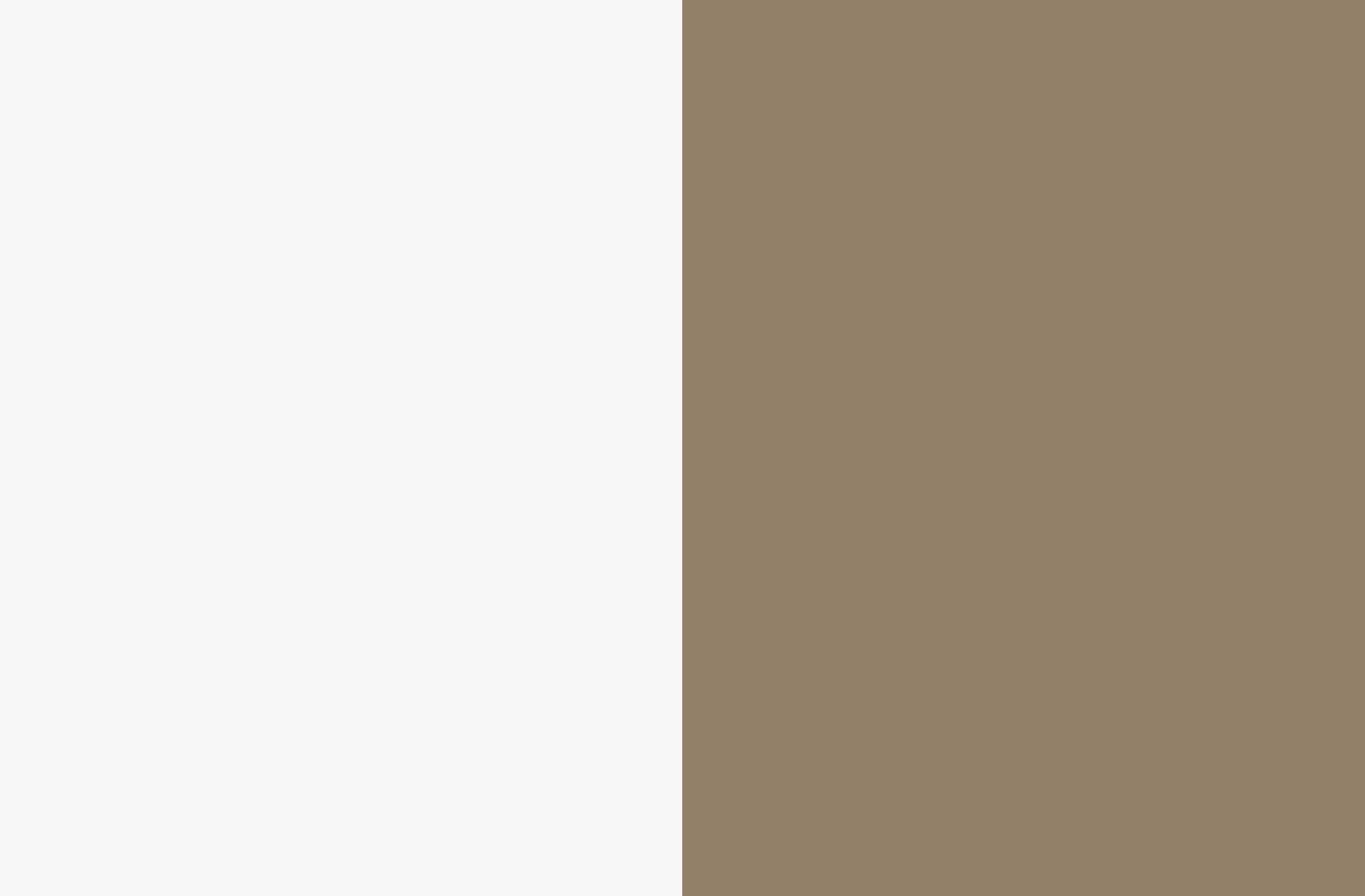


# WOODEN ARCHITECTURE

## 木建築



K11 CRAFT & GUILD FOUNDATION





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Classical architecture in China is marked by its uniqueness, as well as its distinctive style when compared with Western architecture. Traditional Chinese buildings, made mainly of wood, emphasise the harmonious relationship between architecture and organic life. This, in turn, articulates the cosmic view that man and nature are united.

With well-preserved ancient structures representative of the golden era of Chinese wooden architecture, the wooden architecture in Ningbo is an excellent example of the architectural style in eastern China dating back to the Song Dynasty (960–1279). Ningbo wooden architecture has become an important branch of Chinese classical architecture.

