Talal Abu-Ghazaleh – Confucius Institute

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TAG-Confucius Institute:

The Institute was established in September 2008 to introduce the Chinese language and culture, as well as achieving a greater mutual understanding between the Arab and Chinese cultures. This unique initiative is based on the cooperation agreement between TAG.Global and Confucius Institute in China. The Institute has been named after the great intellectual, mentor and philosopher, Confucius, whose ideas had influenced China and other regions around the world for over 2,000 years.

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TAG-Confucius Institute is the first institute accredited by the Chinese Government to teach Chinese language in Jordan.

TAG-Confucius Institute is holding a new course to teach the basics of the Chinese language for beginners:

A. Threshold Level for Adults: starting 4/12/2023

Schedule: Monday – Wednesday from 6:00 – 8:00 pm

B.Threshold Level for Kids : starting 2/12/2023

Schedule: Schedule: Saturday – Wednesday from 3:00 – 4:30 pm

***All Chinese language teachers are from China specialized in teaching Chinese language for foreigners and accredited by the Confucius Institute in China.**

US-China Scientific Collaboration is Important and Must Continue

Talal Abu-Ghazaleh

Despite the ongoing technology war between America and China, there has been a long-time scientific collaboration between the two superpowers that has been productive and mutually advantageous for many years. This is now encountering increasing obstacles and doubts as some American politicians doubt the value, and even see risks, of the Science and Technology Agreement (STA), the first bilateral agreement signed after the two countries reestablished relations in 1979, by Deng Xiaoping and US President Jimmy Carter. There is concern that China is taking advantage of the collaboration to improve its technological and military capabilities, and that it is engaging in intellectual property theft.

I believe that such worries are largely unfounded, and that terminating or weakening the STA would be harmful to both sides' scientific interests, though with little proof that academic collaboration has compromised America's security or competitiveness. The STA covers research that is published in peer-reviewed journals, which are open to anyone, regardless of nationality. In addition, America has other mechanisms to protect sensitive areas of research, such as an executive order by President Joe Biden that limits the sharing of American expertise in certain fields.

China has achieved remarkable progress in some fields, such as batteries, telecommunications and nanoscience, which can complement America's strengths. China also has a large and diverse population, which can offer valuable data for research in areas such as health, education and social sciences. By collaborating with Chinese scientists, American researchers can gain insights and opportunities that they would otherwise miss.

Some US politicians have raised concerns over China's methods in conducting ethical research. If this is a major point of contention, America can further influence China's approach in such matters. Under the influence of the US, China has already adopted Institutional Review Boards, which oversee research that involves human subjects. As innovation in artificial intelligence and other frontier areas poses new ethical challenges, America can use its collaboration with China to guide its approach towards more responsible practices if it feels this is necessary.

The history of scientific collaboration among rival great powers during the cold war demonstrates that such an approach can bring mutual benefits and advance humanity's progress. For instance, joint research by American and Soviet scientists led to the detection of gravitational waves, the eradication of smallpox and high energy density physics that resulted in over 400 joint scientific publications and presentations. Research between US and Chinese scientists has even been more fruitful in areas such as cancer trials, mapping the Milky Way, quantum technology, biology, medicine and physics. The US-China partnership brings strength in numbers to global science projects which is essential if we are going to face joint challenges such as climate change.

Rather than adopting a new model of scientific isolationism, America should remember that collaboration in the lab tends to benefit everyone, including itself. It is clear that cooperation between these two powers is necessary as it helps to foster mutual trust and understanding between them, which are crucial for maintaining world peace.

Therefore America needs to continue its scientific collaboration with China and it should renew the STA without major changes. Quitting or watering down the STA would not only harm America's scientific interests, but also damage its relations with China and its reputation as a leader of global science.

Agriculture in China

China primarily

China primarily produces rice, wheat, potatoes, tomato, sorghum, peanuts, tea, millet, barley, cotton, oil seed, corn and soybeans.

History

The development of farming over the course of China's history has played a key role in supporting the growth of one of the largest populations in the world.

Archaeology

Analysis of stone tools by Professor Liu Li and others has shown that hunter-gatherers 23,000–19,500 years ago ground wild plants with the same tools that would later be used for millet and rice.

