

Research on the Architectural Form and Decorative art of the Residential buildings in the Qing Dynasty in Xiyang County, Shanxi Province, China

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Abstract: This paper presents firsthand field data on the Residential buildings in the Qing Dynasty, gathered through field research, mapping, and interviews. It analyzes the architectural form and decorative features of the compound, which adopts a typical Siheyuan layout that harmoniously integrates practicality, durability, and aesthetics. Notable features include stone arch-vaulted kiln dwellings, brick-wood hard-roofed structures, and cave-top pavilions. These elements not only fulfill residential requirements but also accentuate aesthetic values. The compound's overall layout is symmetrically organized, reflecting the deep influence of traditional Chinese culture. The brick, wood, and stone carvings, marked by their simplicity and rustic charm, hold substantial artistic significance. As a quintessential example of Qing Dynasty residential architecture, the Residential buildings in the Qing Dynasty not only embodies the aesthetic principles of traditional Chinese architecture but also integrates Confucian thought and patriarchal values, positioning it as a key site for studying Jin merchant culture and Qing Dynasty residential architecture.

Keywords: Jinzhong; Residential Buildings in the Qing Dynasty; Architectural Form; Decorative Art

1. Introduction

This residence located in Xinangou Village, Leping Township, is situated 6 kilometers west of Xiyang County. This late Qing Dynasty compound complex, built in the Taihang Mountain area, showcases typical architectural features of the period.

1.1 Natural Environment

Xiyang County lies in the eastern mountainous region of Jinzhong. Xinangou Village is positioned 6 kilometers west of the county and 1 kilometer north of Provincial Highway 317. The village is characterized by hilly and mountainous terrain, with some flatlands to the north and east. Dense forests extend to the southwest, while loess hills dominate the eastern side. This topography provided an ideal setting for the construction of This residence, which is built adjacent to the mountains.

The climate of Xinangou Village is temperate continental, with distinct seasons and abundant sunshine. The average annual temperature is 8.2°C, with annual precipitation ranging from 500 to 600 millimeters, and a frost-free period of 128 days. These conditions are conducive to crop cultivation and provide a favorable environment for the family's living.

Water resources are abundant in the area, with a stream flowing into the Liangzhuang River, which eventually merges with the Mingshui River, feeding into the Songxi River. Additionally, numerous springs, located in the western hills of the village, offer an inexhaustible and high-quality water source, essential for daily life and agricultural activities. These water resources not only sustain the family but also influence the compound's location and layout (Figure 1).

Given the mountainous location, the streets are relatively narrow, though an east-west road traverses the entire village, optimizing access. The compound utilizes the terrain effectively, with buildings positioned along the mountain contours, forming distinct groups at various levels.

The compound faces the river with hills behind, a strategic choice that provides natural

defense while allowing for scenic views. The surrounding abundant water resources enhance agricultural productivity and quality of life within the compound. The overall layout is carefully designed, with one stream, two bridges, one street, two alleys, four main courtyards, and fifteen interconnected smaller

courtyards. The compound is oriented westward, facing east, in line with traditional Chinese feng shui principles. This strategic layout takes full advantage of the local terrain and climate, creating a harmonious and functional living space.



Figure 1. Location of the Residential buildings in the Qing Dynasty Image Source: Drawn by the Authors

This residence is also equipped with defensive features, such as tunnels, to protect against potential invasions. Each courtyard serves a specific purpose—living, storage, or production—ensuring that the compound meets both the practical needs and security requirements of its inhabitants.

1.2 Historical Development

The expansion and renovation of This residence from Qing Dynasty to the Republic of China reflect a dynamic process shaped by historical changes and cultural accumulation. Built during the Jiaqing period of the Qing Dynasty (1796-1820), the compound underwent significant expansions and

modifications during the Republic of China era [1]. This period saw the compound's development align with a broader trend among Shanxi merchant families, who constructed grand compounds in a spirit of mutual competition.

This new section was organized into two courtyard groups situated on either side of Jufu Lane, greatly expanding the architectural scope. Meanwhile, Shengxiu acquired land on the southern side of the compound and constructed Sanyi Hall, a more orderly structure than Jiude Hall, with two courtyard groups placed on either side of Yingxian Lane (Figure 2).



