

BEIJING 北京

Issue June, 2025

Gates of Countless Faces:
IP Representing Beijing's
International City Status

ISSN 2095-736X







北京 (BEIJING)

Issue 6, 2025 (Vol. 576)

Supervision

Publicity Department of the CPC Beijing Municipal Committee

Sponsors

Information Office of the People's Government of
Beijing Municipality

Beijing International Communication Center

The Beijing News

Publisher

The Beijing News

Editor in Chief

Ru Tao

Executive Editors in Chief

An Dun, Xiao Mingyan

Editors

Wang Wei

[United States] Brad Green, [United States] Anne Ruisi

Photo Editors

Zhang Xin, Tong Tianyi

Art Editors

Zhao Lei, Zhao Jinghan

Service of Translation

Wang Wei, YGYM Translation Service Co., Ltd.

Photos Courtesy of

Xinhua News Agency; vcg.com; 58pic.com;

IC photo; tuchong.com

Distribution

The Beijing News

Address

F1, Building 10, Fahuananli, Tiyyuguan Lu,

Dongcheng District, Beijing

Tel

+86 10 6715 2380

Fax

+86 10 6715 2381

Printing

Xiaosen Printing (Beijing) Co., Ltd.

Postal Subscription Code

82-777

Publishing Date

June 25, 2025

Price

38 yuan

International Standard Serial Number

ISSN 2095-736X

China National Standard Serial Number

CN10-1908/G0

E-mail

Beijingydx@btmbeijing.net

Contents Photos by

Sang Yi, Tong Tianyi

Contents



4 Gates of Countless Faces



10

The Allure of Ancient Gates

24

Gates Extending in All Directions

36

Gates to the Future

48

Culture Express

Gates of Countless Faces

Text by Gao Yuan Photos by Tong Tianyi, Ma Wenxiao, Meng Fanbo



Every city has its own urban spirit and cultural allure, often embodied in a distinctive symbol that sets it apart. This defining essence is now increasingly referred to as the city's intellectual property (IP).

The IP is the key that unlocks a city's essence, the code that helps people understand it and the reason they fall in love with it.

Beijing, as both an ancient cultural capital and a modern international metropolis, possesses a unique city IP—a distinctive identity shaped by elements such as the city's magnificent Central Axis, the stately Forbidden City, the grand Hall of Prayer for Good Harvests, the historic Grand Canal, the modern skyscrapers of the CBD, the lively hutongs and the traditional courtyards, an extensive transportation network and dynamic economic development zones showcasing cutting-edge industries.

Beijing's historical depth, cultural character, creative vitality and the spirit of its people together shape a series of city IPs—readable, tangible and perceptible—revealing the cultural essence and soul of this ancient yet modern capital.

Beijing is a city to be explored in depth and read with care.





▲ Part of the Beijing Central Axis

Steeped in history, the city's origins stretch back 700,000 years to Peking Man (*Homo erectus pekinensis*), who sparked the early flames of civilisation at Dragon Bone Hill in present-day Fangshan District's Zhoukoudian. The city's urban development spans more than 3,000 years, beginning with an ancient settlement that emerged in today's Fangshan during the Shang (16th century–11th century BC) and Zhou (11th century–256 BC) dynasties. As a capital, Beijing holds an 870-year legacy, beginning in 1153 when the Jin Dynasty (1115–1234) designated it as Zhongdu, or the Central Capital.

The city's long history has nurtured a profound cultural legacy. Every ancient building, street, alley, hutong or tree holds a hidden past waiting to be uncovered. Beijing is often described as ancient yet vibrant, vast yet profound, lofty yet familiar and captivating yet mysterious. With such layered qualities, it is a city that rewards thoughtful exploration and meticulous study.

Beijing can be appreciated in a multitude of ways. Its existing grand city gates reveal

perspectives on the capital, allowing visitors to experience its enduring charm. This provides a meaningful way to understand the city.

The city continues to showcase its historic city gates, with Tian'anmen Gate and Zhengyangmen Gate standing out as the most iconic. For countless people, these two gates were their first glimpse of the capital.

Tian'anmen Gate is a symbol of China, while Zhengyangmen Gate represents Beijing itself. Renowned historical geographer Hou Renzhi (1911–2013) once recalled the emotion he felt upon first seeing Zhengyangmen Gate: "As I exited the station with the crowds at dusk, the majestic gate and the towering city walls suddenly appeared before me. In that moment, I seemed to grasp a historical truth. From then on, a seed full of vitality was planted in my heart."

The Swedish sinologist Osvald Siren (1879–1966) once likened the city of Beijing to a giant: "The gates may be called the mouths of the city; they are the openings through which this huge walled-in body of half a million or more organisms breathes and speaks. At the

gates can be felt the pulse of the whole city, as its life and purpose flows through the narrow openings—a pulse-beat which gives the rhythm of the life and activity of this highly complex organism which is called Peking."

Today, many of Beijing's once-majestic city gates have disappeared, surviving now only as place names. These gates once bore witness to the capital's shifting fortunes, serving as portals between past and present and narrating its legendary history. The surviving gates stand as both architectural landmarks and cultural icons. Seen as mirrors, they offer insight into the multifaceted nature of Beijing.

Beijing is home to the world's longest and most complete ancient urban axis—the Central Axis. This central spine shaped the city's distinctive east–west symmetrical layout. Of great significance, it still defines Beijing today, embodying traditional Chinese ideals for capital city planning and construction. Centred on the Forbidden City, ancient Beijing also took on a form resembling the Chinese character “囿”. “The city of Beijing was encircled by walls

with 16 gates positioned along them. Having withstood centuries of change, the remaining gates and walls still bear the historic imprint of the city's heritage.

On July 27, 2024, the “Beijing Central Axis: A Building Ensemble Exhibiting the Ideal Order of the Chinese Capital” was officially inscribed on the UNESCO's *World Heritage List*. With this recognition, Beijing now has eight UNESCO World Heritage sites, the highest number of sites in any city in the world.

For more than seven centuries, since the completion of the Central Axis, this urban spine has not only shaped the iconic face of Beijing but also become deeply entwined with the fates of the Yuan (1271–1368), Ming (1368–1644) and Qing (1644–1911) dynasties. To this day, compelling legends and stories continue to surround it, capturing the imagination.

Legend has it that during the Qing Dynasty, a foreign envoy visiting Beijing sought an audience with the emperor but refused to observe the imperial etiquette.

Officials from the Ministry of Rites escorted this envoy into the Imperial City through Zhengyangmen Gate, guiding him north along the Central Axis. As the envoy passed through Zhengyangmen Gate and walked along the Qianbu Corridor, he was awestruck by the unfolding panorama. The imposing Tian'anmen Gate came into view. Its golden, soaring eaves, crimson facade and the white jade-like Golden Water Bridges shimmered beneath the clear blue sky,

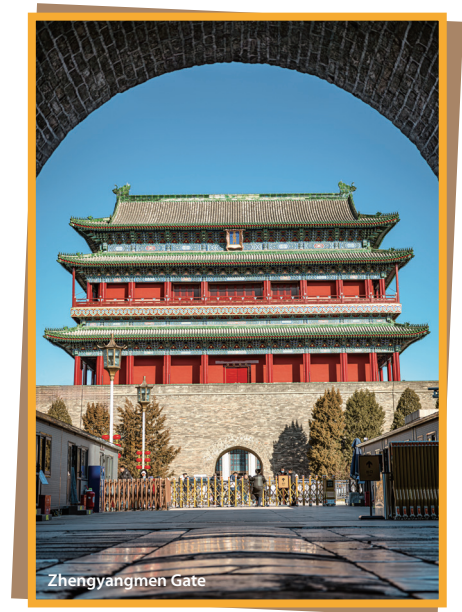
creating a scene that felt almost dreamlike. He continued through the Upright Gate and the Meridian Gate, where the towering structures exuded an irresistible and formidable presence. At the expansive Hall of Supreme Harmony Square, surrounded by distant buildings, he felt small and isolated, like a lone drop in a vast ocean. Stunned by the spectacle, the envoy was overwhelmed by the powerful aura of imperial majesty flowing along the Central Axis. Upon entering the Hall of Supreme Harmony, he instinctively knelt before the emperor.

While the truth of the story remains unconfirmed, the Central Axis has undeniably played a profound role in shaping Beijing's urban structure and ceremonial traditions.

Indeed, the foreign envoy was likely unaware that the Central Axis extended not only through the capital's physical spaces but also deep into the enduring soul and culture of the Eastern nation.

The decision to lead the foreign envoy into the Forbidden City through Zhengyangmen Gate carried deep significance. First, it enabled him to fully witness the grandeur of the Central Axis. Second, as the largest gate in Beijing at the time, Zhengyangmen Gate served as the “Gateway of the Nation” and embodied China's strength and ceremonial traditions before the rest of the world. Its opening marked a new chapter in China's connection and exchange with the global community.

After the Qing Dynasty collapsed in



1911, Zhengyangmen Gate's status as the “Gateway of the Nation” underwent a major change in 1915. Zhu Qiqian (1872–1964), then Chief of Internal Affairs under the Beiyang Government (1912–1928), introduced modern urban planning concepts and oversaw the gate's renovation. With the station of the Beijing–Hankou and Beijing–railways located nearby, Zhengyangmen Gate shifted from being part of the emperor's imperial route to a modern transport hub open to the public. This marked the start of Beijing's transformation from ancient capital to modern city.

Beijing's city gates have come to





Interior of the terminal at Beijing Daxing International Airport



751 Design Store



Shougang Park's No.3 Blast Furnace

symbolise the connection between past and future. As a global metropolis, Beijing has redefined the meaning of its gates. They are no longer merely entry points, but enduring symbols of openness and connection with the world.

In 1909, the Beijing–Zhangjiakou Railway—China's first major railway independently designed and built—was completed under the leadership of Zhan Tianyou (Jeme Tien Yow, 1861–1919). Over a century later, in 2019, the Beijing–Zhangjiakou High-Speed Railway, a landmark project for the Beijing 2022 Olympic Winter Games, began operation. Today, Beijing stands as a vital gateway and transport hub for China's global

engagement, embodying a spirit of openness, inclusivity and technological innovation.

In 2008, Terminal 3 of Beijing Capital International Airport, hailed as “China's First National Gateway” and designed to resemble “a dragon spraying a green pearl,” was opened to the public. Subsequently, in 2019, Beijing unveiled “A New Gateway”: Daxing International Airport, shaped like “a phoenix spreading its wings.” This ushered the city into a new “dual-hub” era. With one airport in the north and the other in the south, the two form a powerful image of “prosperity brought by the dragon and the phoenix.”

In an era shaped by economic globalisation, airports have evolved

beyond mere points of departure and arrival to become powerful engines of regional economic development. The two airports not only reflect the dynamic progress of Beijing's urban development but also serve as a compelling symbol of the capital's growing openness and expanding global reach.

Together, they form a sophisticated and expansive air transport network. Complementing this, seven major railway

stations, including Beijing Railway Station, Beijingxi Railway Station (Beijing West Railway Station), Beijingnan Railway Station (Beijing South Railway Station) and Qinghe Railway Station, comprise a complex and highly developed railway system. From these key hubs, numerous national rail lines extend in all directions, connecting Beijing with every region across the country and reinforcing its status as a crucial transportation centre and gateway to China. The rapid growth of China's high-speed rail network has further enabled Beijing to develop an expanding "one-hour transport and tourism circle." At the same time, the city boasts the world's largest urban subway system, with 25 lines covering both the central core and surrounding suburbs. Beijing is also a true "city of buses," with an extensive public transport grid linking every corner of the capital.

Beijing possesses not only prominent physical landmarks but also an intangible gateway. As China's cultural centre, technology innovation centre and international communication centre, the capital holds a distinct urban identity. This unseen gateway represents a dynamic "gate of innovation and creativity," one that entrusts the city with a mission aligned with the spirit of the times. It drives the flourishing of culture, sparks boundless creativity and enhances Beijing's global appeal throughout its ongoing modernisation. Today, in an era of accelerating scientific and technological progress and constant breakthroughs, this ancient capital, rooted in thousands of years of civilisation, aims to become a science and technology innovation centre of global significance. Through the "gate of science and technology," Beijing gathers innovative energy, and through the "gate of wisdom," it ushers in a new era of high-quality development.

Observing Beijing's progress in science, technology, culture and innovation is like looking inward through the city's invisible "gates" of science, technology, innovation and wisdom. These gateways reveal the capital's impressive achievements as a national centre for strategic scientific and technological resources. Beijing holds the highest concentration of national laboratories, research institutes, top-tier research universities and

leading tech enterprises in the country. It also leads all Chinese cities in the number of national high-tech companies, specialised and sophisticated "little giant" firms and unicorn enterprises. The core platform supporting Beijing's goal of becoming a global science and technology innovation centre, comprising Zhongguancun Science City, Huairou Science City, Future Science City and the Beijing Economic-Technological Development Area, generates a regional GDP that accounts for approximately 40 percent of the city's total economic output.

With focused efforts to establish Beijing as China's cultural centre, the city's cultural industry is undergoing rapid growth and demonstrating strong innovative momentum. Boasting a high growth rate, the cultural industry has become the second-largest economic pillar, surpassed only by the financial sector, and its value added as a proportion of GDP ranks first nationwide. Over 100 municipal-level cultural industry parks are scattered across the city. Notably, venues such as Shougang Park, 798-751 Park, Langyuan Vintage and Langyuan Station have developed into vibrant "cultural living rooms" for residents and key hubs of urban cultural life, marked by their distinctive features and personalised services. The capital's comprehensive "one-stop online government services" continue to make administrative tasks more

convenient for the public. Furthermore, the city's "integrated network of smart governance" has strengthened its capacity in risk early warning, prevention and control.

Beijing has also made steady and significant strides in its "smart city" development, embracing innovations that range from mobile payments, QR code scanning and voice and facial recognition to intelligent robots, drones, cloud computing, telemedicine, big data and artificial intelligence. Once a vision in science fiction films, "Smart Beijing" is now a lived reality, integrated into everyday life. These technologies have made daily routines more efficient, intelligent and convenient.

From ancient city gates steeped in legend to the modern transport hubs formed by two international airports and seven major railway stations, and to the intangible gateways of technology and wisdom that drive innovation and creativity, the form of Beijing's "gates" has continued to evolve. Yet their underlying significance has remained constant. These gates serve not only as boundaries, but also as points of connection, symbolising both protection and openness. They serve as both guardians of the past and bridges to the future. Through this variety of physical and symbolic gateways, the public can appreciate Beijing's lasting charm, its spirit of openness and its captivating, innovative appeal.