Domesticated millet varieties Panicum miliaceum and Setaria italica may have originated in Northern China.[2] Remains of domesticated millet have been found in northern China at Xinglonggou, Yuezhang, Dadiwan, Cishan, and several Peiligang sites. These sites cover a period over 7250-6050 BCE.[3] The amount of domesticated millet eaten at these sites was proportionally quite low compared to other plants. At Xinglonggou, millet made up only 15% of all plant remains around 7200-6400 BCE; a ratio that changed to 99% by 2050-1550 BCE.[4] Experiments have shown that millet requires very little human intervention to grow, which means that obvious changes in the archaeological record that could demonstrate millet was being cultivated do not exist.

Excavations at Kuahuqiao, the earliest known Neolithic site in eastern China, have documented rice cultivation 7,700 years ago.

Approximately half of the plant remains belonged to domesticated japonica species, whilst the other half were wild types of rice. It is possible that the people at Kuahuqiao also cultivated the wild type.

Finds at sites of the Hemudu Culture (c. 5500-3300 BCE) in Yuyao and Banpo near Xi'an include millet and spade-like tools made of stone and bone. Evidence of settled rice agriculture has been found at the Hemudu site of Tianluoshan (5000-4500 BCE), with rice becoming the backbone of the agricultural economy by the Majiabang culture in southern China.

According to the Records of the Grand Historian some female prisoners in historic times were given the punishment to be "grain pounders" (Chinese: 菩瓴) as an alternative to more severe corporal punishment like tattooing or cutting off a foot. Some scholars believe the four or five year limits on these hard labor sentences began with Emperor Wen's legal reforms.

There is also a long tradition involving agriculture in Chinese mythology. In his book Permanent Agriculture: Farmers of Forty Centuries (1911), Professor Franklin Hiram King described and extolled the values of the traditional farming practices of China.

Farming method improvements

Farming in China has always been very labor-intensive. However, throughout its history, various methods have been developed or imported that enabled greater farming production and efficiency. They also utilized the seed drill to help improve on row farming.

During the Spring and Autumn period (722–481 BC), two revolutionary improvements in farming technology took place.

One was the use of cast iron tools and beasts of burden to pull plows, and the other was the large-scale harnessing of rivers and development of water conservation projects. The engineer Sunshu Ao of the 6th century BC and Ximen Bao of the 5th century BC are two of the oldest hydraulic engineers from China, and their works were focused on improving irrigation systems.

These developments were widely spread during the ensuing Warring States period (403–221 BC), culminating in the enormous Du Jiang Yan Irrigation System engineered by Li Bing by 256 BC for the State of Qin in ancient Sichuan.

For agricultural purposes the Chinese had invented the hydraulic-powered trip hammer by the 1st century BC, during the ancient Han dynasty (202 BC-220 AD).

Although it found other purposes, its main function was to pound, decorticate, and polish grain that otherwise would have been done manually. The Chinese also innovated the square-pallet chain pump by the 1st century AD, powered by a waterwheel or oxen pulling on a system of mechanical wheels.

Although the chain pump found use in public works of providing water for urban and palatial pipe systems, it was used largely to lift water from a lower to higher elevation in filling irrigation canals and channels for farmland.

Chinese ploughs from Han times on fulfil all these conditions of efficiency nicely, which is presumably why the standard Han plough team consisted of two animals only, and later teams usually of a single animal, rather than the four, six or eight draught animals common in Europe before the introduction of the curved mould-board and other new principles of design in the + 18th century. Though the mould-board plough first appeared in Europe in early medieval, if not in late Roman, times, pre-eighteenth century mould-boards were usually wooden and straight (Fig. 59).

The enormous labour involved in pulling such a clumsy construction necessitated large plough-teams, and this meant that large areas of land had to be reserved as pasture.

In China, where much less animal power was required, it was not necessary to maintain the mixed arable-pasture economy typical of Europe: fallows could be reduced and the arable area expanded, and a considerably larger population could be supported than on the same amount of land in Europe.

https://en.wikipedia.org/wiki/Agriculture_in_China

Science and technology in China

Science and technology in China have developed rapidly during the 1980s to 2010s, and major scientific and technological achievements have been made since the 1980s.

From the 1980s to the 1990s, the Chinese government successively launched the “863 Plan” and the “Strategy for Rejuvenating the Country through Science and Education”, which greatly promoted the development and progress of China’s science and technology.

