Politecnico di Torino

A Study of Design Associations, Design Centers, and Design Schools in China

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Introduction

With the deepening of China's Reform and Opening-up policy, the Chinese design industry entered a period of rapid development. In 1979, the China Industrial Design Association was established as China's first national design association. Under the influence of Hong Kong's design culture, the mainland design community gradually recognized the importance of establishing design associations to enhance product competitiveness and promote industry development. Subsequently, provincial-level design associations, such as the Shenzhen Graphic Design Association and the Guangdong Industrial Design Association, were successively established.

Meanwhile, the development of design centers has undergone significant transformations. From the establishment of the China Architecture Design & Research Institute in 1952 to the subsequent emergence of various enterprise design centers, Chinese design centers have created significant works in different periods. Examples include architectural works such as the Beijing Exhibition Center and the Capital Theater, as well as product designs for brands like Hongqi Automobiles and Li-Ning.

In terms of design institutions, higher education institutions represented by the Academy of Arts & Design at Tsinghua University and the Central Academy of Fine Arts have made important contributions to the development of design education in China. They have both inherited the essence of traditional Chinese art and actively absorbed advanced international design concepts and teaching methods, cultivating numerous outstanding design talents.

Based on six months of in-depth research on design associations, design centers, and design schools, as well as a systematic review of relevant literature, this paper examines the development history, current status, and future trends of these three types of design institutions. The research shows that the development of these institutions was influenced by the Soviet model in the early stages and actively drew on international experience after China's Reform and Opening-up. In terms of sustainable development, design institutions have begun to emphasize the application of environmentally friendly materials and the promotion of green design concepts. In digital transformation, design centers are actively exploring the application of new technologies such as VR and AR in design.

This research has significant implications for understanding the development trajectory of China's design field while providing reference for planning future development directions. Driven by both sustainable development and digital transformation, Chinese design institutions need to further strengthen the implementation of eco-friendly design concepts and promote the deep integration of digital technology with traditional design. While protecting the environment and promoting innovation, they should make greater contributions to the modernization of China's design industry.

Chapter 1

China Design Association

1.1 Historical Development

The history of the China Design Association can be traced back to the CHINA ARTISTS ASSOCIATION, which was established in 1949 (China Artists Association, n.d.). After the founding of New China, the Chinese government vigorously developed art and culture on the basis of socialist culture, in order to promote the country's important political measures through design and establish a positive image of the country.

Modelled on the Soviet cultural model of the 19th century, a number of national design associations were established. For example, the Union of Artists of the USSR, established in 1932, is the highest-level art association in the Soviet Union and is directly affiliated with the Soviet Ministry of Culture ("Artists Union of the USSR",n.d.). It aims to promote socialism through exhibitions, artworks and publications.

As China's leading economic centre in the 20th century, Hong Kong played a crucial role in this development and had a unique influence on the establishment of the Mainland Design Association. In the 1960s, Hong Kong became Asia's largest economic, commercial and cultural centre, and its design industry flourished amid diversified industries. Founded in 1972, the Hong Kong Design Association (HKDA) brought together the best design ideas and talents from East and West(Liu, 2018).

The high level of commercial design in Hong Kong is astonishing, from the numerous billboards on the streets to the creative brand packaging in the shopping centres, demonstrating the wisdom of design in visual communication. Frequent exchanges and interactions with Hong Kong have deeply moved mainland designers. They began to adopt advanced design concepts from East and West to improve their own products.

This led the relevant industries on the mainland to gradually realise that the only way to build a bridge to interact with Hong Kong and even international design was to establish a design association to learn advanced design management methods and experience of organisation and operation, and then unite the diverse forces of designers to add aesthetic soul to products and increase the added value of products.

1.1.1 Establishment of the China Industrial Design Association

The China Industrial Design Association (CIDA) is a national Chinese design association that was founded in 1979 and was then called the ‘China Industrial Art Association’. Its history of development goes back to the early reform and opening period, when China implemented the reform and opening policy and transformed its economy from a planned economy to a market economy.

The Chinese government recognised the importance of industrial design for product competitiveness and realised that design can improve the added value of products.

At the same time, the government issued the slogan ‘Science and technology are the first productive force’ to promote technological innovation and industrial modernisation and to accelerate innovation in household appliances, automobiles and other machinery and equipment, so that industrial design is seen as an important factor in the development of the industrial structure. In 1987, it was renamed the ‘China Industrial Design Association’.

Fig.1/China Industrial Design Association group photo

"Design" magazine was first published in 1988("Design" magazine,n.d.). It is sponsored by the China Industrial Design Association and distributed nationwide. This magazine focuses on bridging the needs between design and industry, showcases the cutting-edge trends in global design, is committed to raising the public's awareness of design, and will also serve as a professional media representative in the field of Chinese design to participate in international exchanges, thus helping to promote Chinese design to the world.

Fig.2/ Design" magazine

On 28 June 2015, the signing ceremony of the strategic cooperation agreement and the first phase of international cooperation projects between the China Industrial Design Association (CIDA) and the Italian National Industrial Design Association (ADI) took place in Milan, Italy. Liu Ning, Vice Chairman of the Board and Secretary General of the China Industrial Design Association (CIDA), and Luciano Galimberti, President of the ADI (Italian National Industrial Design Association), officially signed the strategic cooperation agreement. The first phase of the cooperation projects between the two associations will take place in Hangzhou, where the official signing ceremony also took place.

Fig.3/2015 China-Italian Industrial Design Association signs cooperation agreement

On July 29th, 2021, a significant milestone was achieved as the China Industrial Design Association and POLI.design School of Milan Polytechnic University in Italy came together and successfully pulled off an online signing ceremony. In the domain of innovative design, both parties found common ground and reached an accord. They agreed to pool their efforts in nurturing design talents, delving into academic research, sharing valuable courses, and collaborating to set up a state-of-the-art design innovation center. Through these combined initiatives, they are working hand in hand to give a huge boost to the design exchanges and cooperation that take place between China and Italy, opening up new avenues for the growth and development of the design industry in both nations（China Industrial Design Association，2021).

Fig.4/2021China Industrial Design Association and POLI.design School of Milan Polytechnic University pulled off an online signing ceremony

1.1.2 Establishment of Local Provincial Design Associations

In 1992, the founder of Shenzhen Graphic Design Association initiated China's first professional graphic design exhibition ‘Graphic Design in China Exhibition’, which met with a great response at home and abroad and became a milestone for the development of graphic design in China. In 1995, the Shenzhen Graphic Design Association (SGDA) was officially founded.

Fig.5/92 exhibition Shenzhen teenager newspaper

In March 1992, ‘Graphic Design in China’ ‘92 exhibition was held in Shenzhen, curated by Wang Yuefei, Wang Xiu and He Maohua.This exhibition introduced the term ‘graphic design’ to mainland China for the first time and was favourably received by Chen Shaohua and others. The exhibition made Shenzhen the birthplace of the Chinese graphic design industry, and 1992 is regarded as the first year of graphic design in China.

Wang Yuefei said in 2008: ‘We are like the hot young people of the Yan'an era who are passionate about exploding the atmosphere in the domestic design industry.’ We first introduced the concept of ‘graphic design’ in China at ....., and the English title of the exhibition was ‘Graphic Design in China92’(Shenzhen Graphic Design Association,2020) The exhibition is called ‘Graphic Design in China92’, and it is the first time that we have introduced the concept of ‘graphic design’ in China, and also the first time that ‘graphic design’ has been properly introduced to the public.’

Shenzhen Graphic Designers Association, as one of the most influential organizations in the Chinese design field, has achieved a great deal in promoting the development of the industry and cultivating design talents over the years. Many outstanding talents have emerged from it. For example, Chen Shaohua. As a pioneer in the Chinese design field, he has created a large number of famous and excellent works.

Chen Shaohua was born in Shangrao, Zhejiang Province in 1954. From 1972 to 1975, he studied in the Decoration Major of Xi'an Academy of Fine Arts. In 1992, he participated in holding the "Graphic Design in China '92 Exhibition". And in 1995, he, together with Wang Yuefei and others, founded Shenzhen Graphic Designers Association.

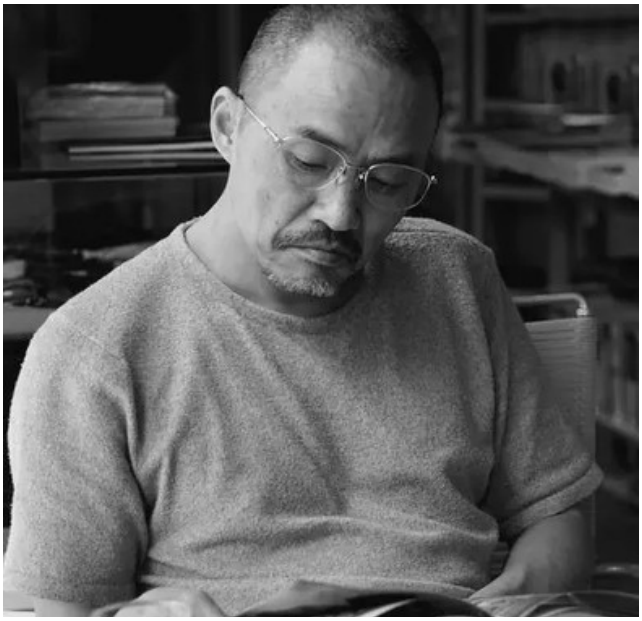


Fig.6/CHEN.SHAOHUA

Fig.7/Bids for the 2008 Olympics logo

The design of this logo contains many important ideas:

First, it reflects Chinese culture and resembles the ‘Chinese knot’, which stands for unity and harmony, as well as a human figure playing Tai Chi, which reflects traditional Chinese sports culture and philosophical thinking.

Second, it embodies the Olympic spirit and consists of the five colours of the Olympic rings, which symbolise the unification of athletes around the world.

Thirdly, it symbolises national unity: the number ‘56’ around the five-pointed star represents the 56 nationalities of China and reflects confidence in the success of the Olympic bid and enthusiasm for the Olympic Games(Chinese Business News,2000).

Mr. Chen Shaohua also has many other famous works. For example, the emblem of the 2009 Xi'an International Horticultural Exposition.

Fig.8/emblem of the 2009 Xi'an International Horticultural Exposition.

The emblem of Xi'an International Horticultural Exposition, named "Chang'an Flower", is inspired by the poem line. Its concept stems from "Tao Te Ching". Designed by Chen Shaohua, it's a "Hundred Flowers Auspicious Seal" with triangle, quadrangle, pentagon and hexagon petals. It symbolizes prosperity, represents earth, nature elements and the universe. The triangle like "Ren" shows people-oriented; the quadrangle resembles Xi'an's city wall. The 3-6 shape progression reflects the harmony of people, city, nature and the universe, fitting the expo theme(SINA Garden Expo,2010).

In terms of design style, Chen Shaohua loves to incorporate Chinese elements into his designs. For example, in the Chinese stamps in 2014, His style inherits the vigorous spirit of the Han Dynasty and the elegant grace of the Tang Dynasty. In terms of modeling, taking "Tri-colored Glazed Pottery of the Tang Dynasty" as the inspiration source, he cleverly borrowed its unique features and abandoned the exaggeration and impetuosity prevalent in current running or leaping horse designs, making his works unique and showing both ancient charm and new style (Nie&Wei,2014).

Fig.9/Chinese stamps in 2014

Of course, many other famous local design associations in China were also established during this time, in addition to the Shenzhen Design Association. The Guangdong Industrial Design Association, founded on 1 April 1991, was the first industrial design association at the provincial level in China.(Guangdong Industrial Design Association,n.d.).It is a cross-regional, cross-industry and cross-sectoral organisation at the provincial level that plays a leading role in the industrial design and manufacturing industry.

The association includes many well-known figures. For example, Yin Dingbang, who is the honorary life president of the Guangdong Industrial Design Association and is famous for his oil paintings, such as ‘Water Ring Xiaozhou Village’, ‘Laughter of the Waves’, ‘Song of the Sea’ and ‘Canola Flower Period’

The association regularly organises events such as the ‘Guangdong Industrial Design Week’, which includes the ‘Governor's Cup’ industrial design award, that promotes the development of industrial design in Guangdong and the integration of design and industry.

Fig.10/Laughter of the Wave

Fig.11/Song of the Sea

Fig.12/Water Ring Xiaozhou Village

Fig.13/Canola Flower Period

Overall, the origins of Chinese design associations can be traced back to the founding of New China, during which they were greatly influenced by the Soviet Union. It was not until after the Reform and Opening-up period that they truly began to develop, marked by the establishment of the China Industrial Design Association. This development is closely linked to the progression of China's market economy. Since then, design associations across various regions and fields have emerged, making significant contributions in areas such as design education and international cooperation, greatly promoting the advancement of China's design industry.

In terms of responsibilities and roles, the China Industrial Design Association primarily oversees national or multinational cooperative projects, driving the development of Chinese design from a macro and overarching perspective. In contrast, provincial design associations focus on more specific and localized aspects, such as refined talent cultivation and the implementation of specific design projects. The author believes that this two-tiered design association system has both advantages and disadvantages. On the one hand, this hierarchical division aligns well with China's vast territory and large population, effectively fostering the development of the design industry under China’s complex social conditions. On the other hand, the separation of responsibilities between national and provincial design associations creates distinctions in their target objectives, leading to potential disconnects in policy formulation and implementation. This can result in issues such as superficial efforts, task completion as a mere formality, and bureaucratic formalism.

1.2 Current Status and Future Development

Since the organisational structure and functions of the China Design Association are key factors for the smooth functioning of the association and the achievement of its goals, let us take a look at the organisational structure and the special features of the functions of each department.

The association has a Creative Industries Centre. This department acts as a bridge between design and business. On the one hand, it conducts in-depth research into industry policy and regulations, studies the development of the design industry and provides members with accurate and forward-looking information about the industry so that they can clearly see their position in the industry and the direction of future development.

On the other hand, the association is actively involved in business development, for example by organising business meetings, meetings to recommend design services and other activities to promote the creative achievements of designers in the market, to foster close links between design and business and to pave the way for the industrialisation of design work, thereby promoting the economic development of the entire design industry.

The China Design Intelligence Award, founded in 2015(China Design Intelligence Award,n.d.), has the China Academy of Art as its organizer and the Zhejiang Provincial People's Government as its supporting unit, with the China Industrial Design Association providing assistance in its organization. Oriented towards “People's Livelihood, Industry, and Future”, it adheres to a people-centered principle. By leveraging imagination, it constructs novel paradigms, taking the integration of life, production, and ecology as the crux. It lays particular emphasis on in-depth learning through human-computer interaction, and promotes the symbiosis of cultural innovation and scientific and technological innovation, aiming to achieve multi-dimensional success in society and economy.

Through the China Industrial Design Association, the China Design Intelligence Award has been vigorously promoted, enabling more outstanding designers to participate in this competition.

GRAND AWARD GR-1

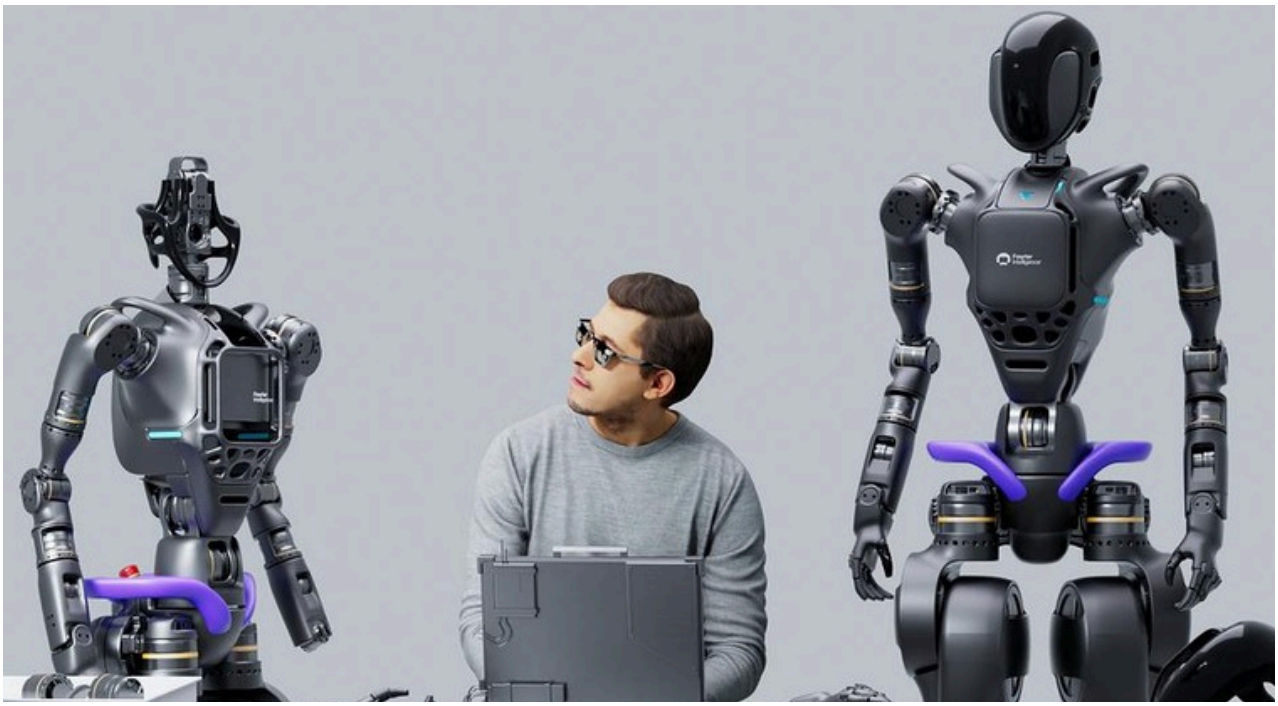


Fig.14/Shanghai Fourier Intelligent Technology Co., Ltd.Li,Wang,Zhang,Dong

Fourier GR-1 has achieved remarkable accomplishments in the field of humanoid robots and has pioneered a brand-new development pattern. It has successfully achieved mass production and delivery. GR-1 is equipped with a multifunctional body structure that can accurately simulate the main degrees of freedom of human body movements, thus possessing outstanding mobility and agility, and becoming an outstanding example of the application of artificial intelligence in diverse real-world scenarios.

This cutting-edge robot has a clear and definite goal, aiming to flexibly adapt to various different environments, achieve smooth and natural interaction effects as well as efficient and precise task execution. Currently, it has carried out experimental applications in multiple fields such as reception services, scientific research and education, industrial manufacturing, and even rehabilitation treatment, fully and comprehensively demonstrating its practicability and multifunctional characteristics in different scenarios, allowing people to truly see its numerous advantages.

DIA SILVER： Clarii mini

Fig.15/Robkoo Information & Technologies Co., Ltd.Wu,Xie,Yin,Yu,Chen Jia Wu

Clarii mini is a new wind instrument. Its intuitive design and audio tech make music-playing easy. With 16 sounds like woodwind and brass, it's a compact, diverse sonic tool. It's also a MIDI controller.It's the first wind synth for wireless sound installs via Clarii App, which offers new sounds, editors, tutorials.

DIA SILVER：AI130 patrol sweeper robot

The AI130 Commercial Patrol Robot represents an advanced embodied intelligent solution designed specifically for outdoor cleaning tasks. It incorporates the state-of-the-art Master2000 general-purpose embodied brain, endowing it with an integrated perception ability that bridges the gap between language and the physical world.Boasting an automotive-grade exterior finish and an in-line layout, this robot facilitates multi-dimensional interactions through voice commands and expressive cues. Its user-friendly design allows for one-button activation, ensuring a hassle-free and minimalist operation experience.

Fig.16/UDEER·AI Chen JunBo

SHARP Plasmacluster Drape Flow Dryer IB-WX901(Japan) IB- SP54C(China)

A fast hair dryer solves drying issues for many. Its 4-point design gets salon results, is 35% quicker than regular ones, and eases wrist strain by 71%. Lightweight, it saves power and plastic. Modes include temp-adjusting “SENSING mode”, baby-friendly “GENTLE mode”, and Japan's custom “APP mode”. Chinese models have unified colors; Japanese ones, eco-friendly packaging.

Fig.17/SHARP CORPORATION Daijiro Tokunaga

M Collection

Fig.18/Expocasa&Yangdesign yang,huang

“M Collection” is an innovative home furnishing series that emerges from the collaboration between Expocasa and the renowned industrial designer Yang Mingjie. Here, the letter “M” encapsulates three core concepts: Modular, Rubik’s Cube, and Magic. It takes a revolutionary approach by initiating innovation from the fundamental structure rather than relying on mere surface embellishments.

The China Industrial Design Association, in order to promote talent development, officially launched the China Red Star Award in 2006(China Industrial Design Association,2020). The original purpose of establishing this award was to advance the development of Chinese industrial design and enhance the innovation capability and international competitiveness of Chinese manufacturing.

Fig.19/Red star Design Award

Fig.20/Reddot Award

The Red Dot Award significantly expanded its global presence through a strategic partnership with Germany's Red Dot Award in 2009. The award has further strengthened its international standing by forming collaborations with various organizations, including the International Council of Industrial Design (Icsid).

The jurors from both awards actively collaborate, with Red Star Award judges like He Renke and Lu Xiaobo serving on the Red Dot Award jury, while Red Dot Award chairman Peter Zec and others have participated as Red Star Award jurors. This exchange has facilitated the sharing of evaluation expertise and professional knowledge, enhancing the judging quality of both awards.

Red Star Award-winning products have frequently been exhibited alongside internationally renowned design awards like the Red Dot Award, enhancing the exchange and promotion of design achievements while fostering the integration and development of Chinese and international design cultures. Notable examples include the 2019 Red Star Award winners: Honeywell's Rig Dog Xtreme impact-resistant gloves, Huawei Mate X, Hola Kora maternal and infant products, and the 2020 winner Tangiplay Train Programming Kit.

The Shandong Province Fashion Design Association has taken on significant responsibilities in protecting intangible cultural heritage through its professional expertise and industry influence. Association President Zhou Jin said: "Since 2021, I have initiated the promotion of the Mamian skirt, showcasing its culture to the world through various domestic and international events. In 2022, my book 'Brocade and Silk Skirts - An Appreciation Guide to Traditional Mamian Skirts' was published. This book has guided thousands of designers in their research and creative work, and indirectly promoted the development of 20,000 Mamian skirt manufacturing enterprises in Cao County."