Figure 2. Layout of the Residential buildings in the Qing Dynasty Source: Drawn by the Authors
During this expansion, the family emphasized both the functionality of the residence and the integration of decorative arts, such as stone carvings, wood carvings, and brick carvings.

These elements not only showcased the owner's aesthetic sensibility but also reflected cultural refinement. As the Guangxu period of the Qing Dynasty transitioned into the early Republic of China, the compound underwent further expansion, particularly in the renovation of its gate towers. Although social changes influenced the residence, the preservation and promotion of the family's cultural traditions remained central to the renovation efforts.

Generations of construction led to a more rational and scientifically planned layout, with multiple enclosed yet interconnected spatial units. Aesthetic enhancements were also emphasized through intricate carvings on key architectural features, including the main gate and screen walls. These decorative elements not only contributed to the visual appeal but also reinforced auspicious motifs symbolizing blessings and prosperity. Cultural symbols, such as ancestral shrines and inscribed plaques, further enriched the compound's cultural significance, embodying the family's deep respect and commitment to their heritage [2].

2. Analysis of Architectural Forms

This residence consists of two main halls, two alleys, six large courtyards, fifteen smaller courtyards, over 120 rooms, and more than 20 kiln dwellings. Its architectural layout follows a progression of one-, two-, and three-entry Siheyuan layouts. Each courtyard is defined by its own gate, with the central building flanked symmetrically by side rooms. The courtyards are separated by walls but are interconnected via side doors. Notable architectural features include wooden carved gateway towers and brick-carved screen walls. All six large courtyards also incorporate concealed passages leading outside the village, a design element indicative of traditional defensive configurations.

The layout emphasizes harmony with nature, ensuring that residents always have views of the sky and earth. This reflects the traditional philosophical concept of the Unity of Heaven and Man and adheres to ancient Feng Shui principles [3]. Overall, the compound represents a classic Siheyuan layouts.

2.1 Courtyard Forms

The main building of each large courtyard is centrally located. For example, in the Sanyi

Hall Courtyard, the main building is positioned at the center, with the left and right wing rooms symmetrically arranged, creating a stepped pattern with the front, middle, and rear courtyards. This layout not only reflects the axial symmetry typical of ancient Chinese architecture but also emphasizes the centrality of the main building. The courtyards are interconnected through gatehouses, alleys, and other passages, maintaining the independence of each courtyard while fostering strong overall cohesion. This design facilitates daily communication and interaction among family members and embodies the cultural tradition of family unity and harmony. Additionally, it demonstrates the adaptability of spaces for varying functions, balancing openness and concealment, public and private use, as well as shared and independent activities.

The wing rooms in this residence are symmetrically arranged on either side of the central building, forming a harmonious and unified architectural complex. The rooms within the compound are functionally divided, with the left, right, and front rooms of the central courtyard designated for the housekeeper, accountant, and servants, while the rear courtyard is reserved for the owner's residence. This arrangement reflects the ancient societal emphasis on ritualistic spatial divisions and efficient use of space (Figure 3).

2.2 Building Materials

This residence primarily utilizes stone, brick, and wood in its construction, each material serving specific functional and aesthetic purposes. Stone is mainly applied in the foundation, wall bases, steps, door frames, and other key structural components. Notably, the stone arch-vaulted kiln dwellings are constructed from durable stone, offering strong resistance to wind and rain erosion. The stones are carefully selected and polished for both smoothness and aesthetic quality. During construction, craftsmen employed traditional dry or wet masonry techniques, ensuring precise control over dimensions and mortar joints to enhance stability and durability. Due to their hard texture and resistance to weathering, the stones preserve the structural integrity of the compound over centuries of exposure. Their natural patterns and colors add an antiquated and solemn atmosphere, while the exquisite carvings further elevate the

architectural artistry. Additionally, the stone's excellent load-bearing capacity and ability to isolate moisture and cold contribute to a comfortable living environment for the residents.

