese people and China," said Ou Jiancheng, his Chinese counterpart working at the CANSM. Nur said in a recent interview with *Science and Technology Daily* that China has transitioned from a manufacturing hub to a provider of cutting-edge technologies such as high-speed trains, and smartphones.

The catalyst for this evolution lies in the establishment of organizations like the Chinese Academy of Sciences and the Ministry of Science and Technology, with their cohesive functions in sci-tech policy making and implementation.

"Technological innovation is like an engine," said Nur. "A country needs to continually fuel the engine to keep it in motion. Once the engine of scientific innovation starts running, it propels economic development, social progress, and cultural advancement in various aspects."

China's role in global innovation culture is not confined to technological capacity alone. He lauded China's strategic deployment of high-tech zones, sci-tech incubators in universities, and support for small and medium enterprises (SMEs) in fostering a knowledge-driven economy.

"I think that China is doing well in developing the knowledge economy and knowledge society," said Nur.

My China Story

Lively Communication, Fruitful Harvests

By LONG Yun & BI Weizi

In 2015, Northwestern Polytechnical University (NPU) welcomed a German expert Michael Schmittbetz to its faculty. As a veteran journalist from Germany turned language educator at a Chinese university, Schmittbetz's journey reflects a commitment to fostering cultural exchange and international communication. He is dedicated to leveraging educators' crucial role in promoting a more connected and understanding world.

Schmittbetz began his journalism career and dedicated years to a German television station. With his increasing passion for history, philosophy and sociology, he started to teach these subjects to international students in Germany, which eventually led him to leave his homeland to explore the diversity of the world. In Xi'an, a famous cultural hub in western China, he found an opportunity to teach a range of compelling subjects, including history, German literature, linguistics and writing.

Reflecting on his teaching approach, Schmittbetz emphasized the importance of "lively communication." He criticized the fear of making mistakes prevalent among Chinese students, advocating for a more interactive and accepting learning environment. He said that overcoming unnecessary shyness is crucial to motivating students to speak and communicate effectively.

From his perspective, the most rewarding aspect of his career lies in his students' reactions. "I am not a teacher who stands behind the teacher's desk.

We find our forms of communication together in the classroom," said Schmittbetz in a recent interview with *Science and Technology Daily*, adding that the reward for him is "when students do not just translate words and sentences but understand thoughts and develop their thoughts."

In our interconnected world, international relations are becoming increasingly complex, he said, adding that despite the challenges, different countries complement each other, highlighting the role of lively communication in gaining the knowledge needed for global understanding.

Nowadays, China has become an increasingly popular destination for people around the world. For foreign experts considering teaching and living in a foreign country like China, Schmittbetz has some salient advice — "keep an open mind." He encouraged embracing cultural differences and remaining true to oneself and emphasized the significance of finding friends and fostering people-to-people connections for a fulfilling experience.

Beyond language training, Schmittbetz's German studies classes convey intercultural aspects. He provides his Chinese students with firsthand impressions of a foreign culture. His hope is more Chinese students will have opportunities to visit Germany, fostering mutual understanding and paving the way for a stronger relationship between Germany and China.

This article is also contributed by NPU.



Michael Schmittbetz. (PHOTO: ZHANG Wei / Beijing Review)

Expats Activity

Orientation Workshop for Foreign Experts Held in Shanghai

By Staff Reporters

To help foreign experts in Shanghai better understand the city and have a more enjoyable work and living experi-

ence, the 2023 Orientation Workshop for Foreign Experts, sponsored by the Science and Technology Commission of Shanghai Municipality (Shanghai Administration of Foreign Experts Affairs), was

held recently and attended by nearly 30 foreign experts and their families from 17 countries.

The workshop included various engaging activities, such as lectures, a city tour, a Chinese learning seminar, and a cultural salon. It not only helped foreign experts further understand Shanghai's relevant policies but also brought them a rich and interesting learning experience, allowing them to feel the charm of Chinese culture.

