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Form, space and spiritual enrichment: A Chinese Community Center in Des Moines

by

Zhongkai Chen

A thesis submitted to the graduate faculty
in partial fulfillment of the requirements for the degree of

MASTER OF ARCHITECTURE

Major: Architecture
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Graduate College
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This is to certify that the master’s thesis of

Zhongkai Chen

has met the thesis requirements of Iowa State University

Signatures have been redacted for privacy
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Chapter 1. Introduction

Intention

More and more Chinese students study in the United States (61,765 in 2004) and most of them (about 90 percent) stay in the United States after graduating from college. Chinese students in the United States face some problems in different areas such as language, culture, religion, and way of life throughout their stay in the country. In some cases, they feel lonely and isolated in such an unfamiliar situation. Psychological problems often develop when people are working under extreme pressure and experiencing spiritual loneliness. These problems are more serious in small towns in the Midwestern region of the United States. An extreme result of these problems is that several serious crimes involving Chinese people have been committed in the Midwest from the 1990s to the present. The severity of the consequences of these psychological problems creates an urgent need to discover how to deal with them.

There are several hundred Chinese students on the campuses of both Iowa State University and the University of Iowa; there are also several hundred Chinese living in Iowa. To accommodate the social and psychological needs of the Chinese community in Iowa, I have designed a Chinese Community Center in Des Moines. This center provides a space where the Chinese are able to communicate with each other. In addition, the center offers Americans the opportunity to learn about Chinese culture, providing them
the means to better relate with the Chinese living in Iowa. Furthermore, Chinese culture is
the central culture of East Asia (Japan, Korea and Mongolia) and it affects the cultures of
Southeast Asian countries such as the Philippines, Vietnam, Laos, and Cambodia as well.
Therefore, this Chinese Community Center will also benefit communities from these
countries.

The purpose of this project is to express how architectural space can enrich people’s lives
and lift their spirits. I also incorporate a modern form of some traditional Chinese design
concepts. The project location is near the Des Moines Art Center, the design of which
reflects different periods of architectural development. The art center consists of three
parts designed by different architects: Eliel Saarinen (1940s), I.M. Pei (1960s), and
Richard Meier (1980s). A comparison of this project to the different parts of the art center
and an overview of architectural development since the 1940s is presented.

Problem Statement

The project is located in Green Wood Park. The design of the Chinese community center
is based on traditional Chinese architectural concepts and modern form. The center
creates harmony between architecture and the environment; it will also be an interesting
building to compare to and incorporate with the Des Moines Art Center.

The site is a perfect example of Chinese traditional site selection. Hills, water, and trees
form a beautiful environment that fits very well with theory of “Feng shui.” The circulation of the building is well considered: the community center and the Des Moines Art Center will be connected and the circulation pattern of the site will provide an interesting walking tour for visitors. The water system at the site is another design element that will be emphasized.

The building will serve as community center for Chinese, as well as a place for Americans to study Chinese issues and culture.

**Methodology**

The design of the Chinese community center should be a reflection of Chinese culture, and should incorporate elements of Chinese philosophy that provide comfort and a sense of community to Chinese visitors. In addition, the center design should allow for exhibitions of Chinese cultural art and activities to teach Americans about the Chinese. To accomplish these design objectives, I conducted research on traditional Chinese culture and the psychological problems of Chinese living in the United States, creating a framework within which to develop the design of the project.

First, I studied Chinese traditional philosophy, way of life, the character of Chinese literati character, the theory of Zen, and architectural design concepts. Chinese students and scholars have always been influenced by traditional Chinese philosophies such as
Confucianism, Taoism, and Buddhism. Zen is a synthesis of Confucianism, Taoism, and Buddhism. The ideals of the traditional Chinese literati are drawn directly from these philosophies.

Second, I investigated the proliferation of psychological problems among Chinese students in the United States and in Iowa, noting the causes of the problems and their harmful effects.

Finally, I conducted a site assessment and, using the information obtained during the research process, employed traditional Chinese design concepts to create a collection of traditional space. Chinese visitors to the center will be familiar with these spaces as they walk through the building. Visitors of all cultures will experience a sense of peace and concordance in such an environment made up of beautiful elements of nature and gentle architectural structures.
Chapter 2. Background and Research

Traditional Chinese Philosophies:
Confucianism, Taoism and Buddhism

There are three main philosophies in traditional China: Confucianism, Taoism, and Buddhism, each of which consists of the aspects of philosophy and religion. In this thesis I address only the aspect of philosophy.