Since the launch of the "Lu Brocade Revival" grand initiative in 2023, the Shandong Province Fashion Design Association has been dedicating its full efforts to carefully planning numerous activities. In September of that year, the spectacular "Ancient Brocade Legacy - Weaving with the World" Lu Brocade Fashion Exhibition made its debut, ingeniously divided into six distinctive chapters: Brocade Knowledge, Ancient Brocade Heritage, Brocade Fashion Achievement, Creative Brocade Innovation, Brocade Land, and Global Brocade Connection. The exhibition showcased everything from the ancient Lu Brocade's inherent rustic charm and exquisite traditional craftsmanship to its stunning modern transformation incorporating contemporary fashion elements; from classic works preserving traditional techniques to creative new products born from the collision with trendy designs. This comprehensive showcase has attracted more people to join the wave of preserving and developing Lu Brocade culture(Hu,2024).

Fig.21/Mamian skirt

Fig.22/Brocade and Silk Skirts - An Appreciation Guide to Traditional Mamian Skirts

1.2.1 Sustainable Development

As design increasingly integrates with environmental protection, sustainable design is making significant strides. Material innovation has become a key driver, with biodegradable and renewable materials like bamboo and algae fibers replacing traditional synthetic fibers, reducing environmental impact from the source while maintaining quality and aesthetics in fashion design. Meanwhile, the government has introduced new policies promoting low-carbon building concepts to advance green development.

In March 2024, the Shandong Province Fashion Design Association and the Shandong Textile Fiber Industry Chain Alliance jointly launched the Bamboo Fiber Lyocell Biodegradable Mamian Skirt Supply Chain Project. A global market development signing ceremony was held at the Shanghai National Exhibition and Convention Center.

Fig.23/A global market development signing ceremony

The core of this project involves licensed production of bamboo fiber Lyocell, while building a competitive industry chain through authorized end-product labeling, original Mamian skirt designs, and digital-intelligent marketing strategies.

The project will be established in Cao County, Shandong Province, helping to develop the area into the "Home of Mamian Skirts" while advancing the local Mamian skirt industry toward high-end and standardized production. The initiative aims to blend Mamian skirt culture with contemporary fashion, promoting research into the origins of Chinese clothing civilization. By utilizing eco-friendly, biodegradable bamboo Lyocell fiber as an alternative to traditional textiles, the project seeks to achieve creative transformation and innovative development that bridges traditional and modern elements.

Zhou Jin stated, "We will undertake a research initiative into the origins of Chinese clothing civilization, exploring traditional elements while transcending them, to achieve creative transformation and innovative development. We will widely promote environmentally friendly bamboo fiber Lyocell biodegradable Mamian skirts, ensuring that each Mamian skirt not only enhances our quality of life but also contributes to green, low-carbon development(China.org,2024).

With environmental protection concepts becoming deeply rooted in public consciousness and China's urgent need for sustainable development, the Inaugural Meeting of the Green Low-Carbon Building Branch of Changsha Investigation and Design Association and the Green Low-Carbon Building Forum was successfully held in Changsha on the afternoon of April 28, 2024.

Fig.24/Inaugural Meeting of the Green Low-Carbon Building Branch of Changsha Investigation and Design Association and the Green Low-Carbon Building Forum

Deputy Director Wang Shun emphasized that promoting prefabricated construction and intelligent construction methods is closely interconnected with green and low-carbon initiatives. These approaches serve as crucial means for achieving green and low-carbon development, while also representing a key direction for Changsha's construction industry transformation and the realization of new productive forces(Green and Low Carbon Building Branch of Changsha Survey and Design Association,2024).

Taking the Pearl River Tower in Guangzhou, completed in 2011, as an example, it is China's first zero-carbon building and currently one of the most energy-efficient buildings in the world. The building's unique curved exterior design increases wind speed, generating power through internally installed wind turbines. Currently, building energy consumption in China accounts for more than 30% of total social energy consumption(Luo,2024).

Fig.25/Pearl River Tower in Guangzhou

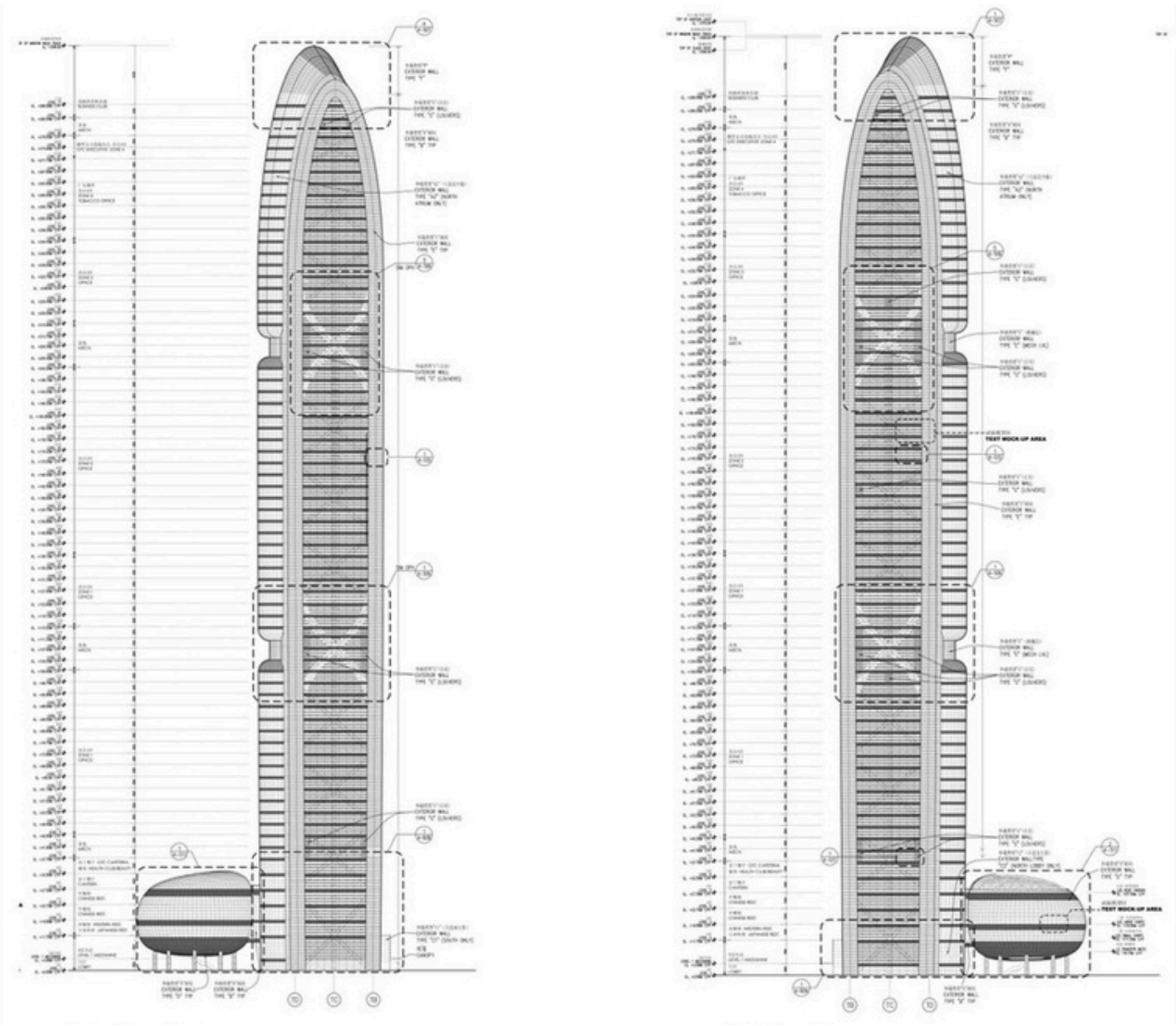


Fig.26/design drawing

The Pearl River Tower's design adheres to the concept of "people-oriented and environmentally friendly." The building's exterior wall design incorporates an efficient thermal insulation system to reduce energy consumption. The exterior wall insulation material uses rock wool boards with a thermal conductivity coefficient of only 0.034W/(m·K). The facade extensively utilizes low-radiation glass curtain walls. The office area walls and ceilings use low VOC water-based paints, with formaldehyde content below 50mg/kg, In the interior space, the multi-function hall is fitted with bamboo-wood composite flooring. Additionally, highly durable materials were used to reduce maintenance costs.

The Guangzhou Pearl River Tower exemplifies excellence in sustainable urban architecture. Its innovative design integrates cutting-edge energy conservation technologies and eco-friendly materials, demonstrating remarkable achievements in energy efficiency while minimizing environmental impact.

Architectural design is at the forefront of green concepts. New public buildings follow green building standards and incorporate passive construction methods. For example, the new library at Chengdu University, whose location takes into account sunlight, ventilation and environmental influences, was built according to the topography of the site to make optimal use of natural light and ventilation and to reduce energy consumption for artificial lighting and air conditioning; the outer walls are made of insulating materials and are equipped with photovoltaic solar cells that allow partial self-sufficiency in electricity.

Fig.27/the new library at Chengdu University

The external structure of the building consists of a top- to-bottom curtain wall, the load-bearing frame of which is a steel tube keel with an aluminium alloy adapter fixture, and each layer of the external façade material consists of three groups of ceramic plates and three groups of coloured glazed insulating glass units, embodying the idea of a green, low-carbon and lightweight design. The bucket-shaped atrium is accessible in all directions, with vertical and horizontal movements inside to form a centripetal space that converges inwards from all sides, while the zigzag sandwich-style volumetric space floats in the air to maximise natural light(Chengdu University Library,2019).

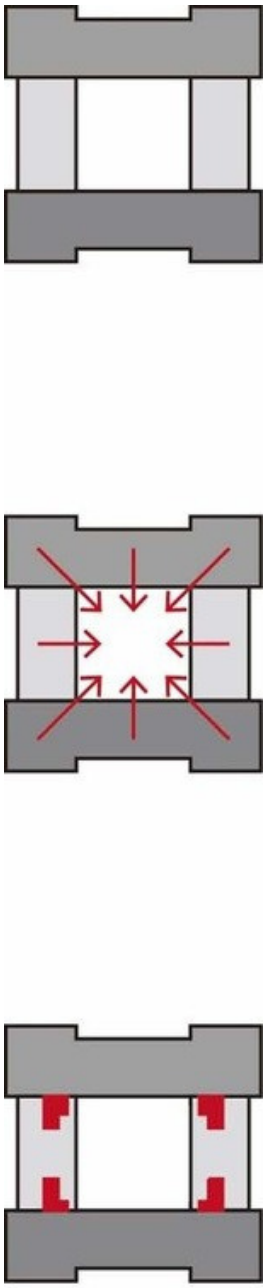


Fig.28/design drawing

Since this event is dated November 2024, which is after my last update, I will focus on the content that can be accurately discussed:

The "Chinese Sustainable Design" exhibition opened at the Chinese Cultural Center in Berlin, showcasing China's achievements in sustainable architecture and design. Christy, the head of German IDAS Architecture Forum, praised the innovative transformation of the Jinyun Stone Quarry, noting that it provides valuable insights for Germany's renovation of open-pit mines and underground caverns. They emphasized how China has demonstrated sustainable design principles through the revitalization of local resources and avoiding redundant construction(Xu,2024).

Fig.29/The "Chinese Sustainable Design" exhibition site

The exhibition features 26 projects and 80 exhibits from 10 Chinese provinces and autonomous regions, focusing on "Integrating Eastern Aesthetics and Youth Social Innovation for a Sustainable Future." It covers various themes including rural revitalization and recycled materials, demonstrating how a new generation of designers incorporates Eastern aesthetics into community building and daily life.

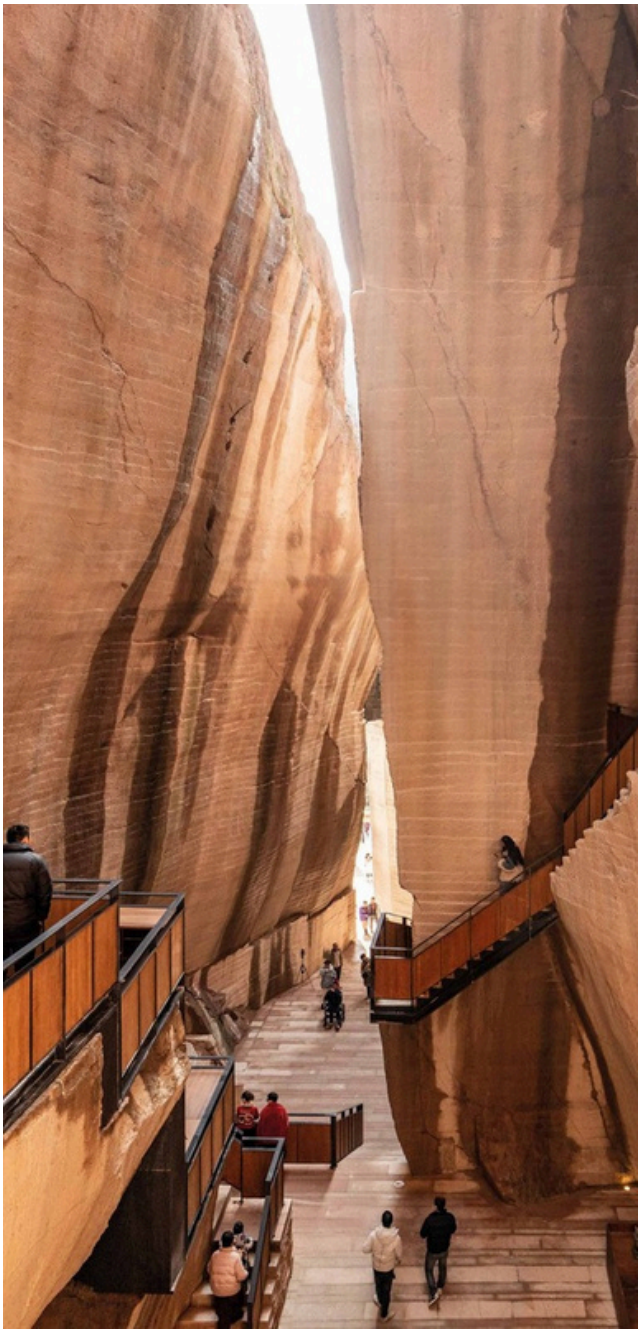


Fig.30/Xiandu Stone Quarry No. 8

In Jinyun County, Lishui City, Zhejiang Province, the Xiandu Stone Quarry No. 8 project stands out. Architect Xu Tiantian, working with local communities, transformed an abandoned quarry into a public cultural space for reading and communication, following a "minimal intervention" design philosophy.

In Chengdu, Sichuan, the Beisen Courtyard in Xicun Creative Industry Park, designed by architect Liu Jiakun, has become a popular destination, attracting visitors with its unique architectural style.In architectural design, functionalism takes center stage and is prominently emphasized. The concrete is exposed like a building's skeleton and veins, completely unconcealed, displaying the raw texture of the material in its most direct form. Meanwhile, the building's courtyard ingeniously incorporates a bamboo grove, drawing inspiration from the traditional teahouses of Chengdu.

Fig.31/The Beisen Courtyard in Xicun Creative Industry Park

The Qiang embroidery culture originated from more than a dozen nomadic tribes who lived in northwestern China in ancient times(Song et al. 2024).While it's sometimes said to date back to the Xia and Shang dynasties with a history of over 3,000 years, this timing needs verification. The Qiang people have earned much praise for their embroidery work on textiles.

Fig.32/The Qiang embroidery

Qiang embroidery carries profound historical and cultural heritage with immeasurable value. On June 7, 2008, this ancient craft was honorably listed in China's "Second Batch of National Intangible Cultural Heritage," becoming a brilliant jewel among national cultural treasures. Qiang embroidery is far more than just a decorative craft - it serves as a living historical record, telling the story of the ethnic group's past through each stitch and thread.

The growing field of sustainable design opens up powerful opportunities within the cultural and creative industries, enabling the creation of products that combine functionality and beauty with ethical production and environmental responsibility. At present, Qiang embroidery cultural products primarily consist of traditional handicrafts, including embroidered garments, scarves, cushions, and decorative bookmarks.

Currently, there are still many areas for improvement. The design should embrace minimalism or abstractionism, while materials should incorporate bamboo fiber or biodegradable materials to enhance environmental sustainability.

In China, the Mid-Autumn Festival carries the beautiful expectation of family reunions, and mooncakes are an essential festive food in every household's celebration. However, during this time, the excessive packaging of mooncake boxes has quietly become a major environmental concern. The layered, elaborate packaging materials, after the brief festival ceremony, often become large amounts of waste requiring disposal, placing significant pressure on the ecological environment.

Currently, many vendors, in pursuit of luxury appearance, use excessive packaging materials to justify higher prices. Similarly, there is a lack of cultural creativity in food packaging design, resulting in mooncake boxes essentially becoming single-use products.

Fig.33/mooncakes

Businesses should actively practice green development concepts by using environmentally friendly and biodegradable materials for mooncake boxes, such as paper materials and recyclable plastics, reducing pollution at the source.

The 2022 mooncake box collaboration between Tmall and Nayuki Tea showcases innovative sustainable design. Composed of 20% coffee grounds, 30% wheat straw, and 50% diamine, the packaging transforms into a light meal container after the mooncakes are consumed(Song,2022).This creative design demonstrates how organic waste can be combined with sustainable materials, successfully merging environmental consciousness with contemporary food trends.

Fig.34/mooncake box co-branded by Tmall and Nayuki Tea

CEDA is actively involved in social services and responsibility and contributes to solving many social problems through design. In the area of sustainable development, CEDA promotes and organises sustainable design activities for its members. When designing urban landscapes, for example, designers promote the use of native. they implement rainwater collection and recycling systems, use rainwater for landscape irrigation and water replenishment to achieve efficient use of water resources.

When selecting building materials, preference is given to recyclable and biodegradable environmentally friendly materials such as recycled bricks, bamboo and wood composites in order to reduce the environmental impact of construction waste. The example of the Chengdu City Park renovation project shows that the application of these green design strategies not only creates an environmentally beautiful and functional public space, but also serves as an example of a replicable design for sustainable urban development.

The first Sustainable Design Summit took place in 2022 and brought together a wide range of experts for talks and workshops that advanced the cause in many ways and caused quite a stir. The second summit will be held at the Beijing Exhibition Centre from 21 to 23 September and will focus on six main topics, providing a deeper understanding of sustainable design from a range of perspectives, including urban spatial planning, circular design, zero-carbon initiatives, building a green future, hotel and office design, and more. The Chief Sustainability Advisor said that the event had made great strides in the last year and that this year it would further address effective design and construction initiatives and help achieve the sustainable development goals set at the UN Climate Change Conference. This year, it will further address effective design and built environment initiatives to help achieve the sustainable development goals of the UN Climate Change Conference(CEDA, 2023).

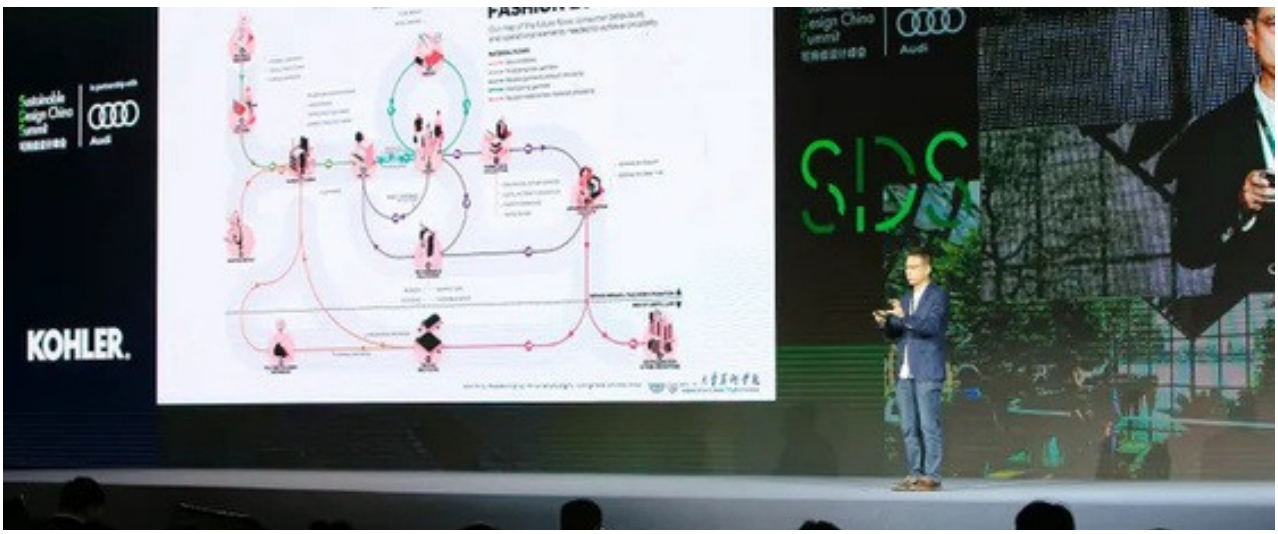


Fig.35/2022 Sustainable Design Summit

In this section, we analyzed the organizational structure, talent cultivation, award establishment, and project collaboration of Chinese design associations. From the above analysis, we can gain insight into the current state and development direction of Chinese design associations. Two main tasks of design associations can be identified: on the one hand, they act as a bridge between the commercial market and designers, facilitating communication and serving as a lubricant between individuals and enterprises, as well as between design and commerce. On the other hand, they guide the development direction of design, such as promoting the inheritance of traditional culture, solving real-life problems through design, and advancing environmental protection efforts, thereby preventing design from becoming uncontrollable in the pursuit of commercial interests.

