

# Digital Revitalization of Museums for Friendship

## Dialogue

By BI Weizi and LONG Yun

Although Steven Back's determination to pursue a career in museums was a challenging path, his creative combination of computer science and exhibitions proved to be a great success, bringing tangible benefits to museum development.

As a representative of the Hungarian National Museum in China, Back did his master's degree in computer science in Hungary. Then he switched to social psychology for his doctorate in the Netherlands. Today he excels in the field of museum digitalization.

**Inherited interest**  
"My grandmother used to collect porcelain, especially blue and white porcelain, and my father is also a collector and historian. I grew up surrounded by old books, old engravings and antiques," he said. His love for china ignited his interest in China, the first country in the world to invent porcelain.

In the late 1980s, many cultural relics, including the famous Terracotta Warriors and horses were exhibited in the National Museum in Budapest, the capital of Hungary. This exhibition is one of Back's fondest memories. "Hungary was one of the first countries to invite the exhibition of the Terracotta Warriors and horses. I felt that the whole country was paying attention to this cultural exchange event," he said.

According to Back, museums play an important role in promoting not only cultural exchanges but also mutual understanding and friendship between people. "People at all times have more in common than differences. So do countries. We can discover similarities through the differences between cultures and between different periods,"



Steven Back. (COURTESY PHOTO)

he said.

**Digitalization empowers museums**  
Going to museums used to be considered a passive experience. A quick look at artifacts that take you back thousands of years with some details is far from enough. What Back is trying to do is to empower museums to narrow the gap between the present and the past, and shorten the distance between China and Hungary with digital technology.

In 2014, Back and his team developed and patented the "Magic Wall" technology with fully independent intellectual property rights. It has been widely used in various events at the China National Museum, the National Gallery of Hungary, the Shanghai Science and Technology Museum, and the China International Import Expo.

Magic Wall is an interactive display wall product that combines real-life modeling with multimedia content. It is mainly composed of high-resolution in-

dustrial monitors, high-resolution image processing parts, large servers, and customized large-scale touch sensitivity. When visitors touch and interact with the wall, the static modeling wall displays graphic content, video introductions, 3D models, etc., which enhances visitors' interest and exploration experience in museums.

Back said that digitalization is a major trend in exhibitions and has a positive impact on the museum and education industry. "The museum industry on the one hand has an intrinsic need for digitization to preserve ancient artifacts, digitization on the other hand empowers the museum in cultural exhibitions, history education as well as information dissemination," he said.

**Museums strengthen friendship**  
Over the years, Back has participated in many cultural exchange activities between China and Hungary. In 2015, the "Chinese Treasures Exhibition" was held in Budapest, co-organized by the

China Cultural Relics Exchange Center and the Hungarian Museum of Arts and Crafts. The exhibition displayed more than a hundred precious cultural relics, including pottery, bronze, jade, porcelain, gold and silverware from the Neolithic period to the Ming and Qing dynasties. It received a warm welcome from Hungarians.

In 2017, Back introduced a major exhibition in the Shanghai Museum titled "Sissi and Hungary - Hungarian Noble Life from the 17th to the 19th Century," which featured 149 cultural relics from past dynasties collected by the Hungarian National Museum. He was pleasantly surprised by the number of people who came to see the exhibition.

For his outstanding contribution to cultural exchange and innovative technologies, Back was awarded the Shanghai "Magnolia Memorial Award" in 2020.

Back hopes to promote more cultural exhibition exchanges between China and Hungary in the future.

## My China Story

# Pursuing Excellence in China

By Staff Reporters

In June 2019, Konstantinos Pouleros, a Greek cable expert, was invited to visit Ningbo Orient Wires & Cables company (Orient Cable).

At that time, he had limited knowledge of China and had never heard of Ningbo city, let alone imagining his future lay in the city.

Half a year later, impressed by the company's sincerity, he agreed to serve as its manufacturing director, focusing on the management of critical production processes for ultra-high voltage submarine and land cables, as well as its core technology R&D.

Pouleros said that the main goal for the future is to continue the projects that the team is currently working on, and focus on investing in new technologies and R&D to maintain the company's position as a global leader in the cable field.

During 17 years working in the submarine cable domain, Pouleros always maintained his original aspiration and enthusiasm for learning, no matter how many problems and challenges he came across in the process. "Once you choose this industry, you'll be an engineer forever," he said.

Pouleros has vast experience in the cable world, having previously worked at Nexans (one of the top three cable companies in the world) as Greek branch production manager. In addition,

he has been involved in a number of internationally renowned submarine cable projects.

In the past few years, his deepest impression of China is efficiency, whether in the implementation of national policies or daily trivial paperwork. He believes that it is efficiency that brings the rapid development of both the city and country.

As a foreign expert in Ningbo, his experience and ability have been recognized by local governments. In 2020, Pouleros was awarded the honorary title of "Great Youth in the New Era" by the People's Government of Beilun District of Ningbo.

In 2021, he was awarded the Ningbo Camellia Award, while in 2023, he received the West Lake Friendship Award from Zhejiang province.

Pouleros currently lives in Ningbo with his family and takes pride in his son's fluency in Mandarin. He said that having visited many places around the world, none have been as open, inclusive and beautiful as Ningbo.

As Pouleros says, Orient Cable connects the land with the sea, while Ningbo, a city of culture and a gateway to the world, embraces experts from around the world.

This article is contributed by Ningbo Municipal Department of Science and Technology.

