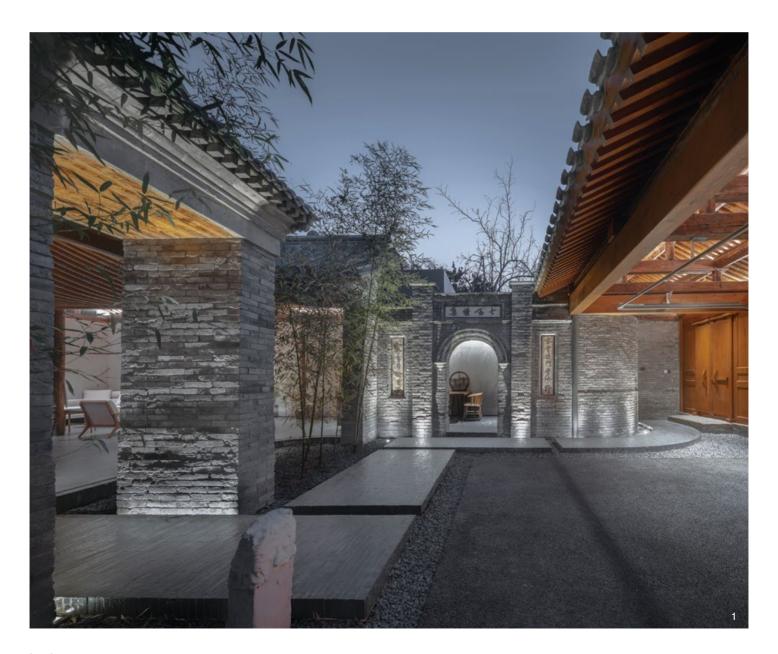
# **Qishe Courtyard**



設計者」建築營設計工作室/韓文強
學與者」王同輝
攝影者」王甯吳清山
空間性質」住宅
坐落位置」中國
主要材料」竹鋼、青磚、玻璃磚
面積」151 坪
項目年份」2020 年

Designer J ARCHSTUDIO / Han Wenqiang Participants J Wang Tonghui Photographers J Wang Ning, Wu Qingshan Category J Courtyard Location J China Materials J baminated bamboo panel, gray tile, glass brick Size J 500m<sup>2</sup> Project year J 2020



## Han Wengiang

在尊重傳統建築的基礎上,修復舊的,植入新的, 將新與舊相融合,為老建築延續新生命。

此作是位於北京舊城核心 區內的三進式四合院,因原 建築共包含7間山形屋頂老 房且是該胡同的7號,故得 名「七舍」。由於建築年代 距今久遠,除了基本的木結 構樑柱和局部拱形門洞,其 餘大部分的屋頂、牆面、門



窗等都已經破損或消失,院內遺留許多大雜院時期加諸的臨時建築與廢料。本次改造 設計主要有3項目的:修復舊的、植入新的,以及令新舊相互疊合為一個新的整體, 再創建築新生。

### 修復舊的

修復舊的,意指對既有院落現況進行整理,尊重傳統建築結構,修復具有品質的歷 史遺存,加固建築結構與安全。在手法上,著重修舊如舊,留存過往的歲月印記,建 築牆面採用原本院內既有的舊磚進行修復,室內外地面也延用老建築的灰磚鋪作,讓 舊有的建築材料充分再利用,並確保院落改造內外一體的效果。

在新規劃中,一進院視為停車院,保留原有建築屋頂並拆除牆面,平移了主入口位 置,留出寬闊的停車空地,前院裡的門樓、拱門雕花、老樹亦逐一修復與保留。二進 院定義為公共活動院,可用於接待與會所,延續傳統院落的對稱式佈局,編佈了客廳、 茶室、餐廳、廚房,以緩坡道取代原來房屋之間的臺階,將餐廳正中的拱門修復後作 為後院的入口。三進院是屋主的居住院,除茶室、書房之外,將注重隱私的兩間臥房 編於建築最後段空間,庭院內保留3棵老樹,室內依據屋脊位置作對稱式佈局,使衛 浴空間緊鄰庭院,並且強調局部立面的透光效果,確保室內擁有舒適的採光與通風。