Confucianism

Confucius (Kongzi, 551-479 B.C.), founder of Confucianism, stressed "Ren" (benevolence, love) and "Li" (rites), referring to respect for the system of social hierarchy. Mencius, who lived in the Warring States Period (389-305 B.C.), contributed a great deal to Confucianism by advocating a policy of benign government and a philosophy that human beings are good by nature. Confucianism became the orthodox ideology in feudal China and during the course of history it drew on Taoism and Buddhism. By the twelfth century, Confucianism had evolved into and remains today a rigid philosophy that calls for preserving heavenly laws and repressing human desires.¹

¹ http://chineseculture.about.com/library/weekly/aa030400a.htm
**Taoism**

Lao Zi created Taoism around the sixth century B.C. Lao Zi’s masterpiece is "The Classic of the Virtue of the Tao." He believed the dialectical philosophy of inaction. Chairman Mao Zedong once quoted Lao Zi when he said: "Fortune lies in misfortune and vice versa." Zhuang Zhou, the main advocate of Taoism during the Warring States Period, founded a relativism calling for the absolute freedom of the subjective mind. Taoism has greatly influenced Chinese thinkers, writers, and artists.²

**Buddhism**

Buddhism was also created around the sixth century B.C. in India by Sakyamuni. Buddhism holds that human life is miserable, while spiritual emancipation is the highest goal to seek. Buddhism was introduced into China through Central Asia around the first century A.D. After a few centuries of assimilation, Chinese Buddhism evolved into many sects and

²http://chineseculture.about.com/library/weekly/aa030400a.htm
became localized during the Sui and Tang Dynasties. This process of assimilation and localization blended Buddhism with the ingenuous cultures of Confucianism and Taoism. Of the three philosophies, Chinese Buddhism has had the greatest influence on traditional ideology and art.³

**Interaction Among the Three Philosophies**

Confucianism emphasizes regulation and hierarchy. Taoism emphasizes nature and freedom. Buddhism emphasizes comeuppance ("karma") and metempsychosis ("samsara").

These three philosophies influenced each other during a long process of development in China, resulting in a new genre: Zen.

**Philosophical Influence on Chinese Traditional Architecture**

Chinese traditional architecture was influenced in different ways by each of the three philosophies. Confucianism, with its emphasis on the whole rather than the individual, influenced the design of public buildings. Taoism, which focuses on the freedom of the individual, influenced the design of private buildings. Buddhism, with its emphasis on the spiritual, influenced the design of religious buildings.

Philosophical influence on Chinese traditional architecture
The Traditional Chinese Way of Life

The traditional Chinese way of life is influenced by philosophy and is defined by three levels: the mundane, the immaterial and the religious.

The Mundane

Chinese people follow the formality of Confucianism. In the sphere of general public activity, society is divided into different hierarchical groups, such as royalty verses civilian, elders verses the young; the superior verses the subordinate, and so on. Many rules regulate each kind of public activity. Public architecture such as palaces and official buildings, also expresses formality with its axis and order.

Forbidden City, Beijing

The Immaterial

Chinese people follow the freedom of Taoism. In their private lives the Chinese focus more on the relationship between people and nature. When people are separated from
public society and exist in their own individual, immaterial spheres, they focus more on freedom and the abstract and less on formality. Chinese art, such as painting, poetry, music, calligraphy and private gardens, has always shown the beauty of nature and freedom.

Liu Yuan, Suzhou, Jiangsu Province

The Religion

Buddhist theory is the most popular of the three philosophies. The Chinese believe in comeuppance ("karma") and metempsychosis ("samsara"). Buddhism advises people that if they perform good deeds they will have good fortune in life, that they should choose good over evil, and that they should be kind to all living beings.
The Character of the Traditional Chinese Literati and Zen

The traditional Chinese literati are more knowledgeable and hold a higher standing in society than the common people. The character of the literati is influenced by Confucianism, Taoism, and Buddhism.

Confucianism deeply influenced the character of the literati in feudal society. Confucianism calls for positivism, morality, responsibility, and loyalty. Everyone should always care about the different aspects of society and dedicate himself or herself to society. There is a famous poem: "居庙堂之高则忧其民，处江湖之远则忧其君." When the literati were government officers they cared about the lives of the common people. When the literati were banished from the capital, they continued to care about the policy of the emperor.

