

Study on Xiurong academy landscape based on regional culture

Abstract

Regional culture has been regarded as the historical record of human activities and the carrier of the cultural inheritance of a particular region during the past decades. The unique regional culture of Shanxi had influenced the landscape construction of Xiurong Academy. In this paper, research of the regional cultural perspective on the overall layout of Xiurong Academy, the creation and analysis of characteristic regional landscapes, and the cultural and garden landscapes of the academy has been conducted through literature research, field research, and other methods. The results show that Xiurong Academy has high reference value in the layout of the academy, historical culture, architectural characteristics, and landscape features of the academy in northern Shanxi. The landscape construction of Xiurong Academy conforms to the regional characteristics of its location. Its unique detailed design is reflected in the architecture, courtyard layout, and plant construction of Xiurong academy. It is valuable to provide some reference for the scientific protection and utilization of Xiurong Academy, even for other similar landscape research through our research to uncover and illustrate its building structure and plant landscape.

Keywords: regional culture, Xiurong academy, regional landscape

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Introduction

As the saying goes, "Different winds in ten miles, different customs in a hundred miles." Regional culture refers to the values and aesthetic interests reflected in the ordinary production and livings, social system organization, and spiritual activities of people in a unique region, and is the product of the interaction between people and the environment. Regional cultures' formation, development, and change require a long-term process and are relatively stable over a certain period. Regional culture had a long history and unique characteristics, and still plays an important role today. Regional cultures are classified into tangible and intangible cultures according to their attributes. The former generally exists in more concrete material forms, such as residential buildings, relics, and ruins, while the latter is more abstract, such as folk customs and traditional skills. China is a vast country with a long history and many ethnic groups and has developed a plenty of distinctive regional cultures such as production culture and residential culture in different regions. Different regional cultures, in turn, have given rise to very different styles of regional cultural landscapes.

Regional cultural landscapes are formed based on each place's specific natural geographical environment, historical culture, and customs and vividly reflect the relationship between man and nature. The regional cultural landscape is an essential carrier for recording the history of human activities and cultural heritage, and it has significant historical and cultural research values. Traditional regional cultural landscapes are not unchanging, means its stable features. However the regional culture has been developing gradually when regional cultures change or are affected by the penetration of other regional cultures, which can find examples in antique relics. In the process of rapid urban development, the traditional regional cultural landscape is facing huge impacts. Therefore, promoting the protection, inheritance, and innovation of regional cultural landscapes plays a vital role in the development of landscape design. In this paper, we analyze the landscape features and landscape culture of Xiurong Academy based on the perspective of regional culture. We use Xiurong Academy as an example to realize the inheritance of regional cultural lineage.

Overview of the academy and research methodology

Xinzhou, with its vast territory and charming mountains and rivers, is located in the Loess Plateau area at the junction of Shanxi, Shaanxi, and Mongolia and is known as the "lock and key of northern Shanxi." The climate is characterized by four distinct seasons and significant temperature differences. Its unique geography affects the local natural resources, environment, economy, culture, building materials, and construction methods. The local trees are abundant, and the buildings are mainly considered for heat preservation in winter and coolness in summer. The buildings are primarily made of brick and wood structures, which are simple and dignified. At the same time, the academy's site and landscape imagery is influenced by economic and cultural factors.

The research target, Xiurong Academy, located in the southwestern highlands of the old city of Xinzhou, which was built in 1775 and covered an area of about 30,000 square meters. At the time, Xin County was known as Xiurong County, from which it derived its name. It is the first academy of Xinzhou city. It is also the only well-preserved academy in Shanxi Province that still has educational functions. In 2004, Xiurong Academy was a key cultural relic protection unit in Shanxi Province. In recent years, the Shanxi Xinzhou Municipal Party Committee and the Municipal Government have carried out comprehensive conservation and repair work on the Xiurong Academy, with a new built library, a study that include north and south chambers, a long room, the Luzu Pavilion, and the Six Arts Garden (Figure 1).

Layout of the courtyard

In ancient times, Xinzhou Xiurong Academy covered a total area of about 107,000 square meters, containing 15 relatively independent courtyards of different styles, with 30 buildings (rows) and 208 houses, 1 theater, 3 pavilions, 1 memorial Archway, and 1 wooden building with two stories (Figure 1).