The Chinese government has placed emphasis through funding, reform, and societal status on science and technology as a fundamental part of the socio-economic development of the country as well as for national prestige.

China has made rapid advances in areas such as education, infrastructure, high-tech manufacturing, academic publishing, patents, and commercial applications and is now in some areas and by some measures a world leader. China is now increasingly targeting indigenous innovation and aims to reform remaining weaknesses.

Per the Global Innovation Index in 2022, China was considered one of the most competitive in the world, ranking 11th in the world, 3rd in the Asia & Oceania region and 2nd for countries with a population of over 100 million.

History

China was a world leader in science and technology until the early years of the Ming dynasty. Chinese discoveries and Chinese innovations such as paper making, printing, the compass, and gunpowder (the Four Great Inventions) contributed to the economic development in East Asia, the Middle East and Europe. Chinese scientific activity started to decline in the fourteenth century.

Unlike in Europe, scientists did not attempt to reduce observations of nature to mathematical laws and they did not form a scholarly community with criticisms and progressive research. There was an increasing concentration on literature, arts, and public administration while science and technology were seen as trivial or restricted to limited practical applications.

The causes of this Great Divergence continue to be debated. One factor is argued to be the imperial examination system which removed the incentives for Chinese intellectuals to learn mathematics or to conduct experimentation.

By the 17th century, Europe and the Western world surpassed China in scientific and technological advancement.

The causes of this early modern Great Divergence continue to be debated by scholars to this day.

After being defeated repeatedly by Japan and Western nations in the 19th century, Chinese reformers began promoting modern science and technology as part of the Self-Strengthening Movement. After the Communist victory in 1949 science and technology research was organized based on the model of the Soviet Union. It was characterized by a bureaucratic organization led by non-scientists, research according to the goals of central plans, separation of research from production, specialized research institutes, concentration on practical applications, and restrictions on information flows.

Researchers should work as collectives for society rather than as individuals seeking recognition. Many studied in the Soviet Union which also transferred technology.

The Cultural revolution, which sought to remove perceived “bourgeois” influences and attitudes, caused large negative effects and disruptions. Among other measures it saw the scientific community and formal education attacked, intellectuals were sent to do manual labor, universities and academic journals were closed, most research ceased, and for nearly a decade China trained no new scientists and engineers.

After Mao Zedong's death, S&T was established as one of the Four Modernizations in 1976. The new leader Deng Xiaoping, and architect of the Chinese economic reform, was a strong promoter of S&T and reversed the policies of the Cultural revolution. The Soviet inspired system was then gradually reformed. Media began promoting the value of S&T, scientific thinking, and scientific achievement.

The third and fourth generations of leaders came almost exclusively from technical backgrounds.

The State Council of the People's Republic of China in 1995 issued the "Decision on Accelerating S&T Development" which described planned Science & Technology development for the coming decades. It described S&T as the chief productive force and affecting economic development, social progress, national strength, and living standards. S&T should become closely associated with market needs. Not only Soviet style institutes should do research but also universities and private industries. State institutions should form joint ventures with Chinese or foreign venture capital in order for S&T developments to reach the industry.

S&T personal should become more occupationally mobile, pay should be linked to economic results, and age and seniority should become less important for personal decisions. Intellectual property rights should be respected. Information exchange should improve and there should be competition and open bidding on projects. The environment should be protected.

Chinese indigenous S&T in certain key areas should be especially promoted. Public officials should improve their understanding of S&T and incorporate S&T in decision making. Society, including Communist Party youth organizations, labor unions and the mass media, should actively promote respect for knowledge and human talents.

An interior diagram of the astronomical clocktower of Kaifeng featured in Su Song's book, written by 1092 and published in printed form by the year 1094.

11th century long serpent fire arrow rocket launcher

A depiction of the 13th Century "long serpent" rocket launcher. The holes in the frame are designed to keep the rockets separate, from the 1510 edition of Wujing Zongyao.

The oldest known illustration of an endless power-transmitting chain drive. It was used for coupling the main driving shaft of his clock tower to the armillary sphere gear box.

During the last 30 years China concentrated on building physical infrastructure such as roads and ports. One policy during the last decade has been to ask for technology transfer in order for foreign companies to gain access to the Chinese market. China is now increasingly targeting indigenous innovation.