Taoism emphasizes nature and freedom. In Chinese society, the public comes first, at the expense of individuality. When the literati were suffering under societal pressure, they sought freedom through their immaterial lives. Taoism calls for inaction and respect for nature. According to Taoism, activity should never violate the laws of nature. People will revert to nature only when they can break free from the chains of fame, benefit, power,
and status. The literati idolize the art of nature. They strike a balance in their lives between the individual and society and between the mundane and the immaterial.

Buddhism emphasizes comeuppance ("karma"因果报应) and metempsychosis ("samsara"轮回). Comeuppance means that everything that happens does so for a reason: people will have good fortune if they do good deeds; people will have bad fortune if they do evil deeds. Metempsychosis is defined as the passing of the soul at death into another body, either human or animal. Everything, including life, has repetition. For instance, Buddhists believe that people have three lives: the past life, the current life, and the future life.
When the Chinese literati meet difficulty or are in a bad situation, they will insist on this idea of repetition and wait for life to improve.

*Zen*

Confucianism, Taoism, and Buddhism influenced each other during a long development process in China, and from that process came the new genre: Zen.

Zen was first a branch of Buddhism and the Buddhist monks of Zen were also influenced by ideas from Confucianism and Taoism. Later, more and more literati became interested in the theory of Zen. Zen became popular among the literati, and its followers were no longer limited Buddhist monks.

One of the main intentions of Zen is to understand the world. In Zen there are two methods of understanding: sudden understanding (顿悟) and gradual understanding (渐悟). Sudden understanding occurs when a person understands something suddenly by inspiration. Gradual understanding is a step-by-step process during which a person understands one thing only after accumulating knowledge over time.
Psychological problems of Chinese students and scholars in the United States and in Iowa

Murder Cases Involving Chinese Students from 1991 to 2004

Case One

Gang Lu, a graduate student at the University of Iowa, killed five people and himself on November 1, 1991. The following description of the crime reveals some insight into the mindset of Gang Lu:

A student described as a brilliant loner went on a shooting rampage at the University of Iowa after being passed over for an academic honor, killing a rival student, three professors and himself. The student, Gang Lu, also critically wounded a university administrator and another staffer yesterday before shooting himself to death, said Ann Rhodes, vice president of university relations.  

Case Two

Zhan Yin, a student at Purdue University, killed two women in August 2001. The campus news report described the crime as follows:

Yin, a Purdue doctoral student in biological sciences, is accused of killing doctoral student Yeun Kyung Woo, 31, and her sister, Hyo Kyung Woo, 29, who was visiting the West Lafayette campus from Chicago. Their bodies were discovered Friday

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4 http://massmurder.zyns.com/gang_lu.html
morning (8/3) in the Purdue Village student apartment where YeunKyung Woo lived.\(^5\)

Another description of the crime reveals the motive for the killings:

An affidavit filed in court Monday alleged that Yin told Purdue Police Chief Linda Stump that he followed Hyo Kyung Woo home and killed her after a car she was driving nearly struck him while he was bicycling in a campus housing complex.\(^6\)

**Case Three**

Haiming Luo, a student at University of Louisiana in Lafayette, killed Ting Chen in May 2004. The crime was reported as follows:

Haiming has been charged with second degree murder in the death of a ULL international Grad student. He was last seen in Lafayette seven days before her disappearance. Twenty-four-year-old Ting Chen of Shanghai, China, had been reported missing earlier last week to university police, but wasn't found until dorm residents complained of an odor coming from the room Haiming had been staying in. Chen lived across the hall. Police have called the death an "obvious homicide." They say the two were friends, and they do not know what motive Haiming may have had.\(^7\)

**Case Four**

\(^6\) http://www.mail-archive.com/uighur-l@taklamakan.org/msg02196.html  
\(^7\) http://www.katc.com/Global/story.asp?S=1870586
Dong Zhang, a student at Eastern Kentucky University, killed Yan Gu in June 2004. The following is a description of the crime, which began as a missing person’s case:

On June 3, 24-year-old University of Kentucky pharmaceutical sciences graduate student Dong Zhang phoned Lexington police to report the disappearance of his girlfriend, Yan Gu. The next day, Zhang filed a police report and Gu’s name was entered into a national missing persons database. However, during the investigation, Zhang articulated certain things that raised suspicion. On June 17, Lexington police arrested and charged Zhang the next day for filing a false missing-persons report, a misdemeanor, and tampering with physical evidence, a felony. On June 19, the FBI and Indiana State Police found a body in the company of Zhang in a shallow grave in a cornfield 60 miles southeast of Indianapolis. The body probably was buried about two weeks ago. On June 19, Chicago police issued a warrant for Zhang’s arrest. On June 21, Zhang was informed that he would be extradited and charged with first-degree murder. Several hours later, Zhang attempted suicide at the Fayette County jail by trying to hang himself with a telephone cord. He was taken to the hospital.  