1. 一進院,保留原建築屋頂,移除牆面,留出寬闊空地。2. 一進院作為停車院。



建築營設計工作室/韓文強 中央美院建築學院副教授 建築營設計工作室(ARCHSTUDIO)創始 人及主持建築師

出生於遼寧大連,2005年中央美院建築學院碩士畢業並留校任教。設計研究主張以 傳統智慧觀照現實環境,秉持「空間即媒 介」的基本觀點,運用,關係的設計」方 法,隨物賦形、為心造境,保持人、自然、 歷史、商業與空間環境的和諧平衡。主要 作品包括水岸佛堂、曲廊院、有機農場、 扭院兒等。2020年,韓文強先生受邀擔任 歐洲傑出建築師論壇大獎(Leaf Awards) 評審。所獲榮譽包括 2015年美國《建築實 錄》全球十佳「設計先鋒」,2017年中國 香港 Perspective 40 UNDER 40 建築師、 2015-2019年「AD100」中國最具影響力 建築設計精英。

ARCHSTUDIO / Han Wenqiang Associate Professor, School of Architecture of CAFA (Central Academy of Fine Arts)

Founder & Chief Architect, ARCHSTUDIO Han Wengiang was born in Dalian, Liaoning, China. He got a master's degree in School of Architecture of CAFA in 2005 and since then has been teaching there. In his design practices and researches, he advocates observing and reflecting on physical environment with traditional wisdom, insists on a basic view that "space is a medium", takes "design of relationships" as an important approach. creates forms based on physical objects. produces spatial ambience for the mind. and strives to achieve harmony and balance among human, nature, history, culture, commerce and space

His representative works mainly include Waterside Buddhist Shrine, Tea House in Hutong, Organic Farm, Twisting Courtyard, etc. In 2020, he was invited to be the judge of Leaf Awards. He was a winner of Architectural Record's Design Vanguard Competition in 2015 and Perspective's 40 UNDER 40 Awards (Architecture category) in 2017. Besides, he has been included in the AD100 list consecutively from 2015 to 2019, which recognizes him as China's top 100 talents in architecture and design.

<sup>1.</sup> The first building component is left open. 2. The first courtyard is used for parking.



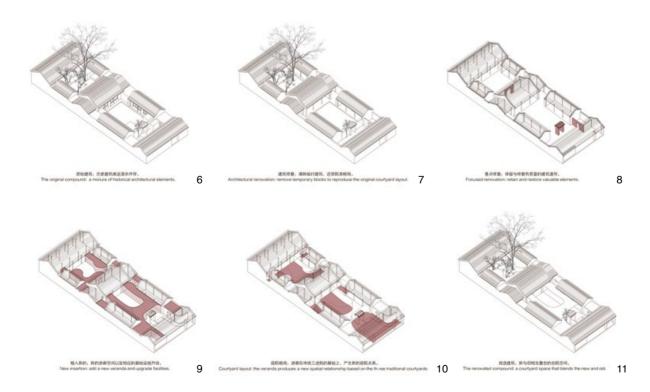
#### 植入新的

植入新的,是透過佈局重構優化動線,同時加入當代生活機能與基礎設施,滿足合院作為公共接待與居住空間的需求。 設計團隊拆除各院之間的圍牆,植入透明遊廊作為新連結。傳統建築裡的遊廊在此作亦有了輕盈新貌,採用框架結構支 撐上設密肋梁和板、以玻璃作為立面,使廊道輕盈地融入舊建築裡,成為一條疊合新舊、裡外的中介場域,輕巧地劃分庭 院層次,亦將日光引入室內空間,並且提供遊賞景致的樂趣。