As for future development, the function of design associations in guiding the direction of design is of greater importance. Based on this research, the author believes that Chinese design in the future will focus on environmental protection, with eco-friendly design leading the development of various fields. In this process, there will be increased emphasis on the development and application of digital media. However, this may give rise to new issues, such as disputes over copyright, originality, and the professional roles of designers, which are areas where Chinese design associations should play a key role in the future. Moreover, in a time when traditional culture is gradually being marginalized and global culture is trending toward homogenization, how to use design to promote the revival and development of traditional culture and to re-establish the importance of Chinese cultural heritage will also become a vital task for Chinese design associations in the future.

1.3 1978-2024 China Design Retrospective Exhibition

Based on the above analysis of Chinese design associations, let us take a look at the phased achievements they have made throughout their development. Design outcomes are closely tied to the social context, economic structure, and political conditions they rely upon. Through these specific design works, we can also glimpse the state of China's development during those times. From the Reform and Opening-up period to modern-day China, design has evolved alongside the nation's progress.

Fig.36/'Songkran – A Hymn to Life',1979

The mural painting of the capital's airport, built in 1979, was a collective artistic work organised on a national scale after the reform and opening up. From the content theme to the design style, presentation methods and production process, it adopted the essence of traditional national art while actively exploring a new visual language. More importantly, however, it has become a 'symbol of China's reform and opening up' in the eyes of people through its free and open creative concept.

Fig.37/The murals at Xi'an Xianyang International Airport

The murals at Xi'an Xianyang International Airport were created by Liu Wenxi and other artists in the 1990s. With the "Silk Road" as the theme, these murals vividly recreate the prosperous scenes of the ancient Silk Road. The Silk Road was an important channel for economic and cultural exchanges between ancient China and the Western world.

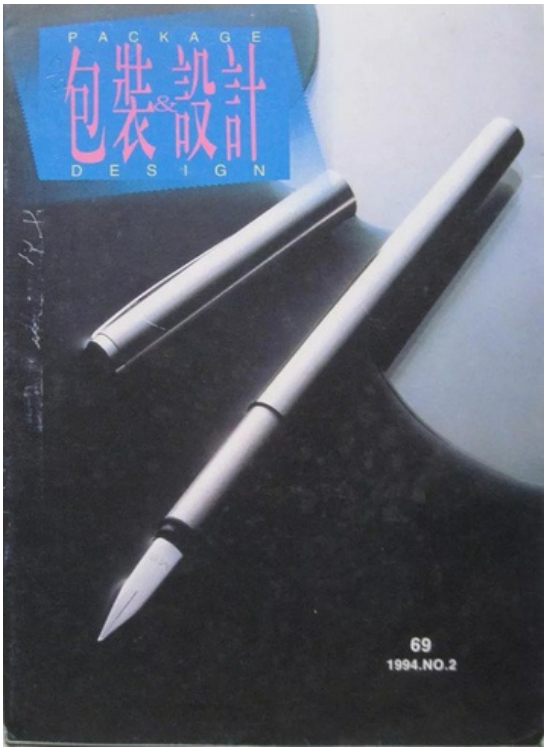


Fig.38/Packaging & Design magazine, 1994

Fig.39/Wang Xu, 'Design Communication',1987

China's first design magazines, such as Design Exchange and Packaging & Design, played an important role in the early days of the reform and opening up, providing designers, teachers and students at colleges and universities with the latest information on design.

"Fundamentals of Design" was first published by Wang Shouzhi in 1990. The book systematically explains the basic concepts, principles, and methods of design studies, covering multiple design fields including graphic design, industrial design, and environmental design. It remains one of the best books for Chinese students to understand design.

Fig.40/Fundamentals of Design" by Wang Shouzhi in 1990

Fig.41/The 11th Beijing Asian Games Logo 1989.Qi.Gao

The emblem features sunbeams and the letter ‘A’ in the shape of the Great Wall. The Great Wall is the embodiment of ancient Chinese civilisation and the letter ‘A’ is the beginning of the word ‘Asia’, signifying that the Asian Games will unite Asian nations. The Great Wall also resembles the number ‘11’, signifying that this is the 11th Asian Games.(School Ideological Education, 1990) This emblem combines all these elements to send an important message while also blessing the unity and friendship of Asia.

The mascot of the 1990 Asian Games in Beijing, Pan Pan Panda, was inspired by China's national treasure, the giant panda. The name ‘Pan Pan’ has a deep meaning. The ‘Pan Pan’ symbol represents the hope for peace and expresses the Chinese people's wish for world peace, in the hope that the Asian Games will be a stage for promoting peaceful coexistence between nations. The panda's naive body is outlined with rounded lines, making it visually appealing and infectious. The choice of colours, sharp and soft tones, emphasises its affinity.

Fig.42/Panda panpan,1989 Renzhong.Liu

Fig.43/2008 Olympic Games Medals

The medals were mainly designed by Wang Min. They are circular in shape, with a jade bi, an ancient Chinese ritual vessel symbolizing nobility, purity and auspiciousness, inlaid in the middle. The main metallic part is made of gold, silver and copper respectively according to the awards, showing their preciousness. On the front is the Olympic Rings logo stipulated by the International Olympic Committee, while on the back, Chinese elements are incorporated, with the emblem of the Olympics engraved as well as the auspicious cloud pattern, which implies good luck and happiness in Chinese traditional culture.

The emblem of the 2008 Beijing Olympic Games was designed by Zhang Wu and named "Chinese Seal, Dancing Beijing". It is shaped like a traditional seal. In Chinese culture, the seal represents authority and credibility, highlighting China's emphasis on the Olympic Games. The pattern features an abstract character "Jing", which stands for Beijing, along with a figure doing Tai Chi, demonstrating traditional Chinese sports culture. (Zhejiang Today, 2008)The emblem uses red and yellow, the colors of the national flag. Red conveys festivity and vitality, while yellow symbolizes harvest and hope. It implies that Beijing welcomes friends from all over the world to take part in the Olympic Games, share the joy and friendship of sports, and also embodies China's best wishes for the successful hosting of the Olympic Games.

Fig.44/The emblem of the 2008 Beijing Olympic Games

Beijing Daxing International Airport started its design in 2014 and was completed in 2019. It was designed by Zaha Hadid Architects. Its design inspiration comes from the phoenix in traditional Chinese culture, which symbolizes auspiciousness and take-off. The star-shaped structural layout implies "the phoenix spreading its wings", predicting the vigorous development and international take-off of China's civil aviation industry. The design also takes into account both functionality and practicality, applying advanced construction technologies and environmental protection concepts, achieving a perfect combination of architectural aesthetics and functional requirements.

It has a unique appearance, smooth lines and open spaces, with advanced internal facilities, providing passengers with a comfortable and convenient experience. The inside of the airport adopts a large number of natural lighting and ventilation designs, which are energy-saving and environmentally friendly, reflecting the concept of green building.

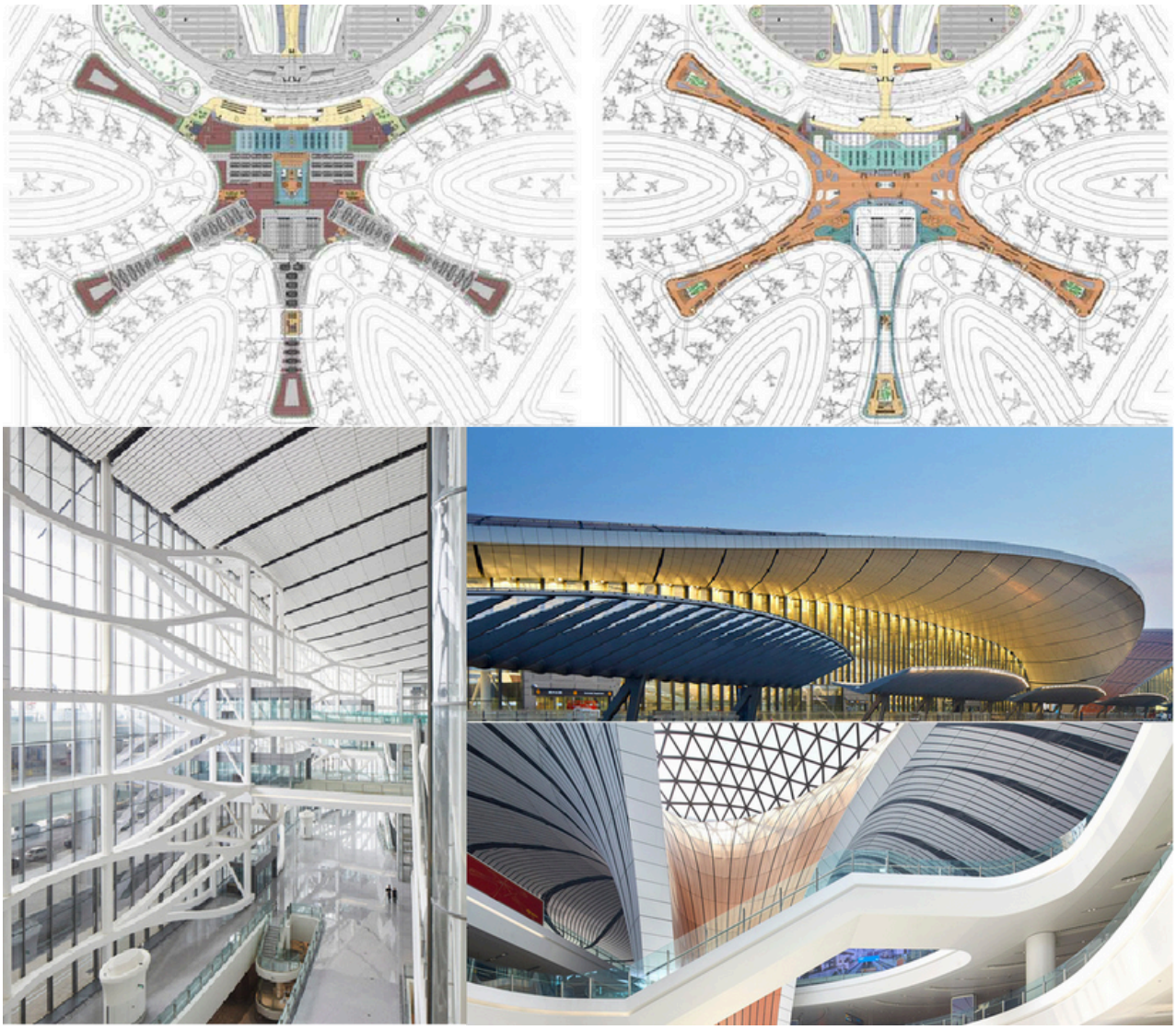


Fig.45/2018 model of Beijing Daxing International Airport

Fig.46/The Canton Tower,designed by Mark Hemel and Barbara Kuit

The Canton Tower, designed in 2005 and completed in 2010 by Mark Hemel and Barbara Kuit, draws its design inspiration from the natural landscapes and cultural characteristics of Guangzhou. Taking the outline of the mountains and waters as inspiration, it creates a curvy shape known as the "Slender Waist", which implies the elegance and vitality of Guangzhou. Meanwhile, modern architectural techniques and environmental protection concepts are integrated into the design of the Canton Tower.It has become a famous scenic spot in Guangzhou.

The Shanghai Tower was designed in 2008 and completed in 2016. It was designed by Gensler, an architectural design firm. Its design inspiration comes from the "dragon" in traditional Chinese culture and the innovative concepts of modern architecture. It has a spirally ascending shape, symbolizing "dragons rising and tigers leaping". It is a super-tall skyscraper with a double-layer glass curtain wall, and there are 24 sky gardens in the curtain wall. Due to the soft soil layer in Shanghai, 956 foundation piles that are 86 meters long have been buried underground.

Fig.47/The Shanghai Tower designed by Gensler

Kan Tai-Keung

Kan Tai-keung was born in 1942 in Sanshan Village, Panyu District, Guangzhou City, Guangdong Province. He has loved painting since childhood and was influenced by his grandfather, Jin Yaosheng, a clay sculpture artist. In 1964, he began to study sketching and watercolor painting in his spare time at the "Baihui Art Gallery" opened by his uncle, Jin Weitian. He took an off-campus diploma course in design at the Chinese University of Hong Kong. Later, he worked at Hengmei Commercial Design Company for eight years. During this period, he served as the vice dean of Dayi Design Institute in 1970. In 1988, he founded the Kan Tai-keung Design Company.

Fig.48/Kan Tai-keung

The first work that made Kan Tai-keung widely known was the logo of the Bank of China in 1980. Generally, the logo is in the shape of an ancient coin, representing the nature of a bank. The Chinese character " 中 " (meaning "middle" or "China") in the middle represents China, and the outer circle implies the global nature of the Bank of China.

"Taking the ancient Chinese coin and the character '中' as the basic forms, the circular frame line of the ancient coin, the square hole in the middle, and the vertical lines above and below form the character '中', which contains the meaning of 'round sky and square earth, with the economy as the foundation'. It is simple, stable, easy to recognize, quite in Chinese style. It was officially approved for use by the head office of the Bank of China in 1986 and serves as a representative of China's financial business community, fully demonstrating Chinese characteristics." (Bank of China, 2011)

Fig.49/The logo of the Bank of China designed by Kan Tai-keung

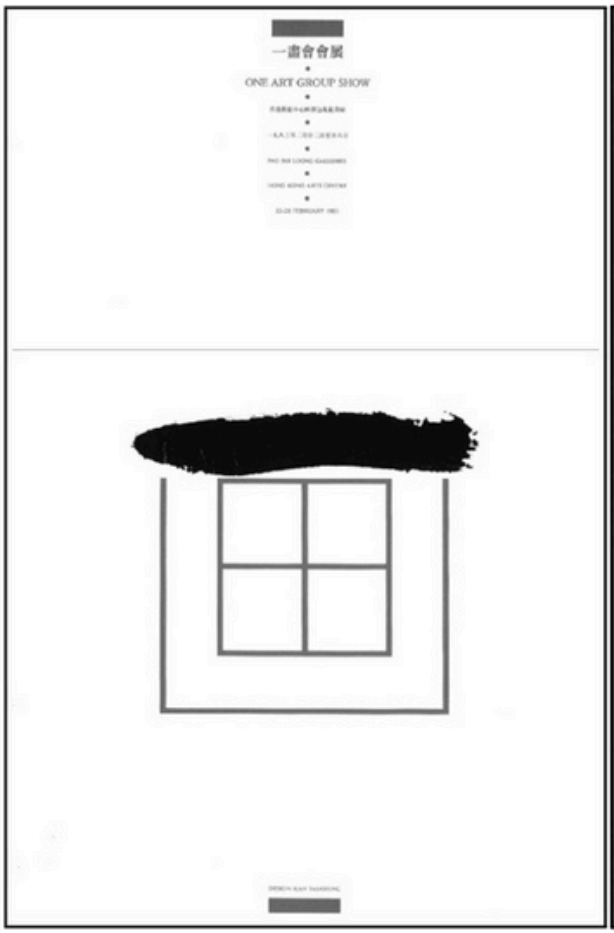


Fig.50/One Art Group Show

Fig.51/Exhibition of Works by 13 Famous Hong Kong Artists in Nagoya

The posters that Kan Tai-keung made for different clients have the following common features: The composition is balanced, and the informational text is small and unobtrusive. The colors are clear and bright, with a preference for black and red characters on a white background. They often contain three main elements: floating space, artworks, and brushstrokes. For example, in the "Exhibition of Works by 13 Famous Hong Kong Artists in Nagoya" in 1980, there is a red dot in the center. Above the dot floats an inkstone with brushstrokes, and a Chinese ink brush rises vertically from the bottom of the page. The text quietly flows down from the right side of the page, and there are two small sponsor logos at the bottom left of the page. The brushstrokes running through the inkstone form the Chinese character " 中 " (meaning "center"), which is associated with China, while the white background with the red dot also links to the rising sun on the Japanese national flag(Huppatz,2002).

There is also "An Art Group Exhibition" designed by Kan Tai-keung in 1983. He recreated and abstracted the formal languages of calligraphy and ink painting. He abandoned using traditional brushstrokes and calligraphy to present written information, and instead preferred modern Chinese and English typography, making the brushstrokes look very rhythmic.

There have been several key events in the process of design development in China that have had a profound impact

In 2008, Beijing hosted China's first Olympic Games and created famous design works such as the Bird's Nest and the Water Cube.

In 2010, the Shanghai World Expo, through elaborate designs of venues and exhibits, built a communication platform for the whole world.

2015 Beijing International Design Week was a significant event that brought together various design works and ideas

2020 Guangzhou Design Week

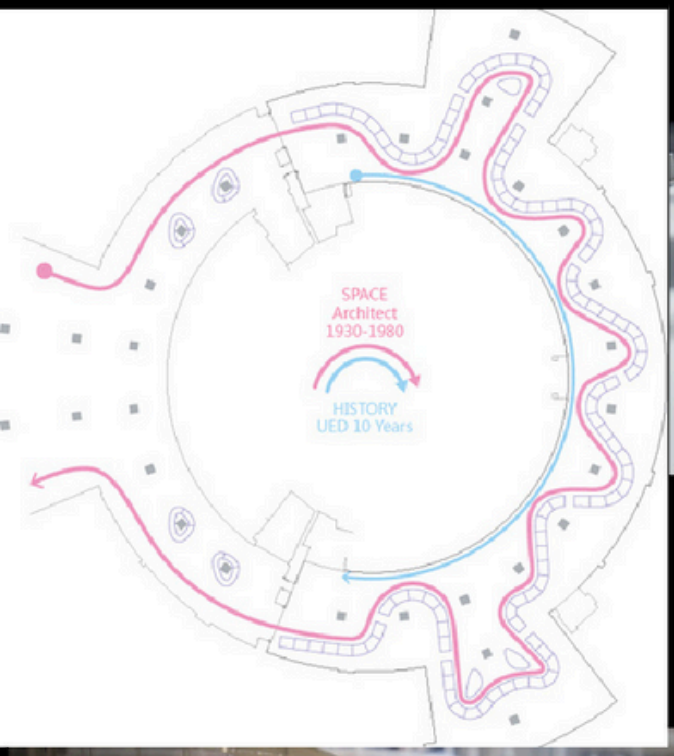
WDCC 2024 was held in Shanghai.

In 2024, China International Industrial Design Expo showcased the latest industrial design products from both domestic and international sources.

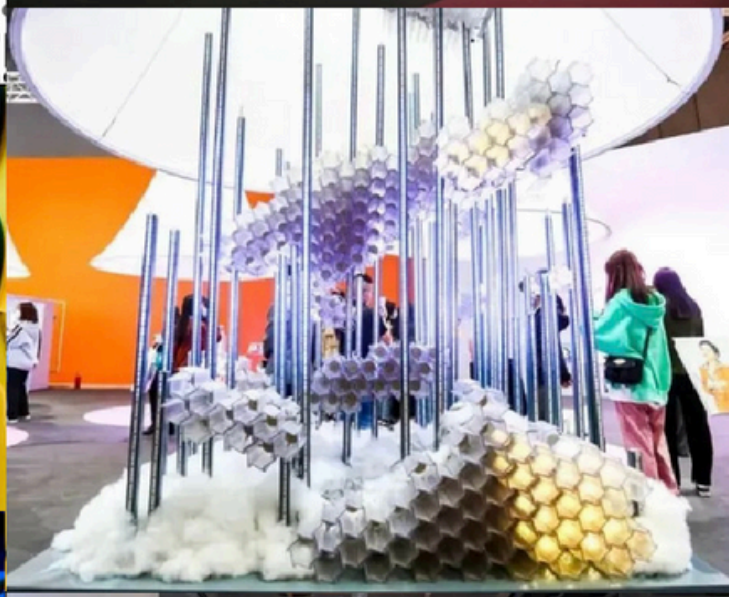
Beijing Olympic Games
2008

World Expo 2010
Shanghai

UED 2015 Beijing International Design Week Exhibition



Guangzhou Design Week 2020



WDCC2024

China International Industrial Design Expo 2024

Chapter 2

China Design Center

2.1. What is a Design Center?

National Design Centers play a core role in the development of China's design industry. In terms of education, these centers work closely with top universities to create a comprehensive talent training system. Students can systematically learn various design courses from traditional art to digital interaction in the classroom, while also participating in practical projects at practice bases. This combination of theory and practice consistently produces excellent talents for the industry.

The large-scale design exhibitions regularly held by these centers are also distinctive. The exhibitions gather top design works from both domestic and international sources, showcasing innovative achievements across various fields, from industrial to fashion, from architecture to digital design. The accompanying high-level forums invite design industry leaders to engage in lively discussions on hot topics such as sustainable design and cultural integration. These exchange activities help China's design community connect with international standards and continuously improve

In terms of research and innovation, these centers invest heavily in building first-class research and development environments. For example, in new materials research, they are developing smart wearable materials and eco-friendly home materials. In technology applications, they actively explore the use of VR, AR, and other new technologies in design. In interdisciplinary collaboration, they unite experts from multiple fields to tackle challenges together.

Another type is the enterprise design center, such as Hongqi and Li-Ning design centers. The design teams focus on two aspects of development. On one hand, they invest in developing new functional fabrics, incorporating advanced nanotechnology into fabric development, ensuring both material strength and improved breathability. On the other hand, they keep up with fashion trends in style design, incorporating current popular elements to launch a series of sports apparel products that are both practical and fashionable.

In conclusion, both national design centers and enterprise design centers play vital roles in their respective fields. National design centers focus on the overall development of the industry through education, exhibitions, and cutting-edge research. Enterprise design centers are more market-oriented, focusing on transforming innovative ideas into actual products to meet consumer needs.

2.2. Historical Development

With the founding of New China, there was a strong need for design development. As a result, the Chinese Architectural Design Association was established in 1952 as a state-owned design company directly under the central government. It shouldered the important mission of creating blueprints for national construction.In 1953, it was renamed as the Central Design Institute, and in 1955 it was further renamed as the Industrial and Urban Architectural Design Institute of the Ministry of Construction Engineering(China Architecture Design & Research Group,n.d.).

China Architecture Design & Research Group, as a top design institution in the country, has earned a distinguished reputation in the architectural field. Over the years, with its profound professional expertise and outstanding innovative capabilities, it has created numerous nationally significant and world-renowned masterpieces.

