Daming Lake Meditation Centre

A Chinese Meditation Retreat Centre in central Jinan

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Explanatory Document

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ABSTRACT

With the quick development of China's society and economy, it has become evident that people in many communities are experiencing psychological stress. With intense competitive pressure and unaffordable real estate many people find that the pace of living is too fast. Not only physical needs, but also spiritual needs are becoming greater as living standards improve. Setting aside religious beliefs, many Chinese people are seeking their own ways to relieve stress.

A building is not only 'a machine for living in.' It is also a combination of technology as well as visual art that can bring spiritual sustenance, provide a story that can be talk about, and be a cultural history recorder. Architecture, as a medium, can create a sense of peace, bringing calm and quietening the heart in a way that embodies an expression of the sacred for the people who enter.

The Chinese-style meditation centre in this research project explores possible ways of creating several relaxing spaces to reduce the stress of daily living for people who are under pressure and looking for an outlet. It is a retreat located in the hustle and bustle of Jinan's city centre, with the purpose of providing a comfortable space for meditation and outdoor activities. There is an indoor workshop, a vegetarian restaurant and a tea-house. In such a place, through study, meeting friends and meditating, people can completely relax their bodies, minds and souls.

My research draws on literature concerning not only architectural form but also the cultures of meditation in different regions and religions. Among other references, Laci Spencer's Flotation: A Guide for Sensory Deprivation, Relaxation, & Isolation Tanks, Rudolf Stegers’ Sacred Buildings: A Design Manual and Tan Hock Beng's Tropical Retreats were analysed, alongside literature on the creation of a sacred building environment. Models and drawings have been used to explain the concepts that make a place of meditation within the centre.

The result is a space more like an activity centre, with a more humane and accepting view of the world than a religious building. It would be possible to extend the use of this architectural form in China to create other 'Chinese Decompression Devices' – meditation centres. In addition, it may be possible to promote this form of Chinese retreat internationally, for anyone who is interested in Chinese culture or who wants to achieve inner peace.
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PREFACE

I grew up in Jinan, a beautiful inland city that was well known for its rich groundwater resources. I still remember the time I spent with my siblings in grandma’s courtyard every summer, before I was six. At that time streams bubbled over in front of the house and there were willow trees by every door. I can remember the feeling of lying down on a cool bench, mottled shade reflected on my face and the buzz of cicadas reverberating in my ears. With my parents, we moved to a six-storey apartment. As time goes on, skyscrapers are being erected, changing the city’s horizons by the month.

After graduating with an interior design qualification, I was working in an office building and dealing with many files after work. When I looked out the window, the leaden sky and granite stones exuded a profound sense of melancholy. I felt that I was living mechanically.

Then, by chance, I came to New Zealand to study architecture. I have been amazed by New Zealand’s natural resources and by the way New Zealanders respect nature, especially in terms of architecture. During part-time work experience in Auckland, I found there are a number of regulations around protecting nature; for instance, tree-protection rules, living courts, permeable-paving percentage and so on. China’s growing population has resulted in high-rise buildings, and under the neon lights of the central city has become where people let off steam instead of by breathing the clean air of nature. But the way New Zealanders balance nature with architecture has inspired me to think more about nature during my design work, and informed the way I have combined architecture with nature for Jinan.
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1.0 Introduction
1.1 Background of the project

As a country with a large population, China faces many problems. Depression and suicide caused by stress have been commonly reported in recent years. Some people are more susceptible to symptoms of anxiety and to stress-induced illnesses than other people are. With social progress and rapid development, peoples’ spiritual demands have increased. It is common for people in Western countries or countries composed of various ethnicities and religions to institutionalise their spiritual longing into religion. For those who are not religious, there are community and psychological institutions that have a significantly positive effect on well-being. However, unlike Western countries, China does not pay much attention to psychology. According to some incomplete statistics, 89% of Chinese people have no religion. With no religion, questions have been beginning to surface about how Chinese people overcome stress. According to my anonymous survey, which questioned 100 Chinese people about topics ranging from the source of stress to solutions for stress, most people know just a little about meditation and more than 80% of people are keen to try this new kind of stress solution.

In China, a lengthy historical culture coexists with a fast-paced life. Reinforced concrete structures do not speak to people’s hearts. Meaning comes from a national aesthetic that has continued through thousands of years of history and is in people’s blood. How people can preserve the old culture and create a calm, quiet ‘asylum’ in the turbulent social environment has become a topic for research. A place of spiritual retreat that can allow deep relaxation is chosen as my proposal. Only a few people would deny the restorative effect of a vacation in the sun. But that lasts only until we sink back into our daily lives. Wouldn’t it be wonderful if we could bring the same peacefulness we found on our journey back home with us?

Meditation in contemporary society is often used to clear people’s mind and has been proved to ease many health concerns, for example those about high blood pressure, anxiety, and depression. It is a non-sectarian teaching suitable for all people regardless of religion, gender, race or nationality. But the idea of a meditation retreat as it has developed in China is not as advanced as in Western countries – and how advanced the concept of meditation appears to be in China is very important.

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2 Appendix A
1.2 Project outline

As a response to finding a place for meditation for today’s Chinese people who want to reduce stress in their daily lives, the following research project attempts to create a calm and peaceful environment through architecture.

The project addresses the way people relax in central Jinan, China. They could spend time in the meditation centre having a vegetarian dinner with family; drinking a cup of tea with friends; doing some handcraft with children; or enjoying the stillness of meditating alone. In changing the way traditional forms and materials are used, the project provides for not only a building but also a calm and peaceful complex where people can learn how to become calm and live happy, useful lives.

Fig. 3: People crowd a street.
The aim of this project is to utilize architecture as a tool to create a peaceful, calm environment for meditation that bears out the idea that a non-emotional structure can affect the emotions of the people who use the building. The aim of the architecture is to create a platform for people who work or live in Jinan City, where they can find an innovative outlet for stress release in a Chinese-style meditation retreat and gain a more meaningful experience of life. The objective is to create peaceful architecture such that the calm, relaxed environment will soothe the soul, and the spirit it conveys will have long-term effects on the people who use it. In addition, the environment that is provided can embrace all age groups in one complex, which is convenient from a societal viewpoint.

In the future, such retreats could become widespread in Chinese society for those who want a mental haven and spread throughout the world for people interested in Chinese meditation. The centre will be a place of architectural and economic value. The use of traditional materials and forms could become a magnificent addition to the ‘reinforced-concrete city’ and the developer see enormous markets developing for such centres.

Fig.4: Aims of the project
1.4 Research questions

- How can architecture offer a peaceful meditation space for Chinese people who are under pressure and interested in finding an outlet for their stress?

- How can traditional architectural forms and materials combine with nature to create a sense of the sacred and peaceful?
Meditation is not popular in China, let alone meditation retreats with a Taoist theme. Such retreats are usually located in a temple or exist in the form of a private sanatorium that cannot serve the public. As this is a newly developing way of relaxing, it will take time for people to adapt to and become familiar with the idea of a meditation retreat, so its possibilities will need to be developed slowly, rather than thrust upon the population.

