

## The gate/door as a border. Forms and types in Chinese villages

The drawing of architecture is the discipline that better than others offers the useful tools for the study of places, historical artefacts and architectural elements that characterize those spaces; the survey, in its broadest sense of knowledge, offers the basis for a systematic documentation, cataloguing and consequent classification of the real.

This consolidated awareness defines the foundations of the research, focused on the architectural heritage of the ancient Chinese villages, the only custodians of the historical and cultural memory of China.

The survey process, extended to the two regions in which the country is divided, has focused on the analysis of common typological elements. Among these, the research focused on the study of the entrance, both gate and domestic door, as a separating element between exterior and interior, public and private spaces,

from macro to micro-scale.

In the operational approach, the study was conducted from direct observation of the types present in some suitably selected villages. From the sketches the formal characteristics have been recognized and ordered, whose qualitative attributes have been perfected with traditional and photogrammetric surveying operations. The results of the survey have been systematized in a first comparative synoptic chart that constitutes the first phase of a larger operation, oriented to the updating and enrichment of the documentation available to date both in terms of quality and refinement of the data.



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Keywords:  
Chinese villages; village gates and doors; integrated surveys; representation; comparison.

## INTRODUCTION

The drawing of architecture is the discipline that better than others offers the useful tools for the study of places, historical artifacts and architectural elements that characterize those spaces. The cognitive essence of the graphic sign is revealed, then, with significant force in the interweaving with the dimension of the journey. The images, usually a complement of the reportages of travellers, testify to the cognitive power and critical analysis underlying the trace of the signs on the paper (Cardone, 2005).

Goethe in his *Italienische Reise* recognizes drawing as the best tool of knowledge of the external world, essential when the reality observed is distant for cultural and physical frontiers.

The ordering principle that animates the hand of the draftsman finds refinement in the survey that, in its broadest sense of knowledge, offers the basis for a systematic documentation, cataloging and consequent classification of the real (De Rubertis, 1994).

This consolidated awareness defines the foundations of the research, focused on the knowledge of a new place and a new culture: the architectural heritage of the ancient Chinese villages.

In the process of modernization and urban expansion that has overtaken China in recent decades, cause the fracture between North and South of the country, traditional villages are the only guardians of its historical and cultural memory. Far from the homologation and monetization of serial production, the small historic urban agglomerations still allow us to read among the plasticity of their forms the typical and authentic characteristics of Chinese architecture.

The survey process, extended to the two regions in which the country is divided to reach a more complete framework of knowledge, has focused primarily on the analysis of common typological elements. Among these, the research [1] focused on the study of the entrance, both gate and domestic door, as a separating element between exterior and interior, public and private spaces, from macro to micro-scale. (M.C.)

## THE ROLE OF THE DOOR IN CHINESE ARCHITECTURE

In the collective image, door, as an architectural element, has always been connected with different symbols that decline the idea of passage and transit regarding to the time and place of reference. The typology of the door has the main attributes in the two different thoughtful connotations, urban and domestic, in China too. Its meaning is part of the vision of the house and, by extension, of the city as an introverted and isolated architecture. Traditionally, the living places are surrounded by perimeter walls designed to conceal the heart of the house and the village, in order to protect the private life of the inhabitants so the door becomes

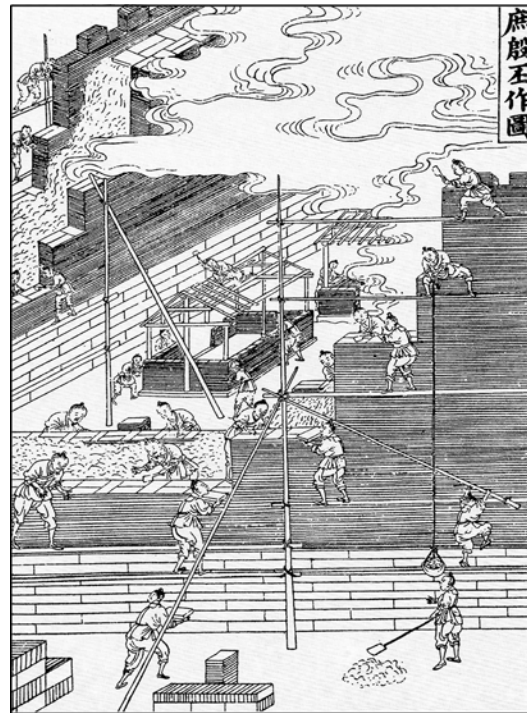


Fig.1 - Construction of the city wall of the capital of the Chou. Ch'ing period, 1905. From Shu-Ching t'u-shuo, ch. 32.

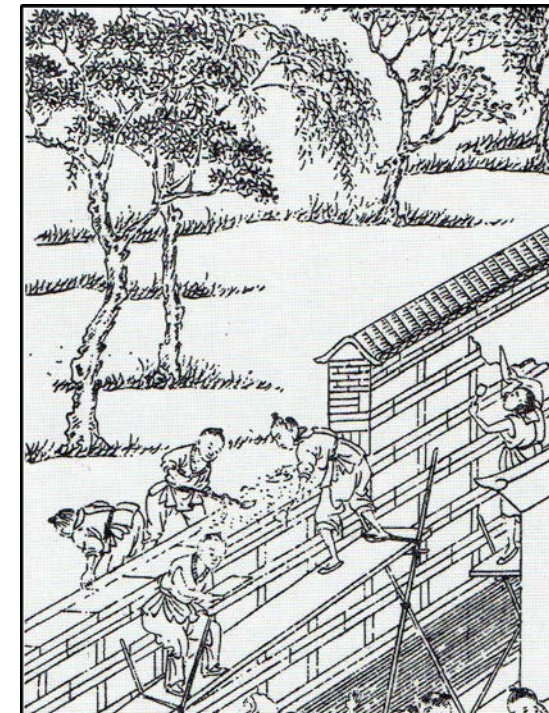


Fig.2 - Construction of the enclosure of a house. Ch'ing period, 1905. From Shu-Ching t'u-shuo, ch. 31.