During this period China has succeeded in developing an innovation infrastructure, founded on the establishment of over 100 science and technology parks in many parts of the country, along with encouragement of entrepreneurship outside the state-owned sector. Yip and McKern argue that Chinese firms have evolved through three phases as their innovation capabilities have matured and that by 2017 many of them are of world standard. They are now strong competitors in the China market and increasingly in foreign markets, where they are establishing local operations.

Techno-nationalism

While the term “techno-nationalism” was originally applied to the United States in the 1980s, it has since been used to describe nationalistic technology policies in many countries, particularly in Asia.

Chinese techno-nationalism is rooted in the country’s humiliation at the hands of more advanced countries in the 19th century. Indeed, China’s leaders (like those of other countries) have long seen scientific and technological development as vital for achieving economic affluence, national security, and national prestige. Lacking indigenous technological intellectual property and innovation are seen as key national problems. The 21st century has thus seen a series of central government initiatives designed to promote “indigenous innovation” and technological development more generally in China. These include the National Medium- and Long-Term Program for Science and Technology Development (2006–20), the Strategic Emerging Industries initiative, the Internet Plus initiative, and the Made in China 2025 Program, among others.

Through these initiatives, the Chinese state has intervened in the economy in a variety of ways to promote national technological development and reduce reliance on other countries. Prioritized industries and firms are protected and guided. There are systematic efforts to replace foreign technology and intellectual properties with indigenous technology. Foreign companies are given many incentives for technology transfer and for moving R&D to China. At the same time the technological abilities of domestic companies are supported in various ways.

Such policies have generated considerable conflict between China and developed countries, particularly the United States, although China has often proven flexible when its policies have been challenged.

Nationalism and nationalistic achievements have been seen as becoming the main ideological justifications and societal glue for the regime as Marxism loses influence.

Some science and technology mega-projects has been seen as questionable trophy projects done for propaganda purposes with Chinese state-controlled media being filled with reports of Chinese achievements.

In 2019, reports surfaced stating that the Chinese government has ordered all foreign PC hardware and operating systems that are installed in government offices to be replaced in the next three years. Other reports stated that the Chinese government would be increasing subsidies for tech firms.

https://en.wikipedia.org/wiki/Science_and_technology_in_China

TAGTech

PRODUCTS

Intel Core i5
8th Generation

8 GB RAM
DDR4

256 GB SSD

FLIP

Intel® Core i7
10th Generation 1065G7

8 GB RAM
DDR4

128 GB SSD
+ 512 GB SSD

PRO

Intel Celeron N4100

4 GB LPDDR3

256GB SSD
+ 64GB EMMC

UNI C

Intel® Core i3
10th Generation 1005G1

4 GB RAM
DDR4

128 GB SSD

EDU

Intel® Core i7 10th
Generation 10510U

8 GB RAM
DDR4

128 GB SSD
+ 1 TB HDD

PLUS I

Intel® Core i7 10th
Generation 10510U

8 GB RAM
DDR4

128 GB SSD
+ 512GB HDD

PLUS II

PLUS III

7022

New

Intel® Core™ i7
1255U

8 GB RAM
DDR4

256 GB SSD
+ 1 TB HDD

Intel® Iris®
Xe Graphics

4500 mAh

AX (wifi 6) BT 5.1

Intel® Core™ i5
1235U

8 GB RAM
DDR4

256 GB SSD
+ 1 TB HDD

Intel® Iris®
Xe Graphics

5000 mAh

AC WIFI
BT 4.2

PLUS III
5022

New

Spreadtrum
SC7731E Quad-core

2 GB

32 GB

TAG-TAB KIDS II

MediaTek MTK
8788 octa-core

8 GB

128 GB

TAG-TAB III

Front: 16 MP
Rear: 20 MP

6 GB

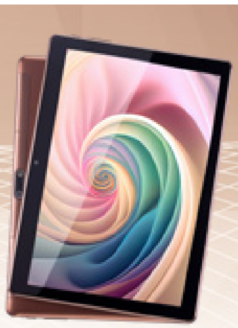
128 GB

TAG-PHONE
Special

Spreadtrum
SC9863 Octa-core

4 GB

64 GB



TAG-DC

Front: 8 MP
Rear: 16 MP

4 GB

128 GB

TAG-PHONE
Plus

Front: 16 MP
Rear: 16 MP

6 GB

128 GB

TAG-PHONE
Advanced

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