The project relies on, and is limited to a summary of current research concerning historical buildings and parts of the contemporary retreat. However there is no literature around Taoist or Chinese retreats, so I had to combine architectural form and traditions to reach my final conclusion.

A building itself is silent; it cannot speak of emotions. Only one who enters the building can experience the feeling of stillness. As a student in New Zealand, I cannot measure the success of this project from the viewpoint of a stressed Chinese person, so whether the design is successful can be tested only against the literature and by the feelings created by the drawings.
Fig.5: General design logic1
1.6 Methods

Before analysing existing buildings provided for meditation, the project began by defining the architectural strategies by which sacred historical buildings were created by from the wisdom of the ancestors. The architectural history of meditation retreats was an indispensable part of my research and played a guiding role in deciphering the principles behind those sacred architectural treasures. The theoretical literature readings with regard to the sense of architecture created were followed by surveys of architectural precedents to help gain a different dimension from which to understand the topic. While many texts focused on the artistic attainments of the historical buildings, a survey for design paid more attention to relevant literature about the creation of a sense of the sacred, especially Flotation: A Guide for Sensory Deprivation, Relaxation, & Isolation Tanks, by Laci Spencer. Important literature about the creation of retreat space included Tropical Retreats: The poetics of place, by Tan Hock Beng and Rudolf Stegers’ Sacred Buildings: A Design Manual. Other literature that was more specifically about architectural strategies included An Architecture of the Seven Senses by Juhani Pallasmaa and The Matters of Architecture, by Steven Holl.

Besides the preceding survey, the project also took into account cultural background, for example, royal gardens and religious buildings. The way of arranging visual aspects of the project and the materials chosen were based on an analysis of related traditional architectural precedents in order to create a Chinese-style meditation retreat centre. In addition, the project explored how different forms rearrange and combine with natural resources, for example, beams of light, shadows and the wind tunnel created by buildings, to come up with new interpretations of how people’s senses are affected. These became strategies used in the project. Sketches and models were used to analyse the similarities and differences between each precedent. Computer models and hand drawings based on the surveys and literature were used in creating different strategies leading to the design. Rendering was used to highlight the atmosphere created by the designs.
2.0 Literature survey
2.1 Definition of ‘meditation’

‘Meditation' as a word has different meanings in different contexts. As a way to reduce stress and pain, meditation has entered the mainstream of medical care, with application to reducing stress for people who are chronically or terminally ill in hospital. However, not everyone knows that meditation has been practised since ancient times as a part of different religious traditions and beliefs.

A meditation retreat, the so-called ‘spiritual retreat’ in contemporary language is a time and place where people can practise meditation and have space to relax and deepen their understanding. Within this broad definition, any meditation retreat is bound up with the religion in which its various techniques were or are practised and the different objectives of the practitioners.

Over its long history, the spiritual retreat as one of the social phenomenon cannot be separated from historical background, social systems and human behaviour. The spiritual retreat has been an integral part of many Christian, Buddhist, Hindu, as well as Sufi communities.


Fig. 7: Evolution of meditation
2.2 The evolution of meditation

As can be seen from Fig. 7, whose images are in chronological order from left to right, the earliest references to meditation can be found in the Hindu religion. About 6th to 5th centuries BCE, Confucian and Taoist meditation forms developed in China, and Jain and Buddhist forms in India. By 20 BCE, Plotinus, a major philosopher of the ancient world, had developed meditative techniques that started a new chapter of meditation in the West. In the first century BCE, Buddhism was spreading in China. By the 12th century, the practice of Sufism included specific meditative techniques, and its followers practiced breathing control and the repetition of holy words. Western Christian meditation progressed from the sixth-century practice of Bible reading and, unlike the other forms, did not involve repeating any phrase or action and did not require a specific posture. In the 1960s, secular forms of meditation arrived in the Europe and United States. Rather than focusing on spiritual growth, secular meditation emphasizes relaxation, stress reduction and self-improvement, and is the prototype for contemporary meditation. Research specifically concerning meditation began in 1931 and increased dramatically during the 1970s and 1980s. Both secular and spiritual forms of meditation have been subject to scientific analysis.

Today meditation is practised all over the world without any reference to religious context, but the techniques are as they were thousands of years ago. In this century, yoga and various stress-management activities, such as holiday retreats and meditation lessons, are more acceptable to modern people. Meditation often becomes a way to spend holidays. Aim to let go of daily pressure by carrying out various activities or engaging in pure meditation.

The study selected some representative types of meditation architecture from India, China and Western Catholic countries to find the differences and similarities between old religious buildings and contemporary meditation halls, in order to discover common ground and create a design strategy for the project.

12 Everly, A Clinical Guide …, 199
16 Everly, A Clinical Guide …, 200
To change the analogy, the mind is like a lake, and stones that are dropped into it raise waves. Those waves do not let us see who we are. ... The waters must be calmed. If one remains quite, eventually the winds that ruffle the water will give up, and then one knows who one is. God is constantly within us, but the mind obscures that fact with agitated waves of worldly desires. Meditation quotes those waves (Bhagavad Gita V.28).


Architecture and meditation retreats

Hindu (before sixth-century BCE)
A Hindu place of retreat is also known as an ashram. Meditation is practised there after preceding exercises such as breath control and mental focusing, which is also a yoga exercise. As William Mahony concludes: "Vedic teachings hold that, since the universal divine Self dwells within the heart, the way to experience and recognize divinity is to turn one’s attention inward in a process of contemplative meditation."

Because Hindu meditation was out of respect for the gods and people’s desire to find their inner divinity. "The meditation retreat would traditionally be located far from human habitation, in forests or mountainous regions, amidst refreshing natural surroundings conducive to spiritual instruction and meditation. The residents of an ashram regularly performed spiritual and physical exercises, such as various forms of yoga." The Hindus’ meditation could be either an individual behaviour or a collective behaviour. Individuals developed behaviour patterns, and a group of individuals, interacting with one another consistently, formed collective behaviour patterns.

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In the past, Hindus worshipped their gods and meditated in temples. A sacred place was chosen for the construction of a temple. The place was, if possible, higher than its surroundings to create a solemn atmosphere.\(^\text{22}\) This is one of the reasons why it is common to see a temple shrine on a hill or a hillock. Proximity to a water body was also preferred as it helped devotees to cleanse themselves before entering the temple. The Konark sun temple, shown in Fig. 12 is a typical Hindu temple made from elaborately carved stone. In devising the horizontal plan for the Konark sun temple, the temple architects took great care to provide a high ceiling and create vibrant effects of light and shade to bring about an intense spiritual experience. The hall at the entrance, known as Ardhana Mandapa, was designed to be exposed to the sun’s rays for at least six hours each day.\(^\text{23}\) The horizontal plan shows the use of symmetrical form to create a sense of harmony and a solemn feeling. However while it emphasises the dignity of the temple, the symmetrical form gives me a feeling of something callous and cold.

\(^{22}\) Adam Hardy, *The Temple Architecture of India* (New Jersey: John Wiley & Sons Ltd., 2007), 56.