遊廊以弧曲線條延續山形屋頂與建築腹地特徵,並與各院景觀、功能進行相應的變化;像是,入口處微微上揚,結合兩側 屋頂構成一個圓弧景框;或是向下連接成為曲面牆,在停車院裡分隔出側邊的機能空間。透明遊廊亦是連結七間房屋的路徑, 並強化了公共空間與院落之間的連通;譬如,位於二進院的餐廳收攏折門後能向弧形庭院完全開敞,讓活動腹地能靈活延伸。 遊廊也增闢出多個弧形休閒空間,它在三進院演變為波曲形態向庭院伸展,一方面與院裡的老樹產生互動,另方面也為室 內圍塑出觀景座區。

## 新舊合一

設計師韓文強指出,全作在尊重傳統建築的材料特徵上適度添加新材料,讓新與舊產生若干微差與疊合;像是,建築結 構局部破損構件以松木材料替換,部分新牆採用玻璃磚引光入室,但尺寸編整得與舊建築灰磚一致,使今昔材料殊異卻能 和諧並置。在保持原建築灰瓦屋面的基礎上,增設防水層與保溫層。新植入的遊廊屋面則採用聚合物砂漿作為曲面層材料 與老建築的灰屋瓦相對應。新的遊廊、門窗、部分家具使用竹鋼作為「新木」與建築原有的「舊木」相和諧。室內空間亦 採用不同的舊木、原木家具,或將老建築作廢的木梁改造成座椅,再次應用於生活之中,選物均重視色澤與質感能與老屋 舊木互襯。而施工過程中意外挖出的石片、瓦罐、石墨磨盤等,則改作為景觀、臺階、花盆,為舊材料賦予新的使用可能, 再次延續生命。撰文」室內雜誌編輯部



 3. 透明的曲形遊廊連結前後院景觀以及各功能區。4. 在傳統建築的材料特徵上添加與之相應的新材料,保留下歲月印記,讓新與舊產生若干微差與疊合。
5. 二進院是公共活動院,連結了客廳、茶室、餐廳、廚房。6-11. 改造過程:原始建築新舊混雜、建築修復、重點修復、植入新的結構、確立庭園格局、 產生新與舊相互疊合的合院空間。

3. Transparent curved shaped arcade links different sections. 4. Mixing old and new materials is the main tactic of the design. 5. The second courtyard is a social venue linking the living room, tea room, dining room and kitchen. 6-11. Process of transformation to mingle old and new.



12. 遊廊延續屋頂的曲面線條,結合前後院景觀進行相應的起伏。13. 遊廊採用框架結構支撐密肋梁與板,讓新結構通透輕盈地融入到舊建築裡。14. 剖面圖。 15.16. 客廳區因透明遊廊與庭園彼此借景。

12. Winding arcade exhibits an organic internal landscape. 13. Arcade structural system mingles with the interior in a delicate way. 14. Section. 15.16. Living room enjoys outdoor landscape and winding curved arcade.



The renovation project is located in a huton within a core old quarter of Beijing. It's a small Siheyuan (a typology of traditional Chinese residence) with three courtyards, with a total length and width of 15 and 42 meters. It's named as "Qishe" ("Qi" and "she" respectively refers to "seven" and "house" in Chinese language), because its address number in the hutong is 7 and it originally consisted of 7 pitched-roof