Case Five

Danlei Chen, a student at Purdue University, tried to kill her husband, Lei He, in December 2004 because of marital difficulties, as described in the following report:

A Purdue student is facing attempted murder charges for stabbing her husband.

http://www.zonaeuropa.com/01652.htm
Police say Danlei Chen, 27, stabbed her husband during sexual intercourse. According to court documents she used a steak knife to stab her husband in the chest on Christmas morning. Purdue Police said the husband, Lei He, was taken to Saint Elizabeth Medical Center along with his wife. Chen told police she was upset the couple was having marital problems, so she tried to kill herself after stabbing her husband. Lei told police the couple had watched the movie "Basic Instinct" which depicted a similar situation. The couple is from China and living in the Purdue Village while studying at Purdue. Both are out of the hospital and Chen bonded out of jail.9

9 http://www.wlfi.com/story_54961.html
All five murder cases included in this sample took place in small towns in the Midwest. There are more Chinese students studying on both the East and West Coasts of the United States than in the Midwest, but no such violent crimes have been committed in either area. Furthermore, no such violent crimes occurred in larger cities, such as Chicago, Minneapolis, or St. Louis, although these cities are also located in the Midwest.

Experts have indicated two factors to explain why Chinese students commit crimes in the United States. The first factor is the difference between the Chinese and American cultures. Psychological studies have shown that when a person moves from one country to another, he or she often encounters “culture shock.” Culture shock refers to the inability to adapt to the vast differences between one’s home and that of the alien country. Differences between American and Chinese cultures are easy to see, and although the Chinese currently come into contact with American culture more often, they are still far from being totally immersed into American society. Typically, Chinese students are good at studying and taking exams, but they are not good at adapting to new cultures. This is particularly true of those who grew up in small- and medium-sized cities or those who came to the United States immediately after graduating from a university. These young Chinese students lack social experience and as a result they can founder in the United States. The greatest challenge facing Chinese students in the United States is the fact that the society in which they grew up is quite formal in terms of public life. In China, someone is always overseeing all aspects of life—studying, sleeping, eating, and falling in love. In the United States, the nature of the public environment is the complete
opposite; society only takes notice when the law is broken. This vast difference requires a significant amount of time for adjustment.

The second factor that affects the psychological health of Chinese students and scholars in the United States is often a result of the first. Because of cultural differences and communication barriers caused by linguistic difficulties, Chinese students typically feel lonely. Although many U.S. universities organize meetings on special days, foreign students will still feel helpless and lonely because of the absence of good friends. The killings by Dong Zhang and Haiming Luo are clearly related to loneliness. To solve the problem of loneliness, foreign students will devise all sorts of ways to “make friends.”

Psychological Problems of Chinese Students in Iowa

All of the students in these cases are or have been graduate students in the department of architecture at Iowa State University. Their real names are not used to maintain confidentiality.

Case One

Mr. A was accused of domestic violence by his wife and sent to jail several months after his wife arrived in Iowa. After one year of living alone in a small Midwestern town, Mr. A was excited when his wife joined him in Iowa. However, their relationship began to worsen over time, culminating in the accusation of domestic violence. At the time of his graduation in 2003, Mr. A wanted to divorce his wife. He found a job in New York City
and the couple moved to a big city. As a result, their relationship began to improve. They did not divorce and their first baby was born one year later.

Case Two

Mr. B transferred to the University of Minnesota after his first semester at Iowa State University. Mr. B is an extrovert and found it difficult to remain in such a small town for two years, so he transferred to the University of Minnesota after completing an internship in Minneapolis. “I don’t know what would have happened to me if I still stayed there for two years.” Mr. B said. “There are few pastimes for a Chinese student; most Chinese students study all through the whole year and [look forward to] the only two parties—the Spring Festival party and the Mid-Autumn Festival party. Many friends said that I looked like an active student, but, in fact, I always felt lonely and dysphoric in fact.”

Case Three

Mr. C cannot help running away from campus when the semester break comes. He thinks that living in such a small town is like being in exile, surrounded by boring plains and far away from what he is accustomed to in a big city. Although he has good relationships with his Chinese classmates, sometimes he feels lonely and depressed when thinking of his former aspirations.