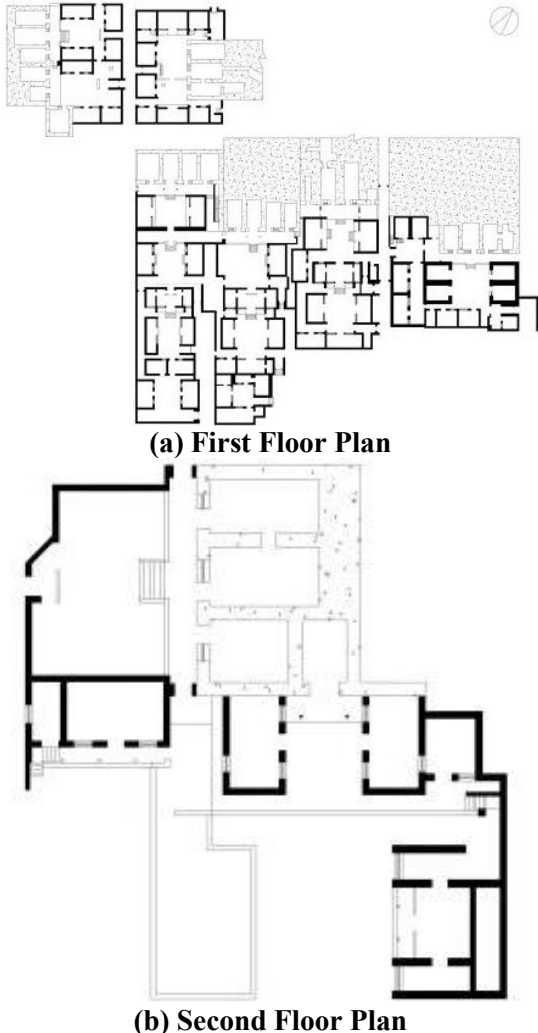


Figure 3. Floor Plan of the Residential buildings in the Qing Dynasty Image Source: Drawn by the Authors

Brick is predominantly used for constructing walls, floors, and roofs. In the brick-wood structure with hard roofs, the bricks' sturdiness and insulation properties surpass those of traditional mudbrick houses. The construction follows standardized techniques, such as staggered bricklaying and precise mortar joint control, to ensure the stability and airtightness of the walls. Brick carving is a key decorative feature in the compound, with craftsmen skillfully engraving auspicious patterns and meaningful characters onto the brick surfaces, enhancing the visual appeal. The bricks, uniform in color and texture, are easily carved and decorated, making the architecture more

vibrant and visually striking. Beyond their aesthetic value, the bricks provide excellent load-bearing and insulation properties, while also being relatively easy to maintain and repair.

Wood is primarily employed in the construction of beams, columns, doors, windows, and floors. The creation of both large woodwork (such as beams and columns) and small woodwork (such as doors, windows, and railings) demonstrates the exceptional craftsmanship of ancient carpenters. The processing and installation strictly adhere to traditional standards, including the use of mortise and tenon joints and anti-corrosion treatments, ensuring the stability and longevity of the wood. Wood carving is another highlight of the architecture, with artisans delicately crafting intricate patterns of flowers, birds, beasts, and human figures, infusing the structure with vitality. Although wood is susceptible to insect infestation and decay, proper anti-corrosion treatments and regular maintenance can extend its lifespan. The natural texture and warm color of the wood, along with its ease of carving, contribute to the liveliness of the building. Additionally, the wood's excellent load-bearing and insulation properties, alongside its warmth, provide a comfortable and inviting living environment.

2.3 The Functional Zoning and Flow Design

The design of each courtyard in this residence not only reflects the essence of traditional Chinese architecture but also takes into full account practical functional zoning and circulation. The following is a detailed analysis of the functional divisions and the organization of both human and logistical flow within a typical courtyard, using this compound as an example.

a) **Masters' Living Area:** Located in the rear courtyard, the owner's primary living space comprises the main hall room and side rooms. The rear courtyard is typically divided into two sections by a floral-pendant gate. The upper section, at the center, houses the elders, while the lower section contains the left and right side rooms live the younger generations. This layout embodies the traditional Chinese hierarchy and respect for elders.

b) **Servants' Living Area:** Positioned on the outer sides of the compound, this area consists of simple, modest buildings dedicated to the

living and working spaces of the servants. The design physically separates the servants' quarters from the owners' living area, in accordance with feudal social norms.

c) Reception Area: Located in the central courtyard, the reception area serves as the space for the owners' interactions with the outside world. The design of this space is elegant, with a structured and standardized layout, intended for receiving guests and conducting important social activities. The left and right wing rooms may also serve as auxiliary spaces during receptions, providing areas for guests to rest or engage in temporary activities.

d) Functional Area - Martial Scholar Courtyard: Consisting of two relatively independent courtyards, this area is spacious, well-maintained, and serves as a space for martial arts practice and cultural study. It is frequently used by martial artists and retains training equipment, such as stone locks and bows for archery.