With its elegance of simplicity, Ningbo wooden architecture has inherited the best style borne from the traditional Chinese art, and developed a full-featured regional style of craftsmanship in Jiangnan. In other words, it is characterised by the essence of the local landscape, a strong sense of place, as well as the aesthetic and the organic life.





中國古代建築為一獨特體系，風格與西方建築迥然不同。傳統的中國建築一直以木材作主要建材，正是因其重視建築與生命之親和關係，要宣揚「天人合一」的宇宙觀。

寧波木建築顯示中國木建築黃金時代。寧波木建築屬於浙江東部木構建築，是中國古典營造裡一個很重要的分支。

寧波木建築充分表達了宋式木構裡的簡約之美，也繼承了中原木構的藝術精髓，並發展了一系列配套完整的江南地域做法。寧波木建築與水鄉的自然結合，孕育發展了一種特有的文人美，是美學與自然結合的設計風格。



With a history of about 4000 years, the beginning of Chinese wooden architecture can be traced to the cave and nest settlement. It thrived throughout the Tang (618–907) and Song dynasties and still continued during the Ming (1368–1644) and Qing (1644–1912) dynasties.

Since the Xia dynasty (2070–1600 BC), wooden architecture has become mainstream and this period formed the basis of classical wooden architecture in China.

Wooden architecture reached its second major growth stage during the Sui (581–618) and Tang Dynasty. These architectures began to demonstrate the skilful use of materials, while their designs were characterised by the regular use of wooden parts and standardised arrangements. During the Tang dynasty, wooden architectures were impressive and it had a huge influence on Korea and Japan.

During the Northern Song Dynasty, with more elaborate ornament designs, Chinese wooden architecture became refined and delicate, especially classical Chinese gardens. An important documentary of Chinese architecture, *Treatise on Architectural Methods*, set out the classical modulus and material system. It has been the guide book to construction and craftsmanship of wooden architecture in China over the last millennium.

During the Ming and Qing dynasties, the classical Chinese architecture reached its peak. The architectural style was marked by the use of less protruding roofs and smaller bucket arches. Wooden frames were reshaped, while bucket arches were increasingly fitted to a structure for ornament.







中國木建築起源於西元前兩千年前的穴居和巢居，至唐宋基本定型，至明清而收尾。

從夏朝開始，木構技術較之前原始社會有很大提高。木結構已成為主要的結構方式，成為以後中國古代建築發展的基礎。

隋唐時期是中國古建築發展的第二個高潮，形成了一個完整的體系。木構架工匠能正確地掌握材料性能，建築設計開始以「材」為木構架設計的標準，構件比例、形式逐步趨向定型化。從唐代開始，中國木建築影響朝鮮、日本等地。

自北宋起，中國木建築向細膩、纖巧方面發展，其精妙之處最能體現於園林風景建築中。中國建築學文獻《營造法式》也是在北宋時期總結而成，它規範了古典模數、材制，成為後來近一千年中國木匠營造房屋的基本手冊。

明清時期是中國古建築體系的最後一個高峰時期。明清建築出簷較淺，斗拱縮小，木構架也形成了新的定型。



Using wooden parts to build a frame, classical architecture in China can be divided into two categories: large-scale and small-scale woodworking. The former refers to the manufacture of weight-bearing components of wooden frames, and the combination, installation and mounting of wooden frames. Small-scale woodworking refers to the architectural decorations, which comprise the external finishes (such as the external finishing of windows and doors) and interior installations such as the panelled door, decorative frieze, partitions, worship shrines, furniture and couplet inscription plaque).

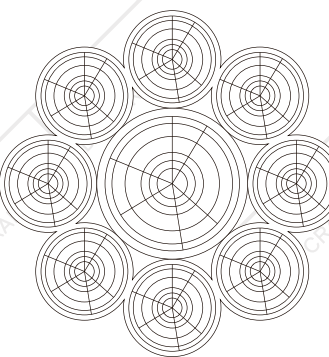
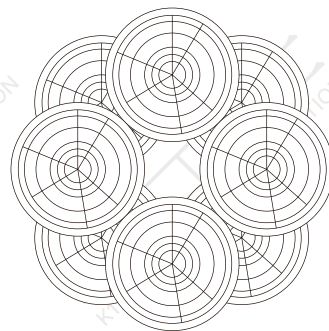
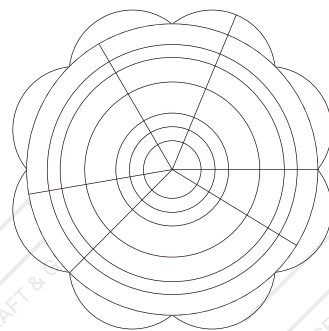
### Melon-Shaped Columns

