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WEEKLY EDITION

Traditional Culture Nurtures Digital Civilization

By WANG Xiaoxia

China is the only country whose traditional culture has endured without interruption. As the core of Chinese traditional culture, Confucianism has shaped an all-encompassing way of thinking and living based on a profound human-centered philosophy.

The heart of traditional culture is in the profound insights into the human condition that has much to teach us in today's world, where the digital revolution is having a deep, comprehensive impact on productivity, production relations and social development.

Adhering to innovation

An important reason why Chinese civilization, which has lasted for more than 5,000 years, is still vibrant and has supported the country on its path to modernization, is that it has always embraced new things and adhered to innovation, said Professor Zhang Weiwei from Fudan University, while on recent WIC Nishan Dialogue on Digital Civilization.

"If you can improve yourself in a day, do so each day, forever building on improvement." This is a well-known Confucius saying that encourages Chinese people to never stop making progress through learning and innovation.

With this spirit, China has completed the great transformation from agricultural civilization to industrial civilization in a few decades and is embracing the digital civilization.

People-centered philosophy

As we sail deeper into the age of AI, the waters become increasingly complex, said Shahbaz Khan, director of UNESCO Beijing Office. AI has realized the leap from cognitive function to generative function, and is transforming the way we learn, live and work, posing incredible possibilities and profound challenges.

Facing challenges, the Chinese civilization has a tradition of critical thinking. To deal with uncertainties, the trend is usually to seek benefits and avoid or reduce negative impacts on people.

It is a wave we must understand, navigate and guide with wisdom, akin to Confucius' teaching, said Khan. "Education breeds confidence. Confidence breeds hope. Hope breeds peace," Khan quoted Confucius' words to reinforce AI's potential to ensure equitable, inclusive and quality education for all.

In addition to education, people-centered philosophy is reflected in national policies concerning Internet governance and AI development and governance, to meet people's pursuit of a better life, and providing useful and affordable information services for all.

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Visitors try on space suits at an exhibition on immigration to Mars in Beijing. (PHOTO: HONG Xing/S&T Daily)

Editor's Pick

Background Station Aids Global Pollution Control

By LIN Yuchen

At the Waliguan Mountain top in the Qinghai - Xizang Plateau stands the Waliguan Background Station. As the only global atmospheric background station of the World Meteorological Organization (WMO) established in the hinterland of Asia and Europe, it aims to monitor background concentration levels of air polluting substances significant for the globe as a whole, and measure long-term changes in the composition of the atmosphere.

Since its establishment in 1994, using the huge amount of data accumulated in the past 30 years, the station's research team has drawn the industry-famous curve on the carbon dioxide concentration changes between 1995 and 2015. The data shown in the curve are compatible with the results from the

Mauna Loa Observatory based in Hawaii and provided the basis for the continuing trend of increasing global greenhouse gas concentrations across the world.

Strict selection of location

Waliguan Mountain is located on the Qinghai - Xizang Plateau dubbed "Roof of the World," with an average altitude of more than 3800 meters. It has a lowest temperature of minus 25 degrees Celsius and no one lives within a 10 kilometer radius.

Established in such conditions, the Waliguan Background Station ensures proper atmospheric background observation procedures in accordance with WMO's standards, meaning larger pollution sources should be more than 40 km away from the monitoring station. In the next 50 years, the surrounding area of the monitoring station within 30-50 kilo-

meters will have no significant change in land use such as major residential areas, industrial areas and highways. These should all remain at the required distance from the monitoring station.

Atmospheric background observation is designed to obtain data on the concentration of each element in the global atmosphere without human interference, said Zhang Guoqing, director of the Waliguan Background Station, adding that to meet the strict requirements of WMO, experts eventually decided to build China's first global atmospheric background station in 1992 at the Waliguan mountaintop, after years of on-site investigation.

Difficulties and trials faced by staff

The problem that comes with such a selection of location, however, is the difficulties staff have to overcome as stay on duty on-site. See page 2

International Cooperation

China-Africa Economic Cooperation Prospers

By Staff Reporters

The economic and trade cooperation between China and Africa has witnessed great progress in the past decade, said Li Fei, vice minister of commerce, at a recent press conference in Beijing, where he was discussing the third China-Africa Economic and Trade Expo (CAETE) and China-Africa economic and trade cooperation.

CAETE has been a crucial platform for economic and trade cooperation between China and Africa. Taking place in Changsha, Hunan province from June 29 to July 2, the third CAETE highlighted the close economic and trade relations between China and Africa. The number of cooperation projects and agreements signed during the expo reached 120, with a total value of over 10.3 billion USD.

For the past ten years, the total volume of trade between China and African countries has exceeded two trillion USD, and China's accumulated direct investment in Africa surpassed 30 billion USD. China remains Africa's largest trading partner and became the fourth largest source of investment.

Last year, the contract projects and labor service cooperation projects created nearly 300,000 jobs for countries where the projects took place.