So, materials, colours and textures of these walls define the image of the village and its houses. Almost every Chinese masonry works are made of pressed earth on which the openings defined by the doors are inserted. As mentioned before, the role and characteristics of the door element vary in relation to their being access to the domestic space or entrance to the city.

In ancient Chinese villages, urban gates were, together with walls and towers, the defence system of the village. Symmetrically arranged along the walls, they are the access point to the inhabited area, enclosed within a fence which has usually a quadrangular shape, marked on three sides by the entrances with the largest one always located to the South. The size of the urban gates is always limited, when compared to the specimens of Western culture, both in width and in height. In fact, a peculiarity, of oriental architecture is a certain lack of interest regarding the buildings and walls verticality preferring the horizontal construction.

This is motivated by specific aesthetic, ideological and practical conceptions (Bertan, Foccardi, 1998). The culture of mandarins is based on the desire to keep the individual and his home in contact with nature instead of overpowering it with imposing buildings, and to protect the private and collective house by surrounding it with perimeter walls that don't stand above the surrounding natural environment. The result is an "environmentalist" and conservative architecture, in search for harmony between the built and the landscape which is also revealed by the materials used for the building works. The urban door is always made of wood in a philosophical vision of harmony with nature, and decorated with a superior battlement, representing the dynasty to which it belongs and the construction era. The Chinese preference for a perishable and ephemeral material such as wood is motivated by philosophical-symbolic ways of thinking aiming to create architectures that are in harmony with nature landscape and people. Wood, which is one of the five main elements of the universe together with metal, water, fire and earth, by its nature stands in the intermediate space between earth and sky. In addition, deriving directly

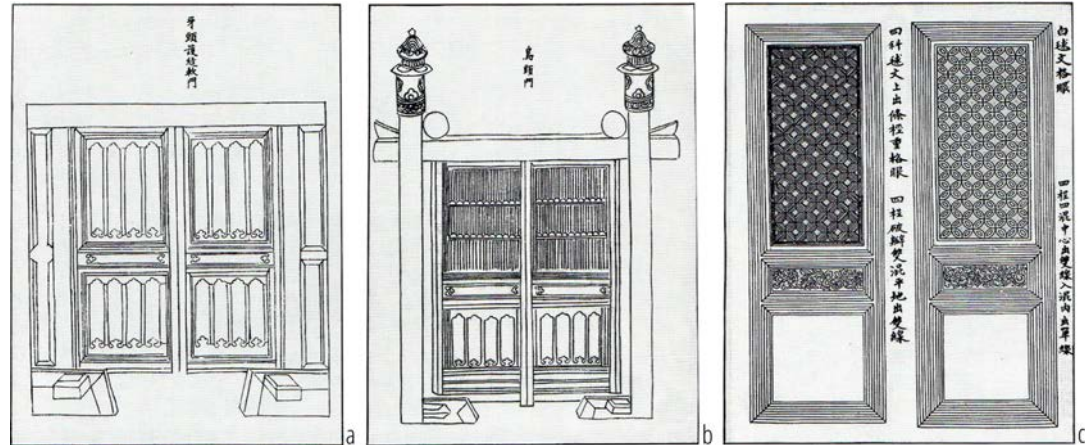


Fig.3 - Examples of domestic doors: (a) half-timbered with ornamental denticles; (b) "crow's head"; (c) interior half-timbered. From Ying-tsoo fa-shih, ch. 6.

from the tree, a vertical structure that naturally aspires to elevation, the timber would have an aerial matrix opposite to the static gravity of the stone. For this reason, Chinese people rarely use stone, since that they are disinterested to leave petrified testimonies that dominate the natural transience and the continuous evolution of the world. Led by the precept to erect houses that don't make violence to nature. (Spengler, 1981). However, it is precisely the attention and respect given to nature that leads Chinese builders to rarely use stone for building the surrounding walls of villages, mainly in mountainous areas or in geologically friable areas where the soil instability makes it necessary to provide a solid structure.

The door type in traditional domestic architecture acquires a different meaning, adding to the meaning of separation line between inside and outside, other complex attributes linked to its position, in the architectural composition, responding to a specific ceremony and seal of the class of social belonging (Benevolo, 1988). Domestic doors are always balanced to the importance and dignity of the building as well as to the owner's wealth. Made of wood, with one or two timber frame doors, they

are arranged in large numbers inside the dwelling but only one, the main one, is located along the perimeter that marks the limit of the space - safe - of domestic living. A space, as has been said, introverted and isolated from the outside that can be opened through the entrance door, that is almost always arranged symmetrically [4] following the traditional dwelling system, divided into a number of individual buildings arranged around one or more courtyards in placed succession and structured along an ideal North South axis.

The door element represents such a basic symbol of living that, according to tradition, there are a series of rituals that mark the stages of building a house ranging from the choice of the place, to the tracing of the foundations, preparation of the beams for the roof, positioning of the door and entry into the house. Placing a home entrance is not a simple practice, it requires a specific ceremony and respect for peculiar rules and so the happiness and serenity of the family will be possible only if the home is built in accordance with five principles - *wushi*-. Following this the house must not be too large but must provide for the shelter of as many people as possible, the front



door must be small, there must be a courtyard and there must be a solid fence whose opening must face South-East. The threshold, conceived as a clear line of separation between the interior of the domestic space and the outside, can only be crossed after the completion of the *kaicamen*, a ceremonial opening of the door to luck, an auspice of good economic fortune for the family who will live there. The door and its threshold are enriched, then, with primary attributes in close connection to the living habits of families in the home, which are different between the North and South of the country. Since the door is a filter permeable to the outside world, its role is emphasized in the Southern areas of China where people from the South are forbidden to sit on the threshold because they prevent access to guests. In the Northeast of the nation, however, walking on the threshold with both feet is prohibited because it brings bad luck to the family [Calia, 2018].