\(^{23}\) Adam Hardy, *The Temple Architecture of India*...96
A modern Indian retreat environment

The Greenland ashram is an outstanding representative of the contemporary Indian retreat. It is located in rural Tiruvannamalai, where there is beautiful scenery around the holy mountain of Arunachala. Greenland is open to groups or individual spiritual seekers who wish to discover the truth of their inner being. The hall is at the disposal of groups or individuals for yoga classes, spiritual teachings, meditation and all devotional activities. Traditional thatched roof materials were chosen for the main buildings. The hall ceiling was utilized to give a greater sense of space and thereby assist concentration.

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25 “Welcome to Greenland Ashram.”
26 “Welcome to Greenland Ashram.”
Buddhist meditation retreats (6 BCE)

Spiritual retreats are considered essential in Buddhism; Buddhist temples are essential places for reflection, prayer, or meditation. In the same way as Hindu meditation, Buddhist meditation can be an individual behaviour or a collective behaviour.

The meditation caves in Yerpa, Tibet, provide a typical Buddhist meditation place among the temples. Yerpa is one of the holiest Buddhist sites of central Tibet. Nuns, monks and hermits live and study there in seclusion on the slopes of the mountains. Near the largest monastery buildings are 80 Drak Yerpa meditation caves. The images show a temple situated in the surrounding forest on a hillside overlooking the whole valley. However, the caves for meditation are in a relatively small area and hermits occupy some. The inadequate infrastructure may embody the idea that it is all to do with their beliefs.
Modern Buddhist retreat environments
Unlike historical temples, the contemporary temples are more diverse. Shinkoji Temple is an example. It is located in Minami-ku Nagoya city in Japan and was designed by Mamiya Shinichi Design Studio. In the hall of the temple, lights from the top vertically pierce the space. Light reaches to the top of the platform, generating a bright and friendly atmosphere. From the entrance, skylights lead the way to the main hall.
Retreats in Western countries

The sacred building form in western such as churches, synagogues, and mosques embody a power which is quite different from any other buildings. This is part of the intangible yet powerful aura and attraction of religion. Even today, spaces for worship that have architectural aspirations must fulfil not only functional but also atmospheric expectations.  

Christian meditation aims to heighten the personal relationship, based on the love of God, which marks Christian communion, usually in prayer, with God. Unlike other forms of meditation, Western Christian meditation does not necessarily involve the repetition of any phrase or action and does not require a specific posture. The idea of a retreat was popularised in Roman Catholicism by the Society of Jesus.

The spiritual exercises in Rome were intended for people wanting to live closer to God's will for their life. Such prayer activities often happened in a prayer room in the church or in the cathedral, which Christians treat as a very sacred place. An example is the Basilica of Saint Peter in Rome, where the high dome and ceiling allow rays of light to converge in the middle of the main hall, creating a sense of a sacred space. The use of high Renaissance-style columns and supporting structures emphasises the power and strength of the main space.

33 O'Malley, The First Jesuits, 129.
**Modern Western retreat environments**

Unlike in previous times, today's church building is not limited by the use of old forms and materials. Many different kinds of churches have been built, some of which people might find rather unusual, yet creatively brilliant. An example is the chapel of Notre Dame du Haut in Ronchamp, France, designed by Le Corbusier. As a unique pioneer of modern architecture, Le Corbusier was a master of light. In the book *Cosmos of Light: the sacred architecture of Le Corbusier*, Henry Plummer captures Le Corbusier's inspired use of natural light and describes his work thus: "Le Corbusier deploys light to create enchanted, emotionally charged spaces wedded to the cosmic rhythm of sunlight and season. 'Cosmos of Light' reveals how the artist reimagined sacred space and charted new ways that buildings can both reveal and inhabit the universe around them."  

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Fig.27: sketch of sacred buildings
Concluding statement
From the research we can conclude that:
• The old retreats were inspired by religion, to express worship of various
gods and from fear.
• A retreat can either be a personal activity or a collective activity. Meditation
can be held in silence, while in others may held in conversation, depending
on the host or the participants.
• Retreats usually located at remote locations which is far away from city.
• Architects took great care in utilising the rich effects of light and shade to
bring about intense spiritual experiences.
• Building forms and materials are constrained by the local environment and
climate.

Comparing old and new, we see that:
• The old religious buildings express much religious sentiment, making them
unsuitable for people who are not religious.
• Some meditation environments appear poorly equipped and unhygienic,
which may affect people's focus on meditation.
• Old building forms cannot always be adapted to meet modern trends.
• Facilities for users of the meditation space must be improved in terms of
the space's modern use.
2.3 Analysis of sacred architecture

2.3.1 Building form
In the light of my research I directed my focus on two areas: building form and building materials. The precedents were also analysed under these two headings.

Light control
Ungers, in his 1977 Sommer Akademie defines architecture thus: “Architecture acts as an intellectual bridge between the visible and invisible, the corporeal and the formless, the expressible and the effable; it affirms the analogical correspondence of the order of reality. It is intended to function both physically and metaphysically…The architectural work embodies in a tangible form…what is intangible and incorporeal.”

Put simply, this means that architects use the form of a building to bring about visual control; visual control can create the atmosphere that the architect wants to achieve. Visual control includes the use of walls, screens, different forms and even the light. Both nature light and artificial light are important elements for atmosphere creation in sacred buildings. In the book *A Guide for Sensory Deprivation* Laci describe light as "Light and shadow determine spatial qualities; when used in the right amount at the right time and in the right space, light can accentuate, direct attention, create an atmosphere of contemplation and composure, foster togetherness in prayer, or underline the solemnity or festiveness of an occasion.”

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High ceiling
It can be seen from the sacred retreats that have been discussed that high ceilings were widely used to create a sense of that to which people can only aspire. Converging beams of sunlight help people to concentrate on the light’s focus. In addition, high ceilings can form an upper empty space to create an echo that gives a sense of the ethereal.
Enclosed and semi-enclosed courtyards
Enclosed and semi-enclosed courtyards are found in many plans of sacred buildings, provided to create a meditation space. As a transitional space between indoors and outdoors, the enclosed courtyard has a buffering function. At least two outlets are needed from one courtyard in order to go through a space to another space. While they are traversing the courtyard, the surrounding walls give people a feeling of security.

Fig.33: Different Enclosure Courtyard in religion buildings

Fig.34: Courtyard sketch of Shaolin temple
Screens
Screens are architectural elements used in many old sacred buildings. Pillars and columns were used on old buildings as a support, in addition creating a screen corridor, which blurred the difference between indoor and outdoor space.

Fig. 35: Screen sketch of Konark sun temple

Fig. 36: Different screen system in religion buildings
2.3.2 Material
A tactile, tasteful surface can be appreciated by anyone. Materials, in their raw state, stimulate the senses. They express their material essence as well as their age. The texture of exposed stone, for example, is infinitely pleasurable. Textures also affect our gait, and hence the way we move through a space and how we experience it.  

Materials are also testament to the effects of the elements and the passage of time, and hence evoke a phenomenological awareness. Especially in old retreats, materials were constrained by the local environment and climate. Steven Holl penetratingly observes that: “The architectural transformations of natural materials, such as glass or wood, have dynamic thought- and sense-provoking qualities. The materials communicate in resonance and dissonance, as do musical instruments. Like instruments of woodwind, brass, and percussion, their orchestration in an architectural composition is crucial to the perception and communication of ideas, as the orchestration of instruments is to a symphonic work.”  