Figure 1 The overall configuration of Xiurong academy. Self-drawn by authors, in which three pavilions were arranged in the west side; the layout of yards did occupy the rest area, and the yards were enclosed.

To the east of the original academy was the Wenchang Memorial Temple, which was gradually expanded and incorporated into the Academy (Figure 2).



Figure 2 Landscape pavilion of Xiurong academy. Cited from <https://tse1-mm.cn.bing.net/th/id/OIP-C.qIB-7dOTjgV4E-TsCoQhbAHaFj?w=264&h=198&c=7&r=0&o=5&pid=1.7>

Three scenic pavilions were powerfully built on the western slope of the academy: the four-horned Kui Xing Pavilion in the middle, the octagonal Wang Xuan Pavilion in the south, and the hexagonal Liao Tian Pavilion in the north (Figure 1). The hexagonal pavilion, the largest of the three, is about with three meters long on each side and nine meters high. The hexagonal pavilion is the highest point in the city, from which you can have a general view over the entire town. In front of the new hexagonal pavilion, there was a brick arch that was named the “Quzhou of Heaven,” which means that scholars from the academy passed through the “Quzhou of Heaven” and climbed onto the “Liaotian Pavilion” to achieve great success.

The general layout of the academy consists of three courtyards: the lower courtyard contains the former site of the White Crane Taoist Temple, and ascending stairs reach the middle courtyard.

The Middle Quadrangle, the main quadrangle of the academy, still retains the features of a temple garden where the original Wenchang Academy stood. Similar to most temple gardens, the spatial layout of the building strictly follows the principle of symmetry, and important halls (music halls, hallways, main rooms) are arranged on a vertical axis, and other halls are symmetrically arranged on the left and right sides.¹ The central courtyard has two parts: a front yard and a rear courtyard. The front and back courtyards are connected and relatively independent, forming an entire vertical space. The whole courtyard has created a “moon” shape layout on the irregular terrain, which echoes the semicircle of Wenchang Star. This manifests the philosophy of “human harmony with nature” in the architectural layout.

The courtyard with the theater is located on the south side of the former palace grounds. The structure of its stages is unique. The stage is divided into two stages on the same platform base. The roof styles of the front and rear buildings are different. The back ridges are significantly higher than the front ridges. The stage was constructed of stone. The existing stage is barely half a meter high and less than eight meters wide. The stone strips at the middle and lower waists of the stage base protrude in a stepped form. The front and side of the stone at the middle waist are carefully carved, with chrysanthemum, unicorn, tiger, crane, pine and cypress, and mountain stone patterns (Figure 3).



Figure 3 Stone carving decoration of theater (a, c, e). b, d, f is self drawn by the authors.

Located in the lower courtyard of the academy, the White Crane Taoist Temple was first built in the Tang Dynasty. It is said that from February 15, the day of the Taoist festival of Taoist Day, white cranes will fly here and hover over it for several days. The poem of Shanxi Governor Wei Yunzhen, “In February, the cranes will be released in Xinzhou, and the birds will be heard in nine days,” reflects the wonder that was like a fairyland in the world at that time. This is also recorded in the Annals of Xinzhou, hence the name of the White Crane Taoist Temple in the main hall. The existing White Crane Taoist Temple Hall was built in 1684 (The twenty-third year of Kangxi of the Qing Dynasty). The overall structure of the White Crane Taoist Temple is a wooden, Single eave hanging hilltop building; the building is 38.34

meters long and 1.7 meters wide. It is generally large and grand, with an air of dignity. During the Qing Qianlong forty years, the Xiurong Academy occupied a portion of the White Crane Taoist Temple. It gradually formed the layout of the academy, which integrated the academy and the Taoist temple.

Analysis of geographical feature landscape construction

The flexible combination of the four elements of landscape construction, namely mountain building, water management, plant configuration, and building construction, creates distinctive regional landscapes. The garden style of the Xiurong Academy generally follows the characteristics of northern gardens and is influenced by the local environment of Xinzhou, resulting in details unique to northern Shanxi landscapes, such as characteristic brick carvings and stone carvings.