Beyond the aspects of general and fundamental nature highlighted so far, that are codified as will be said in the architectural treatises and manuals, the typological element of the door, both urban and domestic, further differs between the North and the South of the country. These differences are still legible today and this proposed research has started to define them. [V.C.]

#### THE REPRESENTATION OF DOORS IN CHINESE TREATY

Chinese architecture doesn't have an impressive theoretical structure like the Western one and maybe this is why, for the oriental arts and techniques, it has been the most neglected for centuries despite having nothing to envy to the highly theorized Western architecture.

The art of Chinese building pursues simple objectives starting from a few clear assumptions defined and handed down over the years in significant treatises and manuals. The oldest drafting of texts relating to architecture is linked to the description of the performance of the rites inside temples and public buildings [5]. These are works, written by writers or court officials, in which the layout of the various rooms of the building has a

maximum importance according to the religious and civil ceremonies that took place in it, with architecture, and therefore city and the building, seen exclusively with a religious key. Most of the originals of these works have been lost and have been handed down to us only through quotes from later texts. It is possible to make a distinction in two main categories of the Chinese literature of which we have a documented written memory: a first corpus of architectural texts is made up of works of an exclusively technical nature, written directly by master carpenters or architect officials, used since the Han dynasty for building representative buildings; a second group is defined by many minor works, of a popular nature, which deal with the various aspects of building in which technical knowledge is weaved together with popular beliefs and rituals such as geomancy, description of rituals and divination.

The works of the first group include *San-fu-huang-t'u* [6], *Mu-ching* [7], *Ying-tiao fa-shih* [8], *Ziren yizhi* [9], *Yuan-yeh* [10], *Kung-pu kung-chen tso -fa* [11] and *Ying-tiao fa-yuan* [12]. Examples of the texts of the second category are the *Lu Pan ching* [13], the architectural section in the popular encyclopaedias, the geomancy writings and the almanacs.

All texts contain recommendations and precepts for constructing the most different building typologies, from bridges to tombs, from temples to public buildings, from animal fences to houses, from gardens to lakes. Some works, such as *San-fu-huang-t'u* or *Ying-tiao fa-shih*, deal in great detail, in specific sections, with the description of the walls and external gates of the cities as well as the building process, decoration and installation of wooden accessory works such as doors and windows.

In Li Chieh's treatise, for example, we can find a large iconographic apparatus to support and integrate the precepts described. There are different charts showing the different types of domestic doors with precise indications about the proportioning and sizing of all system components [14]. What comes out from the analysis of Chinese literature about technical architecture is the ap-

proach and consequent link that Asian builders and architects have with representation and drawing. Chinese treatises replace the preference for the cross section - *ts'e-yang* - which, in some architecture manuals, even constitutes the only iconographic support for reading and understanding the text to the Western preference for the use of the plan. The inclination to use the section is motivated by the generative role it has with the building system: it is linked to all the sizing of the vertical components which, repeated in series in the direction of length or height, constitute the supporting structure of the construction. The design of floor plans and plants was very important for the early dynasties for the purpose of defining ritual ceremonies but became totally secondary in later Chinese manuals. The representations made in orthogonal projection are associated with detailed drawings charts made in oblique parallel projection. The practice of axonometric drawing is preferred by mandarins instead of perspective because of the greater metric clarity and the possibility of making direct measurements of the individual elements starting from the drawing. Axonometry, preserving the parallelism of the surfaces, doesn't present the model deformations due to a subjective vision and therefore reproduces, in the eyes of the Chinese technicians, the real - objective and true - structure of the object.

The treatises and manuals accompanied by iconographic apparatuses consequently show drawing tables made in a second orthogonal projection (elevation or section) and in axonometric projection which, even with the precision of the textual description and the proportioning system, don't provide the same attention in graphic form for measurements and quotas. The tables, for example, included in the work *Vernacular Architecture: Domestic Spaces of Ancient China* [15], a sort of compendium of Chinese treatise production, are configured as synoptic and comparative paintings, extremely fascinating as an expression of the culture and technical language of the Chinese people but certainly "bare" when compared to the Occidental technical figurative tradition.

Among these there are tables for different types of facades and sections of traditional courtyard houses which, define the documentary reference of the proposed research. (V.C.)

### THE VILLAGES IN NORTH AND SOUTH CHINA: METHODOLOGY AND DESCRIPTION

In the operational approach, starting from the selection of some villages considered most appropriate for research and compatible with the operational possibilities on the site, the study was conducted from direct observation of the types present. From the sketches the formal characteristics have been recognized and ordered, whose qualitative attributes have been perfected with surveying operations. The metric data has been acquired by integrating the more traditional methods of direct survey with the more modern ones of aerial and terrestrial photogrammetry.