Conclusion

Although not all Chinese students have difficulty in the United States, psychological
problems do develop in some Chinese students. There are two reasons for these problems. First, external factors, such as community relations, influence students. Second, internal factors, such as one's feelings and emotions, contribute to psychological problems. In order to deal with these problems, we should not only organize more community activities for them, but we should also pay more attention to their spirits.
Chapter 3. Problem Statement

This chapter presents the building type, the design program and site selection based on the study and analysis of Chinese culture. The chapter focuses on the incorporation of traditional concepts and modern form, and continues with a discussion of form, space, and landscape design.

Program Considerations

This Chinese Community Center is a multi-functional building including the following rooms: a meeting room, a performing room, a Buddhist temple, an exhibition space, and a roof space. Outside the building are a public square in front and a private garden behind.

The circulation of this building is well considered. The design connects the Chinese Community Center and the Des Moines Art Center seamlessly and it will create an interesting tour for visitors. This tour will consist of a sequence of special spaces that express Chinese traditional design concepts. Chinese visitors will be familiar with these spaces and their spirits lifted by the experience.

Nature is also a significant consideration in the design of the community center. The water system is thoroughly integrated with building. A sequence of columns stand in the water, and these hollow columns will produce sound when the wind moves through them and will create shadows in the sunlight.
The Chinese Community Center is designed based on the original Chinese architectural concepts that evolved from Chinese culture and philosophy. The form is modern in style and combines the beeline and curve styles. The center will be appropriately matched with the Des Moines Art Center.

Activity Settings

The following are the activity settings based on the community requirements. The description of each setting includes the room size, the number and types of users, the activities for which it is intended, and the features required to meet the needs of the setting. The function of the building is threefold: it will serve as a cultural center, an exhibition space, and a recreational facility.

**Performing room** (Multi-function)

Size: 2,000 square feet

Users: 50 people (visitors, artists, actors/actresses, and scholars)

Activities: This room is located on the first floor near the main entrance of the building. It is a round room in which Chinese art such as music, dancing, and drama can be exhibited. The room also has an open view to the outer environment. In the performance room the Chinese can review their culture and art, and Americans can learn more about China. This room is requires easy accessibility.
**Meeting room:** (Multi-function)

Size: 2,000 square feet

Users: 100 persons (scholars, artists, and students)

Activities: This room is located on the second floor near the elevator. It can host meetings and interior media performances.

**Exhibition space:** (Multi-function)

Size: 6,500 square feet

Users: Visitors, students, artists, and scholars

Activities: This room will be used to display of works of art. The area will consist of two floors with an atrium.

**Buddhist temple:**

Size: 500 square feet

Users: Visitors and scholars

Activities: The temple will be a space for people to meditate. This temple has a ball form inside a pool and is surrounded by trees to help people to improve their mood.

**Roof space:**

Size: about 7,500 square feet

Users: Visitors
Activities: The roof space is for viewing. Three parts of the roof space will offer different height levels of outdoor space, simulating the experience of being on a hill.

Site Considerations

The preferred location for a Chinese Community Center in Iowa is in Des Moines, because it is the state capital and is relatively close to both Iowa State University and the University of Iowa, where many Chinese students and scholars study and work. In addition, several hundred Chinese people live in Des Moines. Greenwood Park is an excellent location because it is close to the Des Moines Art Center. The hills, water, and trees form a beautiful environment that fits very well with theory of “Feng Shui,” making Greenwood Park an ideal example of traditional Chinese site selection.
Location of the Chinese Community Center at Greenwood Park in Des Moines

Overview of the Des Moines Area

Chapter 4. Design Proposal

Site Analysis

This project is located near the Des Moines Art Center, the design of which reflects different periods of architectural development. The three different parts of the art center were designed by Eliel Saarinen (1940s), I.M. Pei (1960s) and Richard Meier (1980s). The site analysis is a comparison of the proposed Chinese Community Center with these different works and an overview of architectural development since 1940s.
Circulation Analysis

The Chinese Community Center is accessed through three entrances. The main entrance is from the road on the east side and has parking space; a second entrance is from the road on the west and also has parking space; the third entrance is from the Des Moines Art Center to the north and is a walking path.

A tour is planned between these entrances, so visitors can walk through a sequence of traditional Chinese spaces. Visitors also can walk on the roof space, which uses different levels to create an outdoor stair.