Fig.37: Different materials used in religion buildings

2.4 Analysis of precedents

Light and emotion that created in Church of the Light
Church of the Light, Tadao Ando, Japan, 1999

Tadao Ando took great care when using light in his work, Church of the Light, in Osaka, Japan. He turns dark into light, and light into space that gives visitors a feeling of the sacred when they see light coming into the interior in the form of a cross. The enclosed building form creates pure, unadorned space that raises the occupants’ awareness of the secular and spiritual within themselves.

Tadao Ando has described his works thus: “In all my works, light is an important controlling factor. I create enclosed spaces mainly by means of thick concrete walls. The primary reason is to create a place for the individual, a zone for oneself within society. When the external factors of a city’s environment require the wall to be without openings, the interior must be especially full and satisfying.”

Won Dharma is a spiritual and recreational retreat for Won Buddhists in Claverack, New York. Its architects have shown much respect for nature and made full use of screen and courtyard structures in the retreat buildings. There are three courtyard buildings in total. The screen-created corridors are the main pedestrian lines for the occupants and recreate the dappled effect of sunlight coming through tree canopies, while also providing solar protection. The courtyard buildings allow for silent walking meditation from courtyard to courtyard. In addition, natural passive cooling can be achieved when open the door on both side of the courtyard. Cross ventilation through the public area to the courtyard provides passive cooling for the meditator.

Visual control in the Yoga House
Yoga house, WMR Arquitectos, Chile, 2011

The Yoga House is a small retreat for the practise of yoga and meditation, located on the mountainside above Matanzas beach, Chile, overlooking the bay. The design is intended to integrate the building within the powerful landscape slope and to derive the building’s aesthetic from the qualities of its surroundings. The whole building is quite transparent and all the yoga rooms are facing the sea. The intention was to be able to view the sea from the backyard, through the house. The rooms are separated by sliding walls that create individual spaces for meditation and other activities. Visitors’ visual lines are controlled so they can see only the sea view and are not affected by other users.

High level Visual control in the Think Tank Retreat
Think Tank Retreat, RMA Architects, India, 2009

The Think Tank Retreat in Goa, India, is composed of a health centre and several units for living. The retreat was conceived as independent boxes that are integrated on a common plinth under a large clay tile roof. The terraces of the separate boxes are for meditation, yoga and meetings. Users on the meditation terraces not only enjoy natural cross ventilation but also have a view from on high where they can meditate uninterrupted by the movements of others.

Water use in the Prayer and Meditation Pavilion
Prayer and Meditation Pavilion, Studio Tam associate, Sudan, 2007

The Prayer and Meditation Pavilion is located in Khartoum, Sudan to provide a meditation space for people of all religions and all faiths. The two water pools in front of the retreat create a spiritual separation between the external macrocosm of the world and the internal microcosm of the building, which is formed by two unaligned white cubes, connected by a semi-transparent cover of palm leaf stalks. The architect has made great use of water in this design to isolate the whole pavilion and create a non-denominational natural space. The non-specificity of the meditation space makes for a flexible, functional meditation retreat.

Use of walls in Stanford University meditation center
The Windhover Contemplative Center, Aidlin Darling Design, California,

The Windhover Contemplative Center is an example of using walls to guide people’s ability to experience the environment. Each wall creates a semi-enclosed space for the people who come into the centre. "Water, in conjunction with landscape, is used throughout as an aid for contemplation," says the architect. "Fountains within the main gallery and the courtyard provide ambient sound, while a still pool to the south reflects the surrounding trees." While paintings on the wall are illuminated, other areas of the hall are kept intentionally dark to direct visitors’ attention to the artwork and the landscape. Visitors can also obtain views of the outdoor landscape through screens.

Wang Shu is seen as an icon among architects from China and the world for his reuse of traditional materials. In his project, the New Academy of Art, he uses old tiles attractively in the design of the eaves, roof and even in the wall. All the tiles have come from historical buildings, giving the new building a calm, quiet feeling. According to Wang Shu, in addition to their visual effect, the tiles have wonderful practical value – their overlap creates a gap between them that provides natural air-conditioning for the room below. In winter, the air space forms a self-adjusting system to keep people warm. Wang Shu thinks that many traditional materials carry a sense of history that should not be abandoned, so he has reused discarded materials in new buildings to make the materials become fresh again.
3.0 Physical context
Asia comprises many vigorous cultures, creating a region rich in traditional architecture. Traditional forms combine place making and disciplined materiality in a sensual response to such basic determinants as climate, context and technology. The built works are invariably tectonic, with an inescapable sense of the tactile.\textsuperscript{45} China is a nation with ancient civilisations that boast a rich historical and cultural heritage.

My design is based on how meditation culture is carried out in China and it attempts to overcome the lack of identification with the national culture that is found in many modern buildings. As a result my research concerning physical context focused on China’s present situation with regard to meditation, and an analysis of traditional landscapes, building forms and materials.

Although China do not have any state religion, a study of Confucianism and Taoism, two conflicting philosophies that underlie much of modern Chinese thought, is mandatory in China’s education system.\textsuperscript{46} Taoist meditation has a very long history record, and has developed various techniques, for example, qi cultivation.


\textsuperscript{46} Victor Mair (tr), \textit{Wandering on the Way: Early Taoist Tales and Parables of Chuang Tzu} (New York: Bantam Books, 1994), 64.
In Guanzi's essay 'Inward training' which is the oldest writing of qi cultivation He described Taiji as: "When you enlarge your mind and let go of it, when you relax your vital breath and expand it, when your body is calm and unmoving: And you can maintain the One and discard the myriad disturbances. ... This is called 'reversing the vital breath': Your thoughts and deeds seem heavenly."

Taoist meditation is carried out in two main ways. One is zuochan, which in Chinese means 'seated meditation'. The other is Tai qi, which has been called 'stillness in movement', referring to the energetic visualisation of qi circulation. Tai qi is quite popular with older people in China and has also attracted many young people. At public parks in any major metropolis you can see people of all races and ages practising Tai qi, the ancient Chinese exercise. I therefore decided to use the Taoist form of meditation for my meditation centre. Taoist sitting meditation will be carried out in the meditation hall and Tai qi – the active way of meditation – will take place in the open area created in my design.

48 Harold Roth, Original Tao: Inward Training (Nei-yeh) and the Foundations of Taoist Mysticism (New York: Columbia University Press, 1999), 92.
49 Victor Mair (tr), Wandering on the Way: Early Taoist Tales and Parables of Chuang Tzu (New York: Bantam Books, 1994), 64.
During my research into Chinese traditions, one thing that I found interesting was the function of traditional landscapes that were added into buildings as places in which to refresh the emperor’s spirit and where he could escape the demands of politics. Although it was an enclosed space it lessened the feeling of having boundaries, which was relevant to my topic of providing a relaxing place in the city centre.