The flow and circulation of both residents and objects within this residence have been meticulously designed to ensure efficiency, privacy, and harmony.

a) Masters' Flow: The owner and family members primarily move within the living and reception areas. The flow design prioritizes both privacy and convenience. For example, the owner enters the rear courtyard through the

floral-pendant gates, while the younger generations access the lower courtyard through the wing rooms.

b) Servants' Flow: Servants predominantly remain within the servants' living area. Their movement is intentionally separated from other areas to avoid interfering with the owner's private life, thus maintaining order and respect for hierarchy.

c) Visitors' Flow: Visitors enter through the main door and proceed directly to the reception area, where they can interact with the owner in the hall. The flow of visitors is carefully routed to prevent overlap with residential or household traffic, ensuring a sense of order and tranquility within the compound.

d) Daily Goods Flow: Daily necessities, such as food and firewood, enter the courtyard through designated entrances. These materials are then transported along specific logistical pathways to the appropriate areas. This system ensures the orderly movement of supplies and prevents chaos within the compound.

e) Special Material Flow: Specialized materials for the martial arts area, such as weapons and training equipment, are transported via dedicated channels or concealed passages. This design ensures both safety and ease of access, safeguarding the integrity of the compound's layout (Figure 4).



**Figure 4. Functional Zoning of the Residential buildings in the Qing Dynasty Image Source:
Drawn by the Authors**

3. Architectural Decorative Features

The brick carvings, wood carvings, and stone carvings in this residence seamlessly blend in terms of themes, composition, and techniques,

creating a distinct and harmonious artistic style. These carvings not only highlight the craftsmanship and ingenuity of the builders but also reflect the cultural atmosphere and aesthetic values of the time. Often featuring

deeply symbolic and meaningful patterns, the carvings express the owner's good wishes and aspirations. Through meticulous composition and expert carving techniques, especially in conveying a rich sense of three-dimensionality on flat surfaces, the overall architecture becomes more vivid and dynamic.

3.1 Brick Carving

The bricks and tiles used in this residence are notable for their excellent fire resistance and insulation properties. The masonry is neat and orderly, ensuring the buildings are strong, beautiful, livable, and comfortable. Wealthy families and merchant compounds often use brick carvings as decorative elements to convey the owner's personal interests and reflect local customs and culture [4]. In this residence, brick carvings are primarily featured on the main gate, screen walls, and various other walls. These carvings typically exhibit simple yet striking compositions with smooth, flowing lines and a strong sense of rhythm.

Common themes in the carvings include

auspicious patterns and mythical stories. Notable examples include lotus flowers and fish, symbolizing abundance year after year. Five bats surrounding the character for longevity represents five blessings bring longevity. Gourds symbolizes fortune and prosperity. Buddha's hands represent blessings and longevity. Peonies signifies wealth and honor. Pine, bamboo, and plum are known as the three friends of winter. These patterns not only serve decorative purposes but also carry deep symbolic meanings, conveying the owner's hopes for a prosperous and harmonious life.

The carvings utilize various techniques, such as round sculpture, openwork carving, high relief, relief, and flat surface intaglio. The lines are delicate, and the carving is meticulous, with a remarkable sense of three-dimensionality achieved on flat surfaces. This approach gives the architecture a vibrant and expressive quality, enhancing both the visual appeal and cultural depth of the compound (Figure 5).