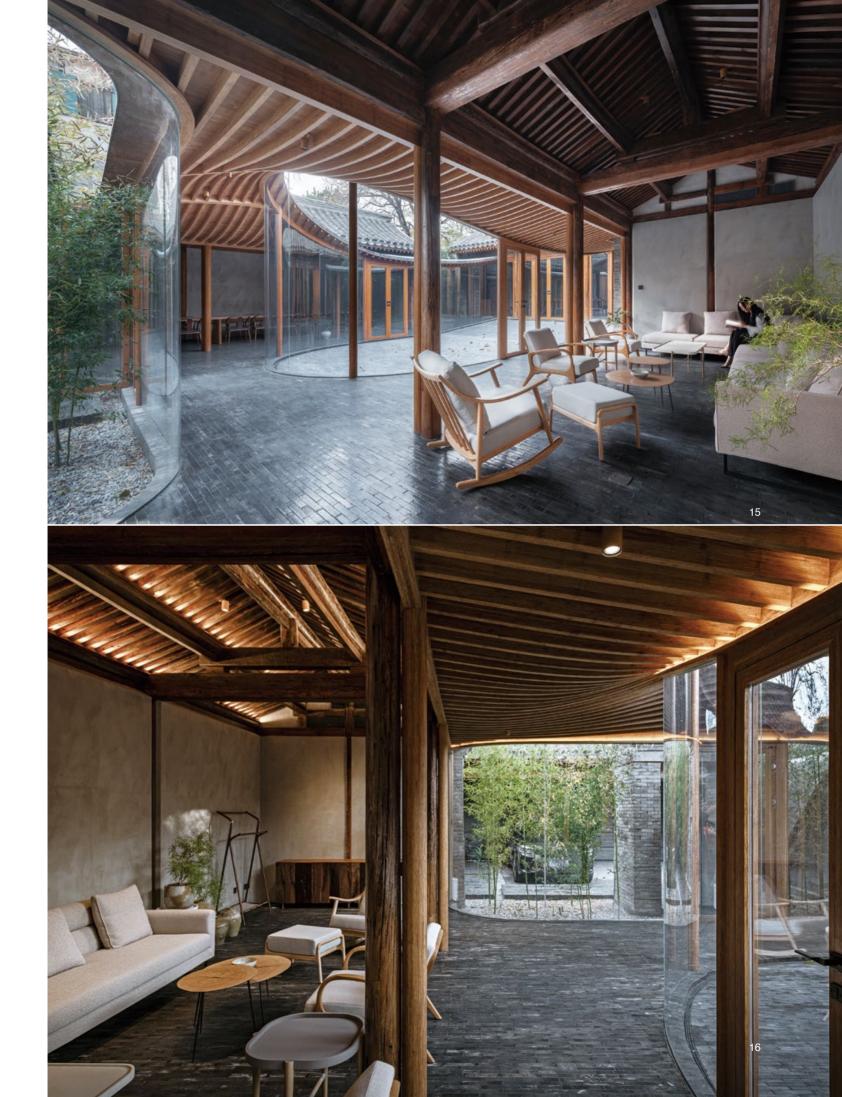
buildings. The Siheyuan before renovation was old and dilapidated. The basic wooden beams and some arched door openings featuring the style of the Republican era were relatively well preserved, while most of the roofs, walls, doors and windows were badly damaged or disappeared. In the three courtyards, there were many temporary architectural blocks inserted many years ago. After demolishing those blocks, the yards were filled with waste of construction materials and overgrown with weeds, presenting a bleak view.

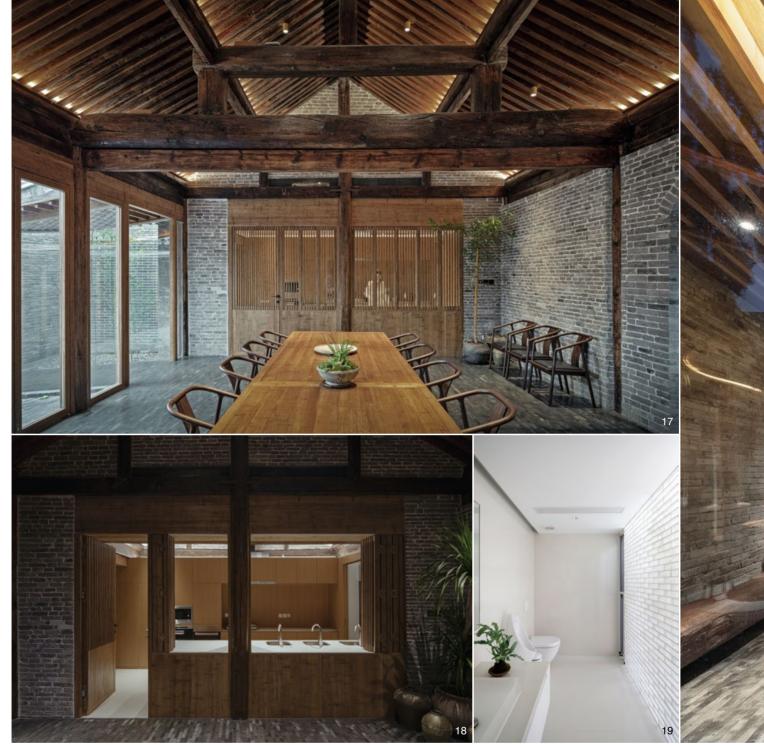
As approaching the project, the design firm ARCHSTUDIO set two goals: renovating the old and inserting the new. On the one hand, the designers neatened the houses, repaired all the building surfaces, and reinforced the architectural structures, with a view to reproducing the appearance of the traditional Siheyuan. On the other hand, they brought in new living facilities such as bathroom, kitchen and garage, HVAC pipes and lines, as well as new veranda spaces. The old and new are integrated into a new whole, to better meet future functional demands of reception and living for the compound.