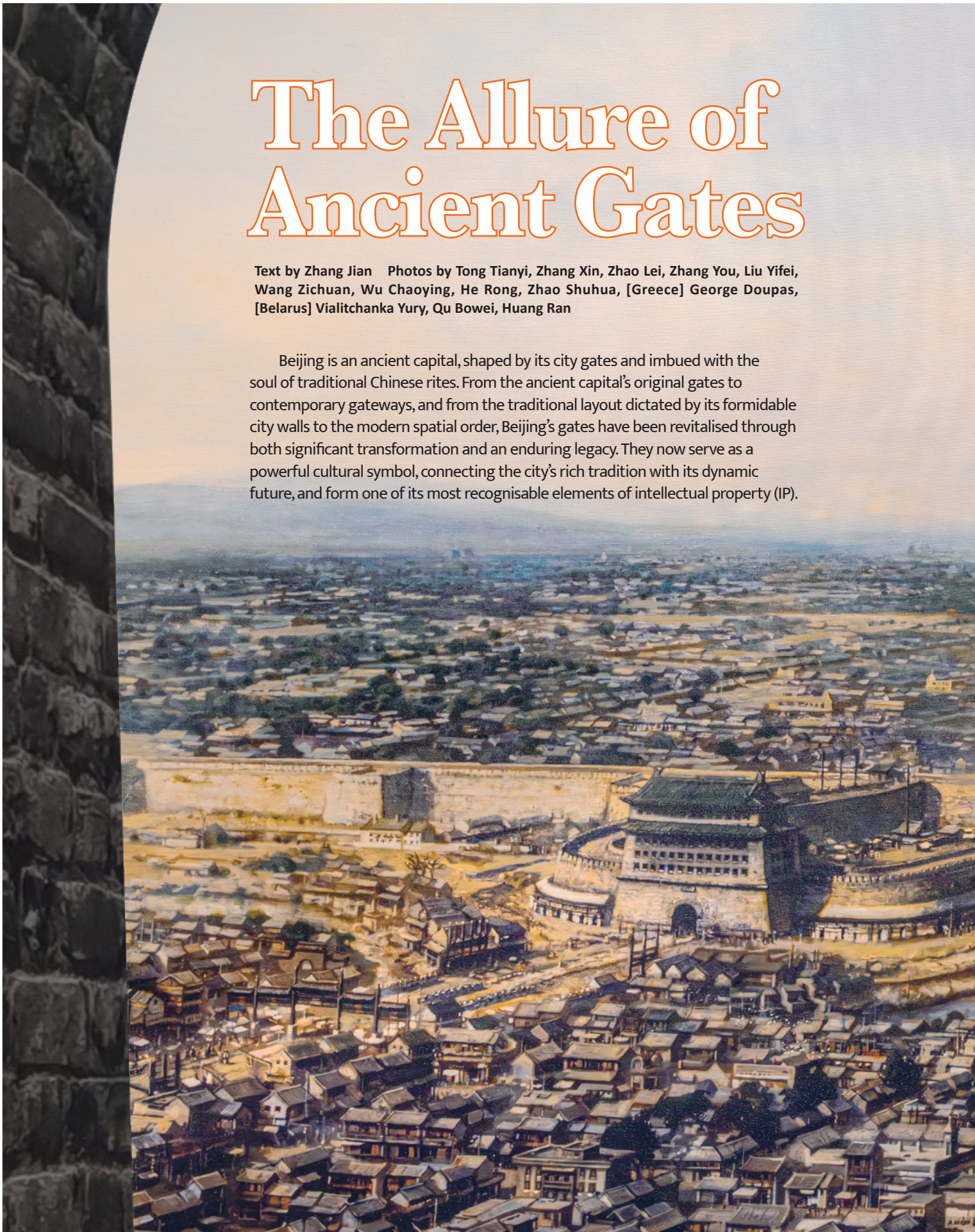


中船集团自主建造的“梦想”号
The "Mengxiang," China's first domestically designed and built deep-ocean drilling vessel

The Allure of Ancient Gates

Text by Zhang Jian Photos by Tong Tianyi, Zhang Xin, Zhao Lei, Zhang You, Liu Yifei, Wang Zichuan, Wu Chaoying, He Rong, Zhao Shuhua, [Greece] George Doupas, [Belarus] Vialitchanka Yury, Qu Bowei, Huang Ran

Beijing is an ancient capital, shaped by its city gates and imbued with the soul of traditional Chinese rites. From the ancient capital's original gates to contemporary gateways, and from the traditional layout dictated by its formidable city walls to the modern spatial order, Beijing's gates have been revitalised through both significant transformation and an enduring legacy. They now serve as a powerful cultural symbol, connecting the city's rich tradition with its dynamic future, and form one of its most recognisable elements of intellectual property (IP).



In ancient times, these gates not only marked directions and demarcated different spaces, but also reflected deeply profound principles of ancient Chinese rites and civilisation, serving as prominent features of the city's layout. Spanning more than eight centuries, from Zhongdu (Central Capital) of the Jin Dynasty (1115–1234), through Dadu (Grand Capital) of the Yuan Dynasty (1271–1368), to Beijing of the Ming (1368–1644) and Qing (1644–1911) dynasties, these ancient gates, renowned for their historical charm, functioned as more than mere passageways; they stood as symbols, silently conveying Chinese civilisation's understanding of and dedication to the beauty of order. While many old gates have now disappeared or exist only as ruins, their names remain firmly embedded in Beijing's urban structure. By comparing historical images with the present day, and connecting the ruins with the surviving gates, one can truly appreciate that the spatial wisdom crafted by the original artisans, brick by brick and stone by stone, continues to shape today's urban layout.



A Point of Origin

Jingfengmen Station, the transfer station for Beijing Subway lines 14 and 19, may seem an ordinary space today. However, Jingfengmen Gate once served as the southeastern city gate of Zhongdu, the Central Capital of the Jin Dynasty. Over 870 years later, a governmental body responsible for administering Beijing's place names confirmed that the location of the Beijing Subway lines 14 and 19 transfer station precisely coincided with the original site of Jingfengmen Gate. To honour this historic city gate, which existed for just over six decades during the Jin Dynasty, the station was subsequently named after it.

This location once served as a significant gateway to Zhongdu, marking the very origin of Beijing's esteemed role as a dynastic capital.

The history of Beijing as a capital city typically dates back to the era of Zhongdu of the Jin Dynasty, established by the Jurchen people in the 12th century. In 1153, Wanyan Liang (Prince Hailing, reign: 1149–1161) relocated the capital from Shangjing (today's Acheng in Harbin, Heilongjiang Province) to Yanjing (today's Beijing), later renaming it Zhongdu. This pivotal move marked Beijing's transition from a mere city to the political heart of a nation, signifying the beginning of its over eight-century history as a capital.

Zhongdu inherited the sophisticated planning and construction ideas of traditional Chinese capitals, incorporating the very essence of Central Plains civilisation. Its square shape, in particular, was

inspired by Bianjing, the capital of the Northern Song Dynasty (AD 960–1127), and deeply rooted in the ritual civilisation of the Central Plains. Ritual has always been the core of traditional Chinese culture, and the construction of Zhongdu was, in essence, a tangible realisation of this idea. To construct Zhongdu, builders went to great lengths to emulate Bianjing (now Kaifeng in Henan Province). The overall layout of Zhongdu resembled the Chinese character “回.” The Palace City was at the heart of Zhongdu, encompassed by the Imperial City, which in turn was contained within the larger Outer City. This central positioning of the Imperial City symbolised the emperor's pivotal role in the nation.

Beyond its palace structures, Zhongdu also featured important cultural and educational institutions, such as the Imperial Academy. The city was further enriched by its altars, temples, gardens and mausoleums, all serving significant ritual or functional purposes. Zhongdu operated not only as a political centre but also as a vibrant melting pot of diverse cultures. The languages, traditions and customs of these varied ethnic groups intermingled and integrated, fostering a dynamic cultural ecosystem where each influenced and enriched the others.

The city's population featured a rich cultural diversity, which permeated its urban layout and architectural styles. The renowned Eight Scenic Views of Yanjing, among which include Taiye Pool, Jade Islet, Yuquan Hill and Lugou Bridge (Marco Polo Bridge), originated from the Zhongdu era, becoming part of its enduring heritage. Additionally, numerous Buddhist and Taoist temples,

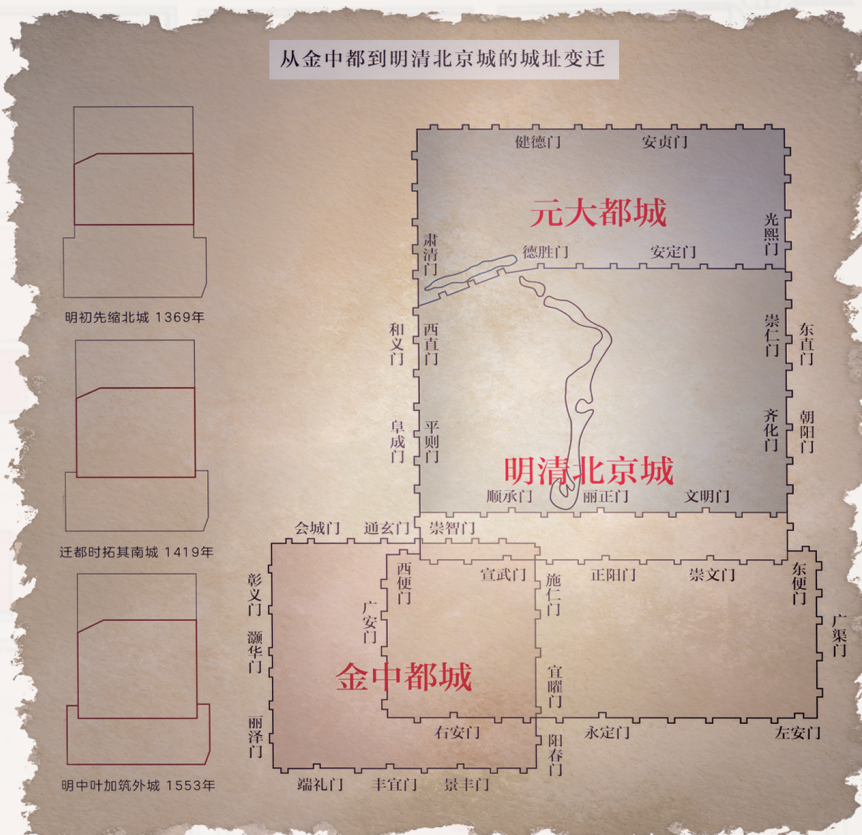


Zhongdu of the Jin Dynasty Park

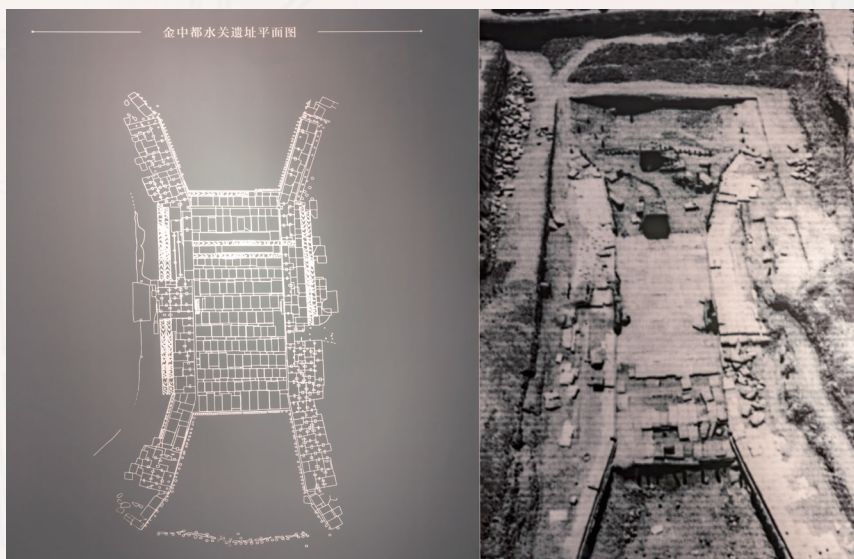
including Fazang, Gongde and Xiangshan temples, became popular destinations for scholars and poets in ancient times. Some even served as models for later imperial gardens. Although many of these scenic views have not survived, historical sites like Lugou Bridge and Taiye Pool (present-day Beihai Park) have been remarkably well-preserved. They reflect Zhongdu's diverse and rich cultural identity, showcasing a unique historical foundation for today's Beijing.

The influence of Zhongdu on Beijing's urban development remains visible today. While the four gates on Zhongdu's northern wall now exist only in historical records, Huichengmen Gate, one of these four, has been revived in another form, appearing in the names of Huichengmen Gate Park, Huichengmen Gate Bridge and Huichengmen Gate Shopping Mall. Zhongdu's western wall featured three city gates, including Lizemen Gate. Today, the area east of the South Third Ring Road in Fengtai District retains place names such as Lize Road, Lize Bridge and Lize Park, all derived from their proximity to the former Lizemen Gate. Furthermore, Chongxiao Temple existed in Nanjiloufang of Zhongdu. During the Ming and Qing dynasties, the temple adopted a homophone name. Present-day Chongxiao Hutong on Baiguang Road in Xicheng District takes its name from this Jin Dynasty temple. Even Diaoyutai, located in Yuyuantan during the Jin Dynasty, has survived to this day. The modern-day Diaoyutai State Guesthouse continues to use the original Jin Dynasty legacy name.

The place name Jingfengmen Gate links the urban planning and design of Beijing's earliest role as a capital, 870 years ago, directly to the rhythm of the modern metropolis. Zhongdu also marked the beginning of Beijing's evolution from a city into a dynastic capital, laying crucial groundwork for its subsequent esteemed status. In 1264, Kublai Khan (1215–1294) designated Yanjing as Zhongdu, directly inheriting the name from the Jin Dynasty. He then established the Yuan Dynasty in 1271 and renamed Zhongdu as Dadu. After



▲ The evolution of the city site from Zhongdu of the Jin Dynasty to Beijing of the Ming and Qing dynasties



▲ Layout of the Water Gate Ruins at Zhongdu of the Jin Dynasty

Emperor Chengzu (reign: 1402–1424) of the Ming Dynasty took the throne, he relocated the capital from the south to the north, renaming the new capital Beijing. Later, Emperor Shunzhi (reign: 1644–1661) of the Qing Dynasty relocated his capital from Shengjing (now Shenyang) to Beijing, formally establishing it as the Qing Dynasty's seat of power. From Zhongdu of the Jin Dynasty to Dadu of the Yuan Dynasty, and subsequently to Beijing of the Ming and Qing dynasties, the city's unbroken history as a capital city continued. It stands as the only city in Chinese history to have transitioned from the capital of ancient dynasties to the capital of the modern era. Over this span, its urban system gradually matured and became fully developed.