The indoor and outdoor spaces are connected and flow into and out from each other in the design of this project.
Formal Organization Analysis

This project employs modern form to create traditional Chinese space. Two organization concepts are considered: Geometric and Movement.

Geometric Organization

The project plan includes several perpendicular walls and several curved walls. The perpendicular walls create an element of order in the project and the curved walls conjoin the different parts of the project.

Regulation vs. Freedom: One comparison between Confucianism and Taoism can be described as “regulation” versus “freedom.” Confucianism emphasizes regulation and hierarchy while Taoism emphasizes nature and freedom.

Beeline vs. Curve: According to common opinion, beelines express regularity and curves express freedom. In this project, the relationship between beelines and curves is not so absolute. The relationships among different beelines are free, while the relationships among different curves are regular.

Movement Organization

The movement organization is considered with both circulation and geometric organization.
Movement vs. Balance: The movement of this project is designed according to the circulation requirements and the environment of the site. This design creates a balance not only between the building and the natural environment, but also among different parts within the building.

Geometric Organization and Movement Organization
Water System Analysis

In Chinese culture, it is believed that water is able to collect the “energy” of nature and that it keeps the “money” of people. The proposed water system can also serve as a medium to conjoin different parts of the project.

The water system of this project consists of a lake, a brook, three pools, and a waterfall. The system begins at the pool of the Buddhist temple at the north entrance, flows along with the walkway to the waterfall, falls down to the Zen Garden, moves to the arc brook around the public square, connects with the river on the site, and finally flows into the lake.

The different characteristics of water are expressed well by this water system. The large lake expresses the power and silence of large bodies of water; the brook expresses the flowing movement of water; the pools express the interaction among water, wind, and light; and the waterfall expresses the dynamics of water.
Function and Space Analysis

Zen Garden

exhibition space

Ground Plan

Viewing
The Sequence of Space

The building design is a sequence of traditional Chinese spaces, which are arranged to create a tour for visitors that will lift their spirits and enrich their lives. As mentioned earlier, traditional Chinese culture was influenced by the philosophies of Confucianism, Taoism, and Buddhism. As a result, Chinese traditional architectural spaces always express the theories of these three philosophies. As visitors walk through this tour, they will become familiar with these spaces and rejuvenate their spirits.

The tour also provides a good opportunity to view the environment. As visitors proceed along the tour, the direction of their view continues to change. The theory of sight designing is expressed through the concepts of “concealed” and “exposed,” “straight” and “bypass,” and “high” and “low.”

The tour begins from the north entrance from the Des Moines Art Center and ends in the south square and the Zen Garden. It includes eight spaces:

1. The Entrance Path from Des Moines Art Center
2. The Buddhist Temple
3. The Waterfall Platform
4. The Wall-Gate
5. The Roof Space
6. The Round Public Square
7. The Sky Eye Pool

8. The Private Zen Garden
Confucianism  Buddhism  Taoism

Chinese traditional culture

Architecture space

Visitor enters ———— Visitor exits

Spiritual enrichment

A tour of Spiritual enrichment

Modern architectural form shapes traditional space

Traditional space enriches visitors spiritually
1. **The Entrance Path from Des Moines Art Center**

As visitors walk along with the path from the north, their first view is the Buddhist temple, which stands inside a round pool. The temple has the appearance of a white ball floating in the blue water surrounded by trees. The background is the blue sky. The golden sunshine creates a gradually changing shadow on the temple and the water, and the reflecting light moves with the wind and water.

This scene will calm visitors and help them experience the beauty of nature and life. The dispirited will be soothed as they look on this scene.
1. Entrance path from Des Moines Art Center

white ball among trees,
floating in the round pool,
under the golden sunshine,
peace and elegant

calm down, calm down,
life is beautiful...
2. The Buddhism Temple

This abstract Buddhist temple acts as a meditation space. It is ball form inside a pool surrounded by trees. This space will be soothing to visitors. There is a front door, a rear door, and a dormer on the top of the temple. A round platform is located in the center of the temple.

Visitors enter the temple through a bridge that crosses over the water pool, evoking the feeling of the peace of water. It is a bit gloomy when visitors enter the temple, as light comes only from the top and the door. The height of visitor’s eye is just in the center of the temple, looking up to the dormer. The light from the top gives visitors faith, which can drive away melancholy and gloom. Visitors can “talk” to the Buddha in the sky and receive help. Then, visitors go forward and exit through the front door into brightness; the sun is outside and gives visitors great expectations for life.