**Qianlong Garden**

Qianlong Garden provided a good contribution to my design. When the Qianlong Emperor, one of the great art connoisseurs of all time, conceived an enclosed garden within the Forbidden City for his future private leisure and inner development, he was building on a Chinese artistic tradition that had evolved over three thousand years. The art of these spaces had evolved into a highly sophisticated form incorporating rocks, trees, paths, and architecture, as well providing reference to literary and historical traditions and reflecting the owners’ morality, wisdom, and values.

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The earliest known Chinese garden manual, *Yuan Ye* (The Craft of Gardens), was written around 1631 by Ji Cheng. He discouraged symmetrical compositions, confused arrangements, and mechanical placements of "caves below and terraces above, pavilions to the east and gazebos to the west...Precipices, peaks, caves and gullies should look as if they were boundless...As you wander wherever your feet take you, you may doubt that there is any boundary to the place; as you raise your head to gaze around, deep emotions will be stirred in you." In other words, such a garden is an art form. According to Ji Cheng's *Yuan Ye*, the primary components of a garden were buildings: halls, studios, terraces, bowers, and pavilions, and then gateways, covered corridors, connecting buildings, paving, walls, artificial mountains, and eaves, rocks, curving waterways, and borrowed scenery.

Ji Cheng demanded a strong linkage between the architecture and the landscape, emphasising the importance of window views that "make use of the scenery outside" and stating: "Buildings will only be right if they harmonise with the landscape."  

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The layout of the garden

As can be seen from the plan, the fundamental design solution was to divide the area into four courtyards arranged in a north–south sequence, thereby establishing a rhythm and preventing the long, narrow space from being viewed and experienced in its totality. The distinct composition of each courtyard also creates its own rhythm.\(^{54}\)

The pavilion, which is on a small rise, guides you along the walks, and moving from one courtyard to another brings different visual experiences. Unlike Western gardens, Chinese gardens pay much attention to where the plants originally grew. The combination of architecture and plants makes the scenery different at every step. The purity of life in the mountains had come to exemplify a desirable lifestyle in Chinese society and eventually was incorporated into gardens within the urban environment.\(^{55}\)


3.3 Traditional building forms

Chinese building forms have a history as ancient as that of the Chinese culture – which is longer than the written history of China. Wood is used as a main material in traditional architectural forms. Timber frames were widely used as bearing systems.\(^{56}\) Columns, beam and board, and even tenon and mortise were processed by stone artifacts to form building structures made of wood.\(^{57}\) Distinguishing features of Chinese architecture include architectural bilateral symmetry, courtyard building forms, arcuated roof systems, and tenon and mortise structures. From the design perspective, the exposed tenon and mortise structure existed early in Chinese buildings, reached its peak in the Tang dynasty and became a specification in the Song dynasty. An exposed structure, as the name implies, is a structure that is exposed in places to make the structure a symbolic experience.

Every structural component has significance. Similar structures are found in many Western buildings. Over a long period, before methods of mass production, designers probably all held the same view as Loos’s ‘Ornament is Crime’. This common idea might have come from technological limitations or a shortage of resources. Designers paid more attention to the mechanical requirements of the structure than its ostentatious ornamentation. At that time aspects of ratio aesthetics, material aesthetics and architectural aesthetics were all embodied in structure.

In my design, I use the essence of traditional Chinese art and rebuild a retreat with traditional Chinese characteristics.

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3.4 Traditional materials

In Northern China, apart from timber frames, materials traditionally used were burnt products, for example bricks and tiles. Stone was often used in the construction of foundations, and other materials such as clay and bamboo were also used. When I was researching old buildings in Jinan, I analysed the building materials that had been commonly used near my site.

Grey brick, stone and clay had been widely used. Tiles were found in many roofs. Reasons for using those materials, apart from the rich natural resources from which they were derived and which were known to everybody, were their strong adaptability to the climate, and that they were convenient to fell, transport and process. Their use over the years led to a distinctly Chinese aesthetic and philosophical concepts. Chinese people fully understand and acknowledge the excellent performance of materials such as wood, and the ability of a timber-framed building to withstand natural disasters, including wood's good shock resistance. Jinan is in a mid-latitude area, so a clay wall above the timber structure could provide effective natural insulation to withstand Jinan's continental monsoon climate.

Unfortunately, the government has caused many old buildings to be demolished during the development of the old Jinan town. I thought that if I could reuse some of the old stones, or bricks and tiles, my building would have traces of the old that would cause people who used my retreat to think deeply about the old structures, and everyone would appreciate their tactile properties.
4.0 Programme
In addition to functional areas such as a meditation hall, individual meditation rooms and accommodation, which I analysed as being necessary from looking at the retreat precedents that I investigated, I found other possible functions after investigating several contemporary meditation centres. An example was the San Francisco Zen Centre, which offers regular monastic retreats, daily meditation and practice periods, lectures, workshops, organic farms and classes. This Zen centre was closer to what I was looking for because it provided a place for a diverse population of students, lay people, priests, visitors and monks to practise, guided by teachers. Programmes at the Zen Centre also reach out to the community, helping the homeless, prisoners, and those in recovery from addictions. Other activities include protecting the environment and working for peace. Guest accommodations can have 20 peoples at the same time.

A second example was the Gaia House\textsuperscript{59} in South Devon, England. It is a retreat centre that offers silent meditation retreats in various Buddhist traditions and includes various community activities, such as a vegetarian restaurant, Dharma talks, workshops and online courses. Retreats are separated into group retreats, family retreats, work retreats and personal retreats, geared to the needs of different people. The management report shows that the retreat can hold around 100-200 people visiting during weekdays and allowed about 20-30 for more the one day stay.

5.0 Design
Design brief
In the light of my design objective, my design was to take effect in Jinan city, Shandong province, China. The city has an intellectual atmosphere with a cultural foundation. As part of the project, the meditation centre needed to provide services and facilities that would support the learning and teaching of Taoist meditation techniques, and provide a room for private meditation. It was possible that other function rooms might be needed due to requirements of the site and cultural requirements. Provision of accommodation was necessary to meet the need for long- or short-term stays in the retreat and to supply suitable facilities. According to my research into sacred buildings, their building forms could be used for reference. Traditional materials and building forms needed to be rearranged in the building design, not only to create an uplifting environment, but also to allow those who used the building to be in harmony with nature.

The beneficiaries of the design would be Chinese people who thought they were under too much pressure and wished to do something about it instead of breaking down or doing something extreme. In order to understand my beneficiaries I launched an anonymous investigation via ‘Wei survey’ an official Chinese survey website. According to the survey, the respondents were not very familiar with meditation and intended to take some free classes before regularly attending sessions or classes. I decided to take the profitable and non-profitable aspects of the centre into consideration in my design.

Programme
Based on my research, I assume that the meditation centre will hold a total of 300 to 500 visitors per day. For the research programmes there will be five or six teachers in the centre. The accommodation area can hold 20 people per day including the teachers.

