

NANJING LIBRARY

A STUDY OF INTANGIBLE CONTENTS OF ARCHITECTURE

GANG WANG SPRING 2005

MASTER OF ARCHITECTURE

DEDICATION

Thanks to my wife Ying Yan, she gave up her job and came here to accompany me. Without her support and encouragement, I will not be able to complete this thesis.

Thanks to my parents, without their guidance and care from my childhood, I may not have the chance to study here.

Thanks to my parents-in-law. Their kindness and concerning help me to concentrate on my study.

Thanks to my friends here in Virginia Tech. Tan helped me to review my book, Qiuda Lin, Cho, Jiang Wu, Min Liu, Luis, Yongmei Gao, they all helped me when I studied here in these two years. Chengbin Zhu, Yong Yang, they bring happiness to my life.

Thanks to my committee. They are so patient and nice. I learned many things from them.

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USA

THESIS ADVISORY COMMITTEE

Professor Joseph C. Wang, Chair

Professor James R. Jones

Professor William U. Galloway

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ABSTRACT

The thesis is to discuss how to design for our time(2005) while respecting traditional Chinese culture and philosophy. It proposes a solution to the conflict between traditional Chinese architecture and modernization patterned after the West. It is an attempt to respond to the question: how can these two different cultural and architectural issues be successfully balanced to support architectural environment in modern China? Instead of using superficial cultural symbols to represent traditional culture, the thesis explores the architectural implications of the inherent principles in Chinese philosophy, through the design of a library for the city of Nanjing.

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INTRODUCTION

THE CONFLICT BETWEEN TRADITION AND MODERN

China has a five thousand years history of civilization. In such a long period, Chinese architecture has evolved to be a mature system and influenced the building art in many East Asiatic countries.

From the last century, Western architecture started to land on China when the gate of China was opened for trade and business. People got to know another architecture system. It is totally different from the traditional Chinese architecture. This difference created a deep conflict and confusion among Chinese architects for their recognition, understanding and the approach to design.

People will simply call Chinese architecture *traditional architecture*, and western architecture *modern architecture*. The western modernism definitely brings many new and advanced knowledge and methods of architectural design and construction. This presents Chinese architects with a big challenge. Because these two architectural styles as well as two cultures are so different that it can hardly find any common ground between them. Consequently, the simple solution is --- pick up one and give up the other. This process has happened several times in China during the last century. In various periods, there were diversified inclinations and they brought distinct products, which shaped Chinese cities in different ways. Nowadays, in China, it is so surprising that these two styles co-exist and build the city like a patchwork. At some points, it is not so harmonious. Many architects feel it is a tough challenge as well as a great opportunity. For me, I also want to be engaged in this discussion and try to propose some of my understandings about tradition VS modernism in this thesis.



TRADITIONAL ARCHITECTURE



MODERN ARCHITECTURE

THE DEVELOPMENT OF A MODERN LIBRARY

The library, a architectural building type originated from the Western, is regarded as a symbolic architecture that represents the Western civilization.

In the recent past, as the technology develops, reading books is almost substituted by browsing the links of World Wide Web. The birth of electronic books creates a great change to people's life. Unavoidably, this trend has been introduced to libraries.

Is this transformation going to influence the essential character of library architecture? The most concerned issue is what impact changes in information transfer may have on the organization and appearance of the library. From last decade, many of such examples have existed in the world. Those are the architectural explorations of the new - or possibly transitional -- library. Actually, no single example can be definitive.

Two primary functions occur in a library: the storage of the information sources --- books, journals, maps, recorded music and CD-ROMS, etc--- and the access to that information by individuals at a time of their choice. The direct and individual relationship of the transaction is crucial, and of primary design significance. The ultimate goal of the library design is to make this process of choice full of interest and efficiency.

THE ART OF READING

A library building should offer a system of spaces adaptable to the needs in time; the spaces and their consequent form as a building should originate from broad interpretations of use rather than the satisfaction of a program for a specific system of operation ... A library designed around the incipient influences of a standardized book storage and reading devices could lead to a form with two distinct space characteristics -- one for people, one for books. Books and the reader do not relate in a static way.