Deshengmen Archery Tower at night



Historical photograph of Deshengmen Archery Tower

An Authentic Representative

Amidst the traffic on Beijing's North Second Ring Road stands Deshengmen Archery Tower, a former crucial military facility and an integral part of the city's urban design. Its predecessor, Jiandemen Gate, was one of Yuan Dadu's northern gates, defending the capital alongside Anzhenmen Gate. According to *Geographical Records* written during the Yuan Dynasty, Jiandemen Gate served as both an entry point and a site of significant political and military importance. The emperor would exit through this gate during inspections of Shangdu, with officials gathering to bid him farewell. Ultimately, Emperor Shundi (reign: 1333–1370) fled north through this very gate, marking the end of the Yuan Dynasty.

While not the longest-lived capital city, Yuan Dadu held paramount significance. Dadu is widely regarded as the direct predecessor of modern Beijing's essential urban layout.

Beginning in 1267, under the imperial edict of Kublai Khan, construction commenced on a new capital to the northeast of Zhongdu. Named Dadu in 1272, this capital was not simply a renovation of the former site but an entirely new creation. This magnificent capital city quickly became a benchmark in the history

of urban planning, not only for Beijing but for ancient China as a whole.

As the last capital in ancient China built entirely from the ground up, the creation of Dadu represented not only a profound influence of Han culture on the Mongolians, but also an unparalleled success in the implementation of the principles of traditional Chinese capital construction.

History of Yuan · Geographical Records notes Dadu encompassed a circumference of 28.6 kilometres (km), forming a slightly rectangular shape and covering approximately 50 square kilometres (sq. km). The city incorporated 11 gates—three positioned on the southern, eastern and western walls, respectively, and two on the northern side—all deliberately arranged opposite each other along straight thoroughfares. The Central Axis, stretching from Lizhengmen Gate to the Drum Tower, meticulously organised neighbourhoods, palaces, altars, temples and government offices in a precise chessboard pattern. This comprehensive layout reflected the rigid political hierarchy and ritual order while simultaneously harmonising with natural elements and practical necessities, aligning perfectly with the *Book of Rites · Kaogongji's* design of nine north-south and nine east-west streets, forming a highly structured urban network.

Dadu represented a city built on institutions and ideas, a testament to a

spatial manifestation of imperial power. According to the principles outlined in the *Book of Rites · Kaogongji*, government offices were concentrated south of the Imperial City ("Imperial Court facing south"), while the market thrived to its north ("market in the rear"). Facing south, the Imperial Ancestral Temple stood to the left (east), and the Altar of Land and Grain to the right (west).

Dadu's urban design displayed remarkable precision and order at both macro and micro scales. Main streets were 24 steps wide, while smaller streets measured 12 steps. Adjacent hutongs were spaced roughly 77 metres apart. Within each neighbourhood, lands were allocated in units of eight *mu* (one *mu* equals approximately 0.067 hectare), with priority given to affluent families. The government imposed strict regulations on settlement and land use, establishing a clear social hierarchy that reflected an ordered society.

In Dadu, hutongs aligned seamlessly with street orientations, creating a remarkably neat layout. Residential courtyards, typically square and regular, faced south towards the Palace City. From the large eight-*mu* courtyards of the upper class to the smaller courtyards for commoners, each structure contributed significantly to Dadu's intricate urban fabric. This top-down planning ensured

that every plot served a precise purpose in the city's rational development.

Annals of Xijin, written during the Yuan Dynasty, records street names such as Qianbu (Thousand-Step) Corridor Street, Zhonglou (Bell Tower) Street and Qipan (Chessboard) Street, showcasing the era's naming conventions and their associated functions. This chessboard-like layout deeply impressed Marco Polo (1254–1324), who famously noted, "On both sides of each street are various shops and houses. The streets are quite straight, allowing visibility from one end to the other, enabling people to see one city gate from another along the same street."

Modern archaeological excavations have validated China's historical records and Marco Polo's accounts. The 1970s Houyingfang excavations in Beijing uncovered Dadu's distinct lane, alley and residential patterns. These revealed various sites: eight-*mu* courtyards, standard courtyard houses, closely packed "unit houses" and small residences under eight square metres. Such findings underscore the integration of different social classes and residents' adaptation to nature and spatial order. This tradition persisted into the Ming and Qing dynasties, forming the basis for Beijing's traditional quadrangle courtyards and its modern hutong culture.

Present-day Beijing features numerous place names reflecting Dadu's cultural legacy, including Deshengmen, Anzhenmen, Dongdan, Xidan, Dongsì and Xisi. These seemingly ordinary names originated from Dadu's original urban layout. The Beijing Central Axis runs south from the Bell and Drum towers, passing through the Forbidden City, Tian'anmen Gate and Zhengyangmen Gate, extending to Yongdingmen Gate. This arrangement precisely mirrors the original "nine north-south and nine east-west streets" pattern of Dadu.

More significantly, the urban development concepts established during the era of Dadu—namely, order, balance, ritual and practicality—have consistently served as core guiding principles for Beijing's ongoing evolution. Throughout the Ming and Qing dynasties, Beijing maintained the essence of Dadu's original layout, and remnants of its distinctive features remain evident in modern urban planning even today. As a true pioneer, the city of Dadu established a foundational framework, thereby solidifying the enduring cultural tradition of the capital.

In the history of global cities, Beijing stands out as one of the rare modern metropolises that still prominently features its ancient planning principles. This enduring characteristic represents the most profound legacy that Dadu bestowed upon today's capital city.



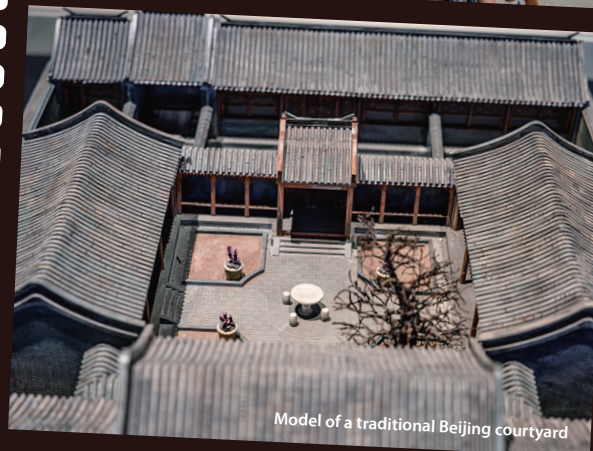
Yuan Capital City Wall Relics Park



A hutong in Beijing



Visitors pose in front of the Drum Tower



Model of a traditional Beijing courtyard

The City's Backbone

In Beijing's southern urban areas stands the impressive Yongdingmen Gate, serving as the main gate to the Outer City during the Ming Dynasty. It was a crucial passage for emperors on southern inspection tours and a site where officials bid farewell and welcomed them back. From this gate, a north-south axis extends through the city, passing Zhengyangmen Gate and Tian'anmen Gate to reach the Forbidden City, Jingshan Park and the Bell and Drum towers, before extending into northern areas. This entire stretch forms the Beijing Central Axis.

If Dadu served as a model capital, the Ming and Qing dynasties further expanded and perfected the city based on Dadu's original layout. This evolution resulted in the old city of Beijing as it is known today, distinctly characterised by the urban plan established along the Central Axis during the Ming Dynasty.

In 1368, Zhu Yuanzhang established the Ming Dynasty, becoming Emperor Taizu (reign: 1368–1398), and initially designated Nanjing in the south as the capital. However, unrest and conflicts often persisted along the northern border. After his fourth son, Prince Yan (Zhu Di), successfully rebelled against his nephew, Emperor Jianwen (reign: 1398–1402) and seized the throne, he chose to relocate the capital from Nanjing to Beijing in the north to secure his rule. Consequently, in 1406, the fourth year of the Yongle Period (1403–1424), a large-scale reconstruction of Beijing was initiated. This undertaking was more than a simple renovation; it was a project

to rebuild the capital city, driven by strong political motivations. The new Beijing evolved from Dadu, but the Imperial City's location was shifted from the northern to the southern part of the city, thereby moving the city's centre of gravity southward.

During the Jiajing Period (1521–1567) of the Ming Dynasty, Beijing's Outer City was extended southward, making Yongdingmen Gate the city's southernmost gate. From this point forward, the Central Axis took its definitive form, stretching approximately 7.86 km from Yongdingmen Gate in the south to the Bell and Drum towers in the north. This established it as the world's longest urban Central Axis. Architect Liang Sicheng (1901–1972) famously described it as "the greatest urban Central Axis in the world." Today, this same Central Axis, so highly praised by Liang and historian Hou Renzhi (1911–2013), has now become the pre-eminent feature among Beijing's urban IP.

The construction of the Central Axis during the Ming Dynasty was a gradual process. During the Yongle Period, the Forbidden City and the Imperial City were built as the orienting elements defining the Central Axis. Subsequently, in the Jiajing Period, the Outer City's southward expansion provided the essential physical infrastructure for establishing the Central Axis's southern segment. Even today, the Temple of Heaven and the Altar of the God of Agriculture remain positioned in an east-west symmetrical arrangement along its southern section, symbolising ancient China's two foundational pillars: the veneration of Heaven and the importance of agriculture. In the north, Jingshan Hill, artificially constructed during the Ming



A large-scale model of old Beijing at the Beijing Municipal Archives

Dynasty, replaced a central platform from the Yuan Dynasty and became the highest vantage point within Beijing. This effectively added a definitive “full stop” to the Central Axis’s northern end.

Following the Qing Dynasty’s continued designation of Beijing as the capital, the city walls remained unchanged, faithfully adhering to the layout established during the Ming Dynasty and reinforcing the Central Axis’s symbolic significance.

The character “zhong” (“central”) in the term “Central Axis” represents more than just a geographical midpoint; it also embodies a profound cultural and cosmological nucleus. Within traditional Chinese philosophy, “zhong” symbolises equilibrium, correct alignment and general harmony. In ancient times, the Central Axis was meticulously constructed with this “central way” concept in mind, positioning the Imperial City at the “centre of the universe.” This symbolised the very heart of the nation, upon which its vast population depended.

Historically in Beijing, the Central Axis structured the city’s ritual functions, directed its daily operation and profoundly shaped the residents’ behaviours.

The Beijing Central Axis remains clearly visible in the 21st century. It transcends its historical role as a symbol of power, now standing as the core of the city’s culture. In 2024, the “Beijing Central Axis: A Building Ensemble Exhibiting the Ideal Order of the Chinese Capital” was officially inscribed on UNESCO’s *World Heritage List*. As the world’s longest and best-preserved urban Central Axis, it represents the ultimate expression of Chinese civilisation’s spatial order.

Perhaps more importantly, it has become a symbol of Beijing’s cultural identity.

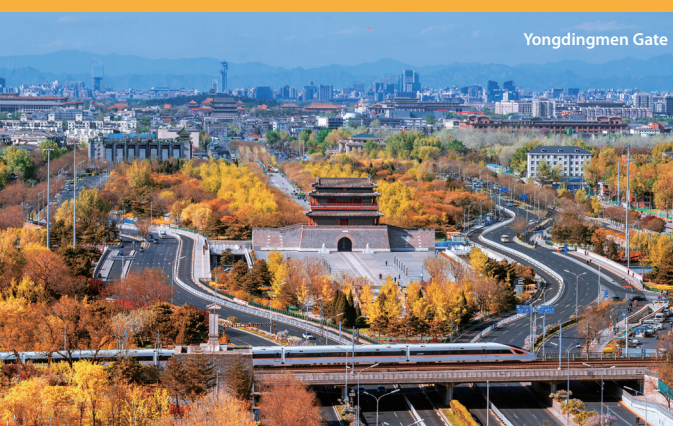
If the city is akin to a human body, the Central Axis serves as its strong and unbroken spine. While many Ming Dynasty city gates have since been demolished, the Central Axis itself endures. It connects not only the landmark buildings in the city’s core areas, but also the internal structure of a culture—an ancient wisdom truly centred on the idea of “zhong” as a worldview. Amidst the steel jungle that is today’s Beijing, the Central Axis powerfully signifies inner order, central stability and the enduring core of Chinese civilisation.

Variations

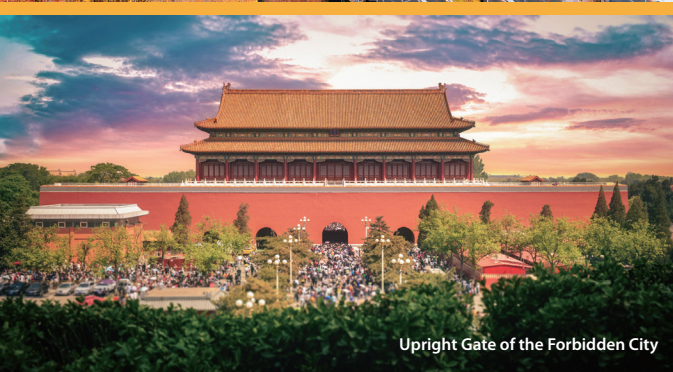
Since the Ming and Qing dynasties, Zhengyangmen Gate has stood majestically along the famed Central Axis. In ancient times, as the very “Gateway of the Nation,” it witnessed the intricate interplay between imperial rituals and the daily lives of ordinary people.

Following the 1911 Revolution and the fall of the Qing Dynasty, the ancient capital underwent a series of profound urban transformations during the era of the Beiyang government (1912–1928). Zhengyangmen Gate, once an imposing symbol of imperial power, quietly transitioned into a key node within the city’s modernisation efforts.

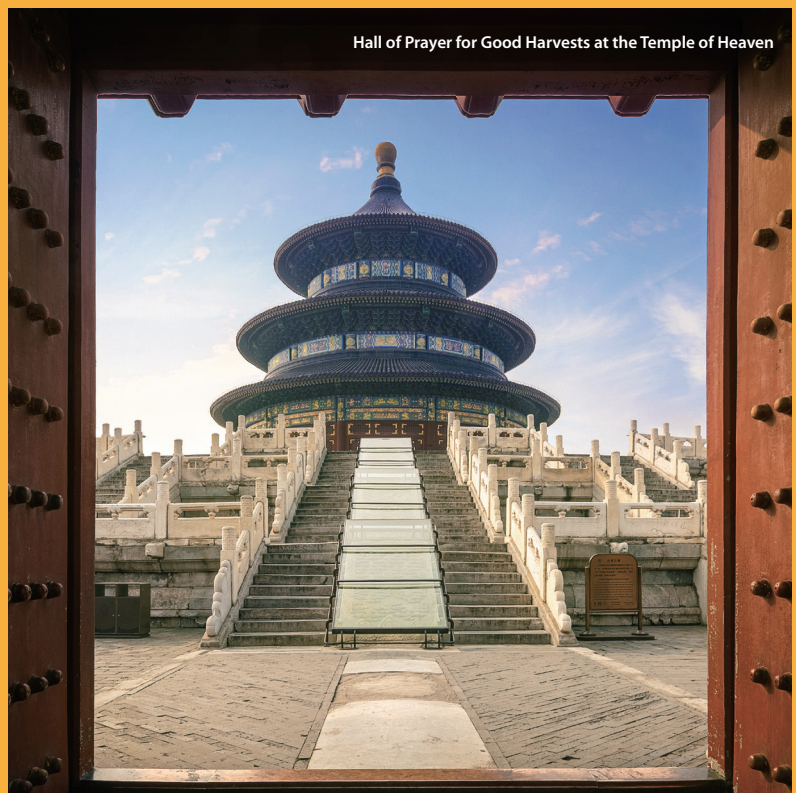
In the summer of 1914, Zhu Qiqian (1872–1964), Minister of Internal Affairs, Minister of Communications and Director of the Capital City Municipal Administration Office, proposed demolishing



Yongdingmen Gate



Upright Gate of the Forbidden City



Hall of Prayer for Good Harvests at the Temple of Heaven



Historical photograph of the Xiangchang New Urban Area



Taianli's revitalised Longtang Space

Zhengyangmen Gate's eastern barbican wall to ease worsening traffic congestion. While seemingly a minor infrastructure renovation by contemporary standards, this act signified a critical advancement for Beijing. It represented the city's shift from closure to openness, and its transformation from being defined by ritualistic systems to prioritising public utility.