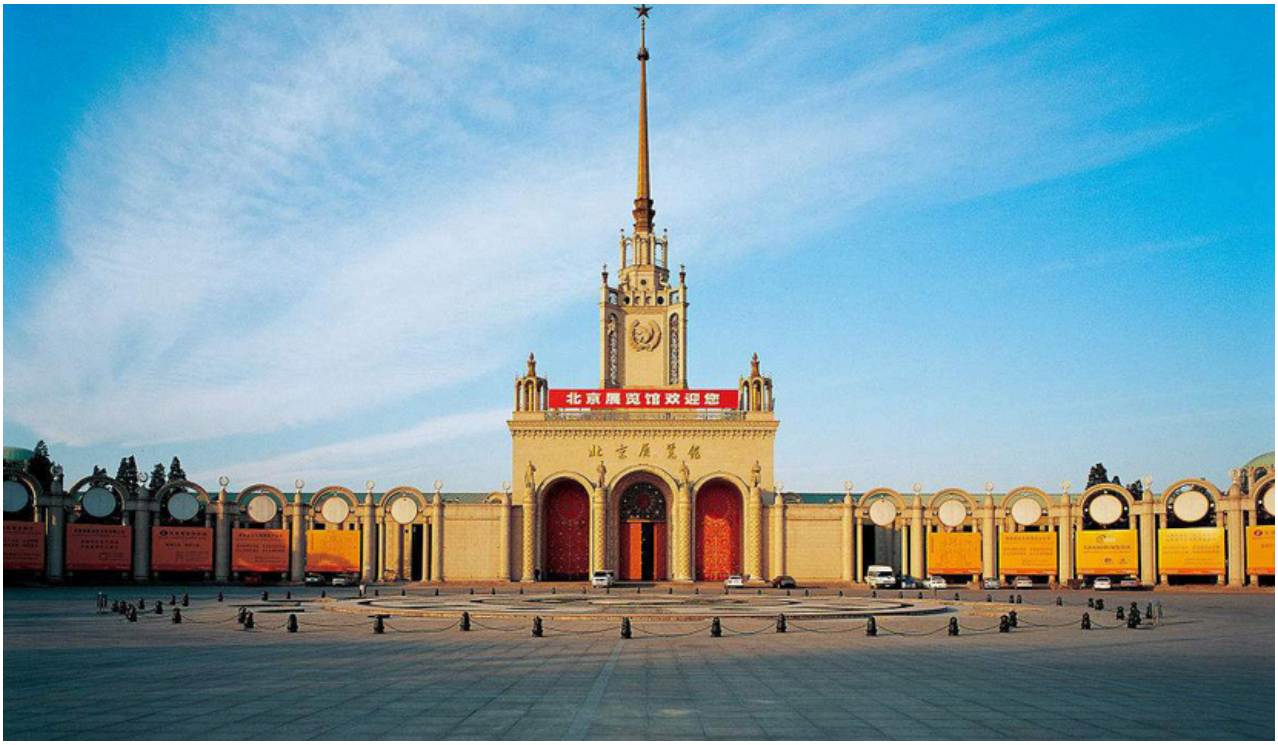


Fig.52/Beijing Exhibition Center

This building, completed in 1954, was a Soviet-aided project modeled after Moscow's All-Union Agricultural Exhibition Center. Its design is imposing yet elegant, with a large fountain in front. Above the center is a tower topped with a red five-pointed star, while the sides feature curved colonnades composed of 18 carved columns, displaying its unique charm.(Li,2014)

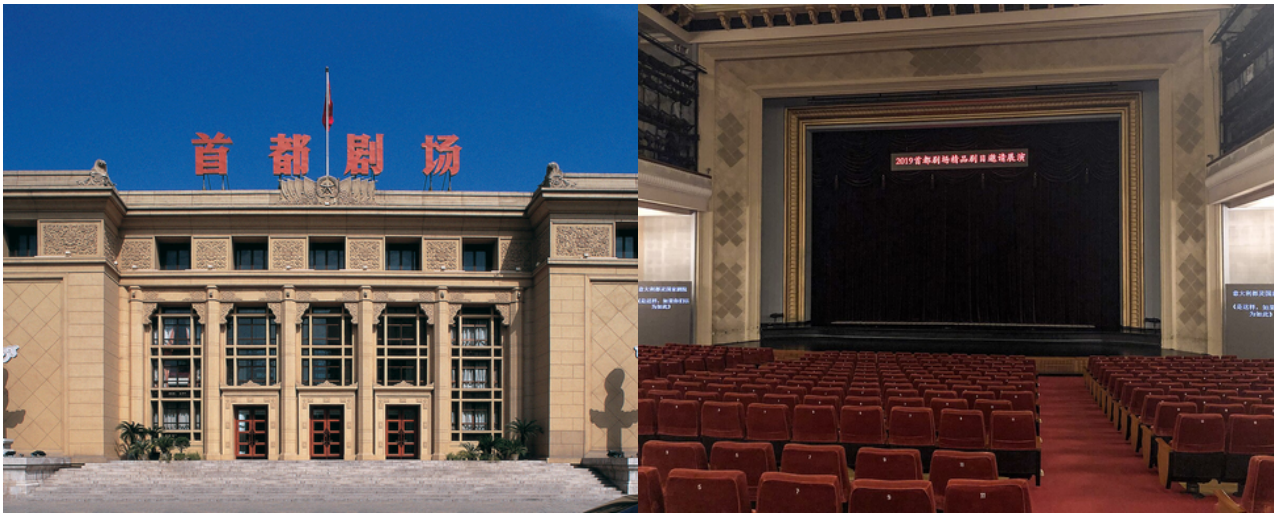


Fig.53/the Capital Theatre (in Beijing)

The Capital Theater was erected in 1954,designed by renowned architect Lin Leyi. This building gained prominence in the 1950s, winning the Excellent Architectural Design Award from the Architectural Society of China. Its unique charm has not only earned acclaim in China but also gained international recognition, being included in the British World History of Architecture, demonstrating its extraordinary architectural value and artistic influence.

Fig.54/Beijing Railway Station

Fig.55/Beijing Railway Station in 1959

In 1958, the Central Committee of the Communist Party of China decided to build the "Ten Great Buildings of Beijing" to commemorate the 10th anniversary of the founding of the People's Republic of China, with Beijing Railway Station being one of them. The station's design work began in late October. The railway yard design was undertaken by the Third Design Institute of the Ministry of Railways, while the main station building was led by Yang Tingbao and Chen Deng'ao, with the design being jointly carried out by the First Architectural Design Institute of the Ministry of Construction and Nanjing Institute of Technology(Zheng &Sun,2003).

Fig.56/Bandaranaike Memorial International Convention Hall

In 1964, Premier Zhou Enlai visited Ceylon (now Sri Lanka) and agreed to help build an international conference hall in preparation for the 1976 Non-Aligned Movement Summit. Construction began in October 1970 and was completed with high quality in May 1973, becoming a symbol of friendship between China and Sri Lanka(Goh,2016).

The Bandaranaike International Conference Hall adopts an octagonal floor plan characteristic of local Sri Lankan temples. Its exterior features a colonnade of 40 snow-white marble columns, creating a design that is both light and dignified, with elegant proportions. This effectively avoids the oppressive feeling that could come from the conference center's massive volume while suiting tropical architectural requirements. The golden patterns inlaid at the tops of the columns and the four pillars at the entrance featuring Sri Lankan ethnic style reflect local architectural characteristics.

Fig.57/Jinnah Sports Stadium

This was a building project undertaken by the China Architecture Design & Research Group in the 1970s, originally intended for the 1978 Asian Games. However, it was ultimately relocated to Bangkok, Thailand(Zuberi, 2019).

In recent years, the China Architecture Design & Research Group has produced numerous outstanding works. The Kunshan Grand Theater, designed by Cui Kai, takes inspiration from Kunqu Opera and conjoined lotus flowers. It follows the curves of the waterfront, capturing the essence of a water town, with comprehensive internal facilities that can meet various cultural needs. The Yanqing Winter Olympic Village, located in the Yanqing competition zone and designed by Li Xinggang and others, adheres to the concept of "mountain forest venues, ecological Winter Olympics park." It adopts a village-style layout that achieves harmony between architecture and nature, receiving high praise from athletes from various countries during the Games.

Fig.58/Kunshan Grand Theater

The building's design work began in 2011, and after 6 years of meticulous development, it was officially completed in 2017.The building's exterior follows the boundaries of the surrounding blocks, while the interior features flowing curved volumes. Through diverse staircase designs, the cascading outdoor platforms become continuous spaces. The diagonal entrance axis extends the site's texture, forming an entrance plaza space, with buildings connected by complete roof covers(China Architecture Design & Research Group,n.d.).

Along the diagonal axis are sunken courtyards and plazas that, combined with riverside landscapes and waterfront platforms, naturally guide foot traffic toward the civic plaza. Outside the theater's lobby, red aluminum tubes appear like flowing water sleeves under lighting. The cinema walls, designed through parametric methods, feature a color gradient from red on the exterior to blue on the interior, with stainless steel mesh decoration on the outside creating an ethereal, fabric-like effect.

Fig.59/Yanqing Winter Olympic Village

The Yanqing Winter Olympic Village is located in the eastern part of the southern core area of the Yanqing competition zone, encompassing residential, international, and operational zones. Design work began in 2017 and was successfully completed in 2021. After the Olympics, it was planned to be transformed into a mountain ski resort hotel with public ski slopes and related supporting facilities.

In terms of planning and layout, the Yanqing Winter Olympic Village innovatively adopted a dispersed mountain village layout with semi-open courtyard patterns. The construction process showed full respect for the natural terrain, cleverly following the mountain contours and gradually smoothing out elevation differences. The project strictly controlled building stories and heights, maximally preserved the mountain forest landscape, and carefully protected existing trees, allowing the architecture to blend seamlessly with the mountain forest scenery. Notably, an existing village ruin within the site was completely preserved and integrated with the landscaping and water systems, transforming it into the Olympic Village's core public space. This approach both preserved historical memory and added unique charm to the development.

In 1986, under the active advocacy of Hong Kong artist Amy Lai, the "Chinese Perspectives Arts Festival" made its brilliant debut in Manchester. This event, like a seed being planted, sowed the initial hopes for the institution and became its embryonic form. In 1989, the organization was officially established on Charlotte Street in Manchester's Chinatown, named the "Chinese Arts Centre."(Chan, F., & Willis, A. 2018)

During its founding period, the center, with sincere dedication, devoted itself to two important missions. On one hand, it actively showcased the diverse and fascinating Chinese culture and arts to the British public, striving to build a bridge for cultural exchange between China and Britain. On the other hand, it eagerly helped British-born Chinese youth to deeply understand their cultural roots and rediscover their cultural heritage. During this period, the center organized several exhibitions of profound significance. The "Children of the Dragon" exhibition vividly presented the moving stories behind Manchester's Chinese community, stirring emotional resonance among countless people. The "Beyond Takeaway" exhibition series boldly challenged social stereotypes about Chinese people, contributing to the reshaping of the Chinese image.

Fig.60/Program of China Scenic Arts Festival 1986

In 1997, under Sarah Champion's leadership, the institution reached a crucial turning point in its destiny. First, the change in geographical location became a landmark event - the organization relocated from Chinatown to Edge Street in the Northern Quarter. This move was not merely a change of location, but symbolized the institution's determination to advance into broader artistic territories.In 2003, with strong support from the Arts Council Lottery Fund, the center relocated again, this time to its current location on Thomas Street in the Northern Quarter. This move was extraordinarily significant, transforming the center into Britain's first public gallery specifically focused on Chinese contemporary art. During this period, the institution's vision increasingly broadened, and it began actively organizing numerous international exhibitions.

In 2013, the institution resolutely renamed itself as the "Centre for Chinese Contemporary Art" (CFCCA), striving to build a platform for diverse exchanges and dedicated to becoming a frontier base for exploring the "Chinese Century." In April 2023, the institution once again embarked on a path of transformation, renaming itself "ESEA Contemporary." This change precisely aligned with the pulse of the times, better reflecting and serving the diverse Asian communities.

At the end of the 20th century, China began the transition from a traditional planned economy to a market economy. In this process, some companies started to pay attention to product design in order to improve their competitiveness.

In the household appliance industry, for example, the Haier Group founded Qingdao Haigao Industrial Design Co, Ltd, the predecessor of the Haier Innovation Design Centre, together with the Japanese company GK in 1994. Most of the design centres founded during this period were dependent on large companies to meet the demand for their own innovative products and expand their market.

Fig.61/photo cutout

On 4 March 2002, the Qingdao Refrigerator Factory, the predecessor of Haier, held a ribbon-cutting ceremony to mark the completion of the factory.

At the same time, economic and cultural exchange between China and the rest of the world intensified. In order to better adapt to the Chinese market, multinational companies began to set up design centres in China. For example, 3M opened a design centre in Shanghai to better understand the needs and cultural characteristics of Chinese consumers and to develop products that are better suited to the local market. In addition, international cooperation has provided local design centres with advanced design concepts and methods.

Some of the Design Centre's products have made a splash in various fields and have unique design stories. Below, we will review the history of some of these iconic products and explore their development.

First of all, I would like to introduce the Red Flag Sedan, which was launched in 1958 and has a special significance as the first premium sedan in China.

Countless designers were involved in the design and development of the Red Flag sedan. From the early Red Flag CA72 models with their characteristic national elements, fan-shaped air intake grille, rear lights and other traditional cultural features, to the later models with continuous innovation and further development, the Changchun Design Centre has played a key role in the development of the Red Flag.

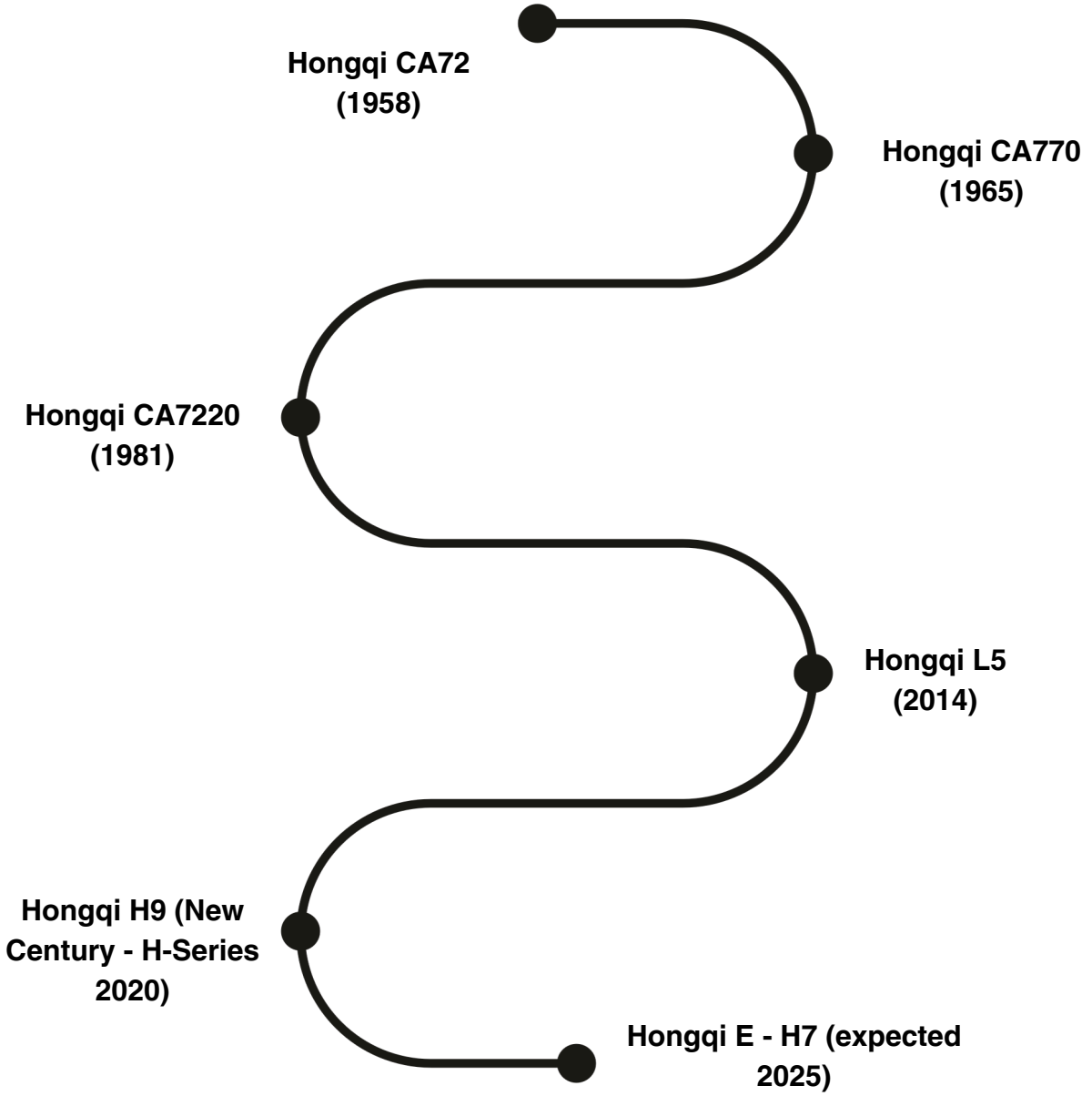


Fig.62/Red Flag CA72

The 1958 Red Flag CA72 has a body length of over 5 metres, and most of the body is painted black to show its noble disposition, elegance and dignity. The radiator grille is shaped like a traditional folding fan, an iconic design element with high recognition value that highlights traditional Chinese artistic taste, and the rear lights are shaped like a palace lantern, a traditional Chinese art lamp, and this design gives the rear of the vehicle a national character.

This 1965 Red Flag CA770 has a large body and a stable shape. The body lines are smooth and look luxurious and dignified, suitable for a government guest car. The front skirt is a 'straight waterfall', very imposing. The headlights and fog lights are conventional, and the rectangular turn signals are matched. The rear lights have elements of palace lights, and the bumper is decorated with chrome lines, giving it an upscale look. The mudguards are also marked with the Three Red Flags logo, which gives a modern look.

Fig.63/Red Flag CA770

Fig.64/Red Flag CA7220

In 1981, the appearance of the Red Flag CA7220 was inspired by advanced foreign automotive design concepts and became more modern, with body lines that were smoother than the previous model, less angular, rounder and more dynamic. The curvature and curves of the body were reviewed to be more visually appealing, reduce wind resistance and improve driving performance.

The headlights of the Red Flag L5 are inspired by the seaweed grass of the Temple of Heaven and create a unique visual effect. The radiator grille is inspired by the bamboo nodes of the jade pipe, the interior is based on the horizontal contours of Chinese architecture with heavy cornices and corners, and the seat design is based on the Chinese round chair.

Fig.65/Red Flag L5

Fig.66/Red Flag H9

The Red Flag H9 adopts the new design language of the family, and its overall shape retains the traditional temperament of the Red Flag brand with a modern and stylish look. The front end has a huge U-shaped chrome moulding around the central radiator grille, merging with the headlights to create a unique front-end shape. The rear of the car has a striking rear light design with chrome trims, emphasising a sense of modernity and technology.

The exterior design of the Red Flag EH7 incorporates elements of oriental aesthetics: a simple and flowing form with an elegant character that combines the Red Flag car logo, ‘flag over the rainbow’, with the concept of the central axis of Beijing.

Fig.67/Red Flag EH7

In the apparel design sector, Li Ning founded the first apparel and footwear design and development centre in China in 1998, making it the first Chinese sportswear company to develop its own products.

In 2004 and 2008, the design and research centre in Hong Kong and the design centre in Portland, Oregon, USA, were opened. These are responsible for high-end design and research for clothing and shoes, and enable Li-Ning to combine international fashion trends and professional sports technology.

In 2018, the ‘China Li-Ning’ collection was presented at New York Fashion Week, which has become an important symbol of the brand's transformation. The collection combines traditional elements of Chinese culture and modern clothing design, such as the use of Chinese characters, traditional patterns and retro colour schemes, to create sports fashion with a unique style.

The collection includes numerous designs. The ‘Wudao’ series combines sport, fashion and culture, exaggerated shapes and special colours, such as Wudao 2 ACE, which embodies a unique design concept.

The co-branding collection ‘Li-Ning x Dunhuang’ cleverly incorporates elements of Dunhuang wall paintings, such as the flying sky and the nine-headed deer on the upper material, giving the products a deep cultural connotation. The Li-Ning x KONGSANKI co-branding collection combines mechanical aesthetics with metallic materials and flowing lines to create a futuristic and technological feel.

Fig.68/Wudao 2 ACE,2018
ShiJie.Zhou

Fig.69/Li-Ning x Dunhuang,2020
Li.Ning center

In summary, design centers in China were established earlier than design associations and began to play a role much earlier as well. Their operations were more prominently state-owned in nature, with early design efforts focusing primarily on architecture. Many of China's classic architectural works were created by these design centers. As development progressed, other types of design centers gradually emerged, playing a significant role in promoting the internationalization of Chinese design.

Moreover, by reviewing iconic products such as the Hongqi automobile and the sports brand Li-Ning, we can trace the development of product design within China's design centers, gaining a deeper understanding of their overall evolution. It is evident that they transitioned from early localized designs to being influenced by foreign trends, and later to combining internationalization with localization. This developmental trajectory has achieved notable progress overall. However, challenges remain, such as insufficient originality and a lack of high-end design capabilities, which need to be addressed urgently.

2.3. Current Status

Although Chinese design embodies profound cultural heritage and innovative strength, its international promotion remains significantly inadequate. Therefore, the China Design Centre was established in London in 2013,aiming to comprehensively promote Chinese design concepts and break the Western bias and misconceptions about "Made in China."

As a new type of design center, it integrates education and research, exhibitions, and business cooperation, aiming to promote the development of Chinese design. In terms of education, it collaborates with many renowned international universities to host various events, facilitating the exchange of design concepts while significantly enhancing the visibility and recognition of Chinese brand packaging design.

In March 2016, the China Design Centre (CDC) collaborated with the renowned British art institution Nottingham Trent University (NTU) to host the “Chinese Tea Packaging Design Competition.” The competition was held alongside NTU’s “Global Week” and aimed to promote Chinese culture while exploring innovative and creative design concepts.