This is the joining together of four smaller wooden columns. Coated with materials, it produces two different sounds when being tapped on the surface (a more solid sound and a softer sound). Depending on the specific sections of columns being used, these include whole wood columns, melon-shaped split columns and inlaid melon-shaped columns. This construction method of using several pieces of small-scale woodworking, instead of a single piece of large-scale woodwork, can minimise the amount of materials used, and has been documented in the *Treatise on Architectural Methods*. The melon-shaped columns in the Northern Song Dynasty Hall of Baoguo Temple are the surviving evidence of the first split columns.

中國古代建築以木結構為骨幹，皆屬木作，可分為大木作和小木作。「大木作」指木構架房屋建築中負擔結構構件的製造和木構架的組合、安裝、豎立等工作。「小木作」指建築裝飾，又分外檐裝修（露在屋外的門窗戶牖等）與內檐裝修（安置室內的格扇、花罩、屏風、神龕、家具、匾聯等）。

### 瓜棱柱

瓜棱柱的做法是將四根小木柱拼合起來，表面再用材料包裹，所以在輕敲時會出現一虛一實兩種不同聲音。根據柱子斷面形式的不同，分別為整木柱、瓜棱拼合柱、包鑲式瓜棱柱。這種做法是為了以小材充大料，達到節省材料的目的，這在《營造法式》中也有記載。保國寺北宋大殿的瓜棱柱是現存使用拼合柱的第一例。







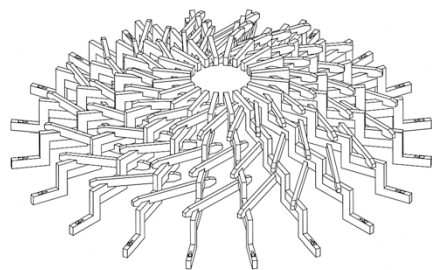
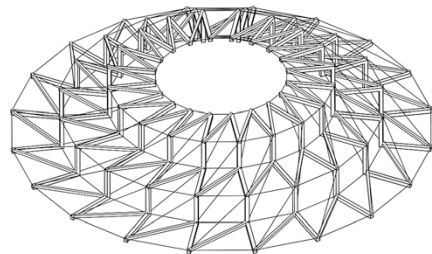
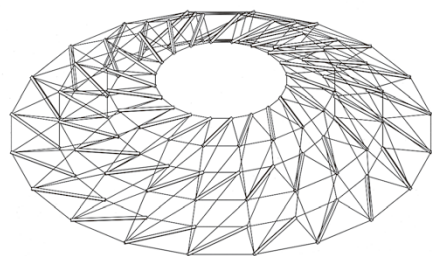
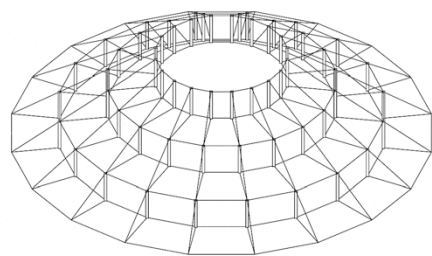
### Caisson Ceiling

Usually seen in the ceiling of the main structure, it looks like a convex-shaped well suspended from the ceiling, adorned with the caisson patterns, and forms a unique decorative feature in the interior. Typically, it is in the shape of a well. It can also be a rectangle, a polygon or a round object. This is then decorated with various patterned ornaments, carvings and colourful glaze, and used in important parts of a palace, or a throne and altar in a temple. In ancient architecture, this is a very important structure. The sophisticated craftsmanship for these caissons means that not a single nail is used — the structure relies entirely on wedge joinery and bucket arches and the stacking of caissons.

As a well is the origin for water, while caisson is a water plant, the name adopted by the ancient population conveys the philosophy of 'using water to resist fire'.