Today, Zhengyangmen Archery Tower stands proud, its function now evolved beyond that of a purely defensive structure. Under Zhu's leadership, the German architect Curt Rothkegel (1876–1946) revitalised the Archery Tower. Employing the New Roman style, he incorporated features such as expansive steps, continuous arched window frame decorations, large reliefs and viewing platforms. This redesign transformed the former military defence site into a prominent city landmark, serving both commemorative and aesthetic purposes.

The renovation of Zhengyangmen Gate was not an isolated event; it was intrinsically connected to a wider spatial transformation for the entire city and a significant ideological shift for its people. During the Ming and Qing dynasties, Beijing functioned as a highly hierarchical and heavily guarded imperial capital.

Following the fall of the Qing Dynasty, Beijing began dismantling its traditional institutional framework and urban layout. The city transitioned from being solely the emperor's residence and started developing public domains. In 1914, the establishment of the Capital City Municipal Administration Office initiated the gradual dismantling of

the city's enclosed structure. Gates like Dong'anmen Gate and Xi'anmen Gate were removed, along with sections of the Imperial City walls, significantly improving urban traffic flow. The once "forbidden area" of the Imperial City then opened to public access, marking a crucial shift from imperial power to a shared, publicly accessible space.

Concurrently, as Beijing's spatial structure gradually opened, the Municipal Administration Office actively explored reconstructing the capital's modern urban functions and revitalising its patterns of daily life. Among these numerous endeavours, the construction experiment in the Xiangchang New Urban Area undoubtedly stood out as the most representative example.

Zhu selected Xiangchang, outside Xuanwumen Gate, as a model for urban renewal, aiming to create a modern district through a "Western-style municipal experiment." This marked Beijing's first systematic infrastructure development, encompassing roads, power lines, running water and sewage systems. It also introduced contemporary practices such as construction bidding and land lease tendering, alongside new catering, entertainment and other businesses in the area.

The renovation of Xiangchang significantly enhanced Beijing's infrastructure and traffic, while also profoundly impacting the lifestyles of

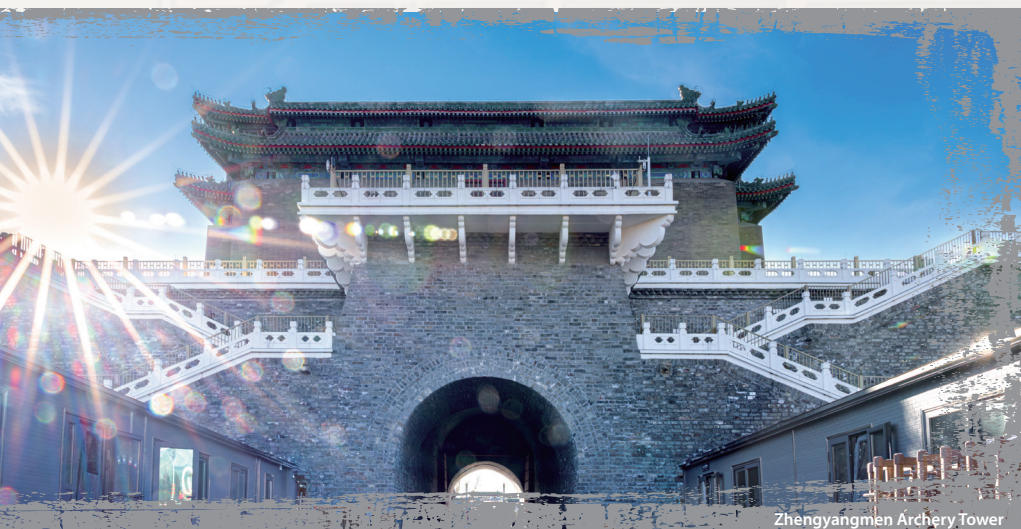
the city's residents. For the first time within the ancient capital, a modern urban living model emerged, distinctly emphasising efficiency commercial accessibility and public amenities.

During this period, the reshaping of urban space was inevitably intertwined with changes in transport means. If the Xiangchang New Urban Area represented an early model for modern urban neighbourhoods, then establishing a public transport system fundamentally altered the city's rhythm and significantly expanded the ancient capital's living radius.

In 1916, the Beijing Ring Railway was completed and opened to the public. Subsequently, in 1921, the Beijing Tram Company was founded. Just three years later, the first tram line, running from Zhengyangmen Gate to Xizhimen Gate, officially began operations. Gradually, Beijing then transitioned towards a modern urban lifestyle, significantly facilitated by these new tram and railway systems.

Beyond efficient streets and convenient transport, a city also requires spaces for the spiritual well-being of its residents. At the time, as public consciousness grew in Beijing, the development of parks across the capital marked a significant historical shift. This transition saw these areas evolve from being "imperial forbidden areas" to spaces "shared by all residents."

In 1914, Zhu funded the creation of Beijing's first modern park, Central Park (now



Zhongshan Park). Following its establishment, Beihai Park, Xiannongtan Park, Jingshan and the Imperial Ancestral Temple were all opened to the public. These significant spaces transitioned from being exclusive areas for the imperial family's rituals and private gardens into everyday leisure spaces for residents, symbolising a notable shift towards modern urban civilisation.

These parks not only provided recreational and leisure spaces, but they were also imbued with functions of national education and the promotion of social norms. Public hygiene facilities were established within them to foster social morality, while national education initiatives advanced the dissemination of new social etiquette. Consequently, Beijing experienced transformation not only in its physical aspects but also made significant strides towards becoming a modern civil society in a spiritual sense.

As society modernised, the ancient capital began to move beyond its purely political functions, entering a distinct phase of "functional diversification" and "spatial openness." The east-west Chang'an Avenue prominently emerged, and the significant north-south Central Axis no longer played an exclusive role in guiding the city's layout. The entire road network evolved from a conventional chessboard pattern to a blend of radial and ring structures, thoroughly reflecting contemporary trends and the city's "self-adjustment." As imperial authority fell

into decline and public access expanded, the capital truly transformed from an imperial-centric city into a modern metropolis focused squarely on its future and residents.

Rebirth

Over time, Beijing's urban development has resembled a grand symphony, evolving from the resounding melody of Zhongdu

during the Jin Dynasty to the majestic tunes of Beijing during the Ming and Qing dynasties. Since the founding of the People's Republic of China in 1949, it has played its most passionate "rebirth" movement. The evolution of today's east-west Chang'an Avenue across the city served as the main theme at that time.

Along the avenue, Jianguomen and Fuxingmen once stood as unique gateways, marking a boundary between old and new. These were not simply vestiges of the city's ancient gates, but were also witnesses to Beijing's evolution from a traditional capital to a modern metropolis, signifying a pivotal change in the city's urban planning from a system of ritualistic axes to a more functional design.

In 1949, Beijing became the capital of the People's Republic of China, initiating its first urban master plan. Initially, this plan faced conflict between idealism and practicality. Ultimately, the pragmatic plan by Zhu Zhaoxue (1904–1965) and Zhao Dongri (1914–2005) gained approval. This approach built the government core within the capital's Inner City, leveraging the geographical and



symbolic advantages of former imperial buildings, thus balancing needs with preservation. In 1953, *The Key Points of the Draft Plan for the Reconstruction and Expansion of Beijing* was issued, marking the start of Beijing's modernisation.

According to the *Beijing Urban Master Plan* from 1957, the capital city would radiate outwards from the core of the old city. Ring roads (Inner to Fourth) would define its growth, with 600 sq.km central areas housing a population of 6 million. The city's spatial expansion would reorganise its functions, integrating industry, transportation, residence and government.

After 1949, urban planning became the intangible "charter" of Beijing, with industrial layout having its biggest impact. The city rapidly transformed from old Beijing into an industrialised metropolis. By the late 1950s, the city developed a comprehensive industrial system, establishing itself as a city characterised by heavy industry.

In actuality, the city's overall planning was not immutable. 1958 saw the city

propose the idea of central urban areas as the "mother city," developing multiple "satellite cities" as its "sub-cities." Guided by this concept, Beijing aimed to alleviate burdens on the old city by creating new urban areas through large projects like Shougang, Miyun Reservoir and Beijing Subway Line 1. By 1979, the total output value of Beijing's heavy industry had risen to become the second highest nationwide, completely transforming the city's image.

However, with the advent of reform and opening up, city administrators gradually recognised that, despite its importance, heavy industry did not support Beijing's pursuit of refined development. Consequently, in 1983, the *Beijing Urban Master Plan* was issued, clearly defining the city's dual role as both the national political and cultural centre. Its heavy industry would soon be replaced by the development of high-precision and advanced industries. Over subsequent decades, the capital's developmental philosophy underwent a fundamental

transformation, evolving from a focus on sheer quantity to an emphasis on quality, and from simple outward expansion to promoting organic renewal.

In 1992, the fifth edition of the *Beijing Urban Master Plan* explicitly articulated the goal of developing the city into a modern, international metropolis. This initiated a period of significant urban renewal, including expanding Beijing Capital International Airport, constructing a comprehensive expressway network and establishing urban greenbelts. In 2004, the sixth edition of the *Beijing Urban Master Plan* was revised early, introducing a spatial framework characterised by "two axes, two belts and multiple centres." This framework designated Chang'an Avenue and the Central Axis as the "two axes," the eastern Central Business District (CBD) and western Shougang as the "two belts," and envisioned multiple new cities replacing traditional satellite cities. The aim was to alleviate pressure on older urban areas. From this point forward, Beijing entered a



Lugou Bridge (Marco Polo Bridge)



1. Universal Beijing Resort
2. Wangfujing Street
3. Beijing Planning Exhibition Hall
4. China National Archives of Publications and Culture

new developmental phase, characterised by a “multi-centre, intensive and ecological” mode.

As the Beijing 2008 Olympic Summer Games drew closer, the “two axes, two belts and multiple centres” framework became strikingly evident from satellite imagery. The Central Axis saw extensions northward towards the Olympic Forest Park and southward to Yongdingmen Gate. Meanwhile, Chang’an Avenue stretched eastward to Tongzhou District and westward to Shijingshan District. This notable spatial expansion also symbolised a strategic outreach. The four new centres—Zhongguancun, Financial Street, the CBD, and the Asian Games Village and Olympic Village—emerged as critical focal points within Beijing’s urban structure.

In 2017, the central government approved the *Beijing Urban Master Plan (2016–2035)*, which for the first time integrated Beijing into the strategic initiative of the Beijing-Tianjin-Hebei region. Under this new plan, Beijing is set to embrace four pivotal functional roles: “political centre, cultural centre, international exchange centre and scientific and technological innovation centre.” Crucially, the city’s development strategy is shifting from an “incremental model” to “reductive development.” This transformation signifies not just an updated vision but also a profound evolution in its governance logic.

The extension and transformation of Chang’an Avenue exemplifies Beijing’s “rebirth.” The once-bustling wholesale markets of Xizhimen have been withdrawn, replaced by a national-level financial technology demonstration zone. Shougang Park has undergone a profound metamorphosis, transitioning from its former identity as a steel production base to become a core area for cultural, sports, tourism and technological innovation. Significantly, this park served as a key venue for the Beijing 2022 Olympic Winter Games, with Big Air Shougang (“Snow Flying Ribbon”) showcasing the remarkable transition of old industrial heritage. Sanlitun has evolved into a prominent fashionable landmark, while the CBD continues its rapid growth. The Beijing Municipal Administrative Centre increasingly demonstrates its vitality. The concepts initially depicted in planning documents have now tangibly materialised into concrete streets, parks and buildings, embodying both the aspirations of the era and the daily lives of its people.

Over more than seven decades, the *Beijing Urban Master Plan* has undergone seven revisions. Like batons passed from hand to hand, these editions shine and are carried forward by dedicated individuals, guiding Beijing’s transformation from a traditional ancient capital into a modern metropolis. The city has evolved from a mere “city” into a vessel of national ambition. Behind these constantly updated blueprints lies the ceaseless evolution and rebirth of the ancient capital.

A Magnificent Transformation

Located in eastern Beijing, Tongzhou District has long been celebrated as the capital city's "Eastern Gateway." From its origins as a farming area to becoming a major hub for canal transport and now serving as the Beijing Municipal Administrative Centre, Tongzhou District functions like a continuously opening gateway. This evolution vividly mirrors the ongoing reconstruction and growth of a city that consistently keeps abreast with the currents of time.

On May 27, 2016, the capital city ushered in another pivotal moment. The Political Bureau of the Central Committee of the Communist Party of China decided to initiate the planning and construction of the Beijing Municipal Administrative Centre. This signified that Tongzhou, the "Eastern Gateway," would embark on a brand-new chapter in reshaping Beijing's urban layout.

A period of only nine years proved sufficient to witness a new city's metamorphosis. From the initial blueprint idea to the construction of its streets and alleys, the Beijing Municipal Administrative Centre's development has progressed steadily. The Comprehensive Transport Hub

of Municipal Administrative Centre Station stands in the heart of Tongzhou District, aptly named the "Sail of Beijing," symbolising a setting sail to greet visitors from all directions. This massive project, situated on the Grand Canal's banks and adjacent to the East Sixth Ring Road, boasts an integrated above-ground and underground design, as if carving a deep corridor through the urban fabric. Above ground, commercial, park and residential spaces are interwoven and seamlessly integrated, while below the surface, multiple subway lines, intercity and suburban railway lines converge, realising a three-dimensional urban idea featuring an underground transport hub and diverse above-ground functions.

When transport transcends its function of merely transporting products and people, it seemingly serves as a connector for various parts of a city and a vessel of their spirit. Tongzhou District, as a gateway to a new era, now begins to embody the strategic importance of leading regional coordination, cultural revitalisation and ecological construction.

Another manifestation of the notion of the "gate" lies in the return and regeneration of culture. Tongzhou District is not a "new city" created from nothing. Rather, the millennia-old cultural legacy of the Grand Canal

deeply infuses its essence. This district, established along the Grand Canal, has historically shouldered the responsibility of safeguarding the capital while promoting trade and prosperity. Today, with the significant development of the Beijing Municipal Administrative Centre, the canal has once again become a vital link connecting the past and the future.