Fig.70/exhibition site

Through innovative packaging design, Yunxugu Fuding White Tea has established a solid foundation for entering the European market, while also allowing more international audiences to understand and appreciate the essence of Chinese Zen tea culture.

In advancing the development of characteristic Chinese towns, the China Design Centre has focused not only on education but also on providing a platform for international academic exchange through forums and thematic presentations. In 2018, the second Blue-Green Towns Sino-British Forum was successfully held at Hangzhou Taolichunfeng, attracting renowned scholars and experts from both China and abroad. The forum focused on key themes such as agriculture, smart cities, industrial operations, and ecological planning, offering innovative insights and an international perspective for the construction of blue-green towns. By integrating theory with practice, the forum provided valuable references for their development.

During the forum, participating experts shared their research findings and practical experiences in their respective fields. Professor Richard Baines from the Royal Agricultural University in the UK analyzed cases of modernized agriculture in the Netherlands and localized community agriculture in the UK. He argued that agriculture is not only a driving force for economic development but should also be integrated into residents' lives through innovative technologies and community activities to promote holistic town development.

Fig.71/forum site

Dr. Nicholas Falk from the University of the West of England focused on smart city construction, using examples from Copenhagen, Singapore, and other cities to emphasize that technological innovation should enhance quality of life and drive sustainable urban development. Dr. Yingying Tian, a director at the London China Design Centre, used the example of Letchworth Garden City to explore the operational patterns of town industries, proposing that the mutual support of education, housing, and industry is key to achieving harmony between people and industries(China design center,n.d).

Furthermore, German scholar Joachim Eble approached the topic from an ecological planning perspective, proposing comprehensive solutions for community-based energy and resource recycling, emphasizing the importance of balancing humans and nature to create livable environments. The overarching discussions of the forum centered on the concept of "interconnection and symbiosis." Experts agreed that town development must holistically consider the relationships between nature, industry, culture, and community, using systematic planning and operations to achieve long-term sustainable development.

However, the China Design Centre still has many aspects to consider in terms of its future development. For instance, the number of exhibitions is relatively limited, and there is a lack of collaborative projects. Moreover, in the process of future transformation, greater emphasis needs to be placed on innovation and development in the field of digital design to drive comprehensive transformation and upgrading.

2.3.1 Digital Transformation

Design and technology are two of the most talked-about topics today, sharing a deeply intertwined and dynamic relationship. On one hand, technological advancements enable the realization of innovative design concepts, transforming ideas into tangible outcomes that deliver genuine value to people. Moreover, technology often reduces the cost of implementing designs, making high-quality design more accessible to a broader audience.

On the other hand, the continuous evolution of technology expands the creative boundaries for designers, equipping them with the tools and confidence to push the limits of innovation. For instance, the growing sophistication of 3D printing allows designers to materialize their concepts at a fraction of the cost while providing the flexibility to refine their designs quickly and effectively.

Before diving into how technology propels design, it is essential to reflect on the essence of design itself—a discipline that predates modern technology by centuries.

In an insightful article titled The Origin of Design: Designing the Future by Understanding the Past, the essence of design is distilled into a simple yet profound concept: design is about realizing future possibilities by learning from the past and leveraging present technologies(Medium.it ,2017).

Michelangelo, the Renaissance master, perfectly encapsulates this philosophy through his description of the creative process:"In every block of marble, I see a statue as plain as though it stood before me, shaped and perfect in attitude and action. I have only to hew away the rough walls that imprison the lovely apparition to reveal it to others as I see it."

For Michelangelo, every block of marble contained an unseen masterpiece. He simply removed the excess, guided by his vision and skill, to bring the form to life. However, such traditional approaches demanded exceptional talent, extensive time, and immense effort—qualities not universally available.

Fig.72/Queen Victoria's copy of Michelangelo's David being restored at London's Victoria and Albert Museum by sculpture conservator Johanna Puisto.

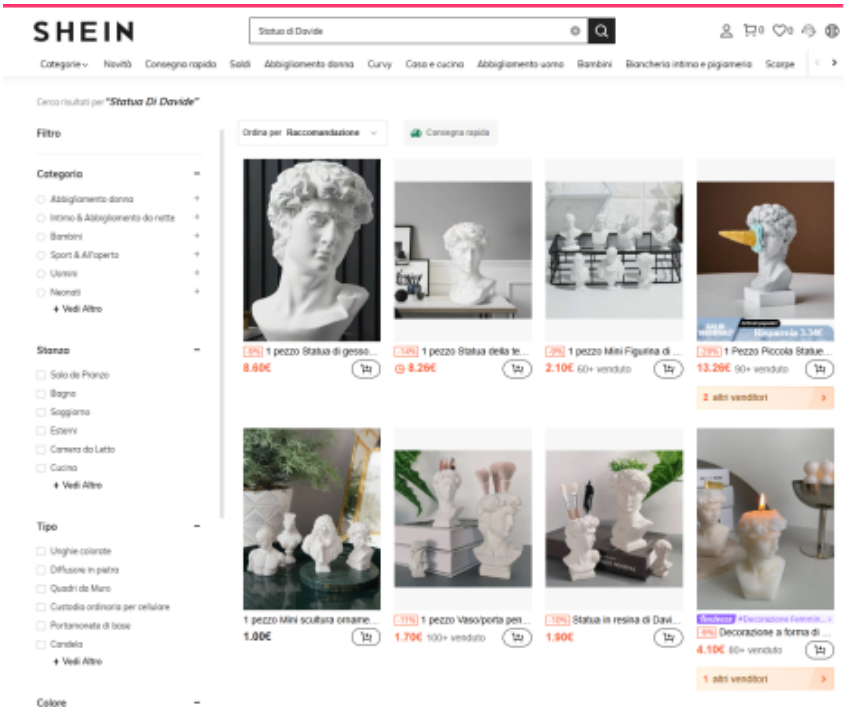


Fig.73/official website

With the advent of modern technology, the paradigm has shifted. Technological advancements democratize creativity, making it possible for almost anyone to achieve what once required extraordinary skill. Today, thanks to 3D modeling software, high-precision algorithms, and CNC machining, even a layperson can replicate a "David" in their own home.

Technology profoundly influences the value, efficiency, and scalability of design. In the pre-technological era, designers relied on manual tools to sketch and draft. These processes were often labor-intensive, unalterable, and hard to reproduce or share, limiting the commercial viability of design. This era marked the nascent stage of humanity's ambition to transform the world through design.

Consider Michelangelo's craft—there was only one Michelangelo because envisioning and sculpting beauty required unparalleled talent. By contrast, contemporary technology enables the replication of intricate designs on a massive scale. For instance, advanced 3D modeling software provides designers with an array of tools—geometric modeling, texture mapping, and lighting simulation—that allow for the creation of detailed virtual prototypes. Designers can explore various carving depths, angles, and textures in virtual environments using AR and VR technologies, refining their ideas before committing to physical execution. This immersive process enhances precision and efficiency, ensuring higher quality outcomes.

Fig.74/product of 3D modeling software

Once a design is finalized, technologies like CNC machining and precision laser engraving take over. CNC machines, guided by digital models, ensure accurate execution of complex patterns and contours. This automation significantly enhances production speed and consistency, enabling mass production to meet market demands. Similarly, laser engraving—commonly used for metal, plastic, and wood—achieves high precision and environmental sustainability.

The intersection of design and technology has sparked considerable debate. Critics argue that over-reliance on technology can homogenize design, stripping away its artistic essence. They also highlight how digital tools make it easier for unscrupulous actors to replicate and exploit independent designers' work. In this view, digital design risks reducing creators to assembly-line workers, churning out uninspired products.

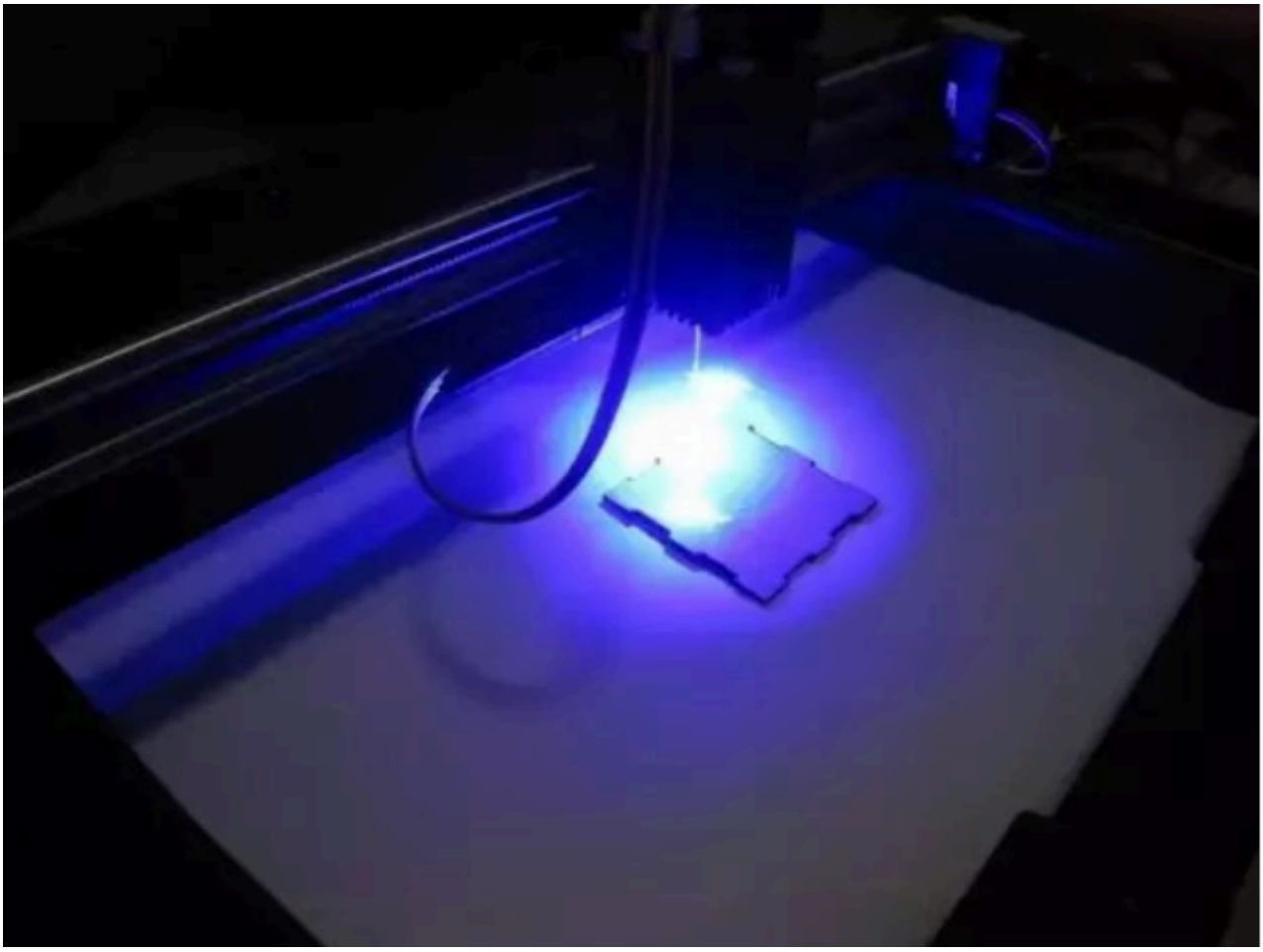
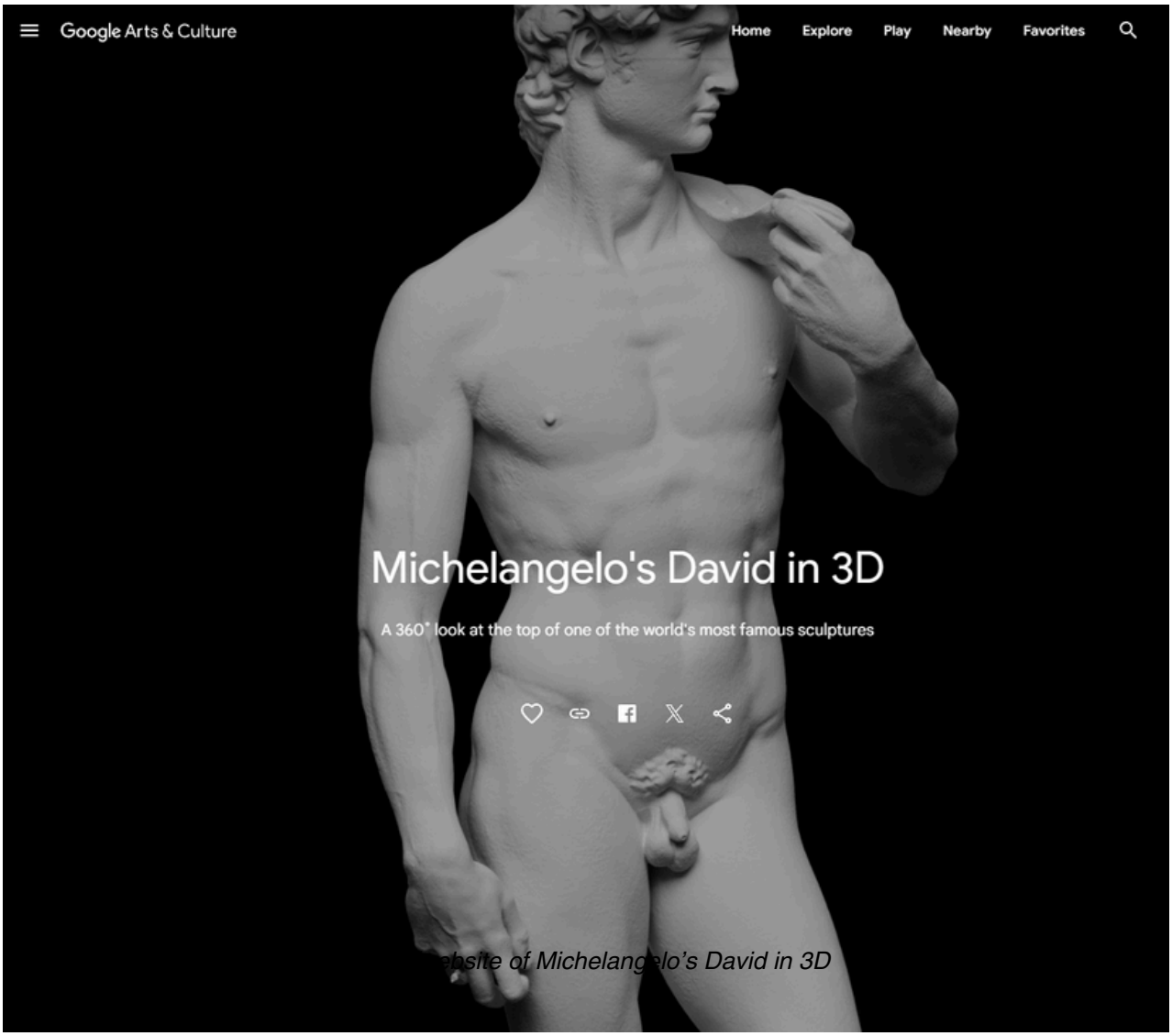


Fig.75/laser engraving

Conversely, proponents emphasize how technology fosters creativity, lowers barriers to entry, and democratizes design. With technological support, anyone can participate in the creative process, leading to diverse and innovative products. These opposing perspectives are not inherently contradictory but reflect distinct market segments.

Technology's impact extends beyond the design process itself, transforming how audiences experience and interact with art and design. For example, by 2025, it will be possible to explore Michelangelo's David in full detail from the comfort of your home via immersive virtual platforms. Through advanced imaging and internet technologies, viewers in distant locations can examine every detail of this iconic masterpiece in 360 degrees, bridging physical and cultural distances.



ebsite of Michelangelo's David in 3D

Digital design has fundamentally transformed the methods of cultural inheritance,breaking the limitations of traditional approaches. It not only enriches the technical means available for recording, preserving, showcasing, and disseminating cultural heritage but also facilitates digital replication and backup, enabling the study and research of cultural resources with unprecedented efficiency. Furthermore, digital technologies allow for the restoration and reproduction of damaged or lost cultural artifacts, addressing critical challenges in cultural heritage preservation. This fosters the regeneration and innovative application of heritage in contemporary contexts.

For instance, the advent of "digital cultural and creative interactive walls" seamlessly integrates cultural relics and creative products into dynamic displays. When visitors touch cultural relics or creative designs embedded in these walls, the objects are brought to life through pictures, videos, or three-dimensional models. The experience is immersive and visually captivating, enabling simultaneous interaction by multiple users. Rich information is presented in an engaging format, and visitors can conveniently scan QR codes for social sharing. Additionally, the backend system allows for easy management of display content, tracking of user behavior, and analysis of metrics such as content popularity.
A prominent example of digital design in action is the Visit Dunhuang Online WeChat mini-program launched by the Dunhuang Museum in 2020. This app leverages multimedia, networking, and digital technologies to disseminate Dunhuang's cultural treasures in an innovative and engaging format. Featuring mini-games that promote human-computer co-creation, the app has proven to be an effective platform for the digital preservation and sharing of these historic treasures.

In recent years, the Dunhuang Research Institute has made significant strides in digitizing cultural heritage. By using advanced digital technologies, they have replicated life-size Dunhuang murals and transformed them into stunning, lifelike dynamic videos. At the Mogao Grottoes Digital Center, visitors can experience the magnificence of grotto art through immersive displays, and future advancements are expected to enable interactive experiences with the murals.

Fig.78/APP of Dunhuang Research Institute

AR technology has broad application prospects in clothing and packaging design. In clothing design, designers can use AR technology to show customers the effect of wearing clothes and make appropriate suggestions to improve the efficiency of customers' purchasing decisions. In packaging design, AR technologies can add interactive elements and display information on product packaging to enhance brand image and user experience.

Fig.79/ZARA's technology app

In April 2018, ZARA introduced AR technology in 137 stores worldwide. It is assumed that consumers can use the technology on their mobile devices via ZARA's technology app. ZARA activates the app in three places: at the store front, at the ID on the counter, and in the online order window. When the smartphone is pointed at the graphical labelling of these elements, the models appear one after the other for 7-12 seconds on the user's mobile device screen.

The Chinese online shopping programme Taobao will also be introducing a virtual changing room in 2023. Through training and application of artificial intelligence models, the algorithm enhances the effect of various dimensions such as the model's pose, background style, and decorative elements to improve the realism and aesthetics of the composition. Combined with the user's face and body data, the artificial intelligence of the Taobao dressing room gives the user a fitting experience that is different from the past.

Fig.80/Taobao app

Artificial intelligence can also help designers in the field of graphic design. For example, design software that uses artificial intelligence technology can automatically create posters, flyers and other graphic templates based on a design programme. Designers only need to enter a few key details and requirements, and the software can automatically generate several different design options for them to choose from, improving the efficiency of the design process while also being more creative and inspiring.

Fig.81/design.AI

Launched by Inmagine in December 2019, Designs.ai is an integrated online design platform that uses artificial intelligence to enable users to create a variety of digital content, including logos, videos and presentations.

Fig.82/These are two practical application examples that combine Midjourney and Stable Diffusion techniques.

In summary, design thrives at the intersection of cultural depth and technological innovation. While cultural content provides the essence and meaning of design, technology serves as its driving force. Modern technology empowers the design industry to create competitive advantages, pushing boundaries and setting new standards. As science and technology continue to evolve, they will not only broaden the horizons of the design industry but also enhance its ability to innovate and maintain a competitive edge in an ever-changing market.

Chapter 3

China Design School

3.1. Historical Progress

In the early 1900s and 1920s, the wave of Western industrial civilisation reached China, and design education began to take root in this ancient country. An important development was the establishment of the Faculty of Arts and Crafts and Design at the Shanghai Academy of Fine Arts in the 1920s(Wu,2017).

Fig.83/The entrance to the Shanghai Art College in 1920

Fig.84/The former site of Baiyun Temple of Shanghai Art College

A significant milestone in modern Chinese art education was the establishment of the Shanghai Art Academy. In November 1912, the talented young Liu Haisu founded China's first modern art school at No. 7 Zhapu Road in Shanghai. The school underwent several name changes: in 1920 it became the Shanghai Art School, the following year it was renamed the Shanghai Specialized Art School, and in 1930 it was finally named the Shanghai Art College (abbreviated as "Shanghai Art School").

The founding of Shanghai Art School had profound historical significance. It not only pioneered modern art education in China but also broke away from the traditional master-apprentice teaching model by introducing a modernized art education system. In terms of curriculum, the school integrated the essence of both Eastern and Western art, emphasizing both the inheritance of traditional Chinese painting techniques and the study of Western painting skills.

When the Shanghai Art School was established, it set three founding principles: integrating Eastern and Western art, preserving Eastern artistic traditions while studying Western art; using art to enlighten the public and transform society; and dedicating itself to art research and dissemination with sincere attitude. These ideals closely linked art education with national rejuvenation, emphasizing art's crucial role in enlightening people and saving the nation, which became important guiding principles for the school's development.

The development of Shanghai Art School was inseparable from the strong support of educator Cai Yuanpei. In December 1919, the school established its board of directors with Cai Yuanpei as chairman. He contributed greatly to the school: not only did he write the school's name, but he also created the school's motto "Hong Yue Shen Mei" (Broad, Concise, Deep, and Beautiful) and the ethical motto "Sincerity," and personally wrote lyrics for the school anthem.

Fig.85/Cai Yuanpei and Shanghai Art College

Fig.86/Cai Yuanpei

Cai Yuanpei attended many events at Shanghai Art School. In his speech at the school's 20th anniversary ceremony, he stated: "Twenty years ago, China had no art schools. It wasn't until 1918 that the National Beiping Art School was established, and until 1928 that the National West Lake Art School was founded. Therefore, our school was truly the pioneer, and has had a transformative influence in the history of Chinese art."