The design of this space simulates the sense of changing from “darkness” to “brightness” and from “pessimism” to “optimism.”
2. Buddhist temple

Walk in the temple through small bridge, cross over the water pool, stand on the top of the platform, eyes in the center of the ball, look up to the top, there is the abstruse sky, talk to Buddha and the gods... then go forward, to the bright sun...
3. The Waterfall Platform

As they exit the Buddhist temple, visitors will reach a platform. Water flows from the pool to this platform and then falls down to the Zen Garden. The platform is at the same height as the roof.

Standing on the platform above the waterfall and looking forward along the axis of the site, visitors can view the building and the lake. Looking down to the Zen Garden, visitors can see the water splashing down and hitting the rocks.

There is an old saying from Confucius. He once stood on the bank of a rushing river and said, "The past is just like this!" People sometimes consider the past and past suffering too much. Why not look forward to the beautiful future and forget the suffering of the past?
3. Waterfall platform

stand on the platform above the waterfall, looking forward, water splashing down, hitting the rock...

Confucius stand above the river and says: "The past is just like this!"
4. The Wall-Gate

After turning left from the platform, visitors will see a hole in the wall. This hole is better described as a "gate" rather than a "door." This gate serves as the dividing line between the inside and the outside of the project.

When visitors stand on the platform and look forward to the south, they can view the building and the lake, but they cannot walk straight to them. Visitors must turn left and walk through the wall-gate, then walk to the roof to reach the project. In Chinese design theory, visitors sometimes need to take a detour instead of reaching a target by a straight path. This design feature echoes the thought that we cannot always easily reach our goals in life, but we do not give up or become discouraged. Instead, we just consider the path more carefully and then find the appropriate way.

Another concept of the wall-gate is controlling the scope of the view. When visitors pass by the wall-gate, their scope of view will suddenly be enlarged and then turned to the right. Visitors will view different scenes and experience different emotions during this process.
4. Wall-gate (space transfer from outside to inside)

Sometimes you have a target, but you can't get there straight, you have to make a detour.

There are many ways to achieve your goal, never give up, just thinking...
5. The Roof Space

When visitors walk through the wall-gate and turn to the south, they reach the roof. There is a stairway that connects the roof levels to different floors and to the ground.

The stairway structure mimics the duties of the literati. The Chinese literati always think about their responsibility to society. There is a famous poem that states: “Concerned about the people when he stands in the high palace; concerned about the emperor when he is exiled away from the capital.” This poem means that one should consider the lives of the people when he works as an officer of the government, and one should consider the activity of the emperor when he is no longer an officer of government. As a member of the literati, one should never forget his or her responsibility to society no matter what status he or she has. In this project, roof space A represents “high status” and roof space B represents “low status.” Visitors will experience different feelings when they stand in the different spaces of A and B. The stairs emulate life: sometimes one has high status and sometimes one has low status. This idea fits with the theory of “samsara” in Buddhism.

The high platform is also a good place to view the beautiful environment. Visitors will be relaxed and happy when they stand in roof space A. Another famous poem states: “Standing in such a high building, relaxed and happy; drinking in the wind, how delectable it is!”
concerned about the people when he stands in the high palace

concerned about the emperor when he is away from the capital

5. Roof space

Standing on a high platform, view the beautiful environment, “drinking in the wind, how delectable it is!”

And remember the responsibility to society, keep the duty of the literati.
6. The Round Public Square

As visitors descend the stairway from roof to the ground, they come to the round public square in front of the building. The main design concept of this square is the relationship between the building and the forces of nature: wind, water, light, and time.

Sequences of columns stand in the water around the square. These columns are made of concrete and each of them is hollow so they will create sound when there is wind. The sequence of columns resembles traditional Chinese musical instruments: Dong-Xiao, Pai-Xiao, and Sheng.

The shadows of the columns are interesting as they change direction and length according to the time of day. This feature has the appearance of a sundial. These shadows are also interesting as they float in the moving water. The interaction among light, water, and wind is very beautiful.

Where does architecture end? Where does nature begin? “Tao can be Tao; Tao is not just Tao.” (道可道，非常道)
Step down the stair, connect several roof levels with the ground, life is just like the stair. Sometimes stand at a high height, some times descend to a low height, or vice versa. Just enjoy it.

6. Round public square
Wind make columns play music, light make shadow changing follow time, inside? outside? nature? building?
7. The Sky Eye Pool

The sky eye pool is located in the center of the public square. When visitors look into this pool, they will see blue sky, white clouds and reflections of themselves. If the project were a living being, this pool would be its eye. This space is designed to make visitors think about how one can know oneself and understand the world.