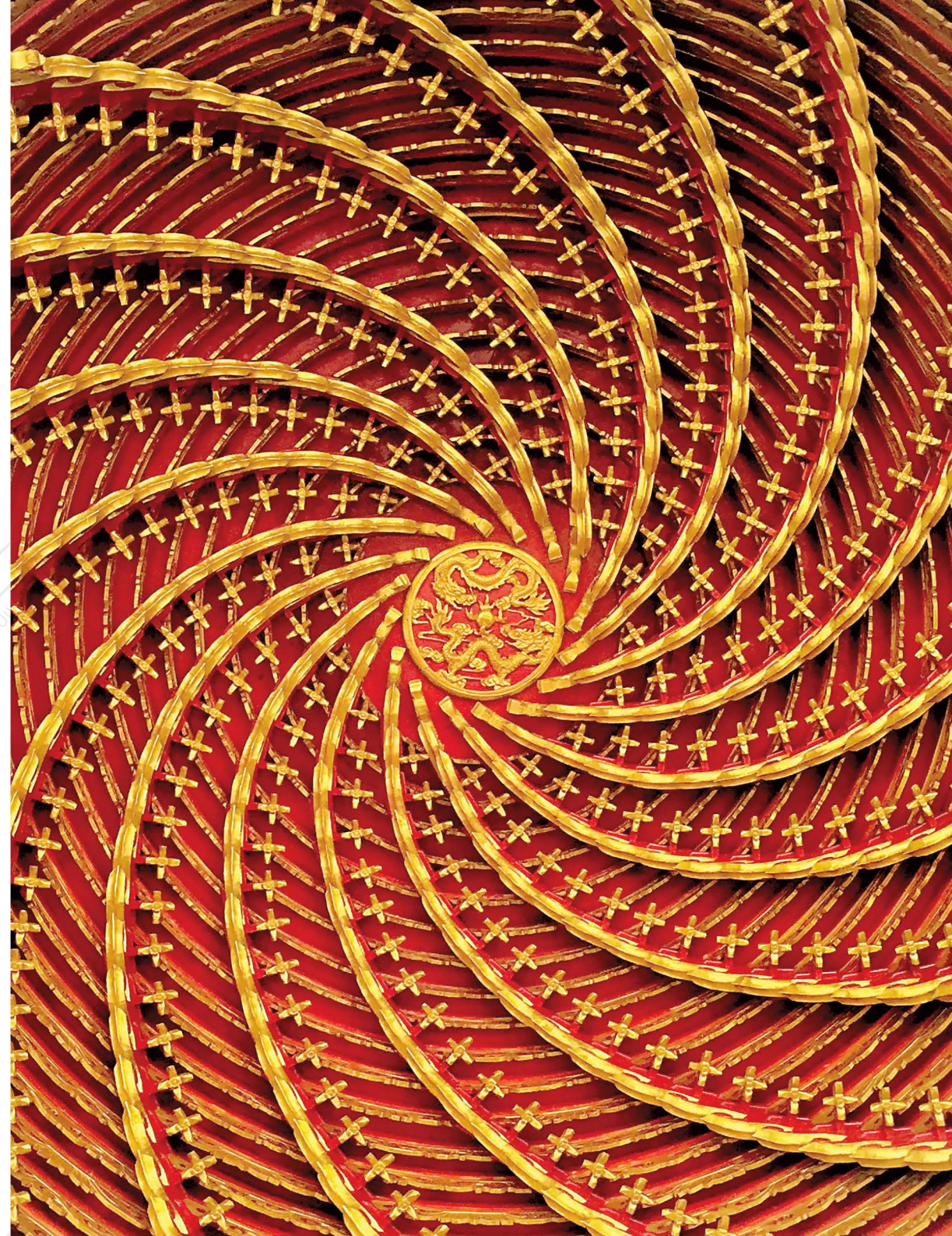
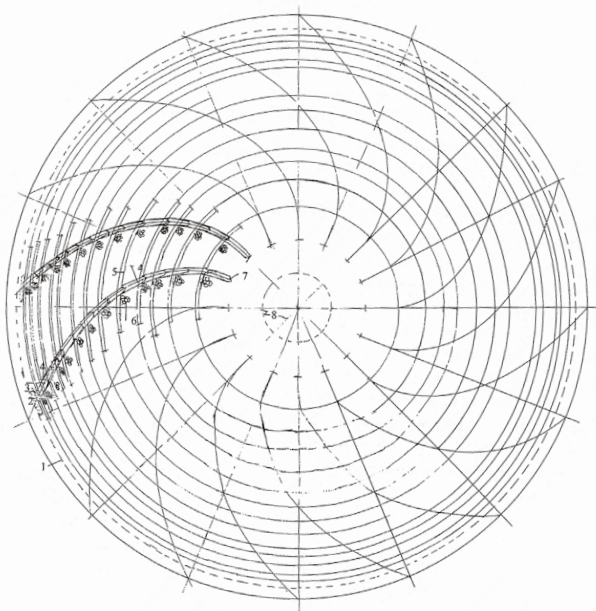