Site selection

It is mentioned in the “Yuan Ye” that the best place to look for land is in the mountains and forests. The reason for this is that, firstly, the landscape is beautiful. Secondly, there is rich vegetation in the mountains and forests. Thirdly, there is often gurgling water in the mountains and forests, which adds to the natural wilderness, and fourthly, the mountains and forests themselves are more conducive to the view, thus giving full play to the advantages of the borrowed scenery, which is more conducive to the creation of the landscape.² Xiurong Academy is located in the southwestern highlands of the Xinfu District of Old City. The creation of the landscape of the academy makes full use of the terrain in the area, forming layers of steps, highlighting the undulating changes in architecture and terrain, while building the hexagonal pavilion Liao Tiange at the highest point of the platform layer to give full play to the advantages of the view. Yuan Haowen once recited here, “Looking at the clear river from Kowloon Gang, the color of the water is far away from the sky. It is like the scenery of Jiangnan, where only fishing boats are missing.”

Building construction

The architectural style is formed based on each place's specific natural geographical environment, history, culture, and customs. China's traditional architectural culture is a unique cultural resource rooted in the local and regional culture, it is the artistic treasure of the Chinese nation, the crystallization of the diligence and wisdom of the people of all ethnic groups, and it reflects the regional cultural characteristics of different regions in China.

The relationship between zone and architecture

Xiurong Academy is located in Xinzhou. The territory's eastern, northern, and southern parts are mostly stony mountainous areas with a greater abundance of trees. In contrast, the western and northwestern parts are mostly loose hilly gully areas. Because of the influence of topography and altitude, people adhere to the principle of taking local materials when choosing building materials. Two forms of brick and wood buildings and brick and stone kiln caves have been formed locally.³ Xinfu District, located in the southern part of Xinzhou above the Xinding Basin, does not have the geological environment to form kiln buildings. Hence, the architectural form of the Xiurong Academy is mainly brick and wood buildings.

The relationship between climate and architecture

The Xinding Basin has a warm temperate monsoon climate. This climate is characterized by four seasons, cold and dry in winter, hot

in summer, and rain concentrated in June and September, with little rain in spring (Figure 3). Climate conditions affect local residents' production and life and the traditional architectural form.

During the summer, the intensity of direct solar radiation is greater, the duration is longer, and the annual mean temperature is highest. Since traditional buildings do not have modern cooling equipment, they can only rely on the building itself or the building layout to achieve shading and cooling effect.⁴ Buildings can be cooled by opening windows for ventilation or by reducing direct sunlight exposure to the interior through the eaves of the building; in terms of architectural layout, the building group is compact, and the shading effect is achieved through mutual shielding between the buildings. Temperatures are lowest in winter; to achieve the effect of heat preservation, the whole building of the academy is sitting in the north and facing south, which is in line with the geomantic omen theory on the one hand can withstand the northwest wind on the other. In terms of architectural layout, the school courtyard is relatively spacious, allowing the building to absorb sunlight fully and increase the indoor temperature. The buildings are relatively low and thick-walled, with no windows in the gables and outer walls. The building design takes full account of the fact that heat loss is reduced and that the eaves of the building serve as wind protection in winter, in addition to shading the sun in summer.

Architectural color analysis

The natural geographical environment affects not only the shape of buildings but also their color. The climate of northern Shanxi is dry and cold, and the vegetation is simple; to visually reduce the feeling of cold, the colors of the building's façade are predominantly warm. As most of the buildings of the inhabitants were made of native materials, this also led to a generally homogeneous coloration of the buildings of northern Shanxi; meanwhile, most of the bricks in northern Shanxi are yellow, so the walls of many buildings appear yellowish-brown under the influence of the wind and sand (Figure 4).⁵



Figure 4 Xiurong academy theaters. Self-drawn by the author, the buildings in northern Shanxi are monochromatic, and the walls of the buildings all appear yellowish-brown under the influence of wind and sand.

Decorations on the building

As the old saying goes, you cannot call it a house without carvings; a building with carvings is expensive. Brick carving is an important part of the decorative art of classical Chinese architecture, so whether it is a palace building or a folk house, it is inseparable from brick decoration. The traditional brick ornaments are varied and exquisitely carved with delicate patterns. The art of brick carving retains unique Chinese values as it represents family tradition and historical culture. As time passed, brick decoration served a practical function and had a cultural connotation and conveyed people's aspirations for a

better life. The subjects of the brick carvings are mostly derived from ancient legends or true historical stories. The Xiurong Academy has images of “Apricot Temple Missionary” and “Carp Leaping over the Dragon Gate,” and some brick carvings have patterns with auspicious meanings, such as “Kirin.”

