

# OLD ART IN A DIGITAL ERA

Some of China's most precious cultural treasures are getting a new lease of life thanks to incredibly sophisticated electronic wizardry, **Xing Wen** reports.

**A**t a recent exhibition held by the Academy of Arts and Design of Tsinghua University, Haiyantang, the largest European-style garden in Yuanmingyuan — or the Old Summer Palace — came alive with water pouring out from the mouths of the 12 zodiac sculptures in front of it — virtually, of course.

The process of how 2,106 stone blocks in the remains of the building were returned to their previous locations before the garden's destruction in the mid-19th century was projected onto a curved wall, allowing viewers to experience the magnificence of the historic architectural masterpiece.

"How do we present the fruits of the research we've conducted on Yuanmingyuan for many years? We used the digital approach to make Yuanmingyuan known to the masses," says Guo Daiheng, professor from Tsinghua's School of Architecture.

Lu Xiaobo, the dean of Tsinghua's Academy of Arts and Design adds that doing a digital re-creation of cultural relics for audiences is safer than to repair the treasures.

The digital restoration of the Yuanmingyuan complex that Guo initiated is just one of the cultural heritage protection projects supported by teachers and students at the university.

The exhibition, called *Renaissance of Traditional Culture*, showcases some of the projects that Tsinghua has been undertaking all across China, including an interactive version of the artwork *Night Revels of Han Xizai*, by ancient painter Gu Hongzhong of Five Dynasties and Ten Kingdoms (907-960), cultural and creative products featuring inscriptions on oracle bones and a virtual-reality museum of the grottoes in Dunhuang, Gansu province.

"The show unveils only a small fraction of the research by the university," says Wang Zhigang, curator of the exhibition.

"However, I want to present these high-quality works systematically, covering both royal arts and traditional folk crafts."

Wang, also an associate professor at the Information Art and Design Department, says that, instead of giving visitors static exhibits in museums, he would like to show the background stories of the cultural heritage using interactive installations.

When it comes to Dunhuang, it took Ma Lijun, a doctoral candidate at the academy, and his team, several years to build a database of the grottoes and frescoes through 3D scanning at the site.

"Though these frescoes have become oxidized and lost their original colors and shapes, we

can demonstrate how they have changed over the long course of history in a VR museum," says the 33-year-old.

He says it's easier for students with a background in art and design to understand the essence of cultural heritage and then create a cultural product that meets the public's needs, so the university encouraged students to contribute ideas and get actively involved in the projects.

In Ma's project, visitors wearing VR helmets find themselves in a dark cave-like museum, where figures of Buddha sit inside grottoes. There, they can use the controller to get pop-up introductions of the statues.

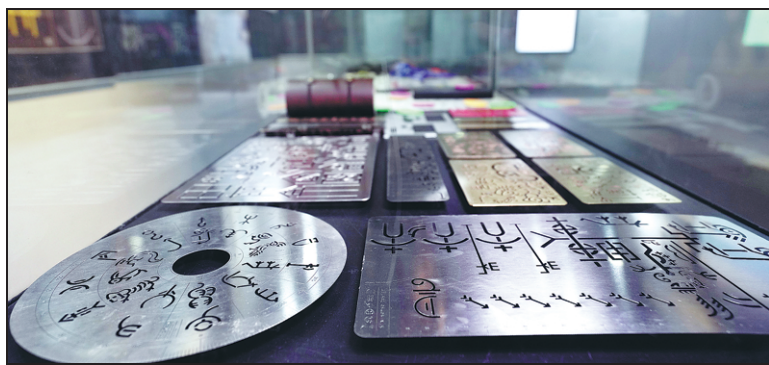
So far, the VR museum has been taken to Austria and Germany, among others.

Ma says: "I'm proud that we could use the VR project to show the world the Dunhuang grottoes and spark foreign interest in China's cultural heritage."

Kong Cuiting, 26, also finds it fun to design interactive media that can impart knowledge to children.

"The challenge is how to add both depth and color to the installations," says Kong, whose work is to create digital exhibits for the Confucius Museum in Qufu, Shandong province.

To complete the task, Kong says that they first checked historical records and dis-



**Above:** Products featuring oracle-bone inscriptions are on display at a recent exhibition held at the Tsinghua University in Beijing. **Middle:** A student interacts with an installation by ringing the bell. **Top:** A visitor stands in front of a curved wall on which the zodiac statues of Haiyantang garden in the Old Summer Palace, appear virtually. PHOTOS PROVIDED TO CHINA DAILY

ussed issues with experts in archaeology, before figuring out a way to put the background knowledge into

installations, such as a scroll painting of the ancient sage. Zhang Lie, Kong's mentor and the director of Tsinghua's

Interaction Media Institute, says he is expanding his team by recruiting students who studied history, cultural heri-

tage and archaeology.

"Before we seek to work with other institutions and universities, we should first build up our own team," says Zhang.

"Then we can work together on the varied possibilities of each project."

The exhibition also displayed the works of students which, in Wang Zhigang's words, "were experimental" and could provide new perspectives of how digital protection of cultural heritage is viewed by the younger generation.

"I hope the exhibition changes people's ideas about China's cultural treasures, and these innovative installation techniques are more widely applied," says Wang.

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