# Study on the Architectural Characteristics of Dacheng Hall of Confucius Temple in Jiang County, Shanxi Province

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Abstract: Jiang Country Confucius Temple was built in the Later Tang Dynasty, and was rebuilt and expanded many times during the Ming and Qing Dynasties, which is a relatively well-preserved Confucius Temple architectural complex in Shanxi Province, and adopts the layout technique of the former temple and the latter school. Combining the methods of literature analysis and field research, the Dacheng Hall of Confucius Temple in Jiang County was mapped and studied in terms of the pedestal, column network, beams, modeling and decoration of the building, and it was found that the main beams of the Dacheng Hall retained the architectural features of the Yuan Dynasty, and the practices of column reduction and column shifting were obvious in the hall, and locally it had the structural features of the Ming and Qing Dynasties that were repaired in the later period. The study of the architectural characteristics of Dacheng Hall is conducive to understanding the historical and cultural value of Confucian temples and architectural ideas, and also provides theoretical references for the protection and study of Confucian architecture in Southern part of Shanxi.

Keywords: Jiang County Confucius Temple, Dacheng Hall, Architectural Features, Confucian Culture

## 1. Introduction

The Temple of Confucius is the central place to worship Confucius and promote Confucian culture in ancient China [1]. Its main buildings generally include Latticework Gate, Dacheng Gate, Dacheng Hall, Minglun Hall, and the supporting halls, etc. These buildings integrate multiple functions such as rituals, education, and art [2]. Dacheng Hall, as the core building of the Confucius Temple, enshrines Confucius and the four matches, including statues of Yan Hui, Cen Shen, Zi Si, Meng Zi and the Twelve Philosophers, etc. It plays an important role in the Confucius Temple. Located in Yuncheng City, Shanxi Province, Jiang Country Confucian Temple was listed as a national key protected cultural relics unit in 2013, with the existing Dacheng Hall and Minglun Hall as buildings of the Ming and Qing Dynasties. Existing studies on Confucius Temples in Jiang County provide a brief description in terms of their types and current status. Confucius Temples in Jiang County belong to the county category of Confucius Temple buildings, which have the functions of education, indoctrination and rituals, and also play an important social role in local governance, but the current research on traditional architectural features in Confucius Temples needs to be further deepened [3]. Therefore, this study focuses on the Dacheng Hall within the Confucius Temple in Jiang County, combining literature combing and field research to analyze the construction method of the Dacheng Hall in terms of architectural form features, which helps to understand the local culture and Confucianism ideology, and also provides a theoretical basis for the protection of architectural heritage.

## 2. History and Cultural Background of Confucius Temple in Jiang County

## 2.1 Historical Background

Jiang Country Confucian Temple has undergone many repairs and expansions, according to the Qianlong edition of "Jiang County Records", "Confucianism in the southeast corner of the county, after the Tang Dynasty, three years of Changxing County Yin Jin Ping built [4]." That is, the Confucius Temple was built in the third year of Changxing of the Later Tang Dynasty (932), and was later rebuilt many times. Yuan Dade seven years (1303), Ming Zhengde eleven years (1516), Ming Jiajing fourteen years

(1535), Ming Wanli thirty-two years (1604), carried out a number of repairs and expansion; Qing Shunzhi six years (1649), the Confucian Temple was destroyed, only survived the Dacheng Hall and Minglun Hall; after the period of Shunzhi in Qing Dynasty, Kangxi, Yongzheng, Qianlong, Daoguang, Xianfeng, etc., many times to restore and rebuild the Temple of Literature in Jiang County, successively perfected the entire Temple complex. Successively perfected the whole temple complex. In 1980, Jiang Country Museum was established and moved to this temple, and the Jiang Country Cultural Relics and Tourism Bureau also had its office here. In 2004, Jiang Country Confucius Temple was listed as a cultural relics protection unit in Shanxi Province, and in 2013, it was listed as a national key cultural relics protection unit.

## 2.2 Cultural Background

The main role of the Confucian Temple is to worship Confucius and cultivate talents. The Dacheng Hall is used to worship Confucius and strengthen the authority of Confucianism through rituals, and the Minglun Hall is used for lectures and debates to cultivate a large number of talents. Jiang Country Confucius Temple also carries the role of indoctrination of the people and dissemination of Confucianism in the local area, and has the characteristics of education in Confucius Temple of both temple and school, which is a comprehensive embodiment of the functions of worship and teaching, and also integrates local cultural characteristics [5]. Dacheng Hall is the core sacrificial building in the Confucius Temple, which has been renovated many times and has the architectural characteristics of the Yuan Dynasty and the Ming and Qing Dynasties, influenced by the culture of the Central Plains [6]. Temple building layout is rigorous, Dacheng Hall is located in the center, the distribution of ancillary buildings on both sides, and follow the Confucian principle of "the order of inferiority and superiority, inside and outside the difference". As an important cultural and educational center in the southern part of Shanxi Province, the Confucius Temple in Jiang County carries a thousand years of local Confucianism heritage and culture, and is a concentrated manifestation of the historical heritage of Jiang County as the "hometown of King Yao" and the "ancient capital of the State of Jin".