Stone carving refers to the art of using various carvable stones to create visible and tangible artistic images with a certain space to reflect social life and express the aesthetic feelings, aesthetic emotions and aesthetic ideals of the artist. Stone carving has a long history in China, with its appearance dating back to the Paleolithic period. Stone carving gives a plain stone a new lease of life. The rich and varied imagery of stone sculptures serves a decorative purpose and has a rich cultural connotation. Stone carving culture in China in the Qin Dynasty into the era of comprehensive development, the Ming and Qing Dynasties its development has reached its peak, it is an important representative of Chinese architectural culture, contains a deep historical value and humanistic value. The stone used for stone carving works are usually Chinese white jade, granite, marble, lapis lazuli and sandstone. Due to the special nature of the material, the form of stone sculptures will not change much even after years of aging. These stone carvings are often used in architectural constructions such as stone piers, stone columns, stone plazas and shadow walls. Stone carving techniques generally have several kinds of shaded line carving, reduced ground shallow relief, multi-level relief, concave plane carving, high relief, and perspective carving. Stone carving culture is not only an artistic culture, but a collection of a hundred schools of thought. From ancient times to the present, each carving has been endowed with a unique connotation by its creator, and the stone carving may tell a story or convey an idea. Carvings from different eras have reflected the prevailing aesthetic and cultural trends of the time. The contents of the stone and brick carvings are similar, and they all reflect the rich imagination and creativity of our ancient laborers, such as the stone carvings of lotuses and scrolls in the academy.

Screen walls are unique and necessary structural components in traditional Chinese residential buildings, bearing a long history and profound culture. As society continues to evolve, screen walls have taken on a deeper connotation. Traditional screen wall art combines painting, carving, and architecture and is an essential part of the

development of traditional Chinese architecture.⁶ There are two types of screen walls: “one” type and “eight” types. It is often set inside the building’s gates to block views and enrich the building’s entry-level. There are five shadow walls in the Xiurong Academy, with plum, orchid, bamboo, chrysanthemum, pen, ink, paper, inkstone, zither, chess, calligraphy, and painting depicted on the top of three of them.

Tree allocation

Xinding Basin has a temperate monsoon climate, with an altitude of 600 to 1,000 meters. The specific geographical environment and climatic conditions determine that the plant landscape here mainly comprises deciduous broad-leaved trees and evergreen conifers. The field survey found that the *Ziziphus jujuba*, *Sabina chinensis*, *Pinus bungeana*, and *Robinia pseudoacacia* sectors (Table 1) are all suitable for the dry and cold winter climate, which is in line with the principle of “suitable trees for the right place.”

The academy’s main deciduous broad-leaved trees are *Robinia pseudoacacia*, *Ulmus pumila*, *Ziziphus jujuba*, and *Salix babylonica*. In addition to functioning as shade trees in summer, these species do not block the sun in winter. The *R. pseudoacacia* is full of elegantly scented *R. pseudoacacia* flowers in spring, which can be eaten and ornamental, and the shade in summer. In fall and winter, the trees are full of pods stored on the branches, and the flowers and pods of *R. pseudoacacia* have medicinal value. The tree is planted in two methods: Isolated planting and opposite planting *Z. jujuba* and *U. pumila* are configured similarly to *R. pseudoacacia*. The climate of Shanxi is well suited to the growth and development of *Z. jujuba*. The germplasm resources of *Z. jujuba* are located in Taigu, Shanxi; moreover, *Z. jujuba* can also harvest red dates. The distinct change of scenery in the four seasons served well to beautify the academy’s gray and earthy yellow buildings and temper the monotony of its life. The *S. babylonica* sagging slender branches soften the gray-yellow buildings and *U. pumila*, *R. pseudoacacia*, and other trees’ rigidity. At the same time, we should fully explore the configuration mode between plants and plants, plants and buildings, and plants and rocky water bodies, and strive to create different plant landscape features. For example, the ancient *R. pseudoacacia* in the academy and the ancient buildings reflect each other, giving people a sense of beauty.