## 藻井

藻井一般裝在主體建築的天花中，從外形看像一口凹進天花裡面的井，且有藻文飾樣，是室內頂棚的獨特裝飾部分。一般做成向上隆起井狀，有方形、多邊形或圓形凹面。周圍飾以各種花紋、雕刻和彩繪，多用在宮殿、寺廟中的寶座、佛壇上重要部位，在古代建築結構中佔有極其重要的位置。藻井的工藝非常複雜，不用一口釘子，只用榫卯和斗拱，將藻井堆疊而成。

井是水的來源，藻是水中的生物，取名為「藻井」是古人寄予它「以水克火」之意。









### Wooden Lounge Bridge

Among all the traditional wooden bridges in China, a wooden lounge bridge is probably the most sophisticated structure. This is most widely used in waterside country villages in Zhejiang. Some of the best examples of their kind can also be found in the eastern province. Comprising the crisscrossing of horizontal columns to form a raised bridge, the lounge bridge is constructed on rocks from either side, while the base consists of dozens of very thick and round wooden poles being joined together to form an arch pattern in the shape of the Chinese character “八”. Structurally, it comes in various forms, such as a single arch, two sets of arches as well as other combinations of the arches. Without any nails, it relies entirely on its own tenacity, friction, the size of the diameter, the inclination of the structure as well as height distance. Such a structure is extremely resilient, despite its beguiling simple structure.





### 廊橋

廊橋是中國傳統木構橋樑中技術含量最高的品類，在浙江等水鄉地區其製作尤其出色，且廣泛應用。廊橋以梁木穿插別壓形成拱橋，足支撐在兩岸的岩石上，底座由數十根粗大圓木縱橫拼接對拱而成「八」字結構。廊橋以其結構形式，一般分為一組八字形拱、兩組八字形拱，以及八字形拱組合。不用釘子，完全靠它自己本身的強度、摩擦力和直徑的大小、所成的角度、水準的距離等巧妙搭接，結構簡單，卻堅固異常。



Founded by Adrian Cheng in 2018, K11 Craft & Guild Foundation (KCG) is a registered charity of arts and culture in Hong Kong. We are cultural crafters who conserve and rejuvenate fast-disappearing Chinese artisanship to create craft ecosystem with sustainable social impact. By incorporating Creating Shared Value (CSV) to bring crafts, businesses and the society together, we make crafts more accessible to the community, educate the public with research initiatives and curate collaborations with artisans, aiming to bridge the gap between culture and economy.

Adrian Cheng, Cultural Entrepreneur and the Founder of K11 Art Foundation and Culture for Tomorrow, founded the charity with the aim to conserve and rejuvenate fast-disappearing Chinese artisanship, while Creating Shared Value (CSV) for the society. He believes that the power of business lies not only in generating profits, but also in supporting and empowering other stakeholders in the community. He believes that the new vision of CSV will bring a sustainable and positive impact to the local community.

K11 Craft & Guild Foundation (KCG) 由鄭志剛 (Adrian Cheng) 於 2018 年創立，是香港註冊的藝術及文化慈善機構。我們是文化工匠，致力傳承與復興即將失傳的中國傳統工藝，建立工藝文化生態圈，為社會創造共享價值。將工藝融入現代生活，通過研究、教育大眾及與匠人合作活化工藝，使「文化」與「商機」共融，做到真正可持續的工藝保護及發展。

文化企業家鄭志剛身兼 K11 Art Foundation 及 Culture for Tomorrow 創辦人，致力透過 KCG 的成立傳承及復興即將失傳的中國傳統工藝，為社會創造共贏。他積極提倡「創造共享價值」精神，在推動企業追求業績、為股東謀取利益的同時，也透過推動文化創意、社會創新、可持續生活，與不同持份者共同創造重大價值，為社會帶來長遠裨益。