蔡元培题上海美专学训-闳约深美

Fig.87/Cai Yuanpei's inscription of "Hong Yue Shenmei" school training

In 1922, ten years after the establishment of Shanghai Art School, renowned painter Yan Wenliang founded the Suzhou Art School near Canglang Pavilion in Suzhou, a city famous for its rich cultural heritage. The school adopted the motto "Patience, Benevolence, Sincerity" and pursued an educational philosophy of "Combining Chinese and Western Art to Nurture Talent." It was dedicated to introducing Western art and promoting the development of modern art. In 1932, the school was officially renamed as Suzhou Art Academy, commonly known as Suzhou Art School.

Fig.87/Yan Wenliang, founder of Suzhou Art College

Yan Wenliang was born into a family of painters in Suzhou and studied Western painting at Shanghai Commercial Press in his youth. In 1912, he created his first oil painting "Moonlight at Shihu Lake." In 1919, he organized China's first national art exhibition - the Suzhou Art Competition Exhibition. His 1920 work "The Kitchen" won an honorary award at the 1929 French Spring Salon, demonstrating his artistic maturity(Andrews, 1995).

Suzhou Art School established a Department of Applied Arts with workshops for printing, type casting, plate making, and photography, pioneering design art education in China. The school also created an Animation Department, training China's first generation of animation professionals.

Fig.88/Suzhou Art College Printing Factory, 1934

From 1946 to 1948, several cultural performance troupes were successively established in the Shandong Liberated Area to meet the needs of the revolutionary war. These troupes were led by cultural cadres who had been working in the liberated areas, and their members were primarily local artists and cultural workers.

Fig.89/The choir of the Shandong University Arts Department during the war,1946

In 1952, following the Ministry of Education's nationwide university restructuring plan, the Music and Art programs from Shandong University's Art Department were merged with Shanghai Art School and Suzhou Art School to form the East China Art School. On December 8th of the same year, a grand opening ceremony was held with faculty, students, and representatives from various sectors in attendance. This date was designated as the school's founding anniversary.

Fig.90/The three schools were merged in 1952

Fig.91/The establishment of East China Art School

In early 1958, East China Art School relocated from Wuxi to Dingjia Bridge in Nanjing, and was renamed Nanjing Art School in June of the same year. The school offered fine Arts, which included Painting, Theater Arts, Decorative Arts, and Textile Arts. The school also established a Special Program in Arts and Crafts and an affiliated secondary art school.

However, the subsequent period of the ‘Cultural Revolution’ (1966-1976) was a disaster for design education. Numerous design colleges and universities were forced to discontinue their programmes, student enrolment almost came to a complete stop, and design education as a whole was paralysed. This situation lasted until the resumption of university entrance exams at the end of the 1970s, when design education began to recover. Some colleges and universities started to accept students again and gradually adapted the teaching content to the changing demands of social development.

Fig.92/One of the first universities in China to recruit graduate students

Fig.93/Liu Haisu returned to serve as president of Nanjing Art Institute

In the 1980, the reform and opening-up policy gave a strong impetus to the rapid development of the Chinese economy, and the demand for design talent increased dramatically. The example of the Nanjing Art Institute, the Faculty of Arts and Crafts founded in 1981, clearly illustrates the development of design education during this period. The institution's archives show that during this time it actively promoted exchanges with foreign countries and introduced progressive design concepts and teaching methods from abroad. The influence of foreign curriculum models and practical teaching methods on Chinese design education is also evident in the records of international educational exchange, which opened up new ideas for the further development of Chinese design education.

In the 1990, the rapid development of information technology led to profound changes in the field of design. Design colleges were aware of these changes and began to focus on developing students' computer-aided design skills. The information in the curricula shows that software courses such as Photoshop and Corel DRAW have become compulsory for students specialising in graphic design. At the same time, specialities such as artistic environmental design, animation design and other new specialities are emerging. In view of the development of the industry, these specialisations have emerged to meet the acute demand for design talent in the development of the architecture, film and entertainment industries, and they have given these industries new impetus.

From the beginning of the 21st century to 2010, comprehensive universities such as Zhejiang University and Tongji University have devoted themselves to design education. From the teaching materials of these universities, we can see that they make full use of their interdisciplinary advantages to implement interdisciplinary design education. The industrial design programme, for example, combines engineering and design so that the design talents trained have a more comprehensive knowledge system. This interdisciplinary learning approach has broadened the scope of design education and enabled talented designers to better tackle complex design problems.

Through the above overview of the development of Chinese design institutions, it is evident that their history is longer and more established compared to design associations and design centers, playing a foundational role in cultivating talent for the Chinese design industry.From a chronological perspective, Chinese design institutions originated in the early 20th century, around the same time as the Bauhaus, the pioneer of modern design education. It can be speculated that the establishment and development of Chinese design institutions were likely influenced by the Bauhaus.

From a geographical perspective, China's earliest design institutions were established in Shanghai and its surrounding areas, which were relatively open at the time. This can be attributed to two main reasons: first, the Shanghai region had a more developed economy and a higher demand for design talent; second, Shanghai was deeply influenced by foreign cultures, fostering a more open cultural environment where people were more receptive to emerging design institutions.

As for the current state of Chinese design institutions, this study will analyze two highly representative institutions in China: the Academy of Arts and Design at Tsinghua University and the Central Academy of Fine Arts.

3.1.1 Tsinghua University Academy of Fine Arts

The Central Academy of Arts and Crafts was founded in 1956 .The university has three faculties: dyeing and weaving, ceramic art, and Department of Decorative Arts. The curriculum of the dyeing and weaving department included textile materials, dye and weaving pattern design, and the printing and dyeing process; the ceramic art department focused on ceramic materials, shaping, and the firing process; and the Department of Decorative Arts included typography, typeface, layout design, and packaging design.

Fig.94/Group photo at the inauguration ceremony of the Central Academy of Fine Arts, 1956

In preparation for establishing the Central Academy of Arts and Crafts, Gao Zhuang and Chang Shana, teachers from the Arts and Crafts Research Group of Tsinghua University's Architecture Department, were transferred to the Applied Arts Department of the Central Academy of Fine Arts in September 1952(Qin,2020). In early 1954, the Applied Arts Department was renamed as the Arts and Crafts Department, with Pang Xunqin appointed as department head. The research office focused on "connecting with practical applications, improving craft techniques, training faculty, and developing teaching materials."

In terms of exhibition and arts and crafts research, in 1953, the Applied Arts Department was tasked with collecting materials and designing the exhibition for the first "National Folk Arts and Crafts Exhibition" organized by the Ministry of Culture. This work also contributed to the academic foundation for the department's development.

In terms of teaching materials, the Applied Arts Department collected, copied, organized, and edited the first batch of traditional pattern textbooks after the founding of the People's Republic of China. These included "Chinese Brocade Patterns," "Dunhuang Ceiling Patterns," and "Beijing Shadow Puppetry," published by the People's Fine Arts Publishing House in 1953. These became core materials for pattern design education.

Fig.95/Beijing Shadow Puppetry

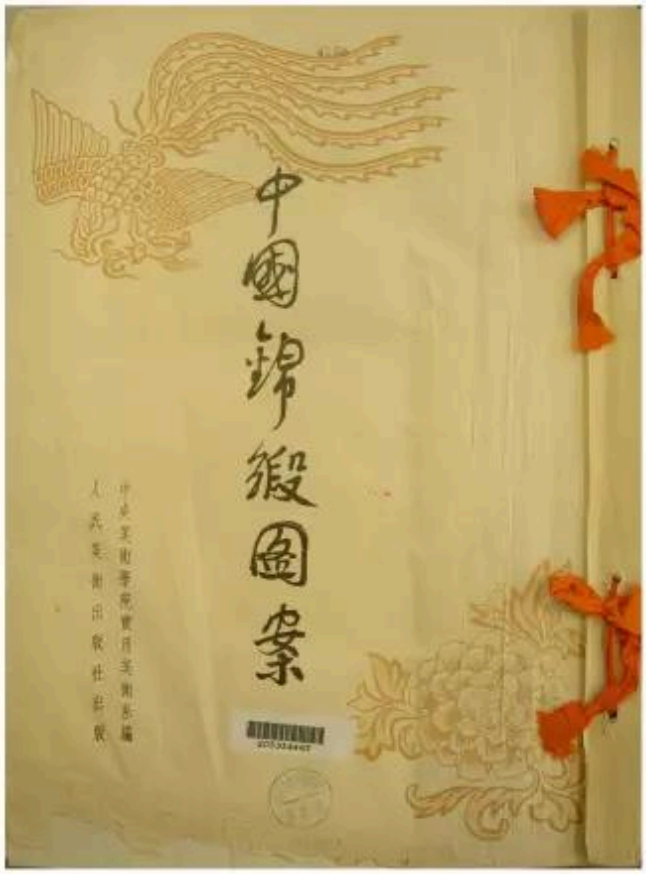


Fig.96/Chinese Brocade Patterns

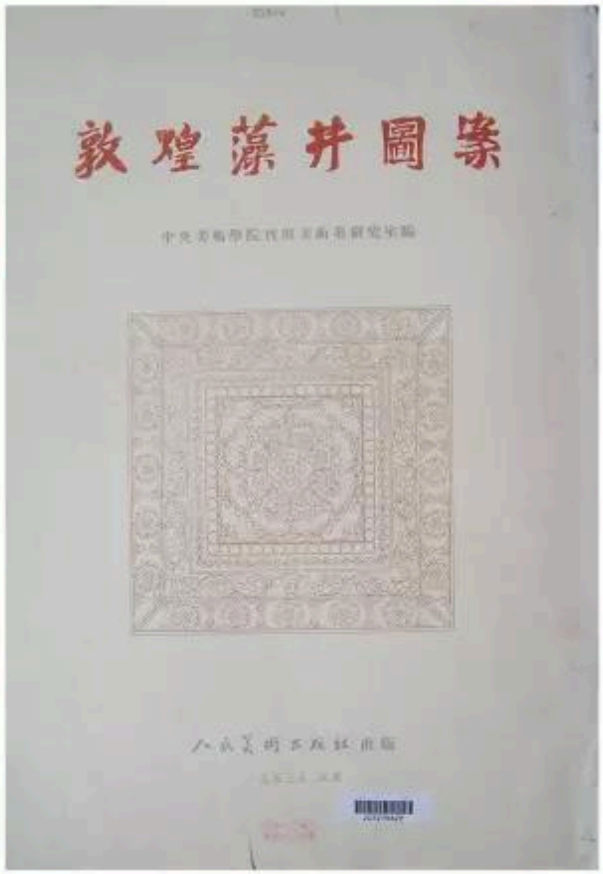


Fig.97/Dunhuang Ceiling Patterns

In the 1970s and 1980s, as the wave of Reform and Opening Up swept across China, the Central Academy of Arts and Crafts adapted to the era's demands by developing comprehensive disciplines centered on "art design."

In 1975, the Architectural Decoration Department was renamed the Industrial Arts Department, laying the foundation for the Industrial Design major. In 1977, while conducting national research on arts and crafts and compiling "A Brief History of Chinese Arts and Crafts," preparations began for establishing the Arts and Crafts History and Theory Department. In 1983, the nation's first Arts and Crafts History and Theory Department was officially established at the academy, and in 1987, it became the country's only doctoral program in arts and crafts history and theory. In 1984, the academy took the lead in establishing the Industrial Design Department and Fashion Design Department, further improving its academic structure and training professional talents in related fields.

Fig.98/founding meeting

In 1985, the Book Binding major, which had been established in 1958, was restored and developed into the Book Design Department. This department later merged with the Decorative Design Department in 1991. In 1988, the Environmental Art Design Department was established, adding Landscape Design to the existing Interior Design Department (which had split from the Industrial Arts Department in 1984).

In 1988, the Foundation Department was established. Meanwhile, the Interior Design Department was renamed as the Environmental Art Design Department, and the Special Arts and Crafts Department was renamed as the Decorative Arts Department.

In the 1990s, the university expanded the range of teaching disciplines and talent development. It improved and enriched the professional fields, for example by adding transport design and interaction design to industrial design. At the same time, the application of computer-aided design was strengthened and courses were offered for the corresponding software.

In 1999, the Central Academy of Arts and Crafts was merged with Tsinghua University and renamed the Tsinghua Academy of Fine Arts. Building on Tsinghua University's disciplinary strengths, the academy has achieved remarkable results in integrating disciplines. The Faculty of Environmental Design works together with the Faculties of Architecture and Civil Engineering, while the Faculty of Industrial Design works with the Faculties of Mechanical Engineering and Automation, which promotes students' interdisciplinary design skills.

In the 21st century, Tsinghua Academy of Fine Arts has undergone profound development in the areas of disciplinary construction, talent cultivation and international cooperation. In terms of disciplines, the academy has taken a leading position in a number of disciplines related to the development of ‘double first-class’. It focuses on developing students' innovative and practical abilities and works with companies to provide opportunities for internships and practical projects.

The Academy of Arts & Design, Tsinghua University has created many outstanding works throughout its history, including the design of the national emblem. The Architecture Department of Tsinghua University, led by Liang Sicheng and Lin Huiyin, collaborated with the Applied Arts Department of the Central Academy of Fine Arts, which included Zhang Ding, Zhang Guangyu, Zhou Lingzhao and others, to collectively complete this design.

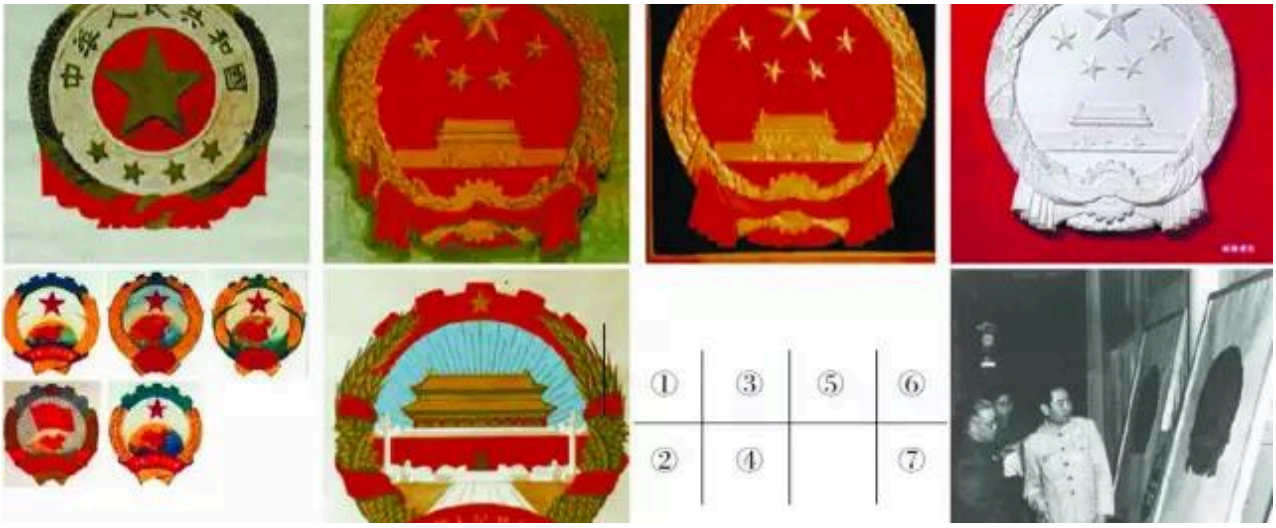


Fig.99/The design of the national emblem

The Great Hall of the People, where the National People's Congress meets, serves as a venue for political activities of the state and the masses. It is one of the "Ten Great Buildings" constructed for the 10th anniversary of the People's Republic, located on the western side of Tiananmen Square. In December 1958, the Central Academy of Arts and Crafts formed a 75-member decoration design team of faculty and students for the "Ten Great Buildings" project, led by Vice President Lei Guiyuan. The construction was completed in 1959.

Fig.100/The Great Hall of the People

Founded in 1958, Decoration is an academic journal published by the Central Academy of Arts and Crafts (now Tsinghua Academy of Fine Arts). The journal covers a wide range of areas, including the study of traditional arts and crafts such as ceramics, embroidery, wood carving and other crafts, as well as contemporary art and design, highlighting advanced concepts in the design direction of graphic, media and industrial design and presenting relevant practical achievements.

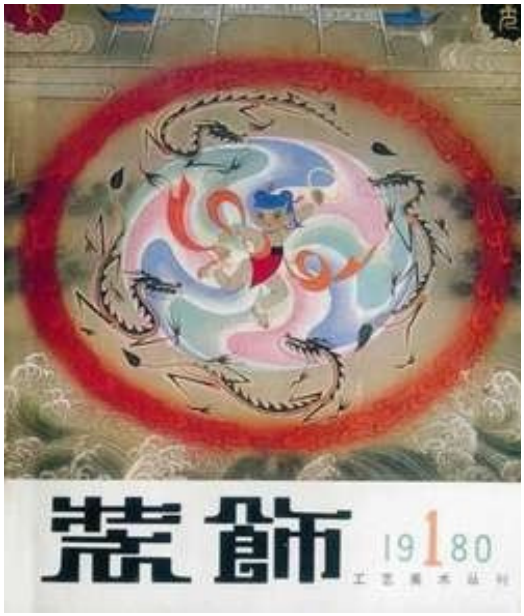


Fig.101/Magazine cover

Affected by the Cultural Revolution, the magazine "Zhuangshi" (Decoration) was forced to suspend publication. It was not until June 1980 that, after a 19-year hiatus, the magazine resumed publication. After the resumption, "Zhuangshi" focused on academic hotspots, integrated modern design, craft culture, folk art research, etc., and published a large number of highly influential articles, contributing to the development of related fields.

It is evident that the development of the Academy of Arts and Design at Tsinghua University is deeply intertwined with China's broader development. Its predecessor, the Central Academy of Arts and Crafts, was established in the early stages of socialist development. From its name alone, it is clear that the institution initially focused on arts and crafts education, which aligned with China's economic foundation as an agricultural country at the time.

During the Reform and Opening-up period, the Central Academy of Arts and Crafts adapted to the changing times, transitioning from a focus on arts and crafts education to modern design education. By the late 20th century, as reforms further deepened, the Central Academy of Arts and Crafts merged with Tsinghua University, transforming from an institution solely dedicated to art and design into a design school within a comprehensive university. This transition reflects the interdisciplinary trend in design education and society's increasing demand for well-rounded talent.

The development of the Academy of Arts and Design at Tsinghua University represents the trajectory of many design institutions in China. These institutions were born to meet the needs of the nation at its founding and have evolved alongside China's progress. As the cradle of China’s comprehensive design talent, they have significantly contributed to the advancement of both national education and design education.

3.1.2 Central Academy of Fine Arts

China's modern art education system emerged from the social reforms and New Culture Movement of the early 20th century. In April 1918, under the active advocacy of prominent educator Cai Yuanpei, the National Beijing School of Fine Arts (predecessor of today's Central Academy of Fine Arts) was established, becoming China's first state-run art institution.

Fig.102/The main entrance of the auditorium of the National Beijing Academy of Fine Arts

Fig.103/The teaching of the Western Painting Department in 1927

Faculty and students of the National Beijing School of Fine Arts actively participated in democratic revolutionary movements, including the May Fourth Movement, promoting art beyond the "ivory tower" and into public spaces. In 1926, Lin Fengmian became the head of the National School of Art, determined to reform art education and promote artistic development in society. In 1927, he organized the "Beijing Art Conference," which exhibited over 3,000 artworks.

The Lu Xun Academy of Arts, established in Yan'an in April 1938, was the first comprehensive art academy founded by the Chinese Communist Party during the Anti-Japanese War period and was one of the predecessors of the Central Academy of Fine Arts. The educational policy of "Lu Yi" was to train a large number of artistic cadres and new-type artistic talents needed for the war of resistance, and to unite and cultivate artistic talents for the new era.

Fig.103/Group photo of teachers and students of the Lu Xun Academy of Arts

In1940,the faculty and students of "Lu Yi" integrated art with the Chinese revolution, creating numerous works that depicted the War of Resistance and Liberation War. Through their unique artistic style, they portrayed the heroic images of soldiers and civilians, inspiring the nation's fighting spirit.

Fig.104/Zhang Ding and his large-scale portrait of Lu Xun

Fig.105/Mass production sports exhibition held in Yan'an

During the Yan'an period, art teachers from "Lu Yi" created several important portraits of leadership figures. Wang Shikuo painted the portraits of Mao Zedong and Zhu De for the 7th National Congress of the Chinese Communist Party in 1945. In 1942, Wang Chaowen created the famous relief portrait of Chairman Mao Zedong, which later became the cover of "Selected Works of Mao Zedong."(Zhang,1952)

After the victory in the Anti-Japanese War, students and faculty of "Lu Yi" formed the North China and Northeast China Cultural Work Troupes and headed to the liberated areas. The North China Cultural Work Troupe merged into the Art College of North China United University in 1946. In August 1948, it combined with Northern University to form North China University, with the Art College being renamed as "Department Three." After Department Three entered Beiping in January 1949, it merged with Beiping Art College to establish the National Art Academy, which was renamed as the Central Academy of Fine Arts in 1950.

In 1946, as the principal of Beiping Art College, Xu Beihong established a unique artistic teaching system that combined Western realism with Chinese characteristics. His advocated realist approach emphasized reflecting Chinese social reality, stressing that art should be grounded in democratic and patriotic spirit while serving social needs.

The newly established Central Academy of Fine Arts in early People's Republic of China was formed by merging two institutions: the National Beiping Art College led by Xu Beihong, and Department Three of North China University, which evolved from the Lu Xun Academy of Arts in Yan'an. The faculty and students from both institutions contributed their respective strengths and characteristics to form the Central Academy of Fine Arts.

Fig.106/Inauguration Ceremony of the Central Academy of Fine Arts

From 1952 to 1956, the school was restructured and, after pooling its resources, faced the challenges of integrating the disciplines and coordinating administration. In 1956, the Central Academy of Arts and Crafts was spun off from the school and the disciplines of the Central Academy of Fine Arts were realigned to focus more on fine art. ‘During the Cultural Revolution, the school was severely damaged and teaching was suspended, but teachers and students continued to persevere in artistic creation and research.

After China's reform and opening up in 1978, the Central Academy of Fine Arts resumed admitting students and reorganised its teaching system. On the one hand, it strengthened teaching in traditional art disciplines, while on the other, it introduced foreign art concepts and methods. In the 1980s, there was a strong academic atmosphere here, and various art movements collided, encouraging students to think creatively and express their individuality.