A gate represents both passage and connection. The Beijing Municipal Administrative Centre's transformation is evident not only in architectural reshaping and urban planning, but also in the renewal of ecological and humanistic ideals.

While Beijing's ancient "gates" served primarily defensive and ritual purposes, today's "gates" symbolise openness, movement and connection. From Tongzhou District, it stretches to Hebei Province and links to Tianjin, forming, with Xiong'an New Area, Beijing's "new two wings," and then extending to the north, south, east and west. The Beijing Municipal Administrative Centre is becoming a significant engine for the regions around the capital, marked by a grand, inclusive approach. At a deeper level, these "gates" signify a shift in governance: from single-centre to multi-centre development, from spatial expansion to intrinsic growth, and from resource accumulation to balanced distribution. An enhanced capacity for



the capital's self-awareness and self-regulation underpins this profound transformation.

"Metamorphosis" is not a sudden miracle but an orderly, gradual process. The "gate" of Tongzhou District not only paves the way to the future but also reflects the ancient capital's enduring ritual order and layout. In this ongoing urban renewal, each instance of a gate being opened, pushed through or simply passed through, represents a tribute to history and a vital dialogue with the present era.

Today, Beijing has long transcended the limitations of its city walls, evolving into a magnificent urban complex characterised by multi-core interaction and axial support. However, those former gates still stand within the city, preserving vital links between the urban fabric and its inhabitants. Today, Tongzhou District, the capital's "Eastern Gateway," is emerging as Beijing's most dynamic "facade" in this new era, distinctly defined by its rich culture, harmonious environment and sophisticated governance.

For Beijing, the gates function as both historical witnesses and temporal markers. The city's gates are now opened to a fusion of millennia of traditions and contemporary aspirations. While modern Beijing extends far beyond its former city walls, its original gates persist, offering tangible historical imprints and powerful symbols of order. After passing through these gates, visitors will not only traverse the city's streets and lanes but also explore its history and urban layout.

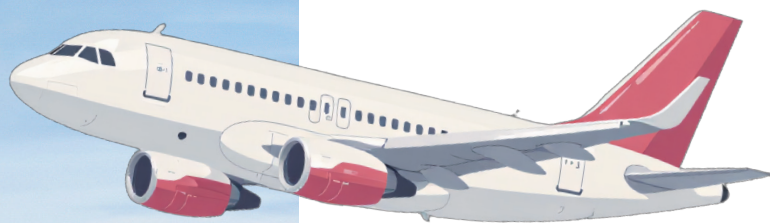


Three major cultural landmarks in the Beijing Municipal Administrative Centre

Gates Extending in All Directions

Text by Ma Kai Photos by Tong Tianyi, Yan Yusheng





Upon closer inspection of the Chinese characters “北京” for “Beijing,” the character “北” (“Bei”) resembles two people back-to-back, or, more precisely, an open double-leaf gate. Beijing, an ancient yet modern city, bears thousands of years of history and culture, and bursts with vigour of the new era. The dense criss-crossing transport network is its open gateways to welcome guests from afar and extend the influence of the city further.

In the diversified city, countless Intellectual Property (IP) can represent the image. Nevertheless, whether human flows, logistics or the recurring yet ever-updating dialogues between cultures and people, all converge or diverge along the transport network comparable to a thoroughfare. As a result, an in-depth recognition of Beijing always starts here.

Dance of the Sky

When dawn gently penetrates through clouds onto the magnificent buildings of Beijing Daxing International Airport (BDIA), the airport's shape of "a phoenix spreading its wings" design is instantly illuminated, glittering in sunlight, like an auspicious bird ready to soar up and hover in the vast sky. Passengers from all over the globe, with their suitcases loaded with dreams and expectations, shuttle in the spacious, bright and modernised terminal. People

of different backgrounds greet each other. The warm or polite voices, woven with the clear prompt tones from the self check-in kiosks, sound like a harmonious and melodious modern symphony, which plays the bustle and vigour of the airport as an international transport hub.

Echoing in the distance, Beijing Capital International Airport (BCIA) is like an elder going through vicissitudes of time yet remaining hale, standing still proudly, witnessing each firm pace of China in opening up to the outside world and bearing a myriad of historical memories

and changes of times. In today's broad context of the economic globalisation era, the significance of the airport has undergone a profound transformation. It is no longer limited to the traditional place of departure and arrival, or a transport site simply pierced with runways and terminals. Beyond a pure concept of the airport, it serves as a robust engine in leading the vigorous development of regional economy, and more importantly, an indispensable new power source in the overall development of the nation.

Wandering inside Terminal 3, BCIA, people feel as if staying at an international crossroads, where worldwide multi-cultures collide and merge. Passengers come and go from all over the world, speaking different languages, with their unique cultural backgrounds and stories, forming a colourful scroll here. The aviation hub, honoured as the "first national gateway of China," acts as a hospitable host who opens arms wide cordially to offer each passenger from around the globe a warm hug, making each guest from afar feel cozy and assured.

In retrospect, immediately after the founding of the People's Republic of China in 1949, the country began planning the construction of new airports. In 1958, BCIA was built in Shunyi District. As the nation's first large civil airport built after 1949, it marked a key step officially taken by China's civil aviation cause.

In 1972, President Nixon of the United States paid his first visit to China. The historic "handshake across the Pacific" made BCIA a focus of worldwide attention. It witnessed significant moments in the thawing of the Sino-US relationship and became an important witness to China's friendly exchanges with foreign countries. In 1978, the annual passenger throughput of BCIA reached 1.03 million. At that time, China was embracing the world with open arms, and exchanges between China and foreign countries became increasingly frequent. BCIA served as China's window to the world, showcasing the country's new look on the global stage.

In 1995, the annual passenger volume



A waiting area at Beijing Daxing International Airport



▲ Terminal 3 of Beijing Capital International Airport

of BCIA exceeded 15 million. To relieve the passenger flow pressure, the construction of Terminal 2 began. In 1999, Terminal 2 was put into use and set an Asian record with 640 inbound and outbound flights per day, marking a period of rapid growth for China's civil aviation industry.

However, the pace of BCIA did not stop here. In 2004, the construction of Terminal 3 officially kicked off. In 2008, the world's largest single terminal at that time was put into operation. With a distinctive design philosophy and advanced construction techniques, it won praise from global visitors. The massive body proclaimed the rise of China's civil aviation. Nonetheless, with the continuous growth of China's economy and the increasingly deepened opening up, by 2018, BCIA entered the supersaturated operation status.

To solve the oversaturation problem at BCIA and meanwhile support the development of Xiong'an New Area, and promote the coordinated development of the Beijing-Tianjin-Hebei region, BDIA came into being. It took only five years from the start of construction to official

operation. Once again, "China Speed" and "China Quality" shocked the world.

Viewed from above, BDIA is like a phoenix spreading its wings, in a graceful and dynamic posture. In contrast, Terminal 3 of BCIA resembles a dragon presenting a green pearl—grand and majestic. Standing one in the south, and the other in the north, they echo each other, forming the pattern of "prosperity brought by the dragon and the phoenix," which implies auspiciousness and happiness, as if narrating the vitality and unique charm of the ancient capital in the new era.

"Please look at the camera for three seconds to finish facial recognition." At a check-in counter, a passenger from Germany had firsthand experience of convenience and efficiency brought by "contactless customs clearance." Entering the world's largest single terminal feels like stepping into a space infused with technology and a sense of the future. It has full 5G coverage network, enabling passengers to enjoy stable high-speed online connectivity at anytime and anywhere. Intelligent robots roam the terminal, providing

accurate navigation guidance and making it easy for passengers to find their way. Such cutting-edge technologies as AR glasses customs clearance are even among the standard configurations here, bringing an unprecedented customs clearance experience to passengers. More marvelously, in the inventive "column-free space" design in the core area of the terminal, eight C-shaped columns support the cloud-like dome steadily, while natural light penetrates the transparent glass curtain walls onto the bronze sculpture named "One Axis, One City." It depicts 10 landmarks along the Beijing Central Axis that blend perfectly with modern architecture, creating a unique atmosphere that is both rich in historical and cultural heritage, and full of the aura of modern art.

Unlike BDIA brimming with a sense of technology and futurism, BCIA is more like a walking dictionary inscribed with the development history of China's civil aviation, bearing rich history and colourful culture. As the first civil airport put into use after the founding of the People's Republic of China, BCIA witnessed countless "firsts" of



US President Nixon and the first lady arrive at Beijing Capital International Airport aboard Air Force One, 1972

pioneering significance in the development course of China's civil aviation. The introduction of the first Boeing 707 airliner marked an important step in China's civil aviation airliners towards modernisation and internalisation. The first open international flight route broke barriers in China's outbound air traffic and built an air bridge for exchanges between China and the world. The first civil aviation science popularisation open day aimed to popularise knowledge of civil aviation to the public, inspiring their zeal for and attention to the aviation industry.

By contrast, Terminal 3 demonstrates the imposing vigour of the modern aviation hub with a magnificent posture. It not only has a wide, bright space and advanced facilities and services, but also makes constant breakthroughs in intelligent services and sets a standard for the industry. The world's first in-

airport unmanned rail line runs here, which not only improves transport efficiency in the airport, but also brings passengers novel and special travel experiences. The honour of Asia's first five-star environmental-friendly terminal embodies its outstanding achievements in the practice of environmental protection concepts and sustainable development. As the first airport nationwide to implement "One Certificate for Customs Clearance," it greatly simplifies the customs clearance process for passengers and enhances travel convenience.

BCIA witnessed numerous historic moments which are worth recording. From the country's diplomatic milestones in 1972 to the return of Hong Kong to the motherland in 1997, a significant historical event for the Chinese nation,

and then the Beijing 2008 Olympic Summer Games which attracted worldwide attention, this site has stood guard through each of China's major historical milestones. It has served as a steadfast witness, quietly recording these defining moments through its very presence, reflecting the nation's growing engagement with the world and its steady advancement across multiple fields. So far, the airline network at BCIA covers 53 countries worldwide, involving 87 international destinations in total, making a vast and dense air traffic network. Every week, more than 20 flights depart for European cities, including Frankfurt, Paris, London and Munich, forming an air bridge to link China and Europe. More than 50 flights shuttle between Beijing and other Asian cities, including Seoul, Tokyo and Bangkok weekly, establishing closer ties with our Asian neighbours.

With the implementation of the "240-hour visa-free transit" policy, the popularity of China travel continues to rise. The world increasingly desires a more authentic, multifaceted and comprehensive understanding of China, and China responds to the zeal and expectation with a more open approach.

In January 2025, "Beijing Service" airport service areas were officially put into operation in BCIA and BDIA, providing



A colourfully decorated plane takes off from Beijing Capital International Airport

foreign passengers with thoughtful and all-inclusive one-stop services. They cover multiple practical services, including phone card application, cash exchange and cultural tourism consultation. Whether it is resolving communication issues as a new arrival, fulfilling basic consumption needs within the airport and surrounding area, or rich abundant tourism and cultural information, all of it can be easily managed here through the one-stop services.

The “Beijing Service” airport service area in Terminal 3, BCIA, with a noticeable position opposite to Exit B on the Arrival Floor, facilitates passengers to discover and gain services immediately. ATMs from various banks are conveniently located throughout the terminal, allowing foreign passengers to easily withdraw RMB using a wide range of bank cards.

At the service area, foreign visitors can easily apply for the Beijing Pass. With this small but powerful card, visitors can not only use public transport like the metro and bus, but also conveniently make purchases in many cultural and tourism

scenic areas, malls and supermarkets. It truly achieves “One Card All Pass” and provides visitors with great convenience to live and travel in China. The service area also has professional staff to provide passengers with detailed services like cultural and tourism consultation, to help foreign passengers plan their trips better.

The convenient customs clearance services in the city’s airports also win high praise from foreign passengers. On social media platforms, many foreign users share their firsthand experiences of handy customs clearance in the airports. Between the lines, the public can feel strong recognition and satisfaction with airport services. The sincere evaluations are undoubtedly a strong testimony to the quality of airport customs clearance services.

Hearing your native language in a foreign country evokes a feeling of extraordinary warmth. Being able to communicate in their native language means a great deal to foreign passengers, instantly making them feel at ease and welcome in an unfamiliar environment.

Each key point of the entry and exit procedures in the city’s airports is carefully arranged with multilingual signs. These signs are eye-catching in design and accurate in content. Wherever passengers come from, they can easily access the information they need from the multilingual signs and finish the exit and entry procedures smoothly.

In the terminals, apart from the conventional bilingual broadcast in Chinese and English to inform passengers with important information, foreign passengers can also dial a specialised service hotline to get more abundant and diversified multilingual information services, which include such common languages as English, French, German and Russian, to meet the communication demands of passengers from different countries and regions. Even foreign passengers who speak non-major foreign languages have specialised service staff in the airport to assist promptly. They can use AI-powered translation tools to communicate effectively with passengers,





The Beijing Service area at the Terminal 3 in Beijing Capital International Airport



A staff member explains how to use the Beijing Pass at the Beijing Capital International Airport



Beijing Pass, a versatile travel card designed specifically for foreign visitors

ensuring that everyone receives a satisfactory response.

It's worth mentioning that the baggage claim broadcast has been upgraded, transformed from a traditional standard broadcast to "AI-powered plus artificial multilingual broadcast." Through the innovative model, in virtue of accurate identification and efficient processing of AI, in combination with meticulous human review, it can broadcast baggage claim information both rapidly and precisely, offering convenience to foreign passengers.

How can foreign passengers integrate smoothly into local daily life upon exiting the airport, establishing a seamless connection with the city? To achieve this, the People's Government of Beijing Municipality works closely with the airports to jointly promote inbound tourism in Beijing to create a sound environment for foreign passengers to know China from all aspects and fit in to the life in the city.

Information counters within the airports offer detailed brochures in multiple languages. These brochures cover a comprehensive range of information, spanning tourism, employment and education. From handy ways to order takeout and try Chinese delicacies, easy ways to scan QR codes to take the subway and travel around the city, and even how to make an accurate appointment for hospital registration, detailed and all-inclusive tips are offered for foreign passengers arriving in China.

From the completion and opening of BCIA, the first large civil airport built after the founding of the People's Republic of China, to the expansion that brought Terminal 3 with its world-leading flight guidance system, and then to BDIA with its long-term goal of 100 million annual passengers, the construction of these "national gateways" is not only a vibrant chapter in the development of China's aviation industry, but also a testament to the country's rapid economic and social development and its ever-expanding global engagement.



Beijing-Zhangjiakou High-speed Railway

Steel Pulse

Beijing's railway development history is quite similar to a shining metal chain, polished by time, with the steam of the late Qing Dynasty (1644–1911) roaring at one end, and the steel pulse of the intelligent era at the other. Standing before the Beijing–Zhangjiakou Railway Heritage Park at Xizhimen, the rusty rails and the high-speed trains, whistling 100 metres away, form a stereoscopic picture spanning a century.