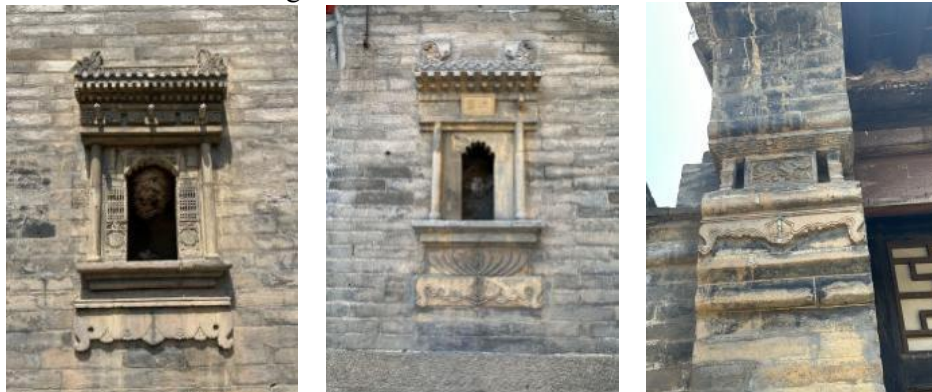


Figure 5. Detailed Brick Carving of the Residential buildings in the Qing Dynasty Image Source: Taken by the Authors

3.2 Wood Carving

Wood carvings also hold a prominent place in this residence, primarily adorning doors, windows, beams, rafters, and various other architectural elements. These wood carvings are characterized by intricate compositions, clear layering, and a dynamic sense of movement. The subjects often depict historical stories, character anecdotes, and natural motifs such as flowers, birds, insects, and animals. For example, scenes like a warrior cracking a whip to urge a horse, Jiang Taigong fishing under the shade of willows, and a scholar writing by a window are commonly featured.

These carvings not only demonstrate the owner's cultural refinement and life aspirations but also reflect the cultural atmosphere and aesthetic ideals of the time. Common carving techniques include relief, high relief, and openwork carving, each executed with delicate precision and intricate detail. The lines are smooth and natural, enhancing the lifelike quality of the scenes. Through thoughtful composition and ownerful carving, the wood carvings create a rich sense of three-dimensionality and motion on flat surfaces. This dynamic interplay of form and space brings the architecture to life, infusing it with energy and expressive vitality (Figure 6).



Figure 6. Detailed Wood Carving of the Residential buildings in the Qing Dynasty Image Source: Taken by the Authors

3.3 Stone Carving

The stone carvings in this residence are equally remarkable, adorning architectural elements such as stone lions, pillars, railings, and other features. These carvings are known for their bold, grand compositions, with strong, powerful lines that evoke a sense of strength and stability. The subjects often include mythological legends, animal figures, and symbolic motifs such as coiled loongs, floral patterns, and various animal representations [5].

These patterns not only emphasize the owner's authority and social status but also reflect the religious beliefs and aesthetic ideals of the time. Common techniques, including relief and flat-surface intaglio, are employed, with rough yet bold carving and smooth, flowing lines that highlight the natural beauty of the stone. Through thoughtful composition and meticulous craftsmanship, the stone carvings create a rich sense of three-dimensionality and spatial depth on flat surfaces, contributing to the solemnity and grandeur of the building (Figure 7).



Figure 7. Detailed Stone Carving of the Residential Buildings in the Qing Dynasty Image Source: Taken by the Authors

3.4 Gatehouse and Screen Wall

The gatehouse and screen wall are fundamental elements in traditional Chinese architecture, serving both functional and symbolic roles while contributing to the aesthetic value of the structure. In this residence, the gatehouse stands out as a prominent feature, often regarded as the face of the owner's residence, and carries significant symbolic meaning.

As a landmark structure, the gatehouse clearly demarcates the entrance to the compound, making it easy for visitors to identify and access the residence. Architecturally, it is built to be solid and robust, serving as a protective

barrier against unauthorized entry. Beyond its functional role, the gatehouse also acts as a space for the owner to display wealth and status, with intricate carvings and paintings that showcase the owner's refined taste and social standing (Figure 8(a)).

The gatehouse decoration in this residence harmoniously blends local cultural elements with family traditions. It is adorned with auspicious patterns, flowers, and mythical creatures, all symbolizing good fortune, wealth, and longevity. The paintings on the gatehouse further enrich its cultural significance, depicting historical stories and mythological legends that reflect the family's heritage and aspirations.

The screen wall, typically situated along the central axis, is either inside the gatehouse or just outside the main gate, complementing the gatehouse structure. In this residence, the screen wall is positioned directly opposite the gatehouse or on the inner side. Its primary function is to block the line of sight, maintaining the compound's privacy. According to feng shui, the screen wall serves to buffer airflow, attracting positive energies like wealth and vitality, while blocking negative energy, thus offering comfort and protection to the residents.