The concept of passage, aimed at the knowledge of the place through a specific typological element, has also become an opportunity to reflect on the methodological approach used by two different cultures. The investigations focused on the villages of Yujiacun, Danguancun, Yujiaxiang and Dagucheng in Hebei Province in the North of China and on the villages of Fubao, Laitan and Luocheng, respectively in the provinces of Sichuan and Chongqing in the South of China. The various inspections have allowed us to read the history

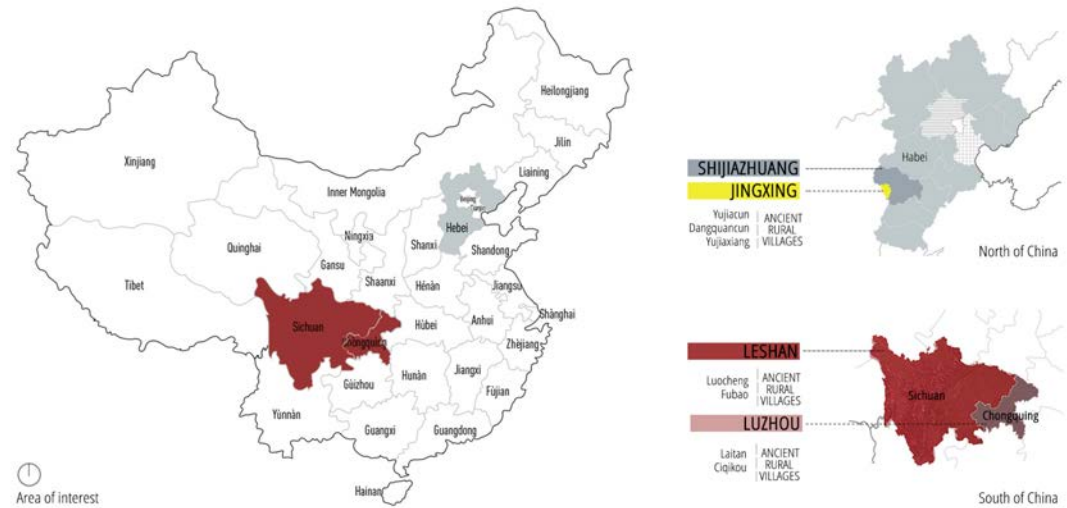


Fig.4 - Area of interest and its ancient rural villages.

and the transformations through the remaining traces and plan the important campaigns. For the study and the resumption of the measurements of the villages in North of China the instrumental choice fell on the methodology of direct survey with traditional techniques of measurement *in situ* and classic representations in orthogonal projections that have allowed analysis and identification of typological elements but also

Fig.5 - Photos of villages: Yujiacun (left), Danguancun and Yujiaxiang (right).



Fig.6 - Photos of Dagucheng village.



Fig.7 - Photos of Fubao village.



Fig.8 - Photos of Luocheng village.



Fig.9 - Photos of Laitan village.





of morphological characteristics typical of these places. Yujiacun and Danguancun and Yujiaxiang are three ancient rural villages that rise in the small valley of the Taiguan Mountains, a mountain range that marks the border between Hebei Province and Shanxi. The particular orographic conformation makes the system of these three stone villages, oriented towards the river and protected by the mountains, like a small closed universe that lives of mutual relations in a place defined as pleasant and propitious according to the canons of *fengshui*. The studies and surveys carried out show that, as usual, access to the village system was to the East and West through the *pàifàng* or the village gate located along the main road axis. It should be noted that the location of the entrance differs from the original prescriptions which generally provided the main access to the South and the secondary entrances to the East and West. In this case, the Southern position is lacking due to the natural boundary formed by the course of the river. The entrance, in the original conception of Chinese culture, was constantly guarded and incorporated into the walls surrounding the entire area while every night the doors were closed in order to protect the village from possible enemy attacks. Even today, in these villages located in the Northeast is clearly legible the entrance that is no longer characterized by doors with doors, as usual, but by a trilith stone system, 13,80 m wide and a height of 7,20 m consisting of four vertical elements on which horizontal elements are placed at different heights. Thus, there are three openings, always open, with ornamental motifs, arranged along the horizontal axes, while the central opening, larger than the lateral ones, allows access not only to pedestrians, but also to vehicles and livestock. Within the village system, however, the rhythm of the road is punctuated by domestic doors, called "*dà mèn*", which are the most variable elements in Chinese architecture. They have the dimensions of about 1,50 m x 2,20 m and consist of two leaves, reinforced with iron bars and plates, while the pediment, sometimes decorated, fits on side pillars that rest on a carved stone plinth, which can also