Then I decided to meld the group room and conference room into one meditation centre and provide a personal retreat for individual meditators. Accommodation would be provided for long-term visitors or weekend visitors and Taoism teachers. Workshops would provide craft and drawing activities for younger people. There was to be an outdoor space for active meditation such as Tai qi. A vegetarian restaurant and tea-house would provide space for people to get together and enjoy a cup of tea or some light dishes and would also be a good place in which to relax. I divided the functional buildings into three:

Private (Absolute quiet)
• Meditation centre
• Personal retreat

Semi-public (Relatively quiet)
• Workshop
• Tea-house
• Accommodation

Public
• Outdoor active
• Reception and vegetarian restaurant
Design | Programme selection

Fig. 86: Programme selection

- Group retreat
- Zen Centre
- Work retreat
- Family retreat
- Personal retreat
- Library
- Guest accommodation
- Teacher's accommodation
- Workshop
- Family programme
- Tea house
- Farmers' market
- Hot pools
- Apprenticeship
- Outdoor active
- Sunday market
- Vegetarian restaurant

Zen Centre
- Personal retreat
- Absolute quiet

Accommodation

Workshop
- Tea house
- Relatively quiet

Outdoor active
- Vegetarian restaurant
- Relatively public
5.2 Site

Previous site
The location selected was in my hometown, Jinan, which is the capital of Shandong province in Eastern China and played an important role in the history of the region from the earliest beginnings of civilisation. Taoism flourished in Jinan in the 5th century CE. In particular, a large number of cave temples were established in the hills south of Jinan, for example the Thousand-Buddha Cliff. The historical background of Jinan provided a strong basis for my design.

Previously I had chosen a site on Red Leaf Mountain, which is about a one-hour drive from Jinan city and one hour and twenty minutes from Taian city in an excellent, naturally scenic area. To enjoy the weather and observe the beautiful valley covered in red leaves, it is better to visit from the end of October until the last week of November. But I soon began to doubt whether people would want to spend one hour driving to a new place.
New site
I then decided to change the site to Daming Lake, which is located in the bustling city centre of Jinan. The reserve for the lake is surrounded by a commercial area and high-density apartments.
Site condition
As can be seen from old maps, the lake once occupied only part of the area. From 2007, the government has been expanding the lake area and opening it up for the use of the surrounding communities, to provide more lakeside space for residents and visitors. In the enlarged section, people have been encouraged to construct heritage-style buildings for public use; for example, boat docks, restaurants, an art museum and public parks. My site, which is quite easy to access, is in the middle of the development area where one can enjoy a view of the lake reserve.
Fig. 92: Site location in new map

Fig. 93: Minghu road view
Fig.95: Site vegetation and pedestrian

Design | Site condition
Design | Site condition

Fig. 96. Site axonometric drawing
Minghu Road
Minghu Road is a main road running alongside the proposed site. To the left of Minghu Road are commercial buildings, restaurants, a shopping street and hotels. However, the site is sheltered from these by its surrounding vegetation. There are two parking areas near the entrance to the site where people can park and then walk to the meditation centre.

Chaoran Art Museum
Chaoran Art Museum is a place where people hold traditional Chinese painting and sculpture exhibitions. The museum is 51.7 metres high and has been built following the heritage style. This is the tallest building in the proposed site area.
Imitation ancient buildings
Imitation ancient buildings surround the site, which means the proposed building style is already limited to the heritage style. The lakes between the buildings are a nice feature close to my site.

Lake side
The most pleasing thing is that the site enjoys a view of the lakeside reserve. The area near the lake can be used as a personal meditation space. People sitting near the lake will be soothed by the beautiful, quiet lakeside and views that change with the seasons and the weather.
Design | Site condition

Fig. 102: Building height restriction
Building height and density restriction

Commercial buildings and a high-destiny residential area surround the site at Daming Lake. The design is limited by this context. The average building height in the lake reserve area is 4 to 10 metres while density is more flexible, at around 12%.
As can be seen from the site analysis, the site has surrounding views of the lake and is limited by its context. Site strategies utilize the surrounding conditions to provide spatial variation and transition within the project. The transition is from the bustling urban environment to a quiet lakeside. Figure 104 shows the arrangement of different activities within the site and the attempt to achieve a transition from the public area to a relatively quiet space while ensuring visual penetration between each building.
**Entrance and exit arrangements**

There are seven different ways to access the site, but most people will come from Minghu Road and from the south, near the existing parking area. The site needs to have an area that will not be affected by streams of people, so three entrances have been placed on the south side of the site, one to the right of the site. The other means of access will be used as exits.

**Transition partition**

Based on the entrance and exit arrangements described above, the site can be divided into three different areas: a public area close to the main entrances to the south; a semi-public area in the middle, and a private area close to the lakeside from which people may exit only.

Fig.105: Entrance and exit arrangement and transition partition
Programme arrangement

According to the programme analysis, various parts of the site will have different functions. The reception area and restaurant occupy the public area, so staff at reception can tell first-time visitors how the meditation centre works and where to go. The vegetarian restaurant can provide vegetarian food for the teachers and people who want to have a light meal and enjoy some food with friends in a quiet dining space. The outdoor meditation area is a place where people can do Tai qi and other outdoor activities. It is an open space that can be seen by people who walk into the site and all are welcome to join in. The tea house is a gathering space where people can choose different teas and enjoy a peaceful moment watching the art of tea making. The workshop will be used for drawing classes and as a pottery workshop. It is also a space in which to relax. In addition, the workshop is a place where adults can leave their children when they want to carry out meditation without being disturbed by their children. The main meditation hall is the place where people will sit together and perform group meditation led by teachers. Accommodation is located in the private part of the site. It can be used by the teachers or by people who have come from a distance and intend to have an extended stay. Space for
individual meditation is provided on the northern part of the site where people can sit and enjoy the view of the lake while not being disturbed by others.

The site has two other main divisions: the profit-making part and the non-profit-making part. People in China are unfamiliar with meditation. As a result, the meditation spaces (the main meditation hall and the individual meditation space) will be free for the residents of the city of Jinan to encourage them to accept this healthy lifestyle and as a contribution to the community. The profit-making activities will be the restaurant, tea house and workshop, which will support the operations of the entire centre.

**Courtyard system**

In accordance with the research into landscapes, a courtyard system was used in the master plan of the design. The site is separated into five different courtyards. Each courtyard can create a relatively quiet and secure environment. The area in the middle of the courtyard is a good space to fill with the landscapes that are components of the peaceful environment in the meditation centre.
Visual lines from surroundings

The visual aspect is an important component of the site. It is necessary to ensure that people can see through the whole site while walking along the site. By using visual lines we can test what people can see when they stand in one place. Use of visual lines also helped to design some screens in the landscape design with which to protect private views.
Pedestrians
There are two different footpaths on the site. The main pedestrian line that extends through the whole site is around 3.7 metres wide. As in Chinese traditional landscapes it winds and zigzags, which also acts to prolong the time a visit takes and slows down the pace of a tour. The narrow pedestrian line is around 2 metres wide and functions to allow people to enjoy the small landscapes in the courtyards.
Meditation centre strategies

Strategies have been derived from research into sacred buildings, China's own conditions, and studies of precedents. Each of the building designs followed strategies to define the spatial qualities of the building complex. The main objective has been to create a sacred and peaceful environment along with landscapes to make full use of natural resources. This has been done by creating different building forms and by the use of courtyards with landscapes in the master plan, emphasizing the transition between urban life and nature, and working towards people’s acceptance of the new centre by using traditional building materials.