## Traditional Eastern Wisdom

# Bronze Sun-shaped Device: Secondary Casting Method Icon

By ZONG Shihan

A bronze sun-shaped device, unearthed at the Sanxingdui Ruins in Sichuan province, has a history of more than 3,000 years. The circular device, around 84 cm in diameter, has a protruding center like the sun. Five arms are radially connected to the surrounding halo. The circular hole in the center of the device and five equally spaced circular holes on the halo are all used for fixing purposes.

The device was made by a secondary casting method. First, the halo and five arms were cast, and then the sun was embedded in the arms using an inlay casting method. Next, holes were drilled at the junction where the arms meet the halo. Finally, liquid copper was poured into the holes to firmly rivet the arms.

The bronze sun-shaped device was once considered by the public to be the

most modern relic at the Sanxingdui Ruins because of its resemblance to a car's steering wheel. Speculation about its use have some people saying it is a wheel on a bronze wagon or ornament on a shield. However, the academic community generally believes that it is a sacred artifact regarded as a symbol of the sun, used in rituals.



The bronze sun-shaped device at the new Sanxingdui Museum. (PHOTO: VCG)

# Low Temperatures in Warmest Year: Reasons

## Science Outreach

By ZONG Shihan

The World Meteorological Organization announced at COP28 a month ago that 2023 was the warmest year on record. Its report states that the ongoing El Niño event is expected to last until at least April 2024, leading to further increases in land and ocean temperatures. Yet while 2023 heated up, China has recently experienced ongoing low temperatures. So what are the

reasons?

According to statistical analysis, China's winter temperature is generally warmer during El Niño events, but there are frequent phased cold air activities, which means that there are significant fluctuations in temperatures.

The intensity of cold air processes is not only affected by El Niño, but also has a strong relationship with the splitting of the Arctic polar vortex and disturbances in the mid- to high-latitude westerly winds.

Since last mid-December, the Arctic polar vortex has split into two centers, located over Greenland and Siberia. Accompanied by the westerly

winds over Eurasia, the Siberian high is unusually strong, causing most of China to shift from prevailing southerly winds to northerly winds. The southward movement of cold air has led to a sharp drop in temperatures.

Moreover, El Niño strengthens the western Pacific subtropical high, allowing more water vapor from the tropics to be transported to China. Therefore, the combination of cold air from middle and high latitudes with abundant water vapor conditions from low latitudes has led to widespread snowfall in eastern China. The increase in clear sky albedo caused by snow on the ground also slows down temperature recovery.

According to the National Climate Center of China Meteorological Administration, from January to February 2024, the intensity of the East Asian winter monsoon will generally be weaker, with temperatures across most of China close to normal. However, there will be significant temperature fluctuations, and another drop in temperature may occur.

A cold snap is a short-term weather event. Only by considering whether the average temperature throughout winter is significantly higher or lower than the historical average temperature for the same period, can it be determined whether it is a warm or cold winter.

# Shaanxi Holds Colorful New Year Party

## Expats Activity

By LI Jing & ZHANG Ting

"Over the past decade working in Xi'an, I've been steadfastly at the forefront, guiding generations of young people to build a bridge of friendship between China and Russia," Russian expert Olga Dubkova said at a New Year reception for foreign experts in Xi'an, Shaanxi province.

More than 100 foreign experts from over 20 countries and their families attended the event to celebrate the new year and exchange ideas on December 28, 2023.

According to Bai Chongjun, deputy

director of the Shaanxi Provincial Science and Technology Department, Shaanxi will create platforms for international talent exchange, optimize open and inclusive policies, and strive to provide a better working and living environment for foreign experts in 2024.

The event featured traditional Chinese cultural performances, such as classical Chinese dances. The foreign experts showed diverse talents, including playing the guitar and cello, and performing Latin dances and even Chinese martial arts. Interactive activities like traditional paper cutting,

Qin Opera costume experiences, shadow puppetry and clay sculpture added to the vibrant atmosphere.

Source: Shaanxi Provincial Science and Technology Department



Foreign experts try out the traditional paper-cutting art at the New Year reception. (COURTESY PHOTO)

## Service Info

# Tianjin Provides Convenient Services for Overseas Experts

By Staff Reporters

The Entry-Exit Affairs Service Center at the National Offshore Entrepreneurial Base for Overseas Professionals (Tianjin Binhai New Area) was officially inaugurated on last December 19.

The Tianjin Municipal Public Security Bureau's Exit and Entry Administration said the establishment of the center is tailored for overseas talent innovation and entrepreneurship. This initiative aims to focus on attracting talent, intellectual resource introduction, entrepreneurial incubation, and professional service support in Tianjin.

According to an official from the administration, the service center collaborated with the Tianjin Free Trade Zone Policy and Industry Innovation Development Bureau to further optimize the business environment and improve the convenience for both domestic and international experts in Tianjin.

"The center's location is just a 15-minute commute from my workplace and residence. It provides one-stop services for visa documentation, accommodation registration, and business registration, making it extremely convenient," said Ali, a senior foreign engineer at Bo-

hai Ocean Engineering Company.

The service center integrates resident services, entrepreneurship guidance, and technology transformation into a multifunctional platform, offering services such as document processing for entry and exit, online accommodation registration, and policy consultations for Chinese and foreign employees of enterprises.

Kong Xiangxin, the founder and CEO of Tianjin Vision Intelligence Technology Company applauded it, saying, "It will greatly empower the long-term development of our company by attracting talent from home and abroad."