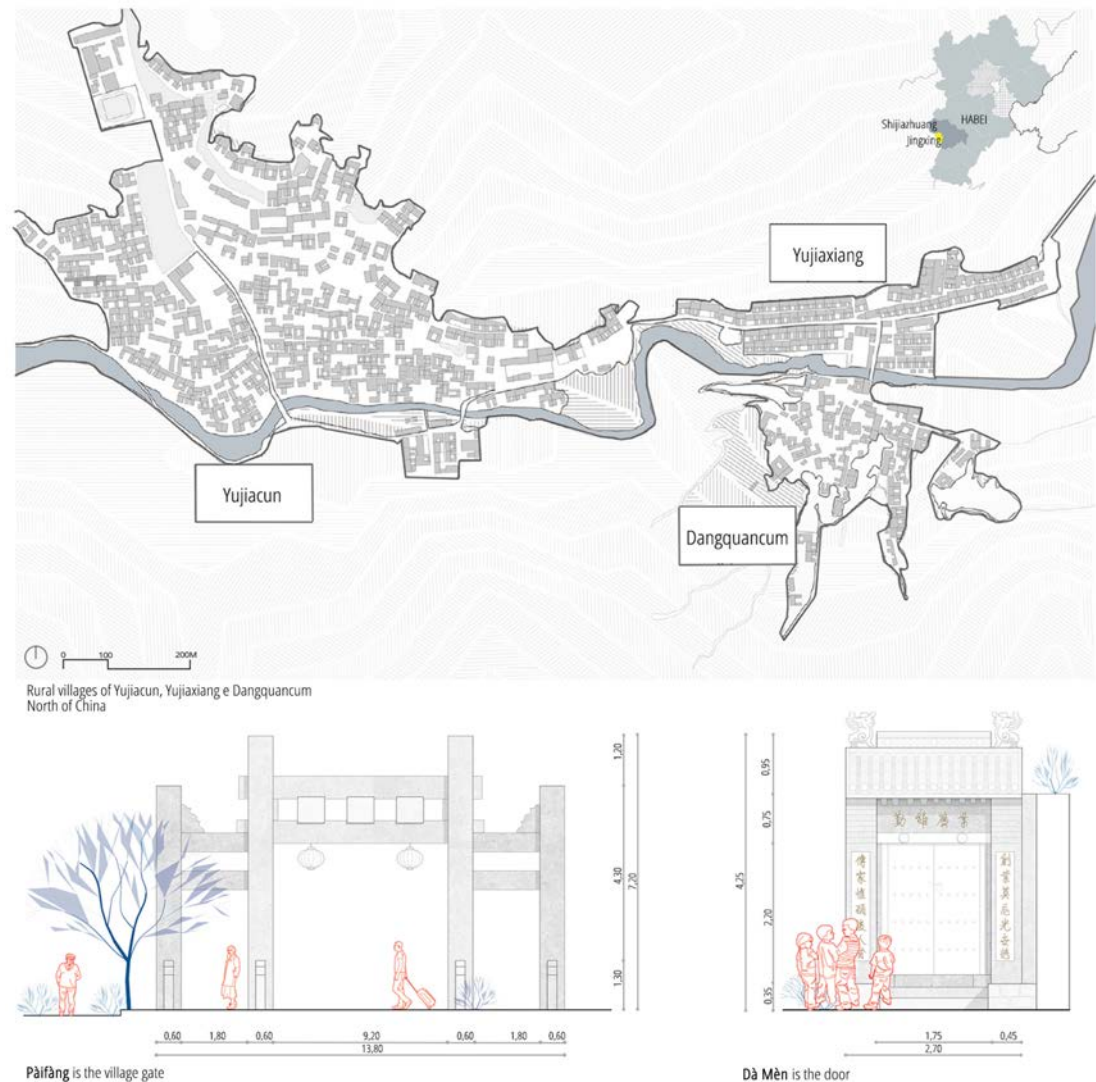


Fig.10 - Rural villages of Yujiacun, Yujiaxiang e Danguancun – North of China.



Spare point cloud

Dense point cloud

Triangular Mesh



DJI MAVIC AIR

Dimension: 168x184x64mm  
 Camera: Fov: 85°-35 mm  
 Aperture: F/2.8  
 Photo Size: 4:3:4056 16:9:4056  
 Video: 4k ultra HD: 3840 X 2160

Video number: 20  
 Tot. video length: 35:36 min  
 Video quality: 3840 x 2160  
 Capture frame: 1 fps  
 Photo number: 1980



ZEPHYR AERIAL

PHOTOGRAMMETRIC PROCESS

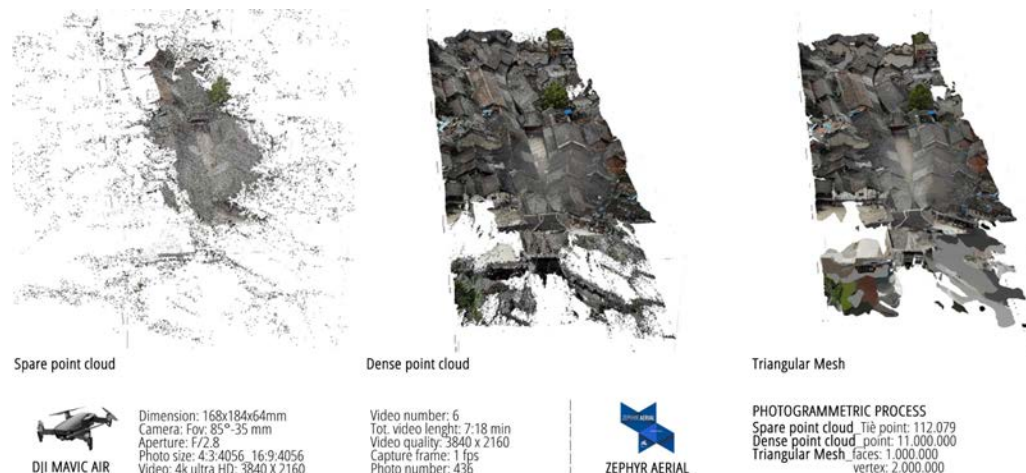
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 Dense point cloud: point: 20.000.000  
 Triangular Mesh: faces: 5.000.000  
 vertex: 10.000.000

Photogrammetric survey  
 Rural village of Fubao\_South of China

serve as a seat. Consequently, the door is placed at a higher altitude than the roadside recalling the beliefs on the threshold in this area of the country. More articulated are the city gates of the village Dagucheng also located in the North of China. Once again, the entrances are positioned to the East and West along the main road axis but in this second analysis, unlike the previous entrance, the village gates are incorporated into the boundary wall. The dimensions are small and characterized by an arched system with an incomplete profile, whose shape shows an angular point at the right angles, so that the internal vertical side of the right side and the plane tangent to the intrados in the lines of set, are distinct. Completely in stone, they have in the external facade a decorative and ornamental apparatus more accentuated as it was the case in Greek and Roman architecture, compared to the inner facade in which these elements are completely absent. The village gate, positioned to the West, is surmounted by a canopy with terracotta tiles above the arched system, the one to the West, is incorporated in a tower in the crown band are reported decorative friezes. Internally along the main axis we have domestic

Fig. 11 - Photogrammetry survey – Fubao.

Fig.12 - Photogrammetric survey – Luocheng.