Table 1 The planting design of Xiurong academy in Xinzhou city, Shanxi province

Serial number	Latin name	Section	Planting method	Life Type	Quantity
1	<i>Platycladus orientalis</i>	Cypress family, Lateralis	Opposite planting	Evergreen trees	3
2	<i>Sabina chinensis</i>	Cypress family, Sabina Mill	Opposite planting/ Avenue system	Evergreen trees	22
3	<i>Pinus bungeana</i>	Pine family, Pinus spp	Avenue system	Evergreen trees	12
4	<i>Robinia pseudoacacia</i>	Leguminosae, Robinia	Isolated planting/ opposite planting	Deciduous tree	17
5	<i>Ulmus pumila</i>	Elmaceae, Genus Elm	Isolated planting/ opposite planting	Deciduous tree	56
6	<i>Ziziphus jujuba</i>	Rhamnaceae, Zizyphus	Isolated planting/ opposite planting	Deciduous tree	3
7	<i>Salix babylonica</i>	Salicaceae, Willow genus	opposite planting	Deciduous tree	2

The evergreen conifers in the academy are mainly *Platycladus orientalis*, *Sabina chinensis*, and *Pinus bungeana*; these species make up for the lack of winter plants in the north, adding a touch of green for the academy in winter, giving people a sense of vitality. Still, it is advisable to have few such species rather than many, and different

planting methods will give people a different feeling, such as with the rocks will remind people of the “roots of the original in the broken rocks” tough, but into columns opposite planting will give people a sense of solemnity.⁷

Academy cultural landscape

Construction background

The site of Xiurong Academy is located on the same hill as Wenchang Memorial Temple, the former state school's former site before the 5th year of Hongzhi (1492) in the Ming Dynasty. The reason why the Xiurong Academy was built here is probably the quietness of the environment. At the same time, building on the highlands also has expectations for students to pass the civil service examinations. The implication is that "All occupations are base." The influence of men of letters on horticulture. The garden style of the academy reflected the aesthetic interests of the literate classes. The greater part of the literary classes is not fond of extravagance. The style embodied in the architecture of this mood is simple and unadorned, and therefore the Xiurong Academy is also simple and generous. Xiurong Academy is a late Qing Dynasty building. Its appearance was also improved upon the old system inherited so that the academy's buildings were mostly of brick and wood rather than pure timber. However, the roofs of the Academy buildings are all of traditional wooden construction; their shapes vary, including round-roofed, single-pitched, double-pitched, and flush-roofed. Such ingenuity breaks the traditional single architectural form and adds vitality to the academy.⁸

Site selection and architectural cultural connotation of Xiurong academy

The doctrines of Confucianism, Taoism, and Buddhism constitute the mainstream of traditional Chinese philosophy. As a vehicle for the spiritual culture of Confucianism, Taoism, and Buddhism, the academy has been profoundly influenced by its architectural layout and building site selection. In ancient China, the theoretical guide to architecture was the theory of geomantic omens, so the layout of the academy's buildings and the choice of its site were inextricably linked to geomantic omens. The scenic area is often referred to as a land of geomantic omens.⁹

Building site selection

Confucianism proposed advocating "withdraw from society and live in solitude," Man of honor admiring morals, and "harmony between man and nature," emphasizing the affinity between man and nature. Confucius said, "The wise find pleasure in water; the virtuous find pleasure in hills. The wise are active; the virtuous are tranquil. The wise are joyful; the virtuous are long-lived." Smart people are as active as running water, sensible, active, and responsive, so they are compared with water. Intelligent people are as active as water. They are sensible, active, and responsive, so compare them with water. Kindhearted people are as good and quiet as mountains. They are content with justice, kind and tolerant, and not easy to be impulsive, so they are compared with mountains. Confucius uses landscape as a metaphor for wisdom and benevolence, with vivid and profound images.

The idea of seclusion for the literati influenced the academy's choice of site. In the Analects of Confucius - Taipo, it is mentioned that "When right principles of government prevail in the kingdom, he will show himself; when they are prostrated, he will keep concealed." Man of honor admired morals and "harmony between man and nature." Most of the literati in ancient China were influenced by Confucianism's idea of "coming out of the world" and "entering the world." On the one hand, the scholars actively entered the world to promote Confucianism, and on the other hand, they did not want to go with the flow, so they chose to return to the mountains. This promoted the development of academy gardens in the mountains, and it became

a fad to build them. As a result, the location of the Xiurong Academy in the mountainous region of Gao Gang, Kowloon Gang, was also influenced by Confucianism.