Fig.110: High ceiling use in meditation hall
Fig.111: Screen use

High ceilings

High ceilings were used in the design to create a feeling of spaciousness. The abundant ceiling space gives good potential for lighting design. The light coming from the ceiling space can be arranged to highlight some areas and provide a sacred atmosphere.

Screens

Screens can create mottled light and shade, which makes a good component in the transition between outdoor spaces and the indoor function area. The dim feeling created can allow more privacy for the occupier.
**Courtyard system**

Derived from the courtyard analysis, the courtyard building form can make an inner space within the building itself. This provides a quiet place for privacy and rest. In addition, the courtyard system gives the buildings good natural flow.

**Visual control**

Visual control is a strategy used to control what people see. Whether it is control of the view in the building or in the landscape, visual control can make people focus on the view that is provided.
Fig. 114: Conceptual model
Conceptual model
The conceptual model comes from the collection of different functional spaces that may inform the intention of the design.
5.4 Function development

**Building entrance**

**Reception and restaurant**

There are four entrances arranged on the southern part of the site. No one way can lead to the function buildings because of the natural feeling of being without boundaries that is desired for the whole complex. However, the first building to be seen by the visitors will be the reception building and restaurant. The reception building can be used as an information centre to introduce meditation and reasons for performing meditation. It can also tell first-time visitors what activities are carried out, provide a time-table for classes, and explain where people can go and how they can perform meditation. The vegetarian restaurant in this area will be a feature to attract people to come and enjoy a healthy diet and they may be additionally attracted to the meditation activities. The two functions are linked, but the areas are separated by the use of walls. As a conscious design strategy, the reception area and restaurant are used to break down the connection with busy urban life outside and create a relaxed and peaceful atmosphere upon entry.
Fig. 117: Perspective drawing of reception and restaurant
Workshop

The workshop is next to the reception area and is also located in the public area. It is a space for activities such as drawing classes, pottery workshops, and introductory meditation courses. It could even be leased for conferences. The adults in a family can leave their children here and carry out meditation alone. For the shared space, the courtyard system has been used to provide a secure area and allow for an inner activities area within the workshop.

At the transition area between the interior and exterior of the building, screens can make great contributions to the control of atmosphere.
Fig.120: Perspective of workshop

- Drawing Room
- Pottery
- Mill - class
- Child Room
**Tea house**

The tea house will be the support facility where people gather for tea and to watch the art of tea-making. It is a space where people can enjoy the quiet and peaceful atmosphere created not only by the building but also by the smell of the tea. The atrium in the middle allows light into the middle and will provide visual control as it makes people concentrate on the tea-making table in the centre.

![Fig.121: Tea house plan and elevation](image1)

![Fig.122: Water + central light + courtyard system](image2)
Tea House
- Tea Room
- Toilet
- Storage

Fig. 123: Perspective of tea house
Accommodation

Across the stream in the middle of the island will be the teachers' and long-term visitors' accommodation. The way that it is accessed means the public cannot use the space, which allows privacy for teachers and visitors. Courtyards and screens are used in order to make the space more peaceful and secure. The corridor here can be used for walking meditation.
Fig. 126: Perspective of accommodation
Meditation hall
The main meditation hall is the central meditation area within the complex, where tutors will lead groups of people doing seated meditation and will teach aspects of Taoist thought that help people to get rid of stress. High ceilings have been used to give a sacred feeling. The light that comes from the ceiling bring people a feeling of being enclosed by the universe and feel safe and relaxed. The small pool in the middle will engender a sense of meditative quiet. The landscaped pools surrounding the hall before entry into the meditation area will give people the feeling of clearing their busy minds when they pass the pools and lead to their having a different state of mind in the meditation area.
Fig. 129: Perspective of meditation hall
There are two types of individual meditation rooms: high-level rooms and low-level rooms. In both types visual-control strategies determine what scenery is visible and how it is seen. People can see whether the space has been occupied from the back south side windows. Warmth from the southern-facing windows will heat the meditation space during winter and the screens can be used to provide shade during summer.

**Personal mediation space**

Fig.130: Personal meditation space plan and elevation

Fig.131: High level meditation+screen +visual control
Fig.132: Perspective of Personal meditation space
Landscape design is just as important as building design for the whole project. Landscape and buildings together communicate how the project combines with nature to create the feeling of peace that the meditation complex provides. The sensation of having no boundaries will be achieved by arranging the landscape appropriately.

**Landscape pool**

Landscaped pools are used to echo the lake so people within the complex can feel close to the water. The sound of flowing water can make pains and troubles disappear and the heart regains its equanimity.
**Courtyard landscape**

Courtyard landscapes are used in the landscape design to create an open space for outdoor meditation and other activities. The change in levels in the landscape design will attract people to join in and the steps can be used as sitting areas.
The use of walls for visual control
Landscaped walls are used to limit the view from one space to another for the purpose of creating a sense of mystery as well as for security. The walls can help people evacuate the area if necessary.

Borrowed scenery
In traditional Chinese landscaping, scenes from the surroundings such as the view of the lake, the art museum tower and the tall trees can be borrowed and used in the landscape design. The different angle can become the ‘camera aperture’ that allows people a richer view.
**Subfloor walkway**
A development from the traditional landscape – the subfloor walkway will enrich one’s viewing experience by allowing walking at different levels. The plants beneath will grow freely.

**Pavilion use in landscape**
A pavilion in a landscape can be treated as a viewing gallery. The gap between each column will affect how people view the scenery. The designated route can be used for crowd control.
5.6 Structure design

Subfloor structure

Jinan is famous for its rich groundwater resources. It is common to find underground water during construction, due to the special geological conditions. If you build in an urban area, for example, a normal underground garage or basement needs to be ten metres deep. At three metres deep, the site will run into groundwater. To get rid of that water takes more than six months. Therefore all subfloor structures were considered in my design.

All the buildings will be elevated by from 0.5 metres to 1 metre. The entrance to each building will be of above-ground decks or stones.

Fig.145: Subfloor structure sketch
Fig. 146: Sub-floor structure exploded view
**Sloping roof system**

The roofs of traditional Chinese buildings inspired the roof design. I have changed the tented roof from having four or more slopes to having only one slope. Light from the south can come into the building through the gap that the horizontal window creates between the roof and the wall below and ventilation can be achieved at the same time. Old tiles can be used here and will gain new life in the buildings.

Fig. 147: Slope roof structure sketch
Fig. 148: Perspective of roof structure
The exploring structure
Tenon and mortise structures on timber frames are used in my design. This method is a national art treasure that comes from thousands of years ago. The column structures will be interlaced overlay. Some of the brackets are designed to be longer than the footprint or even connected to the other buildings in order to add visual depth and emphasise the relationships between them.

Fig. 149: Exploring structure sketch
Fig. 150: Exploring structure exploded view
From my research into historical buildings and the old buildings surrounding the site, I chose traditional materials such as stone, timber, grey brick and tiles. Combining old materials into a new structure gives fresh life to those discarded materials.