Spare point cloud

Dense point cloud

Triangular Mesh



DJI MAVIC AIR

Dimension: 168x184x64mm  
 Camera: Fov: 85°-35 mm  
 Aperture: F/2.8  
 Photo Size: 4:3:4056 16:9:4056  
 Video: 4k ultra HD: 3840 X 2160

Video number: 6  
 Tot. video length: 7:18 min  
 Video quality: 3840 x 2160  
 Capture frame: 1 fps  
 Photo number: 436



ZEPHYR AERIAL

PHOTOGRAMMETRIC PROCESS

Spare point cloud: Tie point: 112.079  
 Dense point cloud: point: 11.000.000  
 Triangular Mesh: faces: 1.000.000  
 vertex: 2.000.000

Photogrammetric survey  
 Rural village of Luocheng\_South of China

doors in wooden and the size rather similar to the examples analyzed previously. In this specific case they are higher than the boundary wall. Subsequent, analyses have been conducted on typological elements present in some villages in the South of the country such as: Fubao, Laitan and Luocheng, respectively in the provinces of Sichuan and Chongqing. The aerial photogrammetric methodology, integrated with direct detection, has been used. The metrical and colorimetric information was taken from the frames not recorded in situ but from those taken from video recorded by drone during campaign operations. In line with the standard photogrammetric pipeline, the dataset was processed by *Zephyr* application: once the homologous points were calculated, they were used to produce polygonal models with dense image matching algorithms. Subsequently, traditional elaborations in plan, section and facade were extrapolated from the 3D models. Such representations have been shown of fundamental importance in order to understand the articulated structures of these villages and their conformations, returning information characterized by a particular ac-





Fig.13 - Rural village of Fubao – South of China.



Fig.14 - Rural village of Luocheng – South of China.

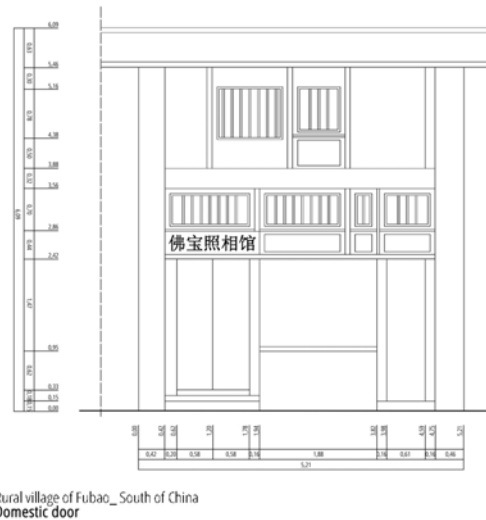
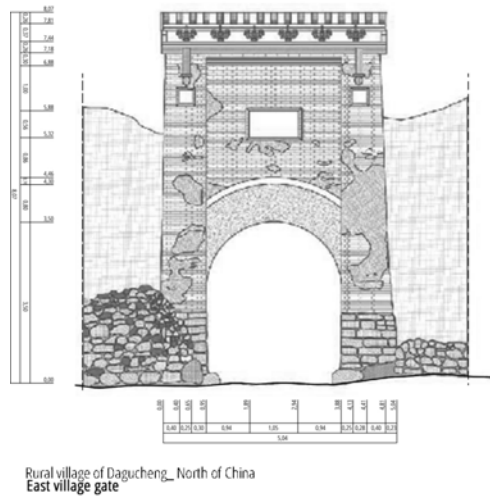


Fig.15 - Survey of village gate – Dagucheng: detail (left). Survey of domestic door – Fubao: detail (right).

curacy of the data. This has been possible thanks to the use of methodologies, belonging to a system now consolidated in Western, European, and Italian culture but applied in a different context with different culture. In the villages of Fubao and Luocheng it was not possible to examine and compare the role of the village gate because it's not present and, therefore, the analysis focused only on the typological elements of the domestic doors. Fubao, located in Hejiang County and built during the fourteenth century, was considered in ancient times, due to its strategic geographical location, the most important cultural and commercial center of the area.

If today, however, it only keeps the memory of its legendary history, it is possible from the territorial framework to read the historical part of the village, oriented according to the North-South axis and surrounded by the river, compared to that of new construction. From the data collected it was possible to make a section along the main axis in which we note that the village is subject to significant differences in height with wooden houses and local stone that develop mainly on two levels, following a homogeneous composition. In fact, the facades are marked by modular partitions, both horizontal and vertical, while in most of the buildings, covered by pitched roofs, a string course always in wood highlights the ground floor from the first level. All the thresholds are placed at a higher altitude than the road axis to avoid that the wooden elements are in direct contact with the muddy soil and subject to degradation phenomena due to humidity. Instead, on the front, there are alternating domestic doors with one or two doors based on the importance and dignity of the building and the wealth of its owner. The punctual examination of the domestic doors of the village of Luocheng, founded in the seventeenth century and famous for the particular shape of the road that resembles the keel of a ship, highlights characteristics and dimensional data common to those just described but with the peculiarity of developing under a portico. The last case study in South China, which completes the picture, is the village of Laitan, built during the

Tang dynasty, between 618 and 907 A.D. and used as a military base. In this case, the knowledge of the place was conducted exclusively with direct measurements to enrich sketches.

The two village gates that, nowadays, allow the passage towards the interior are characterized by pointed arches completely incorporated into the monumental stone wall that surrounds the entire town. The entrances are made up of openings always open, without any closing element, placed at a slightly raised height with respect to the ground line. From the analysis of the drawings of the facade it is evident that, in the perimeter wall placed to the East there is a third door which was instead closed. (M.F.)