----- Louis I. Kahn

Although the development of technology has changed the ways of information storage, it does not influence people in their reading habits. The mutually relationship between readers and their reading materials are the leading role in this story. No matter what the media for reading is, whether physical books or digital links, the essential issue is still the same all along. The only difference is -- this mutually relationship is now more complex and diverse than ever.

It would be impossible to divorce a symbolic aspect from the library building. It really enshrines our belief in knowledge.

As reading is so crucially dependent on light, the control of light and particularly daylight has been a fundamental concern of library design for a long time. As libraries grew ever larger, light from above became important and the ceiling an element which was to be explored and elaborated. The modern development of library is mostly focused on the exploration of the use of light. How can the natural as well as artificial light be comfortably introduced into the library and provide people with a suitable space for reading? That is an important issue of library.

We should also remember that we are social animals, although the book or computer provides us as individuals with information, that search may still at times be considered a social act. We may want to be where the pursuit of knowledge is celebrated. And the celebration may well show itself through architecture; through the manipulation of space. Thus sociality is another issue of library.

As my project is located in China, I have tried to find the best way to introduce the modern trend and development of library architecture into my project and also represent the Chinese cultural characteristics and nationalities.

CHAPTER ONE ANALYSIS OF THE CHINESE CULTURE

CHINESE PHILOSOPHY

INTANGIBLE CONCEPT DEFINES TANGIBLE WORLD

There are two major philosophies in China -- Daoism and Confucianism.

Like the Ying and Yang symbol represents, Chinese philosophers believe there are two basic elements that co-exist in this world. One is positive, another is negative. They are mutually balanced and influence each other. In the real world, the positive can be understood as tangible objects while the negative be regarded as intangible objects.

Usually, the tangible objects can be understood by people through appearance. But under certain circumstances, they can only be comprehended in intangible ways. My thesis is to discuss how this relationship can bring us to a new approach toward architectural design, especially in China.

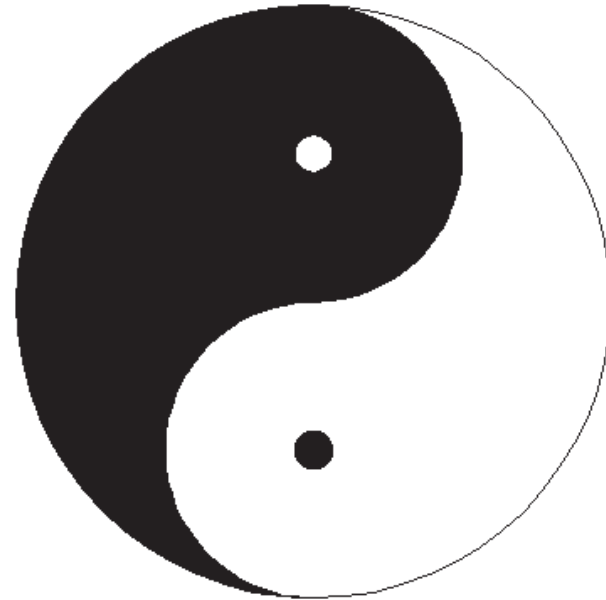
1. INDIRECT AND CHANGING

In the first chapter in Lao-tzu's Tao-te-ching, he said,

The tao that can be told is not the permanent Tao; the names that can be given are not the permanent names.

This sentence indicates that everything in this world is changing. So everything can not be definitely confirmed, it may change and represent different meanings in different situations.

This concept has developed into a tradition of expressing their ideas and feelings indirectly. People will prefer to use some ambiguous expressions which protect him and leave their interpretations to the imagination of the listeners. This philosophy even impacts the architectural design, especially the design of Chinese private gardens.



2. BE NATURAL

Throughout Chinese history, people weary of social activism and aware of the fragility of human achievements would retire from the world and turn to nature. They might retreat to a countryside or mountain setting to commune with the natural beauty. They would compose or recite poetry about nature, or paint a picture of the scene, attempting to capture the creative forces at the center of nature's vitality. They might share their outing with friends, drinking a bit of wine, and enjoying the autumn leaves or the moon.