Taoism advocates nature and develops aesthetic ideas that were centered on natural beauty. Lao-Tzu said. "Man follows the earth, the earth follows the heavens, the heavens follow the Tao, and the Tao follows nature." Taoism emphasizes the consistency between man and nature. At the same time, Taoism believed immortals inhabited deep mountains with beautiful landscapes, so Taoist temples were often chosen to be built between mountains and forests. After the expansion of the Xiurong Academy, the White Crane Taoist Temple was incorporated into the academy, indicating that the site selection for the Xiurong Academy was the same as the construction site selection for the Taoist Temple.

Buddhism originated in India and was introduced to China during the Eastern Han Dynasty. Due to the strong advocacy of the ruling class, Buddhism became extremely popular during the Tang Dynasty; in the Song Dynasty, there was quite a situation of "Buddhist temples throughout the world." When Buddhism was first introduced to China, it was mostly established in urban areas, but there was no shortage of monasteries built in the mountains and forests. By the time of the Sui and Tang dynasties, Buddhism had developed a Buddhist culture with Chinese characteristics, Zen Buddhism, through continuous integration with Chinese culture. Zen emphasizes meditation, which begins with "entering silence," ends with "reaching silence," and finally reaches a state of selflessness called "silence," allowing thoughts to be calm and focused. Meditation is seen in Buddhism as a way to develop oneself, and the same is true for learning, which requires concentration and no distractions. "Most of the famous mountains in the world are occupied by monks." The ideal location for the academy should be "negative yin and back yang" and "back mountain and face water." During the Five Dynasties and Ten Kingdoms period, when there were wars and disorder in society, many students would borrow temples and study in them, which became a social trend for a time. The academy's location was thus affected to some extent by this, and it often happened that the academy and the monastery were situated on the same hill or that the academy was rebuilt based on the monastery. The expansion of Wenchang Memorial Temple had been developing into Xiurong Academy.

Geomantic omen landscape. Geomantic omens are a synthesis of many disciplines, with a certain amount of superstition, but the central idea is harmony between human and nature. The choice of natural environment for the academy is nothing more than mountains and rivers. The choice of natural environment for the academy is nothing more than mountains and rivers. This geographic pattern can create an extremely favorable microclimate environment. The Xiurong Academy is situated on the Gao Gang, Kowloon Gang, facing south and north.¹⁰

Building layout

Confucianism is the essence of traditional Chinese culture and influences all aspects of our lives. Its advocacy of "order of dignity and inferiority" and "loyalty, filial piety, benevolence, and righteousness" affect the form of traditional architecture. The quadrangle layout emphasizes the basic rules of a standardized form, central axis symmetry, and southeast door opening. The southeast is called Ground, which belongs to the auspicious position and implies good luck (Figure 5). So the door opens in this position. The main house faces south and crosses the central axis, and the buildings on both sides are symmetrically distributed. All these details reflect the

influence of feudal rituals. This layout is strictly followed in the main courtyard of the Xiurong Academy, Wenchang Memorial Temple.

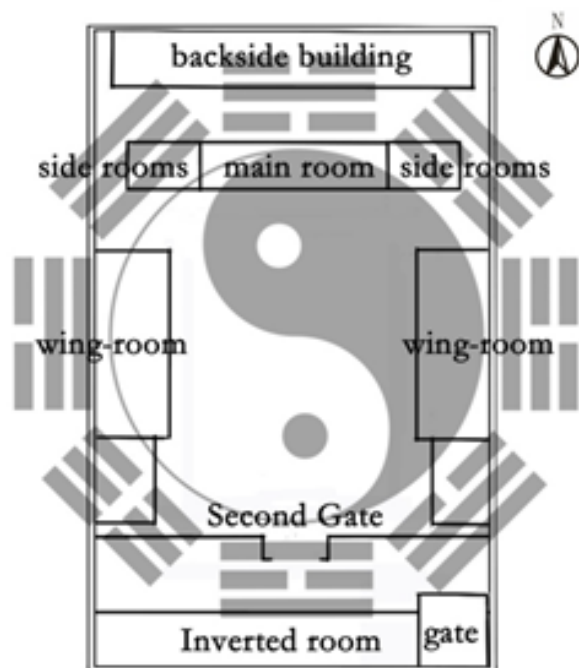


Figure 5 Building geomantic omen diagram. Self-drawn by the author.