One of water’s qualities is a sense of peace. Water is also a good medium through which people understand the world. Everything has an inverted image in water; water can express everything abstractly or visually. People always use their hearts to feel and think according to what they have seen, and what they are thinking is always a reflection of what they have seen. A famous Zen saying is: “What is waving? Not the wind, not the tree, but your heart.”

There is a story about how two famous Zen monks have different understandings of world: Monk Shen-Xiu says, “Body is a banyan, heart is a mirror. I clean it everyday. Don’t let it be dirty.” Monk Hui-Neng says, “Banyan is not banyan, mirror is not mirrored; there is nothing at all. How can it be spotted?”
Know yourself and understand the world

A famous Zen saying:
“What is waving?
not the wind,
not the tree,
but you heart.”

water’s character is peaceful,
water is also a good medium for understanding the world.

people use eyes to see,
architecture also has its eye if we assume that it is alive.

people use their heart to feel and think according to what they have seen.

what people have seen always reflects what they think.

7. Sky eye pool

Monk Shen-Xiu say:
“Body is a banyan, heart is a mirror;
I clean it everyday, don’t let it be dirty.”

Monk Hui-Neng say:
“Banyan is not a tree, mirror is not dado;
there is nothing at all, how can it be spotted?”
8. The Private Zen Garden

The Zen Garden is located between the building and the hill. It changes with the seasons, so visitors can experience the different beauty of each season.

In spring, the water level is half and there is some grass on the shore. Sunshine can reach to the bottom of water pool clearly. This expresses the beauty of ford, full of the vital force of spring.

In summer, the water level is full, so no shore is left except a rockery. Light does not easily to reach to the bottom. This expresses the beauty of the mystery and power of water.

In autumn, the water level is half again, but no grass is on the sand shore. This expresses the beauty of the ford when water is blown to scour the shore by wind.

In winter, no water is in the pool at all, no grass is on sand shore. It becomes a dry garden with a sand bottom. This expresses the abstract beauty of nature and life.

Wall and window: This geometrical wall with scenery windows creates some interesting shadow shapes in the garden.
Spring: half water level, some grass on shore. Light can reach the bottom easily. Expresses the beauty of the ford, full of the vital force of spring.

Summer: full water level, no shore left except a rockery. It is difficult for light to reach the bottom. Expresses the beauty of the mystery and power of water.

Autumn: half water level, no grass on sand shore. Expresses the beauty of the ford when water is blown by the wind to clean the shore.

Winter: no water, no grass on the sand shore. It is a dry garden with a sand bottom. Expresses the abstract beauty of nature and life.

Wall & Window: geometrical wall with scenery windows. Interesting light and shadow on the water.

8. Private Zen Garden

Changing with different seasons, people can feel the beauty of each season, express the theory of Zen, abstract art, nature and life.
Chapter 5. Conclusion and Discussion

Chinese traditional space can be expressed using modern architectural form. The usual method for creating a Chinese traditional space is to employ a Chinese traditional architectural form such as a sloping roof made from wood. It is not difficult to use traditional forms to create a visually similar space. But, in modern times, architectural form and material are quite different than those of the past; Chinese traditional space cannot be expressed only by a visually similar form in traditional style. We can study the meaning of Chinese traditional space in essence, and then employ modern form to express it. When a Chinese traditional space is designed outside of China, especially in the western countries, modern form and modern material should be considered.

Space can affect the psychological feelings of people who remain there. Space is a medium for people to feel and think. We can study the psychological problems of Chinese students and scholars in the United States and then design traditional Chinese spaces to provide comfort and to help them enrich their spirits. Architecture is not only a space in which people can live but is also a space in which people can enrich their spirits.

What should an architect be? An architect should have extensive knowledge of philosophy, technology, art, sociology, and so on. What should architecture express and how should it be designed to do so? Architects need knowledge of philosophy. How should architecture be built? Architects need knowledge of technology. How can
architecture be beautiful? Architects need knowledge of art. How can architecture serve society? Architects need knowledge of sociology. Architects should consider these different kinds of knowledge simultaneously during the design process.

Architecture should be “of the people, by the people, and for the people.”
Bibliography

1. Yan Qin, Qi-Xun Zhang. *Conspectus of Chinese ideology and culture*, University of North-Western Technology Press, 2002.10 秦燕，张启勋. 中国思想文化概论，西北工业大学出版社，2002.10


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