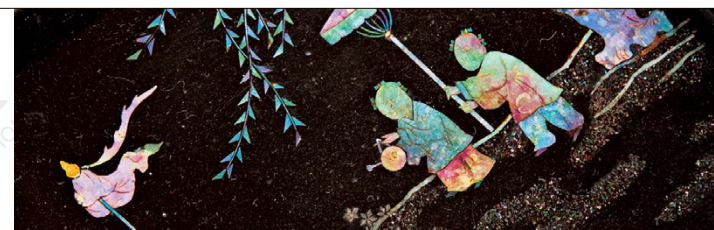
Guangcai  
廣彩



Baibaoqian  
百寶嵌



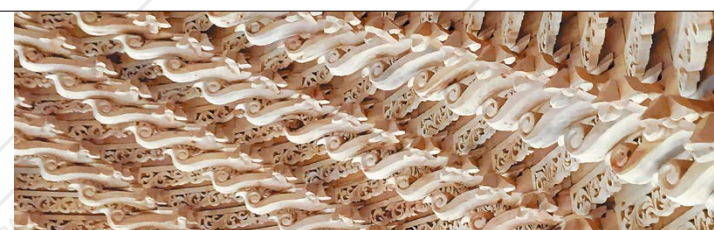
Luodian  
螺鈿



Plaster Moulding  
灰塑



Wooden Architecture  
木建築



Dream of the Red Chamber  
紅樓夢





Cultural Entrepreneur Adrian Cheng is the Founder of K11 Art Foundation and Culture for Tomorrow. In 2018, he founded the non-profit organisation K11 Craft & Guild Foundation (KCG), with the aim to conserve and rejuvenate fast-disappearing Chinese artisanship, while Creating Shared Value (CSV) for the society. Adrian believes that the power of business lies not only in generating profits, but also in supporting and empowering other stakeholders in the community. He believes that the new vision of CSV will bring a sustainable and positive impact to the local community.

Originally from Hong Kong, Adrian received his education in the United States and graduated from Harvard University with a Bachelor of Arts (Cum Laude) honours degree in East Asian Studies. He was further educated at the Stanford Kyoto Center for Japanese Studies. He received an Honorary Doctorate of Humanities degree from the Savannah College of Art and Design (SCAD), and an Honorary Fellowship from Lingnan University in 2014. Adrian holds directorial and committee-level positions in a number of prominent arts and cultural organisations, including the Public Art Fund, the Museum of Contemporary Art, MoMA PS1, and the Metropolitan Museum of Art, the US; Centre Pompidou, France; the Royal Academy of Arts and TATE, the UK; the National Museum of China Foundation and CAFAM Funds of the Central Academy of Fine Arts, Mainland China; Asia Art Archive and Le French May, Hong Kong, etc. He was the youngest person in Hong Kong to be awarded Officer in the Order of Arts and Letters (Officier de L'Ordre des Arts et des Lettres) by the French Government in 2017, and was named the first Global Ambassador of the Council of Fashion Designers of America (CFDA) in 2019. His Asian and western experiences made him the bridge between both cultures, through which he introduces a new dimension to the community.

身兼 K11 Art Foundation 及 Culture for Tomorrow 創辦人的文化企業家鄭志剛 Adrian Cheng 於 2018 年創立非牟利藝術文化基金會 K11 Craft & Guild Foundation (KCG)，致力通過傳承及復興即將失傳的中國傳統工藝，為社會創造共贏。鄭志剛積極提倡「創造共享價值」精神，在推動企業追求業績、為股東謀取利益的同時，也透過推動文化創意、社會創新、可持續生活，與不同持份者共同創造重大價值，為社會帶來長遠裨益。

鄭志剛於香港長大，曾留學美國，以優等榮譽成績畢業於美國哈佛大學東亞文學系，並曾於美國史丹福大學京都研究中心修讀日本藝術及文化。他於 2014 年獲頒薩凡納藝術設計學院 (SCAD) 人文學科榮譽博士學位以及嶺南大學榮譽院士。鄭志剛同時在多個藝術文化機構擔任重要職務。他是美國紐約公共藝術基金董事局及美國紐約 MoMA PS1 董事局成員；美國洛杉磯當代藝術館 (MoCa) 信託人；中國國家博物館事業發展基金會及中央美術學院美術館基金會理事，及於美國大都會藝術博物館亞洲藝術部視察委員會、法國蓬皮杜藝術中心國際收藏委員會、英國皇家藝術學院信託委員會、英國泰特美術館亞太收藏委員會、亞洲藝術文獻庫董事會、法國五月董事會等機構擔任委員。他在 2017 年獲法國政府文化部頒授法國藝術與文學軍官勳章 (Officier dans l'Ordre des Arts et des Lettres)，並於 2019 年獲美國時裝設計師協會 (CFDA) 邀請，擔任該協會第一個全球大使。鄭志剛在亞洲和西方所得的經驗，使他能將各地文化最精髓一面連繫起來，為社會帶來新的層面。



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