ARCHSTUDIO embedded a veranda — a basic element of traditional Chinese architectures, into the old Siheyuan to link up the seven separated pitched-roof houses. The veranda functions as a circulation route, reshapes the spatial pattern and layers, and provides a playful walking experience as well as fantastic views.

The front courtyard is mainly used as a garage. ARCHSTUDIO retained its pitched roof, removed the front and back walls, and shifted the entrance door to the side, so as to leave more space for parking. The design team restored and preserved many valuable historical elements such as the gateway and carvings of the arched door opening, and even a dry tree. In addition, the wall between the front and middle courtyards were dismantled and replaced by a transparent veranda.

The veranda features a curved plane, and presents variations according to different landscapes and spatial functions. It's closely combined with the curved edges of the pitched roofs, hence forming several arc-shaped transparent spaces, which





17.餐廳折門能向庭院完全開敞,連結裡外。18. 廚區,採用木質鋪裝與老建築相和諧。19. 廁區,採用無色彩與玻璃磚牆使空間明淨。20. 起居廳與臥房區。 臥房居於建築最後段空間。21. 去除牆面,改用玻璃遊廊串連裡外關係。

integrate the houses, landscape and the sky into the same picture. In the front courtyard, part of the veranda's roof was bended downwards to form a curved wall, behind which are some functional spaces, including the washroom, service room, equipment room and so on.

The middle courtyard is a public activity space. It previously contained three houses, one on the north, two on the sides. Based on its original layout, ARCHSTUDIO set a living room, a tea room, a dining room and a kitchen, etc. in this area. The designers adopted a symmetric spatial pattern, which inherits the sense of formality of traditional courtyard buildings. Besides, they replaced the former stairs that led to houses with gentle slopes. The slopes and the transparent veranda together enhance the connectivity between the indoor spaces and the open courtyard. The dining room has a folding door, which can open the interior to the outside space completely and extend indoor activities to the courtyard as well. At the middle of the dining room's back wall, there is an arched door, which was restored and becomes the entrance to the back courtyard.



17. Folding door in dining space can be fully opened. 18. Kitchen shows of intimate comfort. 19. Lavatory view. 20. Family room and bedroom. 21. Glass wall replaces solid walls.

The back courtyard is a dwelling space, mainly consisting of two bedrooms, a tea room, and a study. Its original layout is the same as that of the middle courtyard. The veranda in this area has an undulating plane, which interacts with the three old trees that already existed in the courtyard and at the same time forms several small arc-shaped leisure spaces. The bedrooms are set at the backmost area, featuring a symmetric spatial layout based on the roof ridge. The bathroom in each bedroom is adjacent to a small yard, which ensures ample light and ventilation.