Over 50 African countries and the African Union Commission have signed the Belt and Road Initiative agreement documents with China, and set up several special working groups in unimpeded trade, investment cooperation, production capacity cooperation and e-commerce.

In addition, China has been supporting the construction of the African Continental Free Trade Area (AfCFTA), and established an expert group of economic cooperation with its secretariat.

WEEKLY REVIEW

FAST Detects Nanohertz Gravitational Waves

China's Five - hundred - meter Aperture Spherical Telescope (FAST) has found evidence of the existence of nanohertz gravitational waves, according to a research paper published in the international journal *Research in Astronomy and Astrophysics* on June 29. Nanohertz gravitational waves are important for studying astrophysics-related phenomena including supermassive black holes and the formation of large-scale structures in the universe.

First 10,000-ton Hydrogen Project Begins Operation

Sinopec's green hydrogen demonstration project in northwest China's city of Kuqa in Xinjiang has produced 99.9 percent pure hydrogen, the Chinese oil and gas company said on June 30. Green hydrogen is produced directly from renewable energy sources such as solar and wind power, and basically no greenhouse gases are released.

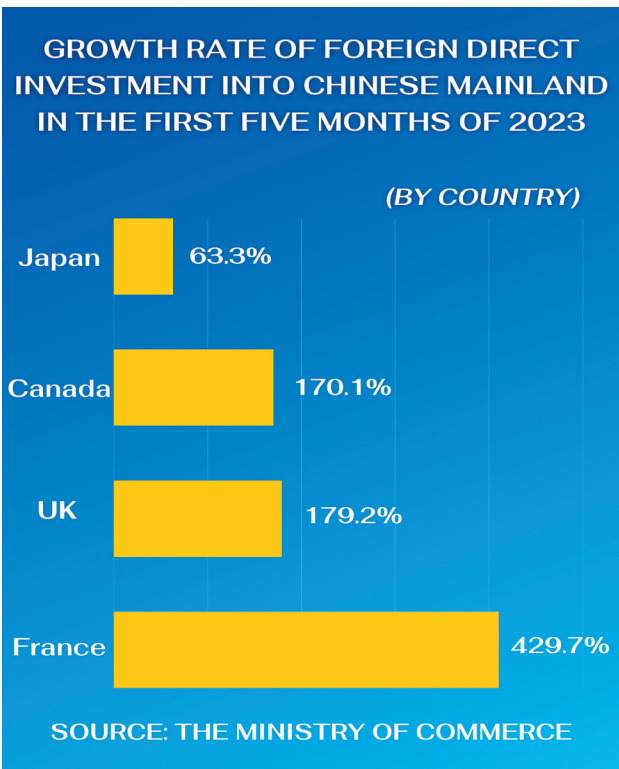
Intelligent Research Vessel Launched

"Haitun 1," China's first digital twin intelligent research and test ship, started its maiden voyage on June 30. Developed by the Harbin Engineering University, it is equipped with the latest technologies such as a 360-degree panoramic infrared vision system, and will lay the foundation for building a mobile maritime lab.

New Bullet Train Model Completes Initial Performance Verification Test

The CR450, a bullet train that can run at a speed of 453 km per hour, completed its initial performance verification test in Fujian in southeast China on June 29. The train is a new Fuxing model that is safer, greener and smarter, with higher energy efficiency.

New Graphic



Solid Progress Made in IPR Protection

By Staff Reporters

Intellectual property rights (IPR) protection in China achieved substantial progress in 2022, with the number of valid patents for inventions exceeding four million, an increase of over 17 percent on the previous year's number, according to a white paper released by the China National Intellectual Property Administration (CNIPA) on June 30.

By the end of 2022, the number of registered trademarks exceeded 42 million, going up by 14.6 percent from the previous year. Public satisfaction with IPR protection also increased, reaching 81.25 points out of 100.

Zhang Zhicheng, CNIPA's spokesperson, said the rule of law in IPR has been

consolidated as institutional reform for IPR protection has deepened. End-to-end IPR protection has also been strengthened.

Three revised laws and regulations regarding IPR were implemented last year, so were more than 20 IPR protection-related documents and policy papers, which fortify the legal guarantee for IPR protection.

The white paper said several special actions regarding administrative law enforcement have been carried out to reinforce IPR protection in key fields such as patents, trademarks, copyrights and Olympic symbols, as well as in key links such as customs and online markets.

Mechanisms to conduct quick and coordinated protection have been strengthened, along with aid to rights

protection and dispute mediation. Crackdowns on abnormal patent applications and malicious trademark registrations have been intensified.

China will continue to cooperate with the World Intellectual Property Organization (WIPO) and other IPR organizations, participate in global IPR governance and promote strengthened joint IPR protection.

Two key WIPO treaties, the Hague Agreement and the Marrakesh Treaty, took effect in China in 2022. The Hague Agreement governs the international registration of industrial designs while the Marrakesh Treaty facilitates access to published works for people who are blind, visually impaired or otherwise print-disabled.