The surface of the screen wall is often intricately carved with auspicious symbols or text, such as peonies and lotuses, enhancing the artistic atmosphere of the compound and reflecting the owner's refined taste and appreciation for aesthetics (Figure 8(b)).



(a) Gatehouse



(b) Screen Wall

Figure 8. Gatehouse and Screen Wall of the Residential buildings in the Qing Dynasty

Image Source: Photo Taken by The Authors
Like the gatehouse, the screen wall in this residence blends local cultural features with family traditions. The carvings and paintings often draw inspiration from historical stories, mythological tales, and auspicious symbols, representing prosperity and longevity. The materials and craftsmanship showcase exceptional skill and unique artistry.

As iconic elements of the compound, the gatehouse and screen wall reflect the owner's power and social status through their scale, materials, and decorations. The exquisite design of both elements highlights the owner's prominent identity and prestigious position, making them essential components of the compound's overall aesthetic appeal.

4. Cultural Connotations and Regional Characteristics

The architectural form and decorative art of this residence profoundly embody Confucianism and feudal ritual system, and local regional culture. These influences are clearly reflected in the architectural layout, spatial organization, and decorative style. The design not only reflects the social hierarchy and respect for elders inherent in Confucianism but also emphasizes the importance of family unity and tradition, aligning with feudal values. The decorative elements further illustrate the connection between the compound and the cultural practices and beliefs of the region, showcasing the rich heritage and identity of the family.

4.1 Confucianism and Feudal Ritual System

The architectural form and decorative art of this residence deeply embody Confucianism and feudal family-oriented values, reflecting the core principles of harmony, hierarchy, ritual, and family legacy.

Confucianism's Principle of Moderation is evident in the compound's layout, with its strict symmetry promoting both harmony and balance. The design accommodates the owner's need for external communication and interaction while maintaining privacy and security. The spatial organization, including the integration of natural lighting and ventilation, ensures a comfortable and stable living environment. This balance of openness and seclusion echoes Confucian ideals of harmony, aligning both the built environment and the daily life of the inhabitants with the pursuit of equilibrium.

Feudal patriarchal values, particularly the emphasis on hierarchy and gender distinctions, are reflected in the spatial arrangement of the compound. The servants' quarters are located at the periphery, simple and modest, while the central and rear courtyards are reserved for the owners, with separate spaces for different

family members according to age and status. This organization ensures both privacy and respect for social hierarchy, where the elders reside in more prestigious areas, embodying the feudal concept of seniority.

Confucianism's emphasis on ritual and virtue is demonstrated through the decorative elements of the compound, particularly in the gatehouse and screen wall. The ornamentation combines local cultural features with family traditions, symbolizing the owner's aspirations for a prosperous and harmonious life. These decorations are not just aesthetic; they serve as a form of expression of the owner's ideals and values, elevating the architecture from mere shelter to a symbol of social status and moral rectitude.

Moreover, the feudal family-oriented values of inheritance and ancestor worship are evident in the decorative elements that honor family legacy. Plaques, couplets, and genealogical records are prominently displayed, showcasing the family's history and deep respect for its ancestors. These elements not only preserve the family's traditions but also reinforce the importance of continuity and respect for past generations.

In conclusion, this residence serves as an outstanding example of traditional Chinese architecture that integrates Confucian and feudal values, emphasizing balance, hierarchy, ritual, and family heritage. The architectural and decorative elements work together to create a space that reflects the cultural ideals and moral principles of the time, offering valuable insight into the essence of Chinese architectural culture.

4.2 The Integration of Jin Merchant Culture and the Taihang Mountain Region

This residence located in Xigou Village, Xiyan County, Jinzhong City, Shanxi Province, stands as a remarkable example of Qing Dynasty architecture. It not only holds historical significance but also embodies the fusion of Jin merchant culture with the regional characteristics of the Taihang Mountains. This architectural complex showcases the aesthetic concepts and cultural values that have shaped its design and decoration, deeply reflecting the rich traditions of the time.