### THE RESULTS OF THE SURVEY

The results of the survey have been systematized in a first comparative synoptic chart that constitutes the first phase of a larger operation, oriented to the updating and enrichment of the documentation available (Liang Ssu-ch'eng, 1984) to date both in terms of quality and refinement of the data. The three-dimensional digital models with the graphic drawings are of fundamental importance to understand the stratifications and the conformations of a place so far from our, becoming the base for the definition of planning actions (Docci, Maestri, 2009). At the same time, being produced in a system of cognitive procedure now consolidated in Western culture, are taking in a dialectic position with the reality that represent, becoming an opportunity for verification and comparison. The concept of passage, aimed at the knowledge of the place through the typology of village gates and domestic doors, has become an opportunity to reflect on the methodological approach used by two different cultures. The Eastern approach of drawings mainly in section, produced with direct measures and in a simple way, it is accompanied by an iconographic apparatus typical of the Western world. is accompanied by an iconographic apparatus proper to the Western world. This is richer, articulated in more representations both two-dimensional and

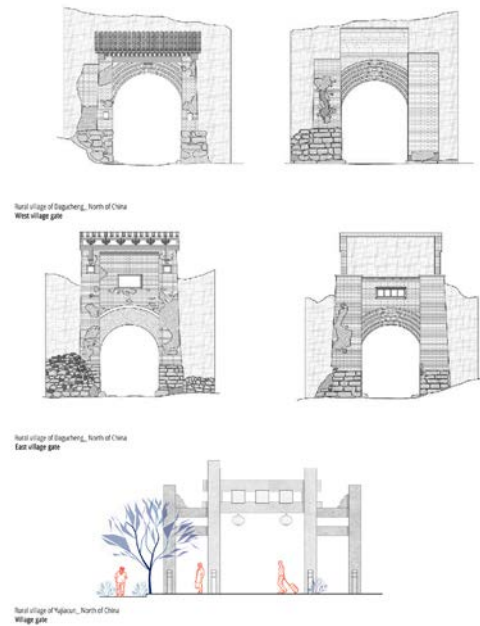


Fig.16 - Village gates – North of China.

three-dimensional, in which the measurement becomes a graphic element of equal importance of the drawing, acquired with a very high degree of precision and accuracy.

All the specific elements that have been analyzed in the individual villages of the North and South have made it possible to define, in this first phase, a comparative synoptic chart from which it is already possible to deduce considerable information between similarities and differences. The representation therefore proved to be fundamental for the critical reinterpretation of these elements, allowing to verify through comparison the different configurations. In particular, in the villages examined it can be noted that the village gates don't have common characteristics between them being completely different both by size and materials. In fact, in these phases of analysis, many singularities emerge that do

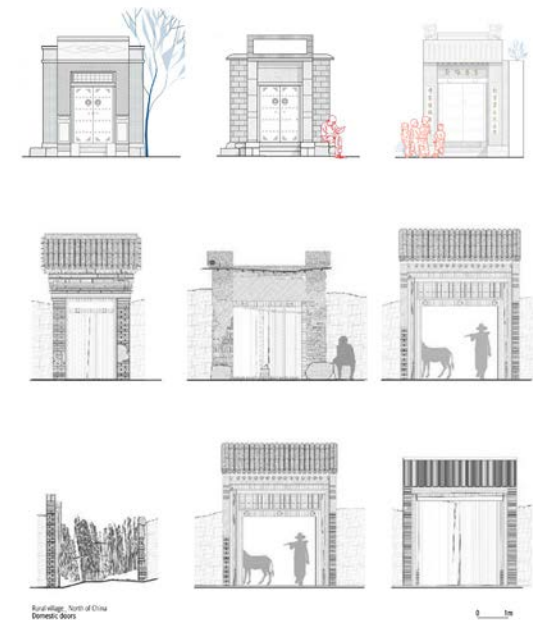


Fig.17 - Domestic doors – North of China.



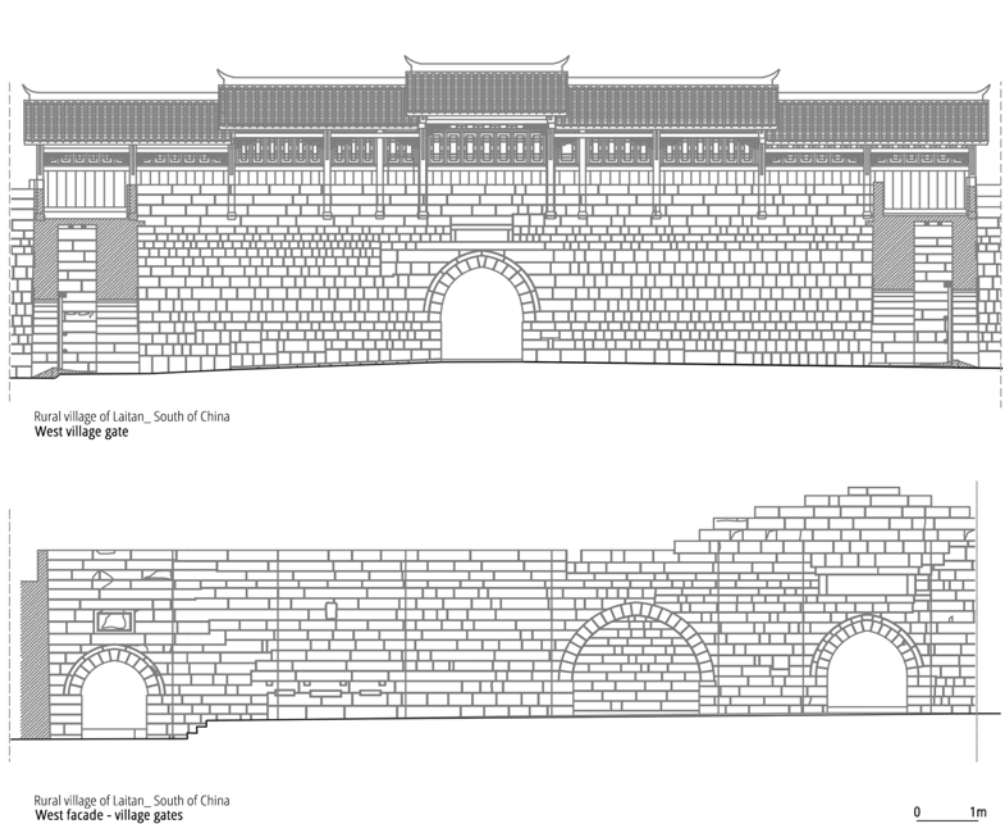


Fig.18 - Village gates – South of China.