So Nature is most admired and respected by Chinese people. They are taught to act in a natural way and protect the natural things, thus it can keep the best balance between human being and Nature.

Briefly, Chinese philosophy gives people an abstract, accidental and evanescent image. *INTANGIBLE* is the best word that synthesizes this philosophy and represents the essential ideas. It also describes some of my architectural studies for this thesis project. I believe it is the existence of intangible elements, mostly the negative, in architectural forms which makes them come alive, become human, naturally harmonize with one another, and enable us to experience them with emotion and sensibility.

CHINESE ART

PAINTINGS AND CALLIGRAPHY

Most Chinese paintings are about the natural scenery. This is also a hint of the influence from Daoism. Nature is represented by Sky and Earth, and based on Daoism, people lives in between these two elements. A perfect situation is to combine the upper sky and nether earth with the human being. So the art itself is a basic understanding of Nature and an attempt to attain this situation.

Chinese artists prefer to arrange the painting with beautiful inscriptions and carved seals. These three elements constitute the typical Chinese configuration. Thus we can also see, the traditional Chinese culture is always trying to make an integration and balance among the natural elements and artificial elements. Most of the natural scenery in Chinese paintings are imaginary. It is an anticipation of the ideal world by those Chinese artists. From these productions, we will certainly be impressed by those unimaginable perfections.



PAINTING



CALLIGRAPHY

CHINESE ARCHITECTURE

Traditional Chinese architecture has also been deeply affected by philosophy and art.

The location of buildings is always carefully selected. It should be close to Nature and suited the climate and topography. There is another knowledge *FEN-SHUI* which specifically describes it.

Chinese architecture deeply respects Natural . The configuration and structure system for architecture express this respect. Based on the consideration of natural environment, Chinese architecture also builds up its own order and hierarchy systems in the planning of community designs.



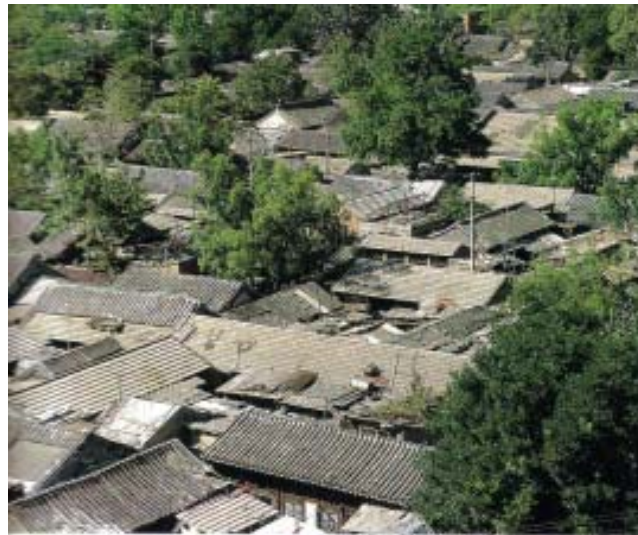
Architecture and nature are beautifully integrated. This building was constructed along the steep mountain and supported by columns and rocks.



In some urban areas, there are certain orders and hierarchies applied in architectural designs and urban planning.

Left -- the organization of traditional communities of courtyard house.