During the Ming and Qing dynasties, the Jin merchants were at the peak of their power,

known as the "No. 1 business clan in the world". The compound's construction coincided with the height of Jin merchant prosperity, and as such, its architectural style, layout, and decoration were heavily influenced by this culture. The east-west axial layout of the compound is a hallmark of Jin merchant courtyards, embodying the formal order and symmetry that are central to their cultural values. This balanced arrangement not only facilitates external communication but also ensures privacy and security, adhering to the Jin merchants' need for structure and organization in both their personal and business affairs.

The intricate carvings that adorn this residence—stone, wood, and brick—are key features of its design. These carvings often depict auspicious symbols and mythological stories, representing the traditional moral values and business acumen that were integral to Jin merchant culture. The use of these carvings also demonstrates the Jin merchants' reverence for traditional culture and their desire to leave behind a legacy that reflects their cultural and familial pride. The door plaques, calligraphy, and paintings found throughout the compound reinforce this sense of duty and connection to both family and country.

Jinzhong's strategic location, acting as a gateway between northwest and northern China, played a crucial role in its history. The region was often a military battleground, and as such, this residence incorporates defensive features typical of the area. Fortress-style architecture, with underground passages, hidden tunnels, and high walls, ensures the safety and fortitude of the compound. These defensive elements reflect the historical significance of the region and the practical considerations that influenced the architectural design of such residences.

The natural environment surrounding the compound, with the Taihang Mountains to the rear and rivers to the front, further influences its architecture. The integration of natural landscape with architectural design is a defining characteristic of the region. Stone archways and kiln dwellings not only cater to the region's climatic conditions but also reflect the ingenuity and resourcefulness of the people living in the Taihang Mountains. The emphasis on functionality and aesthetics, a

blend of practicality with beauty, mirrors the region's unique cultural outlook on life and design.

The decorative patterns within the compound—lotus flowers, fish, bats, and other motifs—are not merely ornamental but hold deeper meanings. These symbols represent the Taihang people's aspirations for a better life, embodying hopes for prosperity, longevity, and harmony. The carvings serve as a visual manifestation of cultural values, offering insight into the hopes and beliefs of the community [6].

This residence is a quintessential example of cultural landscape art, blending architectural function with symbolic decoration. The carvings and designs reflect the ethical values, aesthetic preferences, and cultural aspirations of traditional Chinese society, transcending the boundaries of art to convey intangible ideals [7]. The layout, with its strict symmetry, instills a sense of grandeur and stability, embodying Confucian principles of moderation and the patriarchal hierarchy of the time [8].

Safety features like hidden tunnels, a bell tower, and a watchtower further emphasize the compound's robust security measures, attesting

to the Taihang people's focus on defense and their desire to safeguard their homes [9]. These features, alongside the architectural design and decoration, highlight the compound's dual purpose: a family residence and a symbol of the cultural and historical heritage of the region.

In conclusion, This residence is a testament to the integration of Jin merchant culture with the regional characteristics of the Taihang Mountains. Through its architectural style, decoration, and strategic location, it stands as a lasting embodiment of both cultural values and practical needs. It showcases not only the artistic achievements of the era but also the wisdom and creativity of the people who built it, offering valuable insights into traditional Chinese culture and its enduring legacy.

4.3 Era Features of East-West Integration

During the Republic of China period, significant changes took place in the architectural style of this residence. While retaining many characteristics of traditional Chinese residential buildings, the compound also boldly integrated Western architectural elements, resulting in a distinctive East-West fusion style (Figure 9).



Figure 9. East-West Integration in the Residential buildings in the Qing Dynasty Image Source: Photo Taken by the Authors

In the course of expanding and renovating this residence during the Republic of China period, many features of traditional Chinese residential architecture were preserved. For example, the main building of the compound continued to follow the central axis layout, with symmetrical wings on both sides connected to the inner courtyard and a door

leading to the outer courtyard. This layout reflects the symmetrical beauty typical of traditional Chinese dwellings. At the same time, traditional decorative elements such as wood carvings and brick carvings remained intact, showcasing exquisite craftsmanship and meaningful patterns.