Fig.107/The first art history student after the resumption of recruitment in 1980

Fig.108/In 1982, British Prime Minister Margaret Thatcher visited the Central Academy of Fine Arts

In the 1980s, the school had a strong academic atmosphere, different art movements clashed, and students were encouraged to express their individuality. As part of the departmental structure, the design department developed rapidly, new specialisations such as environmental design and fashion design were added, and the curricula met market requirements and international trends.

In 1978, the first issue of the Central Academy of Fine Arts' revived journal "Art Research" featured striking nude art works on its cover. Soon after, another academy journal "World Art" was launched, publishing a series of articles studying and introducing Western modern art, becoming the first to break into artistic territory that had been forbidden during the 30 years since the founding of the People's Republic.

Fig.109/Journal of the Central Academy of Fine Arts

In 2001, the Central Academy of Fine Arts moved to a new campus in Wangjing and in 2004 it established the Olympic Art Research Centre, which undertook a number of design projects for the 2008 Beijing Olympics and Paralympics, raising its international profile.

Fig.110/sculpture museum new campus

Fig.111/Campus environment drone shot - Gu Haifeng

Fig.112/location of the new Academy of Fine Arts

Fig.113/No. 5 Hutong school gate and house number moved to the new campus

In summary, the Central Academy of Fine Arts (CAFA) represents a different origin and developmental path compared to the Academy of Arts and Design at Tsinghua University. CAFA emerged amidst the social upheavals of early 20th-century China, with its faculty and students experiencing the struggles and battles of China's transition from feudalism to a republic. As a result, it absorbed advanced design and educational philosophy from the West while also embodying a strong revolutionary and socialist spirit and sense of responsibility.

In its subsequent development, CAFA has maintained its independence as an art and design institution, encouraging students to freely develop their individuality and take on social responsibilities. It has often been a pioneer in many areas, leading the development of China's design industry.

While other specialized art and design institutions may not share CAFA's avant-garde spirit or wide-reaching influence, they have nonetheless been relentless in cultivating design talent. However, when compared to design schools within comprehensive universities like Tsinghua University's Academy of Arts and Design, such institutions tend to produce graduates with stronger design skills but comparatively weaker interdisciplinary and comprehensive abilities.

3.2 Educational System

In the 19th century, with the development of Western art systems, China began learning from the West and promoting East-West artistic integration. Many artists were deeply moved and aspired to create epic artworks. Around 1920, numerous young students with artistic dreams embarked on journeys to study in countries like France and Japan. They eagerly absorbed advanced artistic concepts and techniques. After returning home, they introduced new educational models centered on drawing and color into China's art education field, injecting fresh vitality and opening a new chapter in Chinese art education.

In 1902, the establishment of painting classes injected new elements into art education. At that time, Li Shutong returned from his studies in Japan and began teaching in Hangzhou. Deeply aware of the development needs of Chinese painting, he advocated that Chinese painting reform should reference the curriculum of the Tokyo School of Fine Arts, particularly emphasizing painting and art history courses. Through this, he hoped to broaden artistic horizons and inject new vitality into traditional Chinese painting.

In 1914, Liu Haisu brought new painting concepts and established courses centered on life model studies in his classes at the Shanghai Academy of Fine Arts. As a result, the Shanghai Academy became one of the important centers for Western painting development in pre-WWI China, leading the spread and development of Western painting domestically.

The New Culture Movement, like a blazing fire, ignited young people's passion for artistic revolution. Around 1920, France became the artistic sanctuary in the hearts of many young artists, and they flocked to France in pursuit of their artistic dreams. Xu Beihong was among them; after arriving in Paris, he successfully entered the École nationale supérieure des Beaux-Arts. There, Chinese students, including those from ethnic minorities, earned their admissions through hard work. Xu Beihong believed that sketch training was an essential fundamental skill of profound significance in painting. After returning to China, he established it as an important standard in art education, promoting the transformation of domestic art education.

With this transformation, the traditional Chinese painting learning model was rewritten. Western scientific sketch and color education gradually took root in China, becoming key to establishing a solid foundation for Chinese painters.

Fig.114/Xu Beihong

In 1912, he was admitted to the National Art School in Nanjing. In 1919, he went to study in France as a government-sponsored student under the Beiyang Government, where he studied Western techniques including oil painting and watercolor in Paris, while deeply researching sketching and human anatomy(Dillon,1998).In 1927, after completing his studies, he returned to China and was appointed as a professor in the Art Department of National Central University in Nanjing. After 1949, he served as the President of the Central Academy of Fine Arts.

Xu Beihong upheld the concept of East-West integration and realism in his art. He incorporated Western painting techniques such as light and shadow, perspective, and anatomy into his works while preserving the fluidity and artistic conception of traditional Chinese painting. In his figure paintings, he accurately captured anatomical structures while maintaining the charm of traditional ink techniques. He remained grounded in reality, focusing on social life and people's welfare, infusing his works with deep affection for the country, nation, and people, making them highly relevant to the times and socially significant.

Xu Beihong, using realism as a foundation while integrating Western painting techniques, proposed concepts for reforming Chinese painting. He broke through traditional Chinese painting conventions, giving Chinese painting new forms of expression and meaning. During his tenure teaching at institutions like the Central Academy of Fine Arts, he cultivated numerous talented artists including Fu Baoshi and Wu Zuoren, establishing a solid talent foundation for Chinese art. Additionally, through participating in international art exhibitions and holding overseas solo exhibitions, he showcased the charm of modern Chinese art, effectively promoting East-West cultural exchange and enhancing China's artistic influence internationally.

Fig.115/Galloping Horse

Fig.116/Tian Heng 500 strong men

Fig.117/Chicken vertical shaft

Fig.118/The Bamboo Grove Lady

Fig.119/Double cat vertical shaft

With the vigorous development of the social economy and increasing cultural exchanges following the Reform and Opening-up, modern Chinese art and design education truly began in the early 1980s, mainly emerging from the transformation of the arts and crafts discipline. During this period, to meet people's new demands for diversified and innovative design in the new era, the traditional arts and crafts discipline actively changed its development direction. It gradually shifted from focusing on traditional craft inheritance to integrating modern design concepts and emphasizing the combination of functionality and aesthetics, paving the way for modern Chinese art and design education and enabling it to take root in a new historical stage.

Taking the Central Academy of Arts & Crafts as an example, it represents a typical case of the paradigm shift in China's design education. This top institution exemplifies the transformation from initially emphasizing art and handicrafts to a more systematic design education framework. Historically, from the 1950s to the 1980s, art design majors in mainland China were mainly concentrated in art departments, fine arts departments, and arts & crafts departments of traditional universities.

During the Republic of China period, the Bauhaus design philosophy first reached China from overseas. At that time, China's art and design field was in a stage of exploration and innovation. The Bauhaus philosophy, which advocated the unity of function and form and the combination of art and technology, brought new perspectives and methods to China's design community, influencing design education and creative practices to some extent.

By the early 1980s, with China's further opening up, Western design education models and systems comprehensively entered China. This system encompassed everything from basic design theory to professional design skills, from design thinking cultivation to practical design operations.The curriculum content was primarily rooted in arts & crafts and decorative design fields, covering sub-disciplines such as packaging design, advertising design, textile arts, and bookbinding. Additionally, the industrial product design field mainly focused on traditional crafts, including but not limited to ceramic design, lacquerware, and professional craftwork.

The ‘Three Components’ programme is the cornerstone of the modern Chinese design education system. This curriculum was born out of the Bauhaus design teaching system and, influenced by Hong Kong design culture, has played a key role in the teaching of design fundamentals in China since the 1980s. At that time, the traditional model of drawing instruction was strongly influenced in conjunction with the traditional basic drawing course, and a new and far-reaching model of teaching design fundamentals emerged, which has continued to influence design education in China for 40 years. Wang Wuxi, Yin Dingbang, Wang Shouzhi and other gentlemen have spared no effort in disseminating the basic teaching model of the ‘Three Great Compositions’ in the field of design education throughout China, through their in-depth research and work, carefully compiled teaching materials and courses(Chen,2010).

Fig.120/Introduction to Design Studies Yin Dingbang

Fig.121/Outline of a Science of Things Liu Guanzhong

Liu Guanzhong is one of the leading figures in industrial design education in China. A series of his groundbreaking theories, such as ‘path design theory’, ‘symbiotic aesthetics’, ‘factology’ and ‘industrial innovation theory’, have caused a sensation at the Industrial Design Academy. Theories’ etc. have caused a sensation at the Industrial Design Academy and have contributed significantly to ideological innovation and academic progress in this field.

The heritage of traditional art has always been a cornerstone of the education at the Central Academy of Fine Arts. Chinese painting, calligraphy and other ancient arts, which contain the rich heritage of thousands of years of Chinese civilisation, are carefully preserved and passed on in the halls of the academy. When you enter a Chinese painting class at the Central Academy of Fine Arts, the inky smell of the place is a vivid footnote to the continuation of tradition. The students' daily life is an intense dialogue with rice paper, brush and ink, and copying the classics is their first lesson.

When working on ‘Scene on the Banks of the Qingming River,’ students must reflect on the delicate and graceful characters and the design of the marketplace under Zhang Zeduans's brushwork, and understand the mastery of traditional white drawing in contouring characters and designing the space of the scene through the sparse lines and changes in the intensity of the ink colour;

When studying ‘Thousand Miles of Rivers and Mountains’, they feel the unique aesthetic mood of the green landscape and the ancient people's homage to the majestic weathering of the mountains and rivers in the multiple colouring with stone-green and stone-green pigments. This immersive copy is by no means a mechanical reproduction, but rather a dialogue with ancestors across time and space, drawing on the essence of traditional painting techniques and the cultural connotations of this practice.

At the same time, the teacher analyses the technical points in detail when copying the works, such as the use of central, lateral and rear brushstrokes, the alternation of burnt, thick, heavy, light and transparent ink when applying colour, the sparing use, thickness and heaviness of lines, etc. At the same time, students integrate these techniques into their own painting skills through repeated practice, improving their ability to master the tools and materials of Chinese painting.

Interpretation of the cultural background: The focus is on understanding the cultural background of the works, combining painting techniques with historical, cultural and social background. Teachers help students understand the background of the era in which the work was created, the artist's life experiences, the aesthetic concepts of the time, etc., to help students better understand the subtext and artistic value of the work, so that students not only learn copying techniques but also deeply appreciate the cultural spirit embedded in Chinese painting.

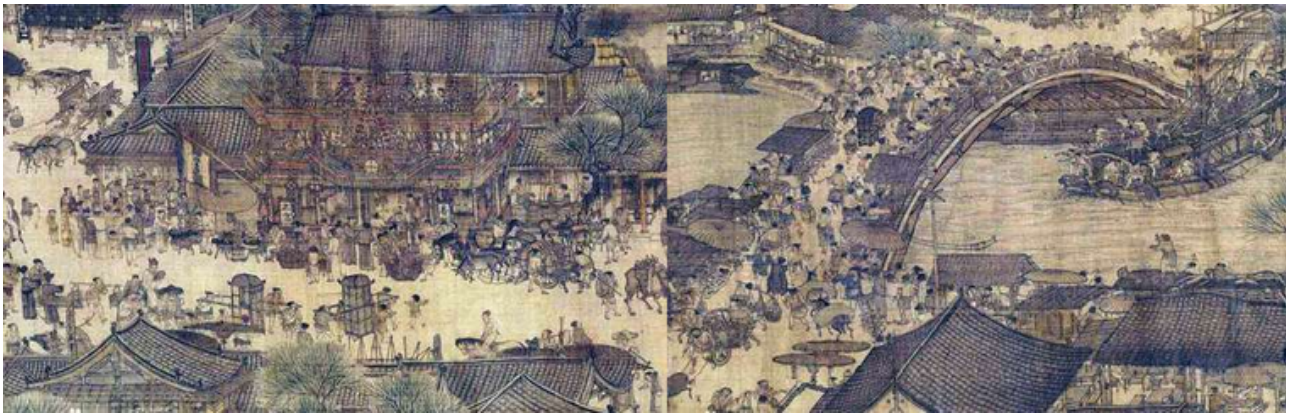


Fig.122/Scene on the Banks of the Qingming River

Qingming Shanghe Tu is one of the ten most famous relic paintings in China. It is a commissioned painting from the Northern Song Dynasty. As a classic work in the history of Chinese painting, it depicts the prosperous scene of Bianjing, the capital of the Northern Song Dynasty, and contains many extraordinary artistic values.

In terms of artistic features, the painting is unique in the use of brushwork and writing, and the colours are bright and elegant. The composition is unique: a bird's eye view panorama and a diffuse perspective, a combination of grandiose scenes and fine details in the scroll; the painting is long, without a sense of redundancy, with dense details arranged in an orderly fashion.

The content of the scroll is extensive and shows 1,695 people from all walks of life, including servants, farmers and merchants, more than 60 animals, as well as shops, boats and buildings. The painting also depicts shops, boats and buildings, the people are engaged in rich activities, and the interweaving of market affairs, trade and drinking is filled with dramatic conflicts(Song,2021), showing social life, which is rarely seen in ancient paintings.

The work is not only of great significance as a work of art, but also as a rich historical treasure that faithfully depicts the trade, folklore and other activities of the Northern Song Dynasty. The entire painting is divided into three parts: the spring countryside, the scene on the Bianhe River, and the city market are beautiful; the merchant ships gathering at the Bianhe River wharf and the scene of crossing the bridge under Hongqiao are intense and vivid, and the streets of the city are full of high-rise buildings, shops, pedestrians and various means of transport, vividly depicting the prosperity of the trading city and worthy of being a classic painting that has been praised for thousands of years and is well known both in China and abroad.

Fig.123/Thousands of Miles of Rivers and Mountains

The painting ‘Thousands of Miles of Rivers and Mountains’ by court painter Wang Xinmen at the end of the Northern Song Dynasty is the longest landscape painting scroll of the Song Dynasty.

Under the influence of Emperor Huizong, Song Dynasty court painting was greatly developed, with the characteristics of form and spirit becoming increasingly prominent. ‘Thousand Miles of Mountains and Rivers’ was painted under the influence of the retro trend in Northern Song Dynasty painting and is based on the absorption of the colour accumulation language of blue and green landscapes from the Jin and Tang Dynasties(Qin,2023). It synthesises the Northern Song Dynasty painting style by combining the combination of chasing and colouring, and forms a unique style.

The artist makes full use of the multi-point perspective characteristic of the traditional scroll form by dividing the landscape into six parts, each of which has the mountain as the main subject of expression, and connecting each part with a long bridge or flowing water, so that each part of the landscape is both relatively independent and interconnected, cleverly interrelated.

Technically, the author skilfully combines the use of the traditional scroll form. Technically, the author skilfully uses the ‘mesh scarf method’ to depict the water surface, from the foot of the mountain to the surface of the lake, the aquatic plants are added with short dots of moss. Moss dots are increasingly used in paintings in combination with thicker ink colours and intersecting dots and lines. When depicting the water surface, green ink is still used as the base colour, with thicker green ink used to outline the waterline and lighter green ink used to repeatedly cover the water surface, enriching the variations of the ‘net shawl method’.

Folk art and traditional crafts have also found a new chapter of their legacy at the Academy of Fine Arts. The Hangzhou-based China Academy of Fine Arts has taken a deep dive into local folk culture, incorporating paper-cutting, ceramics, embroidery, and other folk treasures into its curriculum.

Heirs inheritance were invited to bring their old sharp scissors and patterned paper manuscripts to demonstrate folding, cutting, notching and carving techniques on site, from ‘Liannian Yuhu’, which means happiness, to ‘village social theatre’, which shows scenes from life through simple folk themes. Through the interpretation of simple local themes, artistic treasures of life temperature and folk wisdom were shown, allowing students to touch the simple truth of folk art, implant deep local cultural genes into modern design, and bring the new vitality of tradition into a new era.

Fig.124/tiger-head cap

Fig.125/ craft oiled paper umbrella

Fig.126/ half-moon calendar

Fig.127/ traditional folk paper- cutting pattern

In contemporary China, intangible cultural heritage (ICH) faces severe challenges and multiple threats. The rapid advancement of modernization has dramatically changed people's lifestyles. The impact of fast-paced living and emerging entertainment forms has gradually distanced many ICH elements from people's daily lives. For instance, traditional folk crafts, with their complex and time-consuming production processes, struggle to meet modern consumers' demands for efficiency and speed, leading to shrinking market demand.

In the wave of economic development, some regions overly focus on short-term economic benefits, lacking sufficient attention to ICH protection and inheritance. Some ICH items of significant historical and cultural value face difficulties in talent succession and skill preservation due to insufficient funding. For example, some traditional craft inheritors are aging, yet struggle to find young people willing to learn, mainly because ICH inheritance offers modest income and unclear career prospects compared to other popular industries. Moreover, the influx of foreign cultures has also impacted local ICH. Younger generations are more easily attracted to popular and foreign cultures, gradually losing understanding and identification with local ICH.

Regarding ICH protection, we can see positive attempts by higher education institutions in addressing these challenges, taking the Xiamen Bead Embroidery course at the Xiamen Institute of Arts and Crafts, Fuzhou University as an example.

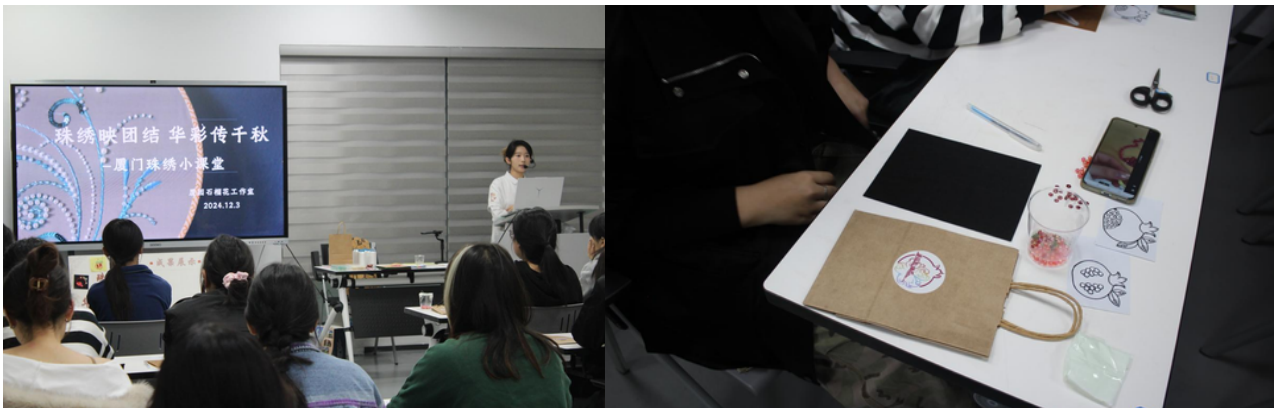


Fig.128/ Seminar site

On December 3, 2024, at the Academic Exchange Center of the Zhangzhou Campus, students participated in the "Bead Embroidery Reflects Unity, Splendor Passes Through Generations" Xiamen Bead Embroidery themed activity hosted by Xiamen University.

The Xiamen Institute of Arts and Crafts, leveraging its deep foundation and unique expertise as a professional art institution, has carefully crafted inheritance classrooms. This innovative initiative not only significantly shortened the distance between students and local culture but also naturally fostered students' identification with their local identity. In the path of inheriting local culture, the institute provides solid professional support and academic theoretical backing. Along this carefully laid development path, higher education will achieve deep integration of theory and practice, creating a virtuous cycle where theory precisely guides practice and practice strongly supports theory(Li, Z., & Xie, L. 2023).

In the Xiamen Bead Embroidery inheritance class, the teaching model is uniquely designed. Teachers ingeniously lead students on regular artistic journeys. In museums, students touch historical traces through cultural relics; in art galleries, they appreciate diverse aesthetic expressions; in inheritors' workshops, they experience traditional skills up close; and even at fashion shows of renowned brands, they capture inspiration from the intersection of tradition and modernity. These rich artistic scenes greatly broaden students' horizons and deepen their understanding and insights into bead embroidery art.

Furthermore, to help students better integrate into society and enhance their external communication abilities, the institute actively encourages students to participate in various art design competitions and exhibitions. Students have remarked that this project is like a key that opens the door to deeply understanding their cultural background, bringing unprecedented experiences and making them profoundly aware of the unique charm and deep connotations of their own culture.

Fig.129/ Xie Liyu, heir to the bead embroidery tradition

In today's fashion context, the Fashion Design Department consistently stands at the forefront of trends, dedicated to exploring the delicate fusion points between fashion and cultural heritage, striving to inject new vitality into traditional clothing and usher in a new era of fashion. The Fashion Design College of Donghua University has seized this momentum to launch a highly distinctive and forward-looking course - "Inheritance and Innovation of Shanghai Qipao" (Erbe und Innovation des Shanghaier Chongsam).

The course invites multiple experts and professors, including associate professors from Donghua University's School of Fashion and Art Design, as well as directors and technical supervisors from the Shanghai Traditional Qipao Museum, ensuring students understand qipao culture from multiple perspectives.

Instructors and students study historical patterns and craftsmanship of qipao, combining them with contemporary fashion and fabrics. They boldly select new high-tech materials that either offer excellent functionality such as water resistance, breathability, and heat retention, or present unique textures and lustres, adding distinctive charm to the qipao. By incorporating international fashion elements, they enable their designs to appear on the Shanghai Fashion Week stage, allowing them to modernize traditional clothing through their own interpretations.

Fig.130/Shanghai Fashion Week

Under the current educational climate, the intensity of college entrance examination competition continues to increase daily, with the number of exam candidates steadily rising. This has led many students and parents to turn their attention to the art examination path, subsequently giving rise to the "art examination fever" phenomenon.