not allow generalizations to be made. To date, however, from the cases studied it is possible to abstain more specific and unusual directives for domestic doors. Regardless of the geographical position, all domestic doors are located at a higher altitude than the road axis, while from the material point of view those of the North are made of iron panels and those of the South are made of natural wood. The dimensional parameters are almost similar with the constant height of 2.20 m and the variable width according to the number of leaves from which they are composed. (M.F.)

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### CONCLUSIONS

In China, in recent decades, urban expansion has created a rift between cities and villages, incompatible with the process of modernization and resulting loss of identity. To address this phenomenon and to enhance and preserve, therefore, the identity of these places has been necessary to apply a precise path of investigation and knowledge both for the villages of the North and for the villages of the South of the country allowing that scientific and intellectual exchange, fundamen-

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Fig.19 - Domestic gates – South of China.

tal for the understanding and analysis of complex phenomena in different geographical areas, but at the same time occasion for verification and comparison. In the comparative synoptic chart initiated these differences and/or similarities found have highlighted how these ancient villages retain the identity aspect of traditional Chinese culture. This identity aspect that the typological element determines, needs to be protected and preserved with punctual actions, where there is a high risk that it will be lost due to the contemporary tendency that leads to monetize Chinese

culture and all aspects of popular village life, to the point that in some villages the visit is allowed with the payment of an entrance ticket. Even in the villages surveyed, in recent years this process of "disneyfication", typical of modern cities, which tends to transform all places of cultural life in areas of consumption, with foreign customs and distant. In this context, research through relief and representation and with an integrated approach between Western and Eastern vision, could give rise to a more up-to-date manual and treatise, with accurate and detailed representations, to be used as a guide for the construction of new urban consortia. In this way, it is hoped that the new constructions will not follow the process of "disneyfication", with themed constructions, but are custodians of traditional construction techniques and typologies, reworked in a modern way. (M.C.)

#### NOTE

[1] In the research have been elaborated thesis of degree that have involved professors and students: Prof. Massimiliano Campi, Prof. Yingjin Gao, Prof. Paola Scala, Prof. Guo Weimin, Prof. Maria Cerreta, arch. Giovanni Aurino, arch. Valeria Cera, arch. Marika Falcone and Guido Asciore, Marianna Auriemma, Alessandra Coppola, Loredana De Feo, Orazio Nicodemo, Francesco Sodano.

[2] The word used for "city" *ch'eng* has the meaning of "wall". The term is used by the Chinese to equally indicate the surrounding wall or the main wall of each architecture. Furthermore, the word indicates both the walls of a city and the space, housing and political together, where the lord resided.

[3] As the volume of Liu Tun-chen (Dunzhen, 1980) shows, there are different types of houses, closely connected to the different landscapes and contexts found in China. For example, the model of the rectangular-horizontal house with three intercolumns is the most common type in traditional Chinese architecture to which are added the more complex three-winged building around a courtyard, circular buildings or large dwellings with multiple lateral wings.

[4] Symmetry is a symbol of solemnity for the Chinese. It is one of the main distinctive elements of country residences, sometimes derogated in the town houses.

[5] This is the *San-li-t'u* volume, known as *Illustrazione dei tre riti*. Work by Cheng Hsuan (127-200 AD).

[6] Known as *Descrizione delle tre divisioni amministrative*. Work by an anonymous of the Han dynasty (202 BC - 220 AD).

[7] Also called *Mujing*, known as *Classico della Carpenteria* (elsewhere translated as *Manuale di costruzioni in legno*). Technical work attributed by scholars to Yu Hao, active in 965-995 AD, one of the greatest architects of the early Sung dynasty.

[8] Also called *Yingzao fashi*, known as *Precetti di Architettura* (elsewhere translated as *Trattato sui metodi dell'architettura*). Work by Li Chieh published in 1103 during the Northern Sung dynasty.

[9] Known as *Tradizioni dell'arte dii unificare*. Work written by Xue Jingshi in 1264.

[10] Also called *Yuanye*, known as *Costruttore dei giardini*. Work written by Chi Ch'eng around 1635.

[11] Also called *Gongbu gong-cheng zuofa*, known as *Metodi di costruzione del Ministero dei Lavori* (elsewhere translated as *Methods of building a working group*). Work compiled in 1734 by a group of architects coordinated by Prince Yinli.

[12] Also called *Yingzao fayuan*, known as *Fonte dei metodi architettonici* (translated elsewhere *Risorsa dei metodi architettonici*). Work compiled by the architect Yao Ch'eng-tsu at the beginning of the last century.

[13] Also called *Lu Ban Jing*, known as *Classico di Lu Pan*. Handwritten work dated to the last years of the Ming dynasty between 1573 and 1644.

[14] Li Chieh is defined by scholars as Vitruvius of Chinese architecture. He is credited with having for the first time fixed the proportioning system for all the wooden components of a building: the *ts'ai*.

[15] Wang, Q. (2015). *Vernacular Architecture: Domestic Spaces of Ancient China*. Beijing: CN Times Books.

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