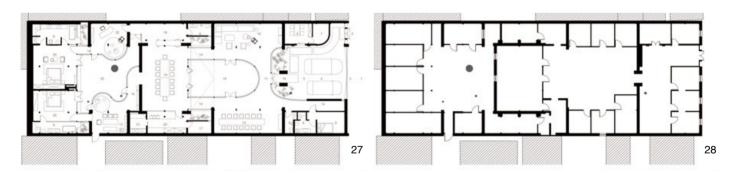
22. 俯瞰後院。23. 主臥房,打開門扇即可與院景通透串連。24. 主臥房衛浴比鄰庭院,具有良好的採光與通風優勢。25. 次臥房,裸裎傳統建築的結構之美。 26. 臥房依據建築屋脊採取對稱式佈局。27. 平面圖。28. 現況圖。

22. A bird-eye's view of the backyard. 23. Master bedroom has easy access to the natural views. 24. Master bathroom with excellent ventilation and natural lighting. 25. Secondary bedroom. 26. Symmetrical layout of the bedroom setting is based on traditional Chinese spatial order. 27. Plan. 28. Existing conditions.

The material scheme of the project well combines the old and new. ARCHSTUDIO preserved the textures of traditional architectural materials whilst adding some new materials in an appropriate manner, so as to retain the marks of time, and present the contrast and fusion between the new and old. The original pine wood framework of the Siheyuan was maintained, with its damaged components replaced by the same material. The new veranda, doors, windows and some furniture utilize laminated bamboo panels (a new material that looks like wood and feels like steel), which echo with the old pine wood. The newly built veranda adopts a frame structure, with ribbed beams and panels on the ceiling, in order to maximize transparency and lightness as well as to better blend into the old construction. As for interior design, ARCHSTUDIO brought in various combinations of furniture made of old or new wood, which shows perfect mix of different hues and textures.

The traditional pitched roofs used no modern waterproof materials and had poor thermal insulation. Considering this, ARCHSTUDIO optimized the roof system and performance on the premise of retaining the original gray tile rooftops. As to the curved roof of the newly built veranda, the designers utilized polymer mortar as the finish, which is smooth and forms contrast with the adjacent textured tile rooftops. The old building walls were restored, by reusing the gray bricks from demolished temporary architectural blocks in the courtyards. The floor of outdoor spaces is paved with the same type of bricks, to ensure visual consistency. Some of the new walls are formed by glass bricks, which have the same size as the old gray bricks. During construction, some stone slices, crocks and a millstone were found unexpectedly, which were later reused as stairs, flowerpots and adornments. The wooden beam waste from the architectural renovation was utilized to make chairs, which gives old materials new life. Text by ARCHSTUDIO





#### 建材分析 Material Analysis

1. 松木:局部破損構件的修整替換。2. 竹鋼:施作遊廊、門窗、部分家具的用材,與建築舊木相對應。3. 青磚:地面與立牆。4. 玻璃磚:局部牆面用以透光。
1. Pine wood – used for repair and amendments. 2. Steel – used for arcade posts, window frames, and constantly used to join with recycled wood. 3. Brick – used to pave the floor and build main walls. 4. Glass brick – used in certain position of walls.

## 溝通重點 Communication Note■

此作位於北京舊城核心區內,是一座小型的三進式四合院,院子占地寬約 15 米,長約 42 米。由於原始建築年代久遠,除了木結構樑柱和局部有民國特點 的拱形門洞,其它大部分屋頂、牆面、門窗等都已經破損或消失。院内遺留了大量大雜院時期的臨時建築。本次改造設計一方面是重現傳統建築的樣貌: 另一方面是植入當代生活機能配備以及新的遊廊空間,讓新與舊相互疊合成為一個新的整體,來滿足未來作為接待會所與居住空間的使用要求。 The building, a small two courts three compound traditional Chinese house, is situated right inside Beijing's medieval quarter. Except for the main wood structure and an arched opening, the building has lost most of its original walls and windows and the current structures were added in a chaotic arrangement. The program was to convert it into a guest house and a space fully equipped with living functions. The chosen effort was to rebuild the original building and add an amenity facility to meet living demands.