In this trend, many candidates choose to engage in crash-course learning to prepare for art examinations. Since China's college entrance art examinations primarily focus on testing candidates' imitation and depiction abilities at the examination level, typically only including four subjects - sketching, color, quick drawing, and creation - with most institutions emphasizing the first two, candidates often concentrate their energy on mechanical imitation and depiction of predetermined objects or scenes during preparation to hone their basic skills. However, the drawbacks of this examination mode have become apparent. During the preparation process, candidates have fewer opportunities to explore and cultivate their imagination and creativity, making it difficult to achieve breakthroughs and expansion in thinking. If this continues, it could likely lead to the rigidity of students' artistic thinking, which is detrimental to their long-term artistic development.

Moreover, there are significant differences between the joint examination and individual school examinations in art entrance tests. The joint examination has unified standards, requiring candidates to strive to meet benchmarks and compete for every point. For individual school examinations, each university follows its own approach, with varying times, locations, content, and requirements. To increase their chances, candidates often travel to multiple locations for different examinations. The entire art examination process extends over a long period, causing both physical and mental exhaustion for candidates, leaving them fatigued and under immense pressure(Che,2018).

Fig.131/exam site

From the above analysis, it is evident that China's education system has been greatly influenced by the West. The courses currently offered in design institutions are derived from the three foundational courses of the Bauhaus. During the establishment of this design education system, the collision and integration of foreign ideas and local art traditions became the most prominent conflict and highlight.

In the field of fine arts, Western painting, which emphasizes precision and realism, clashed intensely with Chinese painting, which values atmosphere and the use of empty space. In modern China, students begin their art education with sketching, which has become the foundation of art training. However, whether this approach benefits the education of traditional Chinese painting is a question worth pondering. The author believes this is an issue that deserves deeper reflection.

In the field of design, the challenges are somewhat different. Modern design concepts were introduced from the West and did not encounter significant conflict with traditional Chinese ideas. In this context, the primary challenge facing the current design education system is how to better preserve and pass on traditional Chinese culture through design education and how to effectively integrate traditional culture with modern elements.

3.3 Talent Development

China's major art academies have achieved remarkable results in talent cultivation. They possess systematic teaching curricula and professional faculty teams, providing students with excellent environments for artistic learning.

Under such nurturing, numerous outstanding talents have emerged. In international design competitions, art academy students have won awards with their exceptional design works. These works demonstrate excellence in creativity and practicality, showcasing students' capabilities. In domestic art exhibitions, many art academy students' paintings, sculptures, and other works have been exhibited and well-received. All these achievements fully reflect the tremendous contributions of major art academies in talent cultivation and have enhanced their influence in the artistic field.

In the fierce competition of the 2024 DNA Paris Design Awards, students from Guangzhou Academy of Fine Arts shone brilliantly. Leveraging their solid professional foundation and imaginative creativity, they demonstrated extraordinary capabilities in the field of product design.

Fig.132/Respect-Baijiu Cup

This baijiu (Chinese liquor) glass shows unique craftsmanship in both material and design. It is crafted from metal with a subtle weightiness, featuring an exquisitely processed, extremely smooth surface and an overall trapezoid structure. When users pick it up, the glass slides slightly downward due to its weight, causing a subtle sense of unease. In response, users tend to instinctively support the base of the glass with their other hand, inadvertently adopting a respectful glass-holding posture that naturally enhances the sense of etiquette during drinking.

Fig.133/Storage Ruler

This ruler has a distinctive feature with its practical storage function. In daily use, after finishing with pencils, one only needs to place this ruler over the pencils to instantly restore tidiness to the desk, avoiding cluttered stationery arrangement. Moreover, when drawing lines, the deliberately designed protruding section on the ruler provides users with a more comfortable and stable grip position, ensuring precision and smoothness in line drawing, greatly enhancing convenience and efficiency of use.

This seal design cleverly integrates fingerprint and traditional seal engraving elements, delivering an unprecedented experience. The shape and material of the seal have been carefully considered to align with ergonomic principles, providing users with a natural and comfortable grip. When needing to leave a mark of commitment, users can simply press their name onto paper with a motion as familiar as pressing their fingerprint.

Fig.134/Fingerprint stamp

Fig.135/FOLD

The "Fold" bookmark is uniquely crafted, breaking from convention. Departing from flat designs, its three-dimensional form sits between pages like a silent guardian. People often forget about half-read books, but "Fold" not only marks pages but also serves as a gentle reminder.

Fig.136/Master Chair

The ingenious design of the top section, with its hollowed-out area, serves as a masterful touch. This design not only enables easy display hanging like ordinary merchandise, making it stand out in retail spaces and becoming a visual focal point, but also transforms into an exceptionally comfortable carrying handle. Whether repositioning or traveling with it, the convenience is remarkable. It truly achieves a perfect balance between aesthetics and functionality, injecting contemporary vitality and convenience into classic design.

In busy daily life, a unique kitchen timer catches the eye. Its unusual appearance seems as if it might topple over at any moment. The ingenious design features a dial housed within a rectangular acrylic case, presenting both a modern aesthetic and the beauty of mechanical operation. It's easy to operate - simply tilt it to stand upright, with a gravity sensor automatically controlling the switch, while a knob on the back allows for flexible time setting. Though the transparent acrylic case might appear fragile, the dial contains counterweights that ensure stability during normal use. This timer combines eye-catching design with practical functionality, making it an excellent cooking companion.

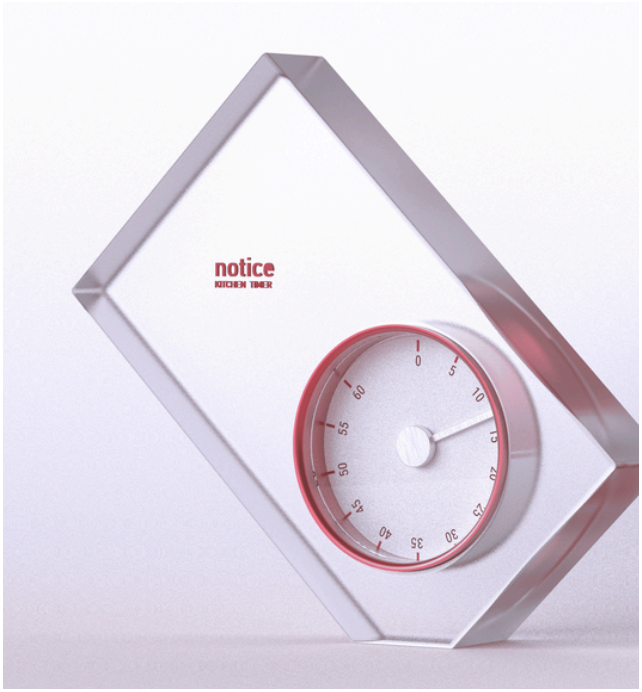


Fig.137/Notice Kitchen Timer

Pan Hu, a 2022 Ph.D. student in the Department of Visual Communication Design at the Academy of Arts & Design, Tsinghua University, engaged in the packaging design of Nikasi beer under the careful guidance of Professor Wang Hongwei. Inspired by the name "Nikasi," Pan conceived the creative idea of crafting a three-dimensional relief of the Sumerian goddess Nikasi on the bottle neck.

The bottle label design is exquisitely detailed, with every element precisely echoing Nikasi's mysterious and noble characteristics, adhering to the bottle like a luxurious dress worn by the goddess of wine. The three-dimensional carving on the bottle neck posed significant challenges. To achieve the desired effect, Pan's team tirelessly underwent more than 30 rounds of mold-making and sampling, repeatedly testing and optimizing. Each attempt challenged the limits of craftsmanship, and every adjustment reflected their dedication to perfection.

Fig.138/Nikasi beer

The design ultimately shone brilliantly on the international design stage. It won multiple prestigious international awards, including the 2023 iF Design Gold Award, the 2022 American MUSE International Design Platinum Award, the 2022 German Red Dot Award, the 2023 Dieline Gold Award - Limited Edition, and the 2023 D&AD Wood Pencil Award.

On January 28, 2021, the American IDA International Design Awards announced its 2020 winners list. The "Interior Design of Tsinghua University Fourth Teaching Building" by Professor Yang Dongjiang's team from the Academy of Arts & Design, Tsinghua University, stood out among numerous outstanding works from over 80 countries and regions, winning the Gold Award in the Interior Design category.

The Fourth Teaching Building of Tsinghua University is a typical public teaching building that not only serves educational functions but also acts as a public space where students from different majors congregate. Due to the unfamiliarity among people, there is often a natural sense of detachment in such spaces. The core challenge became how to create opportunities for students to get to know each other through "lingering" in public spaces. Professor Yang Dongjiang's team's design aims to create a free and open environment where students can meet and get to know each other, fully utilizing the value of public space and helping to foster a social atmosphere on campus.

Fig.139/The Fourth Teaching Building of Tsinghua University

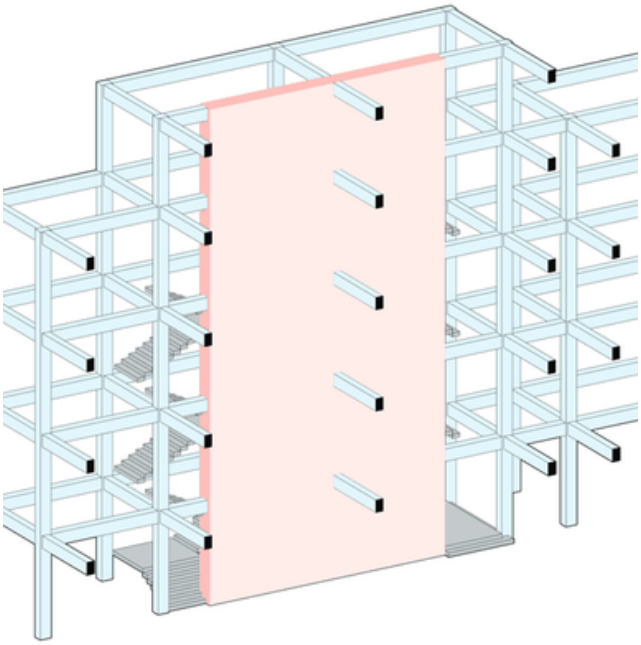


Fig.140/design drawing

The core of the "openness" concept lies in maximizing interior lighting and visual scale. From the first to fifth floors on the east side of the hall, the original staircase and lobby were isolated by walls, existing in an enclosed state. This renovation completely removed the original walls that hindered openness, revealing an impressive grand staircase unreservedly to everyone's view.

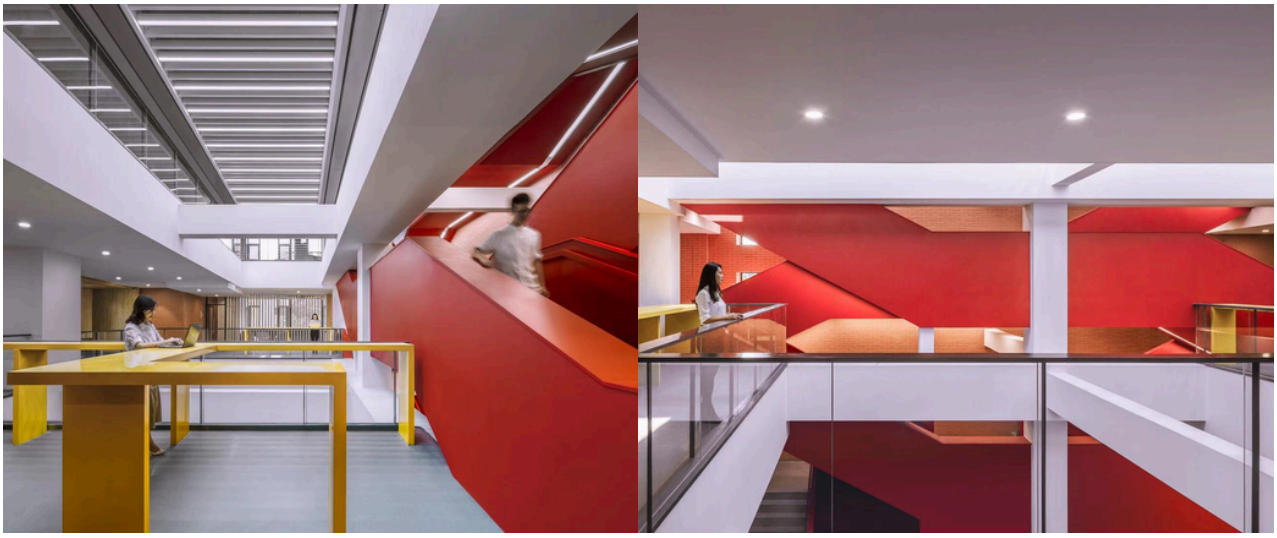


Fig.141/stairs

The open staircase, like a dynamic connecting link, runs through all floors of the building, creating a multi-layered and fluid three-dimensional spatial structure. The original building framework interweaves with the staircase, generating rich transitions and connections at their intersections.

In the key stage of talent cultivation, major Chinese art academies actively expand their international horizons by establishing close connections with many excellent European institutions and conducting extensive and in-depth cooperative exchanges. Through this innovative model of joint education, they collaboratively develop cutting-edge and diverse curriculum systems.

On March 22, 2018, Fan Di'an, President of the Central Academy of Fine Arts (CAFA), met with Naren Barfield, Pro-Rector and Chief Academic Officer of the Royal College of Art (RCA). They engaged in in-depth discussions about art and design education and future cooperation, culminating in the signing of a strategic cooperation agreement.

During the talks, President Fan Di'an pointed out that China's current development in industrial restructuring, new technology research and development, urban agglomeration development, and rural construction are all closely linked with design. He noted that British design enjoys global recognition, and its practical experience in emerging fields is of great significance to China's design development. Vice-Chancellor Naren also expressed strong willingness to cooperate, mentioning RCA's recent developments in discipline construction and innovative research. She hoped to develop breakthrough cooperation with CAFA to jointly cultivate global design leaders and promote artistic and cultural exchanges between the two countries(Central Academy of Fine Arts,2018).

Fig.142/Signing ceremony

On the morning of April 12, 2023, Professor Claudio Rocca, President of the Academy of Fine Arts of Florence, visited the Academy of Arts and Design at Tsinghua University. The delegation was received by Ma Sai, Dean of Tsinghua Academy of Arts and Design, Qin Chuan, Party Secretary, Yang Dongjiang, Vice Dean, Li He, Deputy Party Secretary, Dong Shubing, Vice Dean, along with other leaders, department heads, and alumni.

Dean Ma Sai warmly welcomed President Rocca, reviewed the past exchanges between the two academies, introduced Tsinghua's educational philosophy, discipline construction, and international cooperation, and clearly expressed the willingness to promote in-depth cooperation in talent cultivation, scientific research, and faculty-student exchanges. Secretary Qin Chuan shared the development status of the China-Italy Design Innovation Base in Milan, hoping to enhance exchanges between the two academies and promote the integration of art education by leveraging the Academy of Florence's advantages in fine arts disciplines.

President Rocca expressed gratitude for Tsinghua's warm reception and briefly described the development history and discipline construction of the Florence Academy. He proposed strengthening cooperation and exchanges with Tsinghua in areas such as dual degree programs, faculty-student interactions, and international exhibitions, particularly in traditional fine arts disciplines like sculpture and painting, as well as in ceramics and arts and crafts design. He praised both academies' vitality and creativity in art and design, looking forward to working together to leverage traditional strengths and elevate cooperation to new heights.

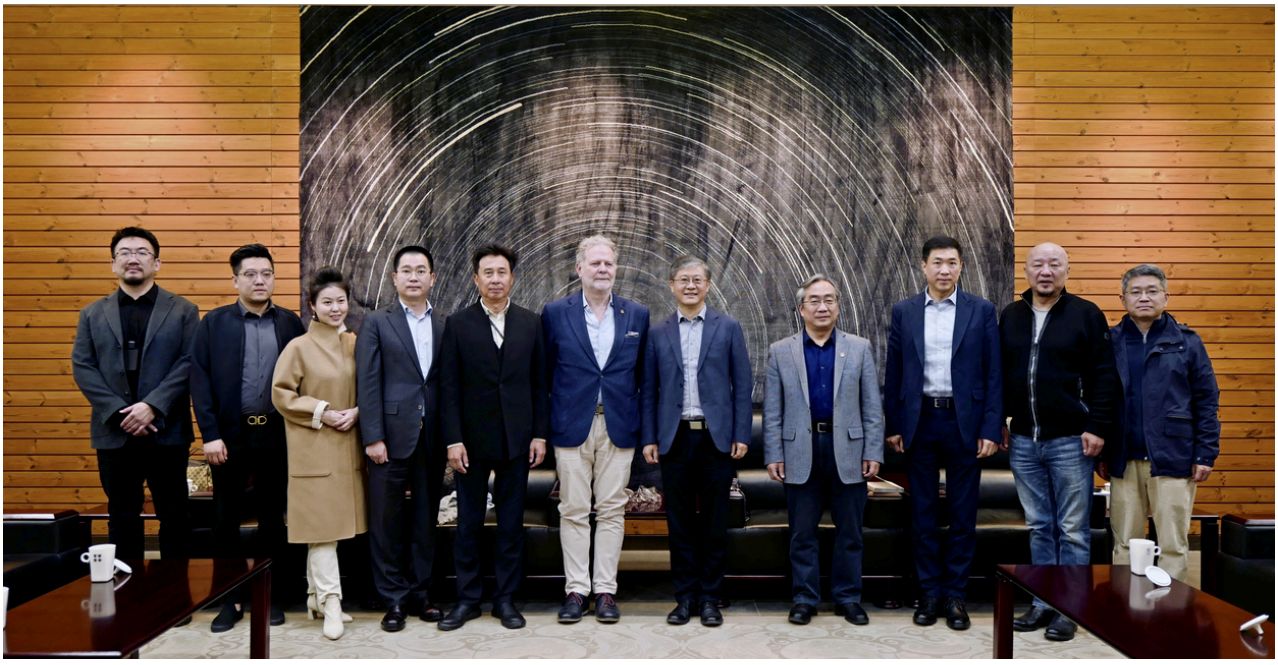


Fig.143/take a group photo as a souvenir

On the occasion of the 700th anniversary of Marco Polo's death and in honour of the extraordinary talent of the traveller and ethnologist, the Venice Biennale and its Historical Archive of Contemporary Arts are presenting this special project in Hangzhou with the special support of the Italian Consulate General in Shanghai and the Cultural Office of the Italian Consulate General in Shanghai. The exhibition is co-organised by the Chinese Academy of Arts and the Venice Biennale, and co-hosted by the Art Museum of the Chinese Academy of Arts and the Historical Archive of Contemporary .

Fig.144/Amfibio Cevdet Erek 2024

Fig.145/ Is symbiosis possible?

Fig.146/ Phantom Sugar Cao Shu 2023

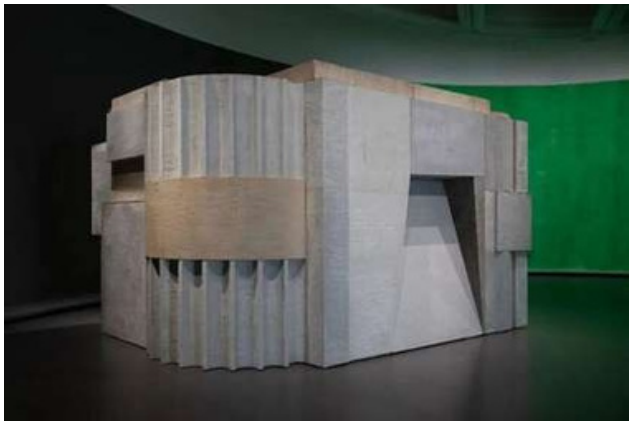


Fig.147/ Look, a book! Liu Shu

It is evident that China’s design education has achieved certain success. Chinese designers have won numerous international awards, and Chinese design institutions have established extensive collaborations with foreign design schools. However, problems such as insufficient innovation ability among designers and a shortage of high-level design talents still exist and need to be addressed. Future design education should focus on solving these issues.

Regarding specific methods, the first step is to further promote industry-academia-research collaboration. By cooperating with enterprises, students can gain an understanding of real design work, avoiding the situation where their knowledge remains theoretical and impractical. However, care must be taken to avoid overcorrection, so as not to make students excessively business-oriented and neglect the cultivation of individuality and creativity.

In addition, adjusting teaching models can facilitate the training of design talents, with special emphasis on cultivating students' proactive thinking and self-directed learning abilities.

Finally, it is necessary to comprehensively consider the needs of society, students, and schools to plan talent cultivation methods suitable for local conditions, thereby providing diverse design talents for China's design industry.

Conclusion

Based on this in-depth analysis of Chinese design associations, design centers, and design schools, we can see that these three types of institutions play different yet complementary important roles in the development of Chinese design. From a historical perspective, design schools were established earliest, represented by the Shanghai Academy of Fine Arts, pioneering modern design education in China. Design centers emerged in the early days of New China, represented by architectural design institutes, making significant contributions to national construction. Although design associations started relatively late, they developed rapidly after the Reform and Opening-up, playing vital roles in promoting industry exchanges and design standardization.

The development trajectory of these three types of institutions reflects China's design evolution from learning the Soviet model, to introducing Western design concepts after the Reform and Opening-up, and to actively exploring the integration of Chinese and Western approaches today. Particularly in education, the progression from early arts and crafts education, to introducing the Bauhaus "Three Compositions" teaching system, to today's comprehensive education model emphasizing both traditional cultural inheritance and modern design methods, demonstrates the continuous advancement of Chinese design education.

Currently, these institutions have achieved remarkable success. Chinese designers frequently win international competitions, design schools are deepening cooperation with renowned international institutions, and design centers are making significant progress in digital transformation. However, challenges remain. In terms of sustainable design, while attention has begun to focus on eco-friendly materials and green building development, the overall depth and breadth of practice still needs strengthening. In digital design, although new technologies like VR and AR are gradually being applied, there is still room for improvement in innovative applications of digital tools and talent development. Additionally, issues such as the need to enhance original design capabilities, shortage of high-end design talent, and deepening integration of traditional culture with modern design still need to be addressed.

Looking ahead, with China's growing economic strength and international status, as long as these three types of institutions can fully leverage their respective advantages, strengthen collaboration, deepen sustainable design concepts, advance digital transformation, and focus on talent cultivation and technological innovation, Chinese design will surely achieve new breakthroughs in inheritance and innovation.

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