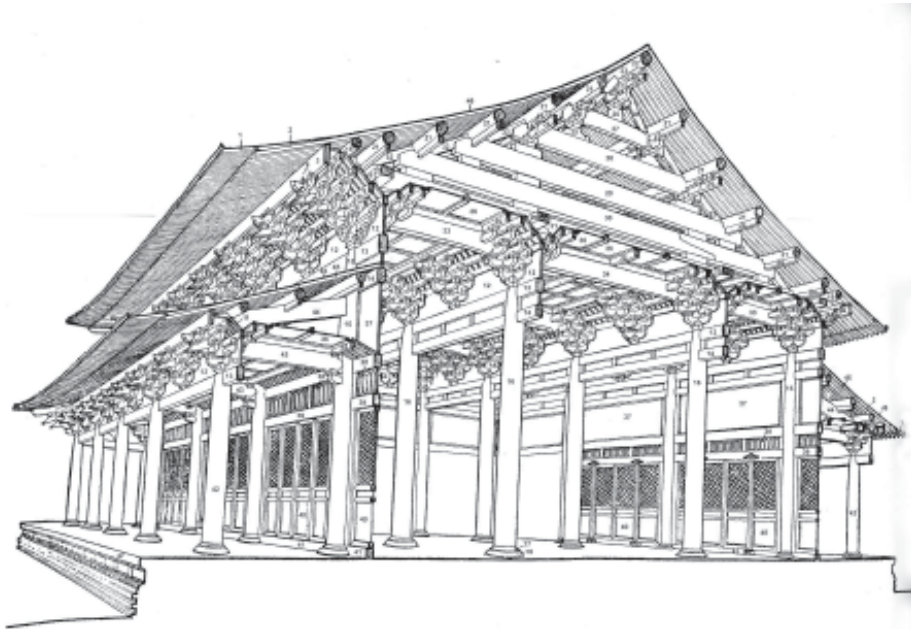
Right picture -- the Forbidden City in Beijing, China, shows the axes and hierarchy system in organizing this huge palace complex.



COURTYARD HOUSE



FORBIDDEN CITY



From this diagram of typical Chinese architecture, we can see that it consists of three parts.

- 1. Platform --- the base of the building.*
- 2. Column & Beam --- the structural system.*
- 3. Roof --- the shelter of the building. Its style shows the hierarchy of the style of this building.*

Basically, the column is the only structural member which bears the load from the roof.

Chinese private gardens specifically embed the essence of Chinese philosophy and traditional art.

The owners of those gardens are mostly officials. Most of them retired or were exempted from the government. So the private gardens were used to express their grievance of being treated unfairly or failing in accomplishing their career goals. The Chinese philosophy of escaping from the busy society to the natural artistic conception can be well applied to the conception and design of these private gardens.

The designers usually regard the design process as drawing a painting. They also use the artistic configuration for these architectural layouts. So we can easily find the commonality between paintings and gardens.



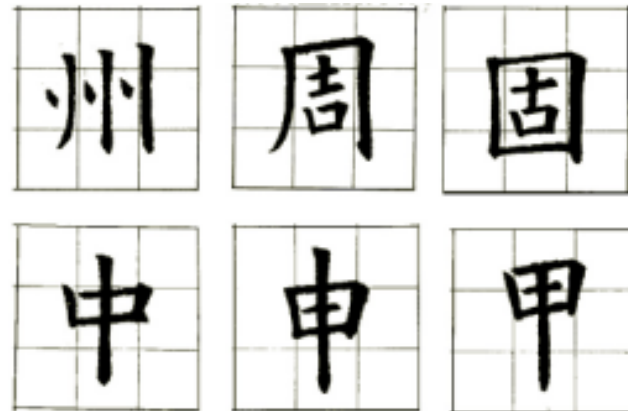
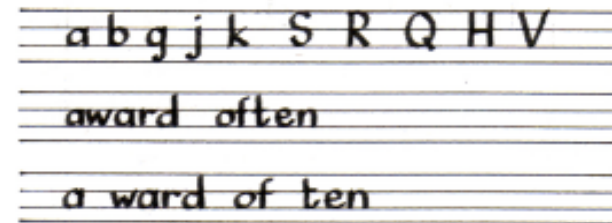
CHAPTER TWO THREE ANALOGIES

FIRST ANALOGY

To analogize the configuration rule of Chinese calligraphy --- the Nine-Chequer System

As compared with the English language, which combines groups of words in linear spacing or formation, the Chinese language is constructed with square characters. As the line can act as a structural guide for English words, the nine-chequer system is also a standard framework for the Chinese characters to be configured properly and harmoniously. This framework is in fact a hidden system which does not show up prominently but influences the way every Chinese character is constructed. To express this idea, I apply the nine-chequer system to the planning of the main structural system of the library project.

This system can be regarded as the most primitive thinking of the gesture of architecture in Chinese culture.