With the introduction of Western culture

during the Republic of China period, this residence began incorporating Western architectural elements. These Western influences were primarily reflected in the following aspects:

a) Introduction of new building materials. Technological advancements and increased foreign exchanges during this period introduced new building materials such as cement and glass to China. This residence used these materials in its renovations, which contributed to the solidity and aesthetic appeal of the buildings.

b) Changes in architectural forms. The renovation process saw the adoption of certain Western architectural features, including arched doors and windows, Roman columns, and other decorative elements. These Western features diversified and modernized the architectural style of the compound.

c) Expansion of building functions. This residence also expanded its functional spaces to align with changing lifestyles during the Republic of China period. New spaces, such as studies and living rooms, were added to accommodate the growing cultural and entertainment needs of the time.

The most notable aspect of the architectural changes in residence during the Republic of China period is the fusion of Eastern and Western styles. This fusion maintained the rigor and symmetrical beauty of traditional Chinese residences while incorporating the modernization and diversity characteristic of Western architecture. Specifically, the following points highlight this fusion:

a) Integration of building exteriors. The exterior of this residence retained traditional Chinese elements while incorporating Western decorative features. For example, the main gate adopted a Western arched design, complemented by intricate Western carvings and paintings. The windows featured Western colored glass and decorative etched glass, enhancing the beauty and modernity of the compound's appearance.

b) Integration of interior spaces. The interior layout of this residence also blended Eastern and Western styles. In public spaces like the living room, Western furniture and décor were used, while private spaces such as bedrooms maintained the warmth and comfort typical of traditional Chinese residences. This harmonious fusion of internal and external

spaces imparted a modern feel to the compound while preserving its traditional charm.

The East-West fusion style that emerged in the architectural changes of this residence during the Republic of China period reflects the multicultural and open characteristics of the society at that time. It demonstrates a respect for traditional culture while pursuing modernization and comfort. This unique characteristic makes this residence a significant architectural heritage, valued both for its historical and cultural significance.

In conclusion, the architectural transformations of this residence during the Republic of China period represent the integration of Eastern and Western cultures. These changes not only enriched the architectural style of traditional Chinese residences but also infused new vitality into the development of modern Chinese architecture.

5. Conclusion

This residence holds a prominent position in the history of Qing Dynasty residential architecture. It is not only a distinguished example of traditional Chinese dwellings but also a vital carrier of Chinese traditional culture. By studying this residence, one can gain a deeper understanding of the essence of Chinese culture and the evolution of residential architecture during the Qing Dynasty.

The compound follows the typical Siheyuan layout, with the main buildings centrally positioned and symmetrical side wings. The inner courtyards are connected, and gates lead to the outer courtyard, allowing for external interactions while maintaining privacy and security. Situated in harmony with the mountainous terrain, the compound consists of two halls, two alleys, six large courtyards, and fifteen small courtyards, comprising over 120 rooms and more than 20 kiln dwellings. Its layout is divided into one-, two-, and three-entry Siheyuan layouts, meticulously arranged to achieve both order and elegance. The design combines practicality, durability, and aesthetic appeal, incorporating stone-arched kiln dwellings, brick-and-wood structures with hard roofs, and the innovative practice of placing floors above kiln roofs. These elements not only meet the needs of the

residents but also reflect the Principle of Moderation of Confucianism and the feudal family hierarchy. The symmetrical layout imparts grandeur and stability to the design, ensuring a peaceful living environment. Additionally, hidden passages leading outside the village enhance safety and privacy.

The decorative art in this residence is primarily embodied in the three carvings—brick, wood, and stone—which are simple in form but rich in meaning. These carvings not only beautify the space but also reflect the owner's ideals, beliefs, and aspirations. The carvings are symbolic, employing ancient motifs and metaphors to convey auspicious themes such as longevity, fortune, and the warding off evil. Notable motifs include the lotus flower and fish. Various carving techniques, including relief, high-relief, openwork carving, and flat surface intaglio, are employed to create intricate and three-dimensional designs that evoke rhythm and space.

Both the architectural form and decorative art of the compound reflect the core principles of traditional Chinese culture. These elements offer a glimpse into the poetic essence of Chinese-style living, infused with strong familial affection. The compound stands as a testament to the development of residential architecture during the Qing Dynasty and serves as a critical resource for studying this period. The design and layout also embody the Confucian Principle of Moderation and the feudal ritual system, which imbue the space with a humanistic atmosphere. As such, this residence is a rites-based living environment, showcasing the profound charm of traditional Chinese culture.

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