In the autumn of 1909, the Beijing–Zhangjiakou Railway, like a green dragon just awakened, slowly rolled into Zhangjiakou Station. The merchants in robes on the platform did not expect that 110 years later, the same mountain range would see the silver-white Fuxing EMU (Electrical Multiple Unit) Train passing, so fast that the continuous beacon towers outside windows are replaced by vague silhouettes—from 35 kilometres (km)/hour (h) to 350 km/h. The scales of a transformed steel dragon reflect the century-old growth rings of the gateway in Beijing.

In the early 20th century, the lifeblood of China's railway construction

was firmly held by foreign powers. However, the land between Beijing and Zhangjiakou was brimming with a nation's ambition to break these fetters and build railways independently. In such a historical background, the Beijing–Zhangjiakou Railway unveiled its grand construction prelude.

In 1905, Zhan Tianyou (Jeme Tien Yow, 1861–1919), a patriotic engineer full of zeal and outstanding knowledge, shouldered resolutely the heavy burden of building the railway. After all, at that time, the area from Nankou to Badaling was like a natural moat, especially in the Badaling section, where steep slopes were like an insurmountable high wall lying across the road of railway construction.

Upon learning that the Chinese planned to build the railway themselves, foreign experts uniformly asserted that the mission was impossible. However, Zhan refused to believe them. He led his team into the desolate landscape and began the arduous surveying work.

No advanced surveying equipment was available then, so Zhan had to measure the land inch by inch on his own

A bronze statue of Zhan Tianyou (Jeme Tien Yow)

feet with simple and crude tools in hand, recording the terrain carefully. Finally, after countless days and nights of racking his brain, Zhan cleverly designed the V-shaped railway. Imagine a train slowly climbing to Qinglongqiao Railway Station along one side of a V-shaped track, then—almost magically—the locomotive becomes the rear as it continues forward along the other side of the V. In this way, the nerve-wracking slope problem was ingeniously solved.

The V-shaped railway along Badaling designed by Zhan was once viewed as impossible by foreigners. When the train crossed Jundu Mountain by means of the brilliant “trick” of “heading back onto mountains,” even *The Times* acknowledged, “It’s more sophisticated than the spiral railway in Switzerland.” Standing on the glass walkaway of Beijing–Zhangjiakou Railway Heritage Park now, people can

marvel at the striking juxtaposition between the remnants of iron-cast turnout junctions from that year and today’s Beijing–Zhangjiakou High-speed Railway Tunnel a hundred metres away: The time-honoured V shape supports not only the trains, but also the upright spine of the Chinese people.

When the V-shaped “spine” of the Beijing–Zhangjiakou Railway was still being sketched on the drawing board, Qianmen Railway Station had taken the lead in witnessing the setting sun of the Qing Dynasty. At that time, it was called Zhengyangmen East Railway Station of the Beijing–Fengtian Railway. Beijing, the ancient capital, had a new way of connecting with the outside world, while the railway functioned as a new link between cities. The railway station, known as the “Gateway of Beijing,” both possessed the grace and solemnity of Chinese architecture and skilfully

integrated the grandness and delicacy of Western architecture. The ancient capital finally opened the first door to modern transport. The railway station that began operation in 1903 witnessed significant moments. To discuss state affairs in Beijing, Sun Yat-sen (1866–1925) arrived at the station by train. Some Beiyang warlords boarded the train from the station to escape. Peking Opera master Mei Lanfang (1894–1961) boarded a train from the station to perform in Shanghai. “Hometown” by Lu Xun (1881–1936) also began its story here. When the People’s Liberation Army entered the city in 1949, the station’s baroque bell tower witnessed the raising of the Red Flag at its square. Now it has been transformed into Zhengyangmen Exhibition Hall of China Railway Museum, with timeless exhibits, narrating the grand epic of China’s railways from toddling to leading the world. In the early years, each train

▼ Beijingnan Railway Station



departing from the station would connect with the Beijing–Zhangjiakou Railway at Fengtai Station, like two blood vessels joining to form an artery.

In 1959, to celebrate the 10th anniversary of the founding of the People's Republic of China, the former Zhengyangmen East Railway Station completed its historical mission, while Beijing Railway Station rose straight from the ground in Maojiawan Hutong, Dongcheng District. At that time, the entire city of Beijing was immersed in the boom of nation building, and the construction of Beijing Railway Station attracted much attention.

The workers toiled day and night, expecting to build a nice and pragmatic station. As a result, a magnificent Beijing Railway Station appeared. The new station immediately became a core hub to link the Beijing–Shanghai and Beijing–Harbin railways and other key rail routes

in China, as well as international train services. For quite a long time, Beijing Railway Station bore the largest transport passenger flow in China.

Transport in Beijing is constantly driven forward by the tide of the times. Railway stations shine one after another like resplendent stars above the transport map of the city and usher in a brand new transport story.

On a snowy night in the freezing winter of 1996, the opened Beijingxi Railway Station or Beijing West Railway Station was like a silent giant. The “largest station building in Asia” required 120,000 tons of steel and combined the cornice and bracket designs in traditional Chinese architecture with the concise lines in modern architecture. Viewed at a distance, it is like a towering castle which guards the western gateway of the city. Beijing–Guangzhou Railway joins with Beijingxi Connecting Line here, like a

belt fastened to the capital, which can be tightened at any time. As the high-speed rail network expanded nationwide from this location in 2012, it became evident to people that the 20 tracks reserved on the platforms that year were a prescient indication of the advancements to come in the new century.

Asia's largest railway hub at that time saw the city's Spring Festival travel rush. Migrant workers with woven polypropylene bags squeezed into the waiting hall equipped with air conditioners, where artificial broadcast in loudspeakers was replaced with changing train information on the digital display screen. Traditional Chinese pancake stalls at the Station Square was in the same frame as KFC, like a living specimen of the reform and opening up. The high-speed railways starting from here are like a dense cobweb, stretching to every corner of the country. In the summer



of 2008, the old Yongdingmen Railway Station was undergoing demolition and contrasted with its new dome. The new Beijingnan Railway Station gave off an enchanting ambiance. A boy wearing Crocs pointed to the column-free canopy and asked, "Mom, why do high-speed trains no longer 'cough' when entering the station?" He certainly had no idea that due to the adoption of advanced braking technology, seamless rail design and other cutting-edge technologies, the high-speed rail system has significantly improved. In Beijingnan Railway Station's waiting hall, passengers with suitcases intruded into the selfie background of a girl in traditional Han Chinese costume, forming a freeze-frame of a silent dialogue between classic and modern. Today, the station sees more than 200,000 departures and arrivals every day. Beyond the glass curtain wall, Yongdingmen Gate stands proudly, observing as high-speed trains appear to transcend time and space with their near-ground passage. Each day, as the Beijing-Tianjin Intercity Train rushes through the morning mist at 350 km/h, while passengers can enjoy a warm coffee from a vending machine, reminiscent of the jasmine tea peddled by vendors along the Beijing-Zhangjiakou Railway a century ago. The

only difference is that speed has spread the tea aroma further.

In addition, in 2008, under Xizhimen Bridge, Beijingbei Railway Station or Beijing North Railway Station was like a greenish grey ark, anchored in the arm of the Second Ring Road. At 6 a.m., the first S2 train sets off from here, continues through the morning mist of Juyongguan Pass, to the Badaling Section of the Great Wall. On the Station Square, young people with hiking bags and elders with woven bamboo baskets brushed past each other. Cooking smoke rising from hutong was reflected in the glass curtain wall. It is the starting point of the well-known Beijing-Zhangjiakou Railway! Looking back on those days, Zhan Tianyou, full of patriotic passion and outstanding wisdom, presided over the construction of the railway. The steel dragon loaded with national hope and railway dreams set off here, head up high, ushering in a colourful fresh chapter in the history of China's railway construction. Nowadays, one after another modernised high-speed trains with a stylish look are like glittering silvery dragons that lie still on the tracks, full of energy, loaded with the colourful dreams and earnest expectations of a myriad of passengers. When the train's whistle blows, it moves forward like a flash.

Over the years, Fengtai Railway Station, Qinghe Railway Station and Chaoyang Railway Station were completed one after the other, which collectively began playing a significant role in improving the city's railway transport system.

Fengtai Railway Station, as a major station that integrates a variety of railway transport functions, significantly reduces traffic pressure in southwest Beijing. Like a booster to the transport hub, via dense railway routes, it connects Fengtai District and Beijing's other districts, as well as close neighbouring cities and drives regional coordinated development around the capital. Whether in cargo transport or personnel exchanges, it is smoother and more efficient than ever. Hence, it has become an important force in driving the economic surge in southwest Beijing.

As an important station along the Beijing-Zhangjiakou High-speed Railway, Qinghe Railway Station made a finer transport network for north Beijing. It not only enhances communication and exchanges among cities along Beijing-Zhangjiakou High-speed Railway, facilitates convenient flows of talents, resources and other elements and infuses continuous vitality into the development of neighbouring regions,



Fuxinghao, an advanced high-speed train



▲ Beijing Chaoyang Railway Station

but also effectively disperses commuter flows in northern Beijing and lays a solid foundation for the prosperity and development in northern Beijing.

Chaoyang Railway Station, in particular plays a crucial role in the transportation network of eastern Beijing. With its strong transport capacity and well-developed supporting infrastructure, it draws a large number of travellers and resources from Northeast China and the eastern coastal cities. Numerous trains and convenient transfers make it an important bond between the capital and other regions, promoting inter-regional trade contacts and cultural exchanges. This also fosters international and urban development in eastern Beijing while improving the flow of traffic along the capital's transport arteries.

These railway stations in Beijing have become a beautiful sight in the city, and it's not just for their architecture. The advanced technology inside that makes travel more comfortable, convenient and efficient for passengers. The interconnection between high-speed railway stations and other means of transportation weaves a giant transport system, closely connects the entire city and other regions throughout the country, and infuses constant vitality to the city's development.

Beijing creates wonders inside and outside its tangible and intangible gateways. From the V-shaped old Beijing–Zhangjiakou Railway to the I-shaped Beijing–Zhangjiakou High-speed Railway, and from the “taking-off dragon” of BCIA to the “wings-spreading phoenix” of BDIA, these gateways never close. They have broken free of the shackles of agricultural civilisation and carried forward the legacy of the industrial revolution. Now, they are forging paths for the age of intelligence. Inside the gateways lies the cultural heritage of a city thousands of years old; beyond them stretch vast landscapes traced by wheels and wings.

+ Tips

From a Century-old Station to a Railway Museum

To the southeast of Tian'anmen Square proudly stands the Zhengyangmen Exhibition Hall of the China Railway Museum.

The celebrated hall reconstructed from a century-old station connects the vicissitudes of China's railway during a period of over 100 years. A century ago, it was the starting point of the Beijing–Fengtian Railway. A century later, it has been transformed into an exhibition hall, recounting the remarkable China's railway development.

Over the past century, historic items have become enduring narrators of the story and legend of China's railway development. Early railway land occupation contracts and the “Dragon Locomotive” enable visitors to explore the early, unsteady steps of China's railway development.

In the intelligent exhibition hall, a model of the Beijing–Zhangjiakou High-speed Railway intelligent EMU echoes the V-shaped railway model from a century ago, bridging time and space. Badaling Underground High-speed Railway Station, recreated via digital twin technology, demonstrates the “zero sedimentation” miracle achieved by the Tianyou Tunnel Boring Machine, which integrates the wisdom of Zhan Tianyou with China's AI-era solutions.

The museum's exhibits collectively hold historical memories and foster hope for the future. They invite visitors to board this “train through time” and discover the century-old story of China's railway development.



An aerial photograph of a modern urban landscape. The image shows a mix of green spaces with trees and grass, modern buildings with glass facades, and a network of roads and pedestrian paths. A prominent feature is a large, curved, light-colored area that looks like a park or a large plaza, surrounded by buildings and greenery. The overall scene is bright and clear, suggesting a sunny day.

Gates to the Future

Text by Zhang Yan Photos by Liu Rui, Tong Tianyi, Wu Hui, Qu Bowei, [Belarus] Vialitchanka Yuri, Zhou Shijie

When thinking of the “doors” of Beijing, what comes to mind? The doors leading to the homes in alleyways, the majestic gates of the Forbidden City adorned with golden studs or the ancient city gates that have withstood the test of time? These “gates” symbolise the history of Beijing, along with its warmth and depth. In today’s fast-evolving Beijing, more and more “invisible gates” are opening quietly. Some may not be visible yet within reach, while others may not be physical but lead to the future. Beijing’s intellectual property (IP) is constantly changing, growing and evolving from cultural symbols to solid expressions, and from historical legacies to innovation visions. Driven by the innovation engine of “Three Science Cities and One Area” (Zhongguancun Science City, Huairou Science City, Future Science City and Beijing Economic-Technological Development Area), the flourishing of cutting-edge technologies such as AI, robots and VR, the thriving of high-tech parks and the international innovation waves sparked by events like the China Beijing International High-Tech Expo, the ZGC Forum, and the HICOOL Global Entrepreneur Summit and Entrepreneurship Competition, the “gate of intelligence” of Beijing is opening to the future. More and more people coming to Beijing are witnessing its vitality and unique charm as a hub of technological innovation. Now, Beijing is not only a city with historical legacy, but also a city with intelligent future.

The gates are wide open to embrace the future of all possibilities.





Zhongguancun Square

‘Three Science Cities and One Area’ to Build a Demonstration for Cutting-edge Technological Development

As the first rays of the morning sun gently shine over the high-rise buildings lining the Zhongguancun National Independent Innovation Demonstration Zone, the entire zone is instantly awakened, bustling with vitality amidst the rush of traffic. As the dazzling pearl of Beijing’s “Three Science Cities and One Area,” Zhongguancun is like an ever-burning “engine of the city” that constantly releases powerful momentum for technological innovations.

Starting from the first national high-tech industrial development zone established in 1988 that centred around Zhongguancun, this area has evolved into the Zhongguancun Science City that takes Zhongguancun National Independent Innovation Demonstration Zone as the core and the Zhongguancun Street as the axis, radiates multiple innovation sub-zones and covers the entire Haidian District and part of Changping District,

with a total area of about 174 square kilometres (sq.km). This renowned “Silicon Valley of China” has become a flag-bearer for China’s progress in innovation and development. On the map of technological innovation, Zhongguancun is shaping the future of science and technology with groundbreaking achievements in frontier fields.