In the Doctrine of The Golden Mean, it is mentioned that “The emotions of joy, anger, sorrow, and joy have not occurred, and can be called” middle “; emotions of joy, anger, sorrow, and joy have occurred, but they can be moderate and measured, which can be called “harmony.” “Zhong” is the most fundamental law in the world, and “He” is the law that the world follows. The Golden Mean thought emphasizes that when the equilibrium is reached, heaven and earth will each settle in their place, and all things will grow and develop. This idea has led to the formation of cohesive courtyards in the layout of traditional Chinese architecture, which means that individual buildings can be independent. Still, the layout of a group of buildings should have a primary and secondary comparison to achieve the overall balance of architectural layout. This is also the case at Xiurong Academy, where the main courtyard, Wenchang Academy, is the center, and other courtyards are built around it to play a supporting role in meeting daily teaching tasks.¹¹

Analysis of decorative architectural imagery of Xiurong academy

The sculptural art of the Xiurong Academy is one of its main means of decoration. From the material selection perspective, it mainly includes brick and stone carving. These sculpture art images are lifelike and have profound meanings.

Plant theme

Plum blossoms, orchids, bamboos, and chrysanthemums are the four gentlemen of flowers. Scholars and literati bestow their true feelings on each flower and grass, making flowers, trees, grass, and stones separate from their original meaning and become metaphors of personality. “The snowflakes fell and covered the plants with silver, without any color; there are some flowers on the south branch but no leaves.” Thousands of trees are cold and colorless, and the

southern branch has unique beauty.” In the cold winter, thousands of flowers wither, while only plum blossoms are proudly placed in the ice and snow, fearing no severe cold. They are noble and clean men. “The valley is empty, and there is no one, and the orchids are fragrant.” are snowflakes falling and covering the plants with silver, without any color at all; “It’s better not to eat meat than to live without bamboo in a place,” bamboo is evergreen, hollow and knotty, bent but unbreakable, and is a humble gentleman.” The chrysanthemum, the release of flowers, “the chrysanthemum is elegant and unique and does not wither even when withered. It reflects the gentle and tenacious qualities of literati and is a recluse. The Lotus is not only a flower with natural vitality but also a symbol of the Chinese nation’s traditional spiritual concepts, aesthetic concepts, and moral standards. The lotus flower, which “emerges from the mud without staining, and bathes the clear ripples without being evil,” is a gentleman. When the lotus flower is in full bloom, its fruit is nurtured, which symbolizes our initial intention to learn and will lead to our final learning outcomes. China has always loved the lotus flower. As the native religion of the Chinese people, the Lotus is naturally one of the symbols of Taoism, so stone sculptures of the Lotus are placed at the entrance of the White Crane Taoist Temple.¹²

Auspicious birds and animals theme

In traditional Chinese auspicious patterns, bird and beast patterns created through human mythology are widely used in brick carving themes, such as the traditional unicorn, which combines multiple animals and has the quality of “benevolence,” in line with Chinese feudal ethics. Later, animals such as lions, tigers, cranes, and bats were gradually added to the folk as symbols of good luck. Therefore, these animal images have repeatedly appeared in the brick sculptures of Wenchang Academy.

Folk tale theme

Apricot altar Lecture. Confucius was the first person in Chinese history that takes education as a profession to democratize learning. He broke the years-long tradition of official schools inherited from the Zhou dynasty and founded the first private school in Chinese history. Confucius proposed. “Education without discrimination.” He believed in equal access to education regardless of poverty. According to legend, Confucius received 3,000 disciples and taught the Six Arts at the Apricot altar temple, which is why scholars revere him. As a result, the Apricot Altar Lecture has been widely used in the cultural construction of the academy.

The carp leaped over the Dragon’s Gate. According to legend, only the pollution-resistant golden carp can survive and reproduce due to the turbidity of the Yellow River. The ancients discovered that each year in the spring, these golden carp would rise above the water and form a leaping swarm at the Dragon’s Gate. Therefore, the ancient people imagined that these golden carp would transform into dragons after leaping over the Dragon’s Gate and disappearing into the sky. The fish is mortal, the dragon is divine, and the carp, by a long effort, leaps over the Dragon’s Gate and becomes a god. The implication is that a student who has worked long and hard can eventually enter an official career, become rich, and glorify his ancestors.

Utensil theme

The four treasures of the study. Pen, ink, paper, and ink stone, writing on artifacts, expressing thoughts with articles, and carrying thoughts with artifacts, are the four treasures of the Chinese literary house. The brick carving patterns add more cultural flavor to the academy.