The main frame of the whole building is of timber. The wall is constructed of timber placed at various angles and has a bamboo frame with insulation in the middle to keep the interior of the building warm. The wooden construction can be deeply shaded to the west and south to allow the entry of natural daylight without gaining excessive heat. Tiles are used as part of the wall to make sure of ventilation during summer.

Tiles are also used in the sloping roof system, densely arranged. Grey bricks are used in part of the block foundation system and stones are used to make landscaped walls and footpaths stone.
6.0 Design Outcome
Fig. 153: Meditation hall
The perspective view of the whole complex indicates how the dynamic and static areas have been separated. The complex conforms to the site conditions and aligns with the entrance to the entire site. The restaurant and reception area occupy the public space, to be an introduction for visitors. The tea house and workshop are located in the middle of the site as the link between public and private areas. The accommodation and personal meditation areas are located cross the centre area of water. The personal meditation rooms enjoy lakeside views. Each of the buildings combines with the landscape and with the system of courtyards to create a peaceful rhythm for the function spaces.
Pedestrian circulation

There are two different walkways on site, one 3.7 metres wide and the other 2 metres wide. The routes have been arranged as zigzags to lengthen the time it takes to move around the area. In this way people can have more time to enjoy the journey and be close to nature. There is also a quick access line to the east of the site for people who want to go directly to a function room or pass through the whole site.
**Meditation space**

Visitors enter the main meditation hall by passing through a long stone passage lined with tall bamboo plants and pools to the side of the building. The still water is meant to enhance the centre’s serene ambience. Within the galleries, skylights with motorised louvres enable natural light to enter. The internal organisation of the residential buildings allows silent walking meditation from courtyard to courtyard.

Fig.157: Interior of meditation hall
Landscape arrangement
When one is standing on any of the places on the site, the buildings do not block the view of the lake and landscapes, but the landscape walls can be utilized to hide part of the view, to convey a feeling of mystery. The cube-shaped, bubbling fountains within the landscapes and the courtyards provide ambient sound, while the still pool between reflects the surrounding trees. Water as a design component, in conjunction with the whole landscape, is used throughout as an aid to contemplation. The larger courtyard area within the landscapes can be used for outdoor activities and Tai qi mediation.
Fig. 159: Interior of tea house
Fig. 160: Accommodation perspective view
Fig. 161: Individual meditation space
7.0 Conclusion
The purpose of this project was to find a way for architecture to offer a peaceful meditation space for Chinese people wanting to quieten their busy minds while remaining in the centre of a city. In addition, the use of traditional forms and materials was developed in parallel in the project to provide a sense of national identity. The whole project was addressed in the form of a meditation centre beside Daming Lake, with a series of function spaces where people could meditate or be in touch with nature. There are no standard rules for a Chinese meditation centre and meditation is not currently well understood in China. Based on various analyses of precedents in sacred architecture and meditation retreats, the project’s intention was to offer methods of peaceful relaxation. Having different ways to relax, for example, quiet meditation, individual meditation, the workshop and active meditation, tea gatherings and a vegetarian restaurant, allows people autonomy so they can choose their own ways to relax. Each of the function rooms explores the idea of building forms that create atmosphere, such as using light entering the building to make people focus on the lit areas, or using the walls to control people’s visual field so they can see only part of the view. Last but not least was the use of traditional materials in the project. Old building materials from Jinan can be used in the meditation centre to give them continued life.

The building design has taken much account of the integration of cities and nature. Landscapes between each of the function buildings were designed according to the different design components of traditional Chinese landscapes. The use of changes in level, corridors and water has created a contemporary retreat landscape that enhances the time people spend with nature and brings about more functional potential for the community.

With the increasing need to find new ways to relieve stress, there is a great need for architecture to address the problems of city living. This project shows the importance of architecture as a medium through which a peaceful and secure space can be created in a busy city. It is hoped that this project will promote the construction of meditative building forms in China and that people will accept meditation as a form of relaxation in their lives instead of other, less healthy, options.
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Appendix A
你有压力吗？
Are you stressed and tense?

1. 你平时工作和生活感到压力大吗？【单选题】
1. Do you feel the pressure during study and work lives [Single-choice]
   - 压力山大：Under so much pressure, 47.0% (47)
   - 还行吧：一般般：A little bit, 50.0% (50)
   - 完全无感：None, 3.0% (3)

2. 压力是来自于哪些方面？【多选题】
2. Where you think the pressures come from [Multiple-choice]
   - 高房价：High housing price, 24.2% (46)
   - 工作压力大：Working pressure, 30.3% (58)
   - 作业太多太难：Academic pressure, 11.6% (22)
   - 包包太贵心情不美丽：High commodity price, 10.5% (20)
   - 家庭要养老：Support the elder, 11.1% (21)
   - 小朋友要花钱：Raising the child, 12.1% (23)
   - 其他：Other, 12.5% (23)

3. 一般怎么释放你自己的压力？【多选题】
3. How do you relieve stress? [Multiple choice]
   - 喝杯咖啡：Drink coffee, 15.2% (28)
   - 听音乐做冥想：Listen to music and do meditation, 26.8% (49)
   - 唱歌跳舞：Keraoke and hang out, 14.7% (27)
   - 和朋友聊天：Talk to family members or friends, 26.6% (49)
   - 其他：Other, 7.1% (13)

4. 你听说过冥想这种减压的活动吗？【单选题】
4. Have you ever heard about meditation? [Single choice]
   - 听说过一点点：A little bit, 46.0% (46)
   - 这是什么鬼：Never, 47.0% (47)
   - 了解，自己尝试过：Yes, and I tried before, 7.0% (7)
5. 如果告诉你冥想是一种减压和放松身心的方式，你会尝试吗？
   - 不感兴趣：9.0%（9）
   - 还不错：44.0%（44）
   - 不太喜欢：47.0%（47）

6. 如果你有机会去参加一次为期一天的减压课程，你会参加吗？
   - 不感兴趣：9.0%（9）
   - 还不错：44.0%（44）
   - 不太喜欢：47.0%（47）

7. 假如你希望在市区创建一个适合冥想的空间，你会考虑什么？
   - 不感兴趣：14.0%（14）
   - 还不错：49.0%（49）
   - 超级喜欢：37.0%（37）

8. 你希望冥想课程有专业的人员指导，还是自己尝试？
   - 不感兴趣：14.0%（14）
   - 还不错：36.0%（36）
   - 超级喜欢：54.0%（54）

图163: The anonymous survey form chines official survey website "wesurvey" (Part B)
Sacred Architecture and Precedent Analysis model
Building density restriction

Site Strategies
Full name of author: Shuo Wang

Full title of thesis/dissertation/research project ('the work'):
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(A Chinese Meditation Retreat Centre in central Jinan)

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This Thesis/Dissertation/Research Project entitled: Daming Lake Mediation Centre (A Chinese Meditation Retreat Centre in central Jinan)
is submitted in partial fulfillment for the requirements for the Unitec degree of Master of Architecture Profession

Principal Supervisor: Bin Su

Associate Supervisor/s: John Pusatere

CANDIDATE’S DECLARATION

I confirm that:

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- The contribution of supervisors and others to this work was consistent with the Unitec Regulations and Policies.
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