The Beijing Academy of Artificial Intelligence launched its “Wujie” series large models, aiming to uncover the fundamental laws of life mechanisms and build a foundation for the interaction of artificial intelligence (AI) with the physical world. The Beijing Academy of Quantum Information Sciences developed the world’s first quantum direct communication prototype, extending communication distance to 100 kilometres (km), setting a new global record in this area. The Chinese Institute for Brain Research in Beijing discovered the role of D-type serine in sleep regulation and achieved the complete reconstruction of single neurons across the entire brain, providing a key technological paradigm for exploring the mysteries of the brain. These breakthroughs highlight the powerful capabilities of Zhongguancun as an innovation resource and inject

core momentum into the global tech competition with “Beijing’s solutions.”

On the construction site for the high energy photon source (HEPS) by Yanqi Lake in Beijing, workers are organised and busy with the final installation and commissioning. This device can be considered a “super-sized X-ray machine” that produces synchrotron radiation light with high brightness and collimation. Like an incredibly sharp “probe,” it precisely analyses the atomic and molecular structures of materials, and provides an unprecedented clear perspective for research in fields such as materials science, physics, chemistry and life sciences.

High Energy Photon Source, Earth System Numerical Simulation Facility, Ziwu Project Phase II and other “facilities of national importance” in Huairou Science City are nestled between mountains and waters, showcasing the strength of the national technological development centre in Beijing.

The country’s major technological advancements have strong appeal, attracting both scientific resources and public attention. During this year’s Public Science Day at Huairou Science City, nearly 10,000 tech enthusiasts gathered by Yanqi Lake, eager to explore these

major technological advancements. In Building X2 of the Institute of Physics of the Chinese Academy of Sciences, Xu Jiahao, a doctoral student, carefully explained the principles and functions of the dilution refrigerator, making complex knowledge sound engaging. Beside him, a group of elementary school students, accompanied by their parents, listened attentively. The Institute of High Energy Physics of the Chinese Academy of Sciences opened some of its core areas where many children gathered around the science exhibition spaces to experience educational games. The diverse interactions and science popularisation lectures have planted seeds of science in children's hearts.

The Material Genome Platform on the fifth floor of Building MA at the Institute of Physics of the Chinese Academy of Sciences is a "must-visit" spot in Huairou Science City where visitors can overlook the panoramic view of the start-up area of the science city and witness its rapid development.

The science city has arranged 37 major technological infrastructures, science and education facilities and interdisciplinary research platforms, of which 29 have been used for scientific research. Sixteen scientific facilities are open to the rest of the world. A total of 329 scientific achievements have been produced. These clusters have gathered 25,000 scientific researchers, including academicians of the Chinese Academy of Sciences and the Chinese Academy of Engineering, outstanding young scientists

and even top foreign specialised talents.

Future Science City, standing by the Wenyu River in Beijing's Changping District, is like a "science and technology dream plant" full of unlimited possibilities, gathering numerous research institutions and high-end industries.

Entering Xiaomi's intelligent factory of next-generation smart phones, visitors are immediately impressed by fully digitalised operations. This "super factory," with an investment of 2.4 billion yuan, has achieved real-time digital twins of process steps and equipment status through the company's independently developed intelligent guidance system and full-scenario 5G network deployment. Engineers, aided by the AR health management system, have what seems like "x-ray vision" to accurately locate and resolve production faults within 1 minute, boosting efficiency by an astonishing 100 times compared to previous methods. Even more impressively, the factory's highly adaptable modular production lines, which shorten setup time to a mere 10 hours, can boost efficiency by a factor of 12 compared to traditional factories. This "dark factory" mode supports

Xiaomi's global supply chain and sets a benchmark for intelligent manufacturing practices in China.

Xiaomi's factory innovation is not an

isolated case. In the "Energy Valley" of Future Science City, the iron-chromium redox flow battery energy storage system developed by Zhonghai Energy Storage Technology Co., Ltd, with 90 percent of the electrolyte being pure water, fundamentally solves the risk of battery fires, with a lifespan of 20 to 30 years. This company's revenue has grown explosively, from tens of millions yuan to an estimated 200 million yuan in 2025, as supported by Future Science City's strategic layout for new energy storage technologies. In 2024, the "Energy Valley" achieved industrial revenue of over 240 billion yuan and attracted leading enterprises such as China Energy Investment Corporation Co., Ltd and China Huaneng Group.

In the "Life Valley," the globalisation of innovative drugs is equally remarkable. BeiGene's Tislelizumab injection, which has been approved for sale in Indonesia, reduces annual medication costs for patients in Southeast Asia from US\$ 80,000 to \$7,000, and is benefiting more people worldwide. As the "leader of innovative drugs" from the Future Science City, BeiGene promoted the clinical development of 15 new molecular entities between 2023 and 2024, and it is expected to achieve its first operating profit in 2025. This breakthrough achievement is supported by the 100-billion-yuan-level pharmaceutical and health industry cluster in Future Science City in 2024. The cluster has attracted nearly 2,000 enterprises,



E-Town sculpture in the Beijing Economic-Technological Development Area, Yizhuang



Future Science City

generating revenue of 104 billion yuan and fostering a comprehensive ecosystem encompassing basic research, clinical translation, production and distribution.

In Yizhuang, the “speed and passion” of China’s cutting-edge manufacturing and technological innovation are showcased every day. With an annual industrial output value of over 600 billion yuan and an annual growth rate of 15 percent, this industrial cluster is becoming a core engine for the high-quality development of Beijing.

As China’s first advanced autonomous driving demonstration zone, the Beijing Economic-Technological Development Area (BDA, or Beijing E-Town) has finished comprehensively upgrading its 600 sq.km vehicle-road-cloud system, deploying more than 3,000 intelligent road testing devices and accumulating over 32 million km of testing mileage (equivalent to circling the equator 800 times). The close integration of industrial chains, including CATL’s batteries, Gestamp’s lightweight bodies and Horizon

Robotics’ AI chips, creates a complete innovation chain, spanning components to finished vehicles. In 2024, Xiaomi’s automobile factory set a new record by producing 100,000 vehicles in just 230 days. This achievement is due to the collaborative efforts of 700 industrial robots and a comprehensive digital management system.

In recent years, incubators in Beijing E-Town successfully incubated over 2,500 core cutting-edge enterprises, covering healthcare, new energy vehicles, robots, intelligent manufacturing, biotechnology and next-generation information technology. The completion of the New Energy and Intelligent Connected Vehicle Parts Park project at Yinghai Town in Yizhuang has added an important support to the high-end and new-energy intelligent automobile industry in Beijing E-town. Jiuzhou Yunjian, a company from Yizhuang, has successfully completed a recovery test of its liquid oxygen-methane engine at the Haiyang Dongfang Aerospace Port in Shandong Province. WeRide, a leading company of intelligent connected vehicles, has officially entered the Saudi Arabian market, offering products such as driverless taxis, minibuses and sanitation vehicles.

Beijing E-Town demonstrates



Huairou Science City

its “innovation density” through the systematic construction of a full-element ecosystem. With a government investment fund of over 50 billion yuan, it leveraged over 200 billion of social capital primarily for the development of high-tech fields. With fund support, LandSpace Technology completed the development of Zhuque-3 or ZQ-3 liquid oxygen-methane rocket, while Galactic Energy achieved high-density launches of Ceres rockets. By 2024, 75 percent of Chinese commercial rocket companies engaged in research and development (R&D) of finished rockets had settled in Beijing E-Town. With a sound talent attraction and retention system, Beijing E-town boasts China’s first one-million-square-metre (sq.m) international talent community and offers 20,000 affordable housing units. In addition, it also provides incentives like “Talent Pensions” and “Venture Investment Funds” to attract top teams from Tsinghua University and Peking University. In 2024, with 44 new specialised and sophisticated “little giant” enterprises establishing operations in Beijing E-town, its total R&D investment ranked second among all areas of the city.

Driven by the “Three Science Cities and One Area,” Beijing leads the nation in the number of national high-tech enterprises, “little giant” specialised and sophisticated enterprises, and unicorn companies, with one new technology company emerging every five minutes. It ranks first in R&D investment intensity nationwide, and is home to over 300 multinational companies’ regional headquarters and R&D centres. These clusters gather rich innovation



▲ Visitors tour the Xiaomi's automobile factory

resources and high-end industrial elements in Beijing, serving as a major driving force in building the city into an international hub for technological innovation. They are also Beijing’s highly representative IPs of technology and innovation, attracting global attention and resources.

Sci-tech Events: Witnessing the Flourishing Growth of Innovation Forces

Beijing is home to many impactful events that constantly invigorate the city’s technological innovation and development. By attending and participating in these events and observing the remarkable progress being made, visitors can experience firsthand how Beijing’s technological innovation embodies the

city’s spirit and its ability to lead the way and shape an intelligent future.

The ZGC Forum, as the top event in global sci-tech innovation exchange and cooperation, attracts outstanding scientists, industry-leading entrepreneurs and visionary investors worldwide in May of every year.

At the 2025 ZGC Forum, two buzzwords were frequently mentioned: innovative thinking and innovative capacity. What fuels China’s rapid scientific and technological advancement and its continuous improvement in innovation? What enables China to consistently achieve breakthroughs? The answer lies in the cutting-edge technological achievements showcased in the permanent exhibition areas of the ZGC Forum.

“Beinao-1,” a brain-machine interface (BMI) product independently developed by



Main venue of the ZGC Forum



An exhibition space at HICOOL



HICOOL Business College

China, has become a focus of attention. It is the world's first BMI system realising high-throughput and wireless full implantation for over 100 channels, which delivers higher stability and manipulation precision and can help patients recover more natural movement abilities. This technology was developed by a new company established by the Chinese Institute for Brain Research in Beijing. It was rapidly transitioned from concept to reality within just two years, showcasing Beijing's strategic foresight in its future industrial planning.

The ZGC Forum is a window for showcasing technological achievements and a bridge for technological cooperation. At the forum, Alex Ariho from African Agribusiness Incubators Network shared a green energy story from Uganda. Three years ago, Sino Soar Hybrid (Beijing) Technology Co., Ltd. built a photovoltaic microgrid for a local medicine warehouse, to solve the long-standing power supply shortage in Uganda. The Beijing Municipal Science & Technology Commission and Administrative Commission of Zhongguancun Park facilitated this collaboration and helped procure cutting-edge new energy generation technologies, which were provided to Sino Soar for free, offering valuable support for such enterprises to "go global."

The ZGC Forum is a "connector" for

global intelligent development. The 2025 ZGC Forum attracted thousands of guests from over 100 countries and regions worldwide, including Nobel laureates, payload experts who just returned from space, leaders of unicorn companies and young entrepreneurs. They gathered to jointly explore new paths for driving technological innovation.

At the China Beijing International High-Tech Expo (CHITEC), dazzling high-tech products showcase the unique charm of technological innovation. The booth of Kunlun Tech at the Dongcheng District exhibition area became the first stop for many visitors. The "theme song," created by the AI music engine Mureka, played continuously at the booth. Visitors eagerly tried creating their own music with AI. In the "simple mode," users only need to input a music description and select the desired music creation model, and Mureka can generate a melody with a single click.

AI empowers all industries, which can be seen in many microcosms at CHITEC. Beijing Chaoyang Environment Group Co., Ltd. unveiled an AI-powered intelligent waste incineration system—the first AI+ waste incineration power generation full-link technology system in China. After just over six months of learning and iteration, the system became as experienced as a "master." The intelligent system possesses the ability to operate stably

across different seasons, complex waste compositions and working conditions. Furthermore, it accurately perceives critical parameters such as material layer thickness, fire line position and flame combustion status.

The booth of Beijing Xinzhihuisheng Technology Co., Ltd. at the pharmaceutical and health care exhibition space attracted many visitors. A graphene flexible sensor placed on the throat and a main control chip worn on the collar work together to transform indistinct speech, inaudible to the human ear, into natural and fluent voice. This AI-powered artificial throat technology demonstrates its unique capabilities. The product quickly translates faint throat muscle signals into a clear voice, with a response time of just two seconds. It requires no implantation, eliminates the pain of surgery and solves hollow sound, mechanical intonation and other issues with traditional tracheal voice generators. This product is expected to be launched soon and may help people with speech disorders to "speak" with dignity in the future.

Meanwhile, several technology park operators showcased the panoramic layout of their tech service systems at the exhibition. For example, Beijing Grid Weilai Technology Co., Ltd presented its latest achievement, the "Weilai Display," which can create an immersive interactive scene through triple screens.

PollyPolymer displayed a 3D printer capable of the “one-click fluid printing.” Wuxi Black Ant Technology’s metaverse interactive platform allowed visitors to travel through a digital world where virtual and physical realities intertwine. The exhibition area hosted over 40 technology projects originating from 10 science and technology parks across the country, spanning cutting-edge fields such as intelligent manufacturing, biomedicine, the metaverse and advanced instruments, showcasing the full-chain service capabilities for the industrial transformation of technological achievements.

CHITEC, a grand stage for gathering technological achievements, serves as an important bridge for promoting the transformation and industrialisation of technological achievements. Through activities such as project matchmaking sessions and investment negotiations, it connects research institutions, enterprises and investors, and promotes the deep integration of technology and capital. This accelerates the commercialisation of scientific innovations from the laboratory to the market and into people’s lives, making technology truly benefit the public and contributing to the high-quality development. Equally captivating as CHITEC, the HICOOL Global Entrepreneur Summit and Entrepreneurship Competition, one of Beijing’s most influential competitions, offers exceptional entrepreneurs and innovation projects worldwide the opportunity to showcase their potential and collaborate for future success.

By 2024, HICOOL had incubated 127 specialised and sophisticated enterprises and 16 unicorn companies. The new post-competition financing of award-winning projects has exceeded 36 billion yuan. Innovation is taking root, sprouting and blossoming in Beijing.

A city thrives by embracing talent, and talent grows through the empowerment of the city. Agile Robot is one of the most representative examples of entrepreneurial success in Beijing. This Munich-based intelligent robot company participated

in HICOOL 2022 and won the Excellence Award. With support from governments at different levels in Beijing, Agile Robots established its China headquarters in Haidian District and a 5,300-sq.m modern factory in Shunyi District. What started as a small team of just a dozen people has grown into a global company with over 2,800 employees, more than 100 patents and a valuation exceeding US\$3.5 billion. Now, Agile Robots has achieved annual sales exceeding 100 million yuan and become one of the highest-valued unicorn companies in the global robot sector. As an increasing number of entrepreneurs and innovative projects gather in Beijing, HICOOL is gradually positioning itself at the centre of the global stage. Since 2020, HICOOL has attracted 34,226 entrepreneurial projects from 167 countries and regions, covering 45,151 entrepreneurs

and has become a bridge connecting high-end talents worldwide with the entrepreneurial ecosystem. In 2025, HICOOL expanded its partners by signing a strategic cooperation agreement with Konza Technopolis Development Authority (KoTDA). This marks the beginning of deep collaboration between China and Kenya in technological innovation, promoting cross-border resource integration and supporting Africa’s digital economy. In the accelerating global trend of tech innovation, HICOOL is not just a competition, but a driving force for global entrepreneurs to resonate and win with Beijing. It injects strong momentum into the city’s goal of becoming a global innovation hub and enables more dreams to come true here. These sparks form a dynamic part of Beijing’s IP and ensure the city’s inspiration never fades.