Before the appearance of the scholar in Jiang County, the Dacheng Gate in the Confucian Temple was not open all year round, and the only way to enter the Confucian Temple was to enter from the west side door, and it was necessary to enter on foot, not on horseback or in a sedan chair. Later, Zhang Guan, a native of Jiang County in the Song Dynasty, was awarded the Scholarship in High School, and since then, the Dacheng Gate of the Confucius Temple can be opened all year round, which is also a symbol of the achievements of local education. In addition, a stele gallery inside the temple is engraved with the names of Jiang Country students who were subsequently admitted to prestigious schools, continuing the tradition of ancient imperial examinations and inspiring future generations to study hard.

# 3. Layout Characteristics of Confucius Temple in Jiang County

## 3.1 General Layout of the Buildings

Jiang Country Confucius Temple is located in Zijinshan Road, Gujian Town, Jiang County, Yuncheng City, Shanxi Province, and its general layout reflects a strong Confucianism <sup>[7]</sup>, an axially symmetrical courtyard layout is used (see Table 1). The whole complex is located in the north-south, originally five courtyards, after damage and reconstruction, now three courtyards, the main building along the north-south axis sequentially arranged to expand from south to north were latticework gate, the gate (later restored), Pam Pond, the Dacheng Hall, Minglun Hall and other major buildings, east and west symmetrically distributed ancillary monument pavilions and other facilities. Dacheng Hall, as the main sacrificial space for the statue of Confucius, is located in the center of the axis, and Minglun Hall, as the teaching space, is located at the back end of the axis. The overall space is characterized by the layout of the "temple in front and the school at the back", which follows the typical pattern of the ancient Confucian temples and emphasizes the order of the rites and the functional zoning.

The layout of the former temple and the latter school refers to placing the Dacheng Hall, Latticework Gate, and Pam Pond, which represent the places of worship, at the front end of the axis of the complex, and placing the Minglun Hall and Zunjing Pavilion, which represent the places of teaching, at the back end of the axis, to form the system of temple and school and a system of one. This layout not only meets the reverence for Confucius, but also continues the tradition of Confucian education. Its significance lies in the realization of the multiple roles of worship, education, cultural inheritance and social integration through the division and integration of architectural functions.

Table 1: General Architectural Layout of Confucius Temple in Jiang Country.

| Site plan                     | Main building | Summarize  |
|-------------------------------|---------------|--|
|                               | Lingxing Gate | The Lingxing gate was originally a wooden structure pagoda, but was later reconstructed into a stone structure pagoda with three rooms and six columns in the cupola style.  |
| MingLun Hall                  | Shanmen       | The Shanmen was originally the Dacheng Gate.In front of the gate, there are three gates and three platforms, taking the meaning of "rising three levels in a row", which is now the gate reconstructed at a later stage. |
| Dacheng Hall Pan Pool Shanmen | Dacheng Hall  | Behind the gate there is a crescent-shaped pond, there is a stone bridge over the pond, Dacheng Hall is located in the back of the pond, the face of three, three deep.  |
| Lingxing Gate                 | MingLun Hall  | MingLun Hall for the remains of the Qing Dynasty, is a place of teaching, after the later remodeling, became the management personnel used to store the place, is not open to the public.                                |
|                               | Colonnade     | Dacheng Hall is equipped with galleries on both sides, placing stone lions and important inscriptions.   |

# 3.2 Internal Space Characteristics

Dacheng Hall is the highest status, the oldest and the grandest building in the Confucius Temple in Jiang County, which is the main hall for sacrificing and enshrining Confucius, and the main statue and tablet of Confucius are enshrined in the center of the hall (see Figure 1,2). On the east side are the saints Yan Hui and Zi Si, and on the west side are the saints Zeng Sen and Meng Ke, symbolizing the respect for Confucius, the worship of Confucius, and the promotion of learning [8]. Dacheng Hall of Confucius Temple in Jiang County has a spacious interior, with only two columns located under the ridge purlin,

the practice of reducing and moving columns expands the interior space, breaks the sense of regularity of the traditional hall, and facilitates the holding of various rituals in the hall, which is a popular wooden structure practice in the Yuan Dynasty. This approach allows the interior of the building to be adapted to meet the needs of different uses, such as the worship rituals of the Confucius Ceremony, the traditional rite of passage, the opening of the brush and the visiting of the masters in Confucianism.