The "Foreign Talents in Shanghai" Kunqu Opera and The Bund Salon, as the final part of the workshop, was held in the Bank of China Building on the Bund. Foreign experts visited the exhibi-

tion hall of the building and attended a lecture on foreign-related financial services.

During the salon, foreign experts dressed in opera costumes learned Kunqu Opera, and practiced calligraphy and painting on folding fans, fully experiencing the beauty of traditional Chinese art.

Foreign experts expressed their gratitude to the organizer for the well-planned workshop, which allowed them to further immerse themselves in Shanghai's culture, gain a deep understanding of policies and beneficiary measures closely related to their work and life, and help them better settle in the city.



Foreign experts dressed in opera costumes learn the Kunqu Opera. (PHOTO by the Science and Technology Commission of Shanghai Municipality)

Traditional Eastern Wisdom

Bronze Heavenly Tree: Mythical Thinking of Ancient Shu People

By ZONG Shihan

The huge bronze heavenly tree is a representation of the ancient Shu civilization, which dates back to at least 4,800 years in southwest China's Sichuan province. It can also be regarded as a masterpiece of bronze casting technology.

The debris of eight bronze heavenly trees was unearthed in a sacrificial pit at the Sanxingdui archaeological site in 1986. One of them, which is 396 centimeters high, has been repaired and is on display at the new Sanxingdui Museum in Sichuan. This tree was named as the No.1 Heavenly Tree, making it the

largest single bronze artifact discovered in the world. Due to the missing top part, experts estimate that the total height would be around 5 meters.

The No.1 Heavenly Tree is composed of a base and a main trunk. The base looks like three mountains connected together, decorated with sun and cloud patterns. The main trunk has three layers, with three branches extending from each layer. Each branch bends into a bow shape in a different direction.

There are small circles and flower buds with hollow patterns on the tree's branches, with one bird sitting on each flower bud, totaling nine birds. In addition,

the tree is full of fruits, and a dragon descends from the side of the main trunk, appearing to prepare for flight.

Regarding the specific connotation of the No.1 Heavenly Tree, the jury is still out in academic circles about its real meaning. However, there is consensus to define the tree as a heavenly tree, which is imagined as a ladder for the ancient Shu people to communicate with gods and traverse heaven and earth. Some people believe that the modeling and connotation of this bronze tree should be related to the divine tree recorded in the *Classic of Mountains and Seas*, a Chinese compilation of mythic geography and beasts.



The huge bronze heavenly tree at the new Sanxingdui Museum. (PHOTO: VCG)

Service Info

Insights into the Origin of Chinese Civilization: Shimao Site

By BI Weizi

Shimao site, located in Gaojiabao town, Shaanxi province on the northern edge of the Loess Plateau, is the biggest prehistoric walled site discovered in China, offering archaeologists insights into the origin of Chinese civilization.

The Shimao site is roughly 4,000 years old and covers an area of around 4.25 million square meters. In September 2019, by performing carbon-14 dating, archaeologists figured out the building time of the primary section of the Shimao site - the palace center - to be about 2200-1900 BC, towards the end of the Longshan period. In recent decades, a lot of valuable jewellery, carved stones, bone needles, shells, and even musical instruments and crocodile bone dishes have been found at the site.

Archaeological research has shown that the Shimao site consists of three practically complete and relatively independent stone cities: the palace center,

the inner city, and the outer city. The palace center was surrounded by inner and outer stone walls, which were 2.5 meters thick on average, with perimeters of approximately 4,200 meters and 5,700 meters respectively, and feature gates, turrets and watch towers.

The palace center was a huge stepped pyramid built on a hill made of loess. The pyramid was modified to form 11 platforms, and it stood 70 meters tall. The inner city consisted of a stone-walled platform, which experts believe was a palatial complex. Unusual features at the Shimao site include jade embedded in the walls for spiritual protection, relief sculptures of serpents and monsters, and paintings of geometrical patterns on the walls.

These discoveries have provided a lot of new research materials for understanding the origin and formation of the Chinese civilization, as well as the social and settlement development and the relationship between humans and the land.