▲ Li Auto Factory



▲ The Tiangong humanoid robot in action

Surging Momentum: Innovation Achievements Spark Social Progress

Nowadays, from travel and food delivery to online shopping, the Internet has become an essential part of daily life and work. However, in remote areas or places where it is impossible to build communication base stations, how can we make the Internet “ubiquitous”? A bold idea is being realised in China: moving the base stations into space to enable satellite Internet. Orbiting the Earth, eight satellites have formed China’s first low-orbit broadband communication experimental constellation, dubbed “Little Spider Web.” This constellation can provide uninterrupted high-speed Internet connectivity for 30 minutes in areas lacking ground network coverage. The entire constellation is made up of satellites from a unicorn company based in Beijing. Among them, the “Lingxi-03” Satellite is China’s first satellite using flexible solar wings. These wings are only about one millimetre thick and can fold layer by layer. With excellent softness and lightness, they can be folded

and launched together with multiple satellites, significantly accelerating the construction of the satellite Internet.

Seizing the opportunities for the future development of the commercial aerospace industry, Beijing has strategically crafted a “combined approach.” The city has gathered commercial satellite manufacturers, operators and application service providers primarily in Haidian District in the north of Beijing to form the most comprehensive satellite industry cluster in China. The economic development zones in the south of Beijing has centralised over 70 percent of China’s commercial rocket companies. Their products include ZQ-3 (the reusable vertical landing and recovery rocket), Ceres-1 (the first commercial rocket launched at sea) and Kinetica-2 (with its first flight in 2025). The “Southern Rockets, Northern Satellites” pattern is rapidly taking shape in the city.

In 2024, the scale of the core AI industry in Beijing surpassed 300 billion yuan, with 36 related unicorn companies occupying a 50 percent share of the Chinese market.

In the application scenario demonstration zone called “World of Robots,” Galbot is showcasing its unmanned pharmacy scene. With a highly humanoid design, the robot navigates smoothly within the pharmacy, and accurately identifies the locations of various medications. When customers arrive to purchase medicines, it engages in voice interaction, enthusiastically asks about their needs and precisely locates the desired medication based on descriptions. The robot also introduces the medication’s effects, usage and dosage. Additionally, with inventory management function, the robot can monitor the stock in real time and alert staff when supplies are low. This significantly enhances operational efficiency and service quality in pharmacies, and demonstrates the vast potential of AI in healthcare services.

At the First Half Marathon of Humanoid Robots in 2025, a captivating scene unfolded as robots and humans ran

side by side. With the sound of a starting gun, robots took off down the track. The powerful mechanical running sound was a solemn announcement—the era of robots has arrived. The humanoid robot “Tiangong,” developed by the National and Local Co-built Embodied Artificial Intelligence Robotics Innovation Centre, participated in the First Half Marathon of Humanoid Robots in Yizhuang under the number “Tiangong 001,” becoming a striking presence on the track. “Tiangong” boasts exceptional athletic abilities, with highly flexible joints and advanced coordination, allowing it to maintain a steady pace on complex tracks. It adjusted its running posture in real time based on surrounding crowds and conditions, preventing collisions and other accidents. Its impressive interactive features also amazed onlookers—it interacted with runners and spectators, used facial recognition to identify individuals and responded with friendly voices to greetings and questions. It even cheered for participants, showcasing the endless charm brought by the deep integration of AI and robotics, setting a successful example of future applications in sports events, public activities and more scenarios.

As the “first city” of leading the

development of AI technology and industry in China, Beijing currently has over 2,400 AI-related companies, which account for about 50 percent of the total. AI-powered video generation tools, AI-powered acoustic hardware, AI-powered security solutions and from breakthroughs in basic algorithms to the export of application ecosystems, Beijing is leading a new wave of “going global” for China’s AI companies, to align with the trend of economic globalisation.

As a representative provider of domestic large models, Zhipu AI has led the establishment of the “Self-developed Large Model International Co-building Alliance” and collaborated with the 10 ASEAN countries and the nations along the Belt and Road to build secure and controllable AI infrastructures. Vidu, the AI-powered video generation tool launched by Shengshu Technology, has been applied in over 200 countries and regions worldwide, particularly excelling in the Japanese anime market. Zhongke Wenge’s intelligent translation platform supports over 50 languages, including mainstream languages like English and French, as well as less common languages such as Urdu and Lithuanian, facilitating cross-cultural communication. The AI acoustic hardware products of SoundAI Technology have been

recognised in markets across Germany, Japan and the Republic of Korea, showcasing China’s innovative manufacturing strength. The success of Beijing’s AI enterprises going global stems from their unique technological advantages. In terms of independent innovation, breakthroughs have been made in key areas like basic algorithms and large models, for example, Zhipu AI’s large model technology has reached internationally advanced levels. Regarding secure and trustworthy systems, a sound AI governance framework has been established to ensure the reliability of technological applications. RealAI has formed strategic partnerships with European companies to introduce China’s third-generation AI security technology, such as DeepReal (AIGC detection platform), to Italy. In terms of application capabilities, customised solutions are provided for different market needs, deeply integrating technology with real-world scenarios. For instance, PixelBloom has developed an AI courseware generation tool for an Indonesian university to automatically convert classroom recordings into structured PPTs, improving teaching efficiency. From labs to the international market, Beijing’s AI companies, with solid technological accumulation and an open collaborative spirit, are writing China’s innovation story on the global AI development map. This journey, driven by technology and innovation, is injecting new vitality into global intelligent development, and it is also an advanced, high-end and highly representative Beijing IP—a golden business card for the city on the world stage.

Future Now: Smart Applications Brighten Colourful Life

At 7 a.m., with the powerful analytical capabilities of big data, the origin information of every vegetable and fruit in the market in Beijing is clearly traceable. They journey from the fields, along logistics routes, to the market. Through online shopping, they also reach the tables of countless homes, powerfully illustrating

▼ Xiaoguan robotic barista





▲ Introducing elder-friendly renovations

how big data effectively connects the entire production-to-consumption chain.

In a mathematics class at the No. 2 Experimental Primary School of Haidian District, the teacher gently taps the screen, and the AI system instantly generates a dynamic probability model. The children gather around the electronic screen, watching virtual colourful balls jump along different trajectories with gestures. This AI-powered classroom scenario has become a daily occurrence in Beijing's intelligent education system. Such intelligent teaching applications have covered 80 percent of primary and secondary schools across the city. Haidian District alone introduced over 200 AI-integrated lessons last year.

Travel methods can also be filled with stunning technology. As traffic floods onto Beijing's ring roads during the morning rush hour, 323 autonomous driving test roads, spanning a total of 1,143 km, are quietly operating. The world's first cloud-controlled connected autonomous driving demonstration zone has entered Phase 3.0. Within a 580-sq. km area, over 1,000 test vehicles have collectively driven nearly 40 million km—equivalent to 900 laps around the equator. At Shougang Park or Yizhuang,

people may catch a taxi without a steering wheel. Its roof-mounted lidar spins like a "little mushroom," sensing obstacles within 200 metres and predicting the need to brake 3 seconds in advance, such as a food delivery person who suddenly appears on an electric bicycle. Inside the taxi, two screens are placed in front of the seats and after passengers enter the correct phone number, the vehicle will begin its journey along the planned route. Sitting comfortably and watching the car autonomously steer and respond to road conditions, a wonderful feeling of being in a futuristic world naturally arises.

Worried about the safety of autonomous driving? There is no need. According to Wang Chong, Chief Brand Officer of Baidu's Intelligent Driving Group, the autonomous driving system has built a three-layer safety mechanism: vehicle intelligence, monitoring redundancy and parallel driving. Vehicle intelligence is reflected in the system's response time, which is just 250 milliseconds, faster than a human driver. The monitoring redundancy system is like having two drivers. If one gets distracted, the other can take over immediately. Parallel driving refers to 5G cloud-based remote driving, ensuring

the smooth and safe operation of the autonomous driving system.

In the Yizhuang Demonstration Zone, there are not only autonomous taxis but also autonomous retail vehicles, autonomous delivery vehicles, autonomous minibuses, and other types of self-driving vehicles. People can travel in autonomous cars, and the goods purchased online are delivered to their doorsteps by autonomous retail vehicles. The daily activities of the city's residents, including dining, shopping and traveling, increasingly feel automated.

In Beijing, smart applications are rapidly penetrating every corner of the city. When entering a "Haidilao" hotpot restaurant, the receptionist is a human, but the robot waiters serve the dishes to guests. In a shopping mall, customers can simply ask a robot receptionist to find out what branded food, clothing and daily necessities are available and where they are located. When checking into a hotel, people may share the elevator with a robot, which, despite lacking "hands," can always step out on the right floor and deliver required items to the guests' room. People can enjoy the convenience of the tech era in their daily life, and more



▲ A driverless car operating in the Beijing Economic-Technological Development Area in Yizhuang



▲ Artificial Intelligence Classroom at the Beijing Institute of Technology Experimental School

smart scenarios will be integrated into the public's routine.

Smart technologies are also being applied in households. In old communities that have been upgraded, seemingly ordinary access control systems are actually equipped with high-tech "smart chips." A resident no longer needs to search for keys or swipe cards at the entrance—just stand in front of it, and the smart facial recognition system will instantly identify the owner and open the door. The implementation of butler services has further simplified daily tasks, allowing residents to manage repairs and utility bills, or sign up for community events with their smart phones.

During the midday delivery peak, the smart delivery station near Huangzhuang Subway Station in Haidian District is especially busy. Automated logistics robots, like diligent "little ants," deliver packages accurately to parcel lockers within a three-km range via an underground pipeline network. This system can dispatch 500 devices simultaneously, with an error rate of less than 0.001 percent, saving 40 percent of the time compared to traditional delivery methods. At Peking Union Medical College Hospital's telemedicine centre, AI-assisted diagnostic systems highlight suspicious

shadows in CT scans, improving accuracy by 27 percent over three years. The time to generate treatment plans for difficult cases has been reduced from 72 hours to 4 hours.

In the evening on Wangfujing Street, long queues form in front of AR virtual fitting mirrors, where customers can wave at the screen to see 3D outfit displays in different styles. Neon lights flash at Taikoo Li Sanlitun, while sensor doors at unmanned convenience stores quietly open. At SKP Mall, AR navigation guides customers directly to their desired counters. Time-honoured brands, rich in history and culture, have embraced digital consumer trends, embarking on a unique "transformation journey." In e-commerce live streams, streamers vividly share the stories behind these brands and showcase their exquisite products, prompting online shoppers to place orders. Many time-honoured brands have also launched popular "Chinese-brand" products which blend traditional culture with modern fashion and inject new life and vitality into the brands. Meanwhile, in an elderly care station in Xicheng District, a smart bracelet with fall detection gently vibrates, reminding Madame Li to do her exercises. These tech devices for the elderly are already serving 20 percent of the elderly care institutions in Beijing, and

they can predict fall risks through gait analysis and issue a 72-hour early warning.

The changes brought by science and technology to Beijing are like equipping the ancient city with a rocket booster. When the integrated circuit factory in Yizhuang produces 7-nanometre chips with domestic equipment, when the scientific devices in Huairou first capture dark matter signals, or when algorithms in Zhongguancun reduce morning traffic rush hour by 20 minutes, these breakthroughs are transforming this "city of the future" from a concept into an achievable reality. Beijing, a city full of innovative energy, is leading with technological innovation, continuously driving high-quality economic and social development, steadily advancing to becoming an international hub for technological innovation. Opening the door to the future with intelligence, Beijing has already made solid progress and achieved fruitful results. With technology leading the way, Beijing's future will be brighter, and the concept of Beijing IP will become even grander. This ancient yet modern city will continue to shine with technological brilliance, contributing more to human technological progress and social development.



音乐剧《夜幕下的哈尔滨》

音乐剧《夜幕下的哈尔滨》于2025年7月11-13日在北京保利剧院演出。该剧改编自著名作家陈玑的同名长篇小说。小说以独特的视角描绘了抗战时期哈尔滨的社会风貌，塑造了众多性格鲜明的人物形象。音乐剧版在保留原著精髓的基础上，融入了更多现代元素，使其更符合当代观众的审美需求。该剧的创作与演出，不仅是对历史的回顾，也是对民族精神的传承。音乐剧的音乐风格融合了古典、流行和民族元素，既有激昂的战斗歌曲，也有抒情的爱情旋律。舞台设计则力求还原20世纪30年代哈尔滨的独特风情，通过灯光、舞美和多媒体技术的运用，营造出紧张、悬疑的氛围。导演钟浩，主演金圣权、何亮辰、马添龙、刘令飞、高天鹤、张慧芳等。

The Musical Harbin Enveloped in Darkness

The musical *Harbin Enveloped in Darkness*, adapted from the novel by celebrated author Chen Yu (1924-2020), will be staged at Beijing's Poly Theatre from July 11 to 13, 2025. The original novel offers a unique perspective on Harbin during the Chinese People's War of Resistance against Japanese Aggression. While preserving the spirit of the source material, the musical incorporates modern elements to engage contemporary audiences. Its score blends classical, pop and ethnic musical styles, shifting from rousing battle hymns to gentle love ballads. The stage design recreates the distinct atmosphere of 1930s Harbin to heighten the sense of suspense and urgency.



吾心安处：中国人居文化思考联展

《吾心安处：中国人居文化思考联展》于2025年5月18日-10月8日在93号院博物馆开展。本次展览以“中”为核心，通过多种科学媒介呈现中国建筑与文化。从《清式营造则例》的墨线飞白到AI复原的数字光影，从榫卯咬合的千年匠心到积木拼搭的潜在创造，展览不仅展示了中国传统建筑的精妙，还通过现代科技手段，让观众感受到科技与文化的融合魅力。

展览特别强调互动体验，设置了多个互动区域，观众可以通过积木拼搭、数字光影展示等形式，深入了解中国人居文化的内涵。此外，展览还纪念了1985年首届全国交叉科学讨论会召开40周年，展现了科学家“科技报国、无私奉献”的精神，推动了交叉科学的融合与发展。

An Exhibition on Chinese Human Settlement Culture

The No. 93 Courtyard Museum launched a joint exhibition, *Where the Heart Is at Ease: Reflections on Chinese Human Settlement Culture*, on May 18, running through October 8, 2025. Centred around the Chinese character “zhong” (“centre”), the exhibition explores traditional Chinese architecture and culture through diverse mediums. From illustrations in the *Qing-style Construction Rules* to AI-driven digital light-and-shadow displays, and from millennia-old mortise and tenon joinery to intricately assembled building block models, the exhibition highlights the essence of traditional Chinese architecture. At the event, visitors can assemble blocks or experiment with digital projections. The exhibition also commemorates the 40th anniversary of the National Interdisciplinary Science Symposium.