Figure 1: Statue of Confucius.



Figure 2: Space of Dacheng Hall.

# 4. Architectural Characteristics of Dacheng Hall

## 4.1 Platform

Dacheng Hall is located in the square platform, the platform for the brick earth rammed structure, about 1 meter high, in front of the temple has a square platform, surrounded by stone pressure edge, and built a corridor structure around the hall, the platform placed in the center of the incense burner, four corners of the four stone lion (see Figure 3). The platform not only serves to elevate the role of the main building, but also extends the space for outdoor ritual activities through the platform, enhancing the solemnity and ceremonial nature of the building. This form of platform in front of the platform, in addition to the existence of the Confucian temple building, but also in the Buddhist and Taoist buildings have appeared, reflecting the ancient Chinese temple building on the importance of foundation works, both practical and decorative. In addition, there is a semi-circular Pan Pool in front of the platform, its shape originated from the Zhou dynasty royal official school in the round pool "Pi Yong", because the Confucian temple belongs to the local official school, it is semi-circular to show the difference in rank (see Figure 4).



Figure 3: Dacheng Hall and Platform.



Figure 4: Platform and Pan Pool.

In ancient times, students were required to cross the Pan Pool to enter school, known as "entering the Pan", symbolizing their formal entry into the Confucian academy. The platform is the main venue for the Dien Shih, or Confucius Ceremony, where the officiating officials offer rites and recite ritual texts, and the music and dance students perform the Bayi Dance to complete the ceremony with the elegant music. As an extension of the front of the Dacheng Hall, the platform draws the participants' attention to the hall, reinforcing the sanctity and centripetal force of the ritual.

#### 4.2 Planar Form

Dacheng Hall is a single-eave hermitage-style wooden building, the face of three rooms, the depth of six frames rafters, using a combination of reduced columns made and moved columns made the construction method, that is, to move some of the internal columns, with the reduction of the columns, and retain only two gold columns, to form an open indoor worship space, so the Dacheng Hall has a total of 14 columns, respectively, for the outer wall of the 12 and the internal 2 (see Figure 5). This practice enlarged the interior space and simplified the structure, which was more common in Yuan Dynasty architecture, saving materials and emphasizing the openness of the space [9]. However, this practice also has the shortcomings of the wooden beams and frames carrying too much pressure and uneven stress on the node members, requiring precise calculation of the dimensions of different beams and frames and node structures, which requires a very high level of skill from the craftsmen, and also increases the difficulty of the subsequent repairs.

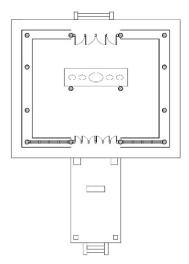


Figure 5: Floor Plan of Dacheng Hall.

## 4.3 Structural Characteristic

Dacheng Hall using lifting beam wood frame, its flat beam support ridge purlin and gold purlin, and set up fork hand auxiliary support, fork hand section was trapezoidal, supplemented on both sides of the foot support, enhance the stability of the roof. The wood used for the seven beams is very thick, more than 10 meters long and with a wide span, so it can bear the huge pressure brought by the pillar reduction and pillar removal, making the structure of the hall more stable and still well preserved after hundreds of years (see Figure 6). Its ridge square left on the Ming Zhengde thirteen years (1518) of the restoration of

the inscription, confirming the continuity of the repair of successive generations. Yuan dynasty before the hall building relies on the paving layer to transfer the load, reduce columns to move columns easily lead to paving overhang, so that the structural system to simplify the development of the Ming and Qing dynasties also promote the popularity of beams and columns direct load-bearing frame. At the same time, this practice usually also adopts auxiliary techniques such as raw start, side feet and adjust the stability of the column network to make up for the defects of column reduction and column removal, reflecting the self-adaptation ability of the traditional wooden structure system.

Dacheng Hall roof for the single-eave xieshan style, xieshan practice using wipe angle beam type, is to 45° angle lap in the seven frame beams and the intersection of the mountain beams, forming a "wipe angle" structure, through the wipe angle beams cantilevered, reducing the number of corner columns, expanding the interior space (see Figure 7). This technique embodies the construction philosophy of traditional Chinese architecture and is still an important reference for the restoration of ancient buildings.

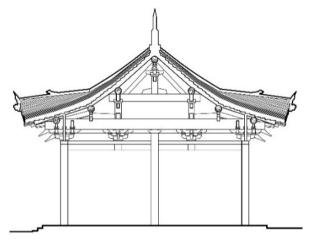


Figure 6: Sectional View of Dacheng Hall.



Figure 7: Practice of Mojiao Liang.