SECOND ANALOGY

To analogize the embodiment of Chinese traditional artistic conception of reading and studying.

While the nine-chequer structural system will be mostly highlighted as vertical columns, I try to create a traditional artistic conception of reading and studying with the quality of light and space in mind. Commonly, ancient Chinese scholars built small huts in the mountains or forests for their serenity and privacy. The amazing quality of light which penetrates through the bamboo forests and the physical landscape of bamboo forest present a typical impression of traditional studios in China. These traditional effects are expected to create a comfortable and attractive space for reading and studying.



HUT BUILT IN THE MOUNTAINS



APPROACH THROUGH THE BAMBOO FOREST

THIRD ANALOGY

To analogize the conventional Chinese philosophy of intangibility.

The most important feature of Chinese philosophy is to adapt an intangible way to meet the society and art. It also has a deep influence on architectural design, especially the design of Chinese private gardens. The sequence of paths in Chinese private gardens is the key element that transforms this kind of philosophy into architecture design.

The Chinese garden is not built as a playground for a multitude of people. The planning of circulation, which in Western gardens are admirably solved by using axes and crossroads, are no problems when visitors wander in the garden, and not walk through it. The long corridors, narrow doorways and curved parts in a Chinese garden are not intended for a crowd. It is essentially a place for contemplation and solitude.



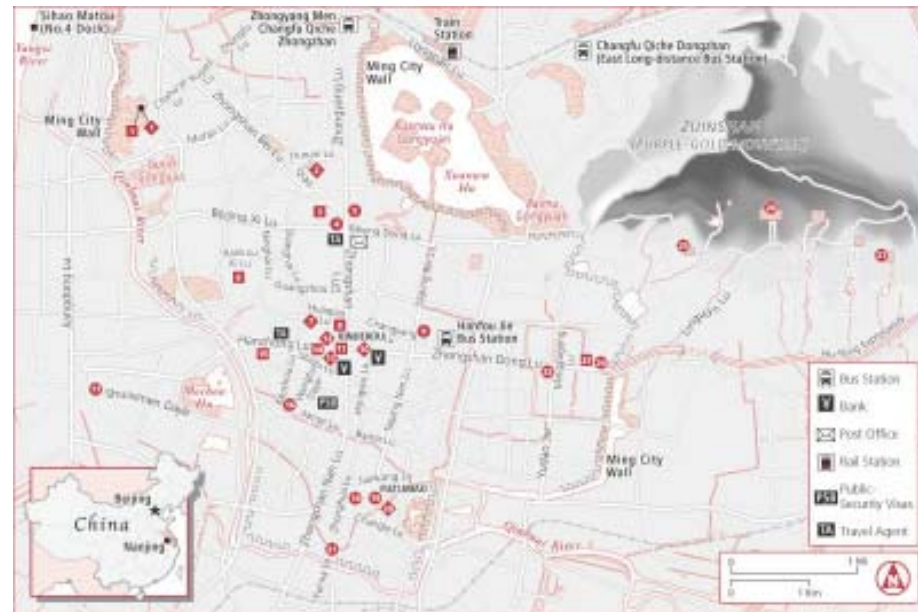
CHAPTER THREE THE DESIGN OF NANJING LIBRARY

THE DESIGN PROCESS

- I. CONTEXT OF THE CITY
- II. CONTEXT OF THE SITE
- III. URBAN DESIGN STRATEGY
- IV. PROPOSALS ACCORDING TO THE THREE ANALOGIES

THE CITY

The city of Nanjing has a history of more than 2,500 years during imperial China. It was the capital for many dynasties. Today, it is designated as one of the historical cities on the national heritage list. Modern civilization also exerts a great influence on this city. Tradition and modernism make an interesting dialogue here and seek some kind of balance between the two.