Piano, Go, Calligraphy, and Painting. In ancient times, playing the zither (mostly referring to playing the ancient zither), playing chess (mostly referring to Chinese chess and Go), calligraphy, and painting were skills that literature and literati must master to cultivate their moral integrity. Therefore, they were collectively called “Four Friends of Literati.” Because of its elegant musical style, Guqin has been entrusted with the character of a scholar and a transcendent and refined attitude in handling affairs. Go game among the squares of the board. The game of chess fully exercises one’s intelligence and mind. Calligraphy is a unique artistic technique in China, either cursive or official script, which reflects the different qualities of literature. Chinese painting is different from the realism of Western painting, which goes beyond the line frame model and reaches the realm of life. Therefore, the ancients said that those who are good at playing the piano are knowledgeable and calm, those who are good at chess are scheming and wise, those who are good at writing are sincere and sincere, and those who are good at painting are supreme and beautiful.

Analysis of botanical imagery at Xiurong academy

As an indispensable part of garden construction, garden plants can create a certain aesthetic character for the site on the one hand and also expresses a spiritual mood on the other. The main courtyard plants of Xiurong Academy are used as an example to illustrate the use of the “Bide” technique. The plants in the theater courtyard are Advantageous *Robinia pseudoacacia*, the plants in the front palace garden are mainly *Ziziphus jujuba*, and the plants in the back palace garden are mainly *Platycladus orientalis* and *Sabina chinensis*.

R. pseudoacacia was of great significance in ancient Chinese culture. *R. pseudoacacia* has a long lifespan, and its roots are prone to produce tillering seedlings, which is conducive to expanding the distribution area and scope of species, and in the ancient times of advocating nature, this long-lived and adaptable tree species will naturally make people feel awe; after the Tang and Song dynasties, the intention of *R. pseudoacacia* began to be gradually linked to scholarly honor or official rank. By the late Tang Dynasty, the scholarly honor or official rank intent of the *R. pseudoacacia* was fully established. During the Southern Dynasty, the *R. pseudoacacia* gradually evolved into a kind of fairy tree with the function of communicating with the gods and seeking immortality.⁷ In summary, the planting of *R. pseudoacacia* in the Wenchang courtyard has the following two broad meanings: one is to pass through the gods and ask the Emperor Wenchang to bless the students with a golden ranking, and the other is that the also signifies the hope that the students can have the world in mind.

Z. jujuba has strong adaptability, especially in northern areas. Many rural families will plant *Z. jujuba* before and behind their houses. The trunk of *Z. jujuba* is vigorous and simple, and the ability to blossom and bear fruit is also strong. We hope that the students can adapt to the environment as quickly as the *Z. jujuba*, and the *Z. jujuba* also contains the good wishes of the school for the students to become successful and achieve success as soon as possible.

The garden type of Wenchang Academy is a temple garden, and *S. chinensis* are planted in the courtyard to create a solemn and mysterious atmosphere. However, with the academy’s expansion, it’s symbolic significance has also changed. The Analects of Confucius say: “When the year is cold, then we know that pines and cypresses wither afterward.” The *S. chinensis*, still standing green in the cold, and we hope our students can be as steadfast and resilient as the *S. chinensis*. “Ten years of trees, a hundred years of trees.” The cypress is an evergreen tree with a long life span and full of vitality, which

also represents the good expectation of the school, hoping that the school will be evergreen for a hundred years and nurture generations of educated people.⁸

Pinus bungeana is hardy and evergreen, so they mostly symbolize youthful vitality and tenacity. The *P. bungeana* in the academy is a true reflection of the students studying away from home. The academy hopes that the students can overcome adversity and hardship on the way to school, like the *P. bungeana*, and remain strong and keep the original intention of studying.⁸

Conclusion

The landscape of the academy is a carrier of cultural inheritance and national spirit guarding and innovation. Xiurong Academy takes the natural landscape as the skeleton. Through the architectural layout, “Linking Plants to Human Character” has formed a cultural landscape with Confucian characteristics, an important microcosm of the history of the development and changes of ancient Chinese academies. Through the study of the geography, history, and culture of Xiurong Academy, this paper provides certain reference significance for the exploration of the landscape of the academy in the ancient northern Shanxi region. Also, it provides new ideas for the creation of a modern campus landscape.

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Conflicts of interest

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