## 4.4 Elevation Features

The facade of Dacheng Hall is characterized by three sections, namely, the platform, the main body and the roof. The foundation consists of platforms and stone steps; the body of the roof consists of wooden pillars, doors, windows, walls, etc.; the roof consists of beams, arches, roofs, ridges, etc (see Figure 8,9). Plane for three openings, the Central Bay and the Side Bays in the front elevation are set up four wooden lattice fan door, latticework pattern is simple, mainly geometric pattern, door and window border carving simple, back of the second room wall embedded in the dragon glazed brick carvings, craftsmanship is exquisite. The total number of eaves Dougong is 13, of which 6 are for the front and rear eaves, 3 are for the mountain wall surface, plus 4 corner paving, the Dougong shape is rough, the material is big, the angular mouth carving is concise, both structural and decorative. The eave part of the structure is stretching and has rising, overlapping Dougong, stout beams and rustic appearance. The roof has one main ridge, four hip ridges and four diagonal ridges, the main ridge is decorated with the Eight

Immortals and other figures, the center of the Bao Sha shines brightly, and the hip ridges and diagonal ridges are equipped with Ridge Ornaments at the end of the ridges, which are both religious symbols and wind and drainage prevention functions.

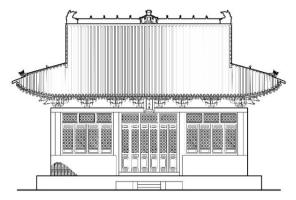


Figure 8: Front Elevation of Dacheng Hall.

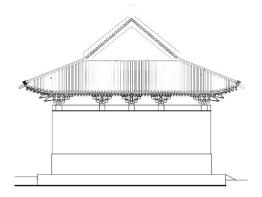


Figure 9: Side Elevation of Dacheng Hall.

## 4.5 Decorative Features

The ridge anastomoses of the Confucian temple buildings are also influenced by rituals and hierarchies, and have symbolic meanings and artistic decorations [10]. Dacheng Hall for the single-eave hiatus roof, glazed ridge central erected palace-style ridge brake, both sides decorated with Chiwen and the Eight Immortals statue, Chiwen is the ninth son of the dragon, to the dragon's head and fish body modeling based on the use of glazed materials, with the symbolic significance of fire prevention to suppress the evil spirits and the practical function of the ridge of the reinforcing. The curved extension of the hip ridge is decorated with a goose animal, located at the end of the hip ridge, with its head facing outward, not only resisting the pressure of the ridge, but also balancing the visual proportions of the building through the decorative animal head. The bumpers are placed at the end of the Diagonal Ridge, which are both lightning-proof and house-suppressing, and are made of green glaze and yellow glaze, showing dynamic beauty and guarding majesty. The eaves of the eaves are about 2 meters long, both drainage function and visual aesthetics, to extend the life of the building, the overall ridge anastomosis glazed decorations both mechanical function and aesthetic effect, but also gives the temple a majestic momentum (see Figure 10).

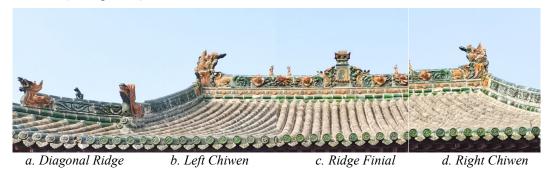


Figure 10: Dacheng Hall's Ridge Ornaments.

## 5. Conclusions

Jiang Country Confucius Temple, as a Confucian building in the southern part of Shanxi Province, has a relatively complete layout, with the layout of three courtyards before the temple and after the school. Dacheng Hall as the main building to assume the role of worship, is located in the axis of the middle section, located in the front of the platform on the square brick pedestal, the face of the three rooms, the depth of six rack rafters, the use of the reduction of columns made with the transfer of columns made a combination of practices, the temple only retains two gold columns in the center, making the space inside the hall increased. Its roof for the xieshan form, the eaves are more far-reaching, the corner of the large smudge angle beam practice, is the Song, Yuan, Ming and Qing periods of official buildings in the xieshan top of one of the main practices, the middle of the ridge of the palace-style ridge brake, both sides of the Chiwen, etc. are glazed material, exquisite modeling, both symbolic significance and use of functionality.

As a national key protected architectural heritage, the Dacheng Hall of Confucius Temple in Jiang County is an architectural remnant of Confucian culture that carries rich historical and cultural connotations. This study provides a case study of the architecture of ancient Chinese Confucian temples. Through the study of the architectural features of Dacheng Hall of Confucius Temple in Jiang County, we can better inherit and promote the Confucian culture in ancient China, enhance our understanding of the architectural features from the Yuan Dynasty to the Ming and Qing Dynasties, and provide theoretical references to the subsequent architectural heritage conservation research.

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