ANCIENT NANJING

CITY WALL OF NANJING

STONE ELEPHANT



FUZI TEMPLE





VIEW OF NANJING



HIGH-RISE BUILDINGS AROUND THE SITE



MODERN NANJING

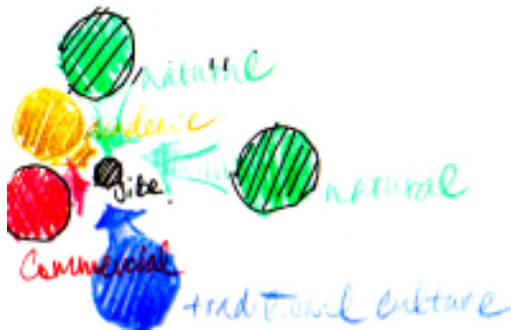
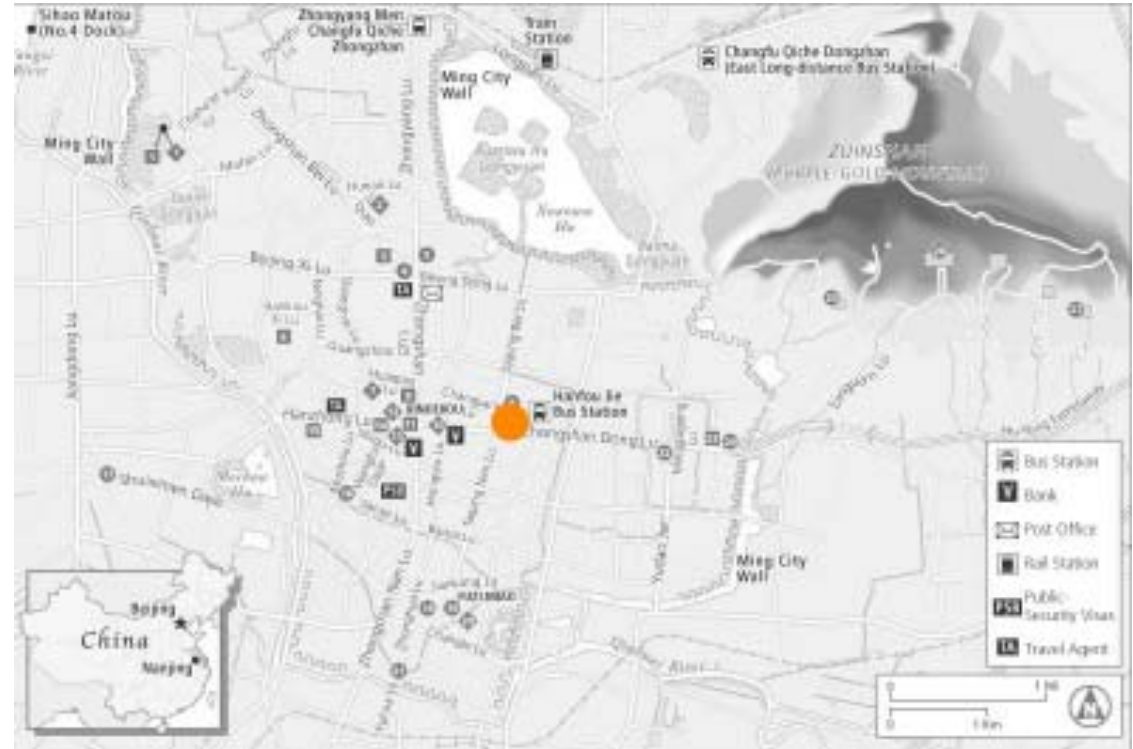


NIGHT VIEW OF THE WHOLE CITY

THE SITE

The site for Nanjing Library is located at a juncture where the modernity meets antiquity. In between, some remains of colonization style architectures continue to exist.

On the south, is the traditional culture district which is specially preserved by this city. On the west, is the downtown commercial area of Nanjing. On the north-west, is the academic area with several universities. The north and east are the Xuan-wu Lake and the Zhong Mountain, which are Nanjing's famous scenic areas.



In close proximity to the site, are three notable landmarks. The first is a group of 19th century western style buildings, which now are the setting for bars and night life of the city. The second is the President Palace which served as the official mansion of the Nationalist government before 1949. The third is the Chinese traditional private garden, Xi Yuan, which is more than 300 years old. It is located between the other two parts.

Obviously, this site acts as a bridge to connect all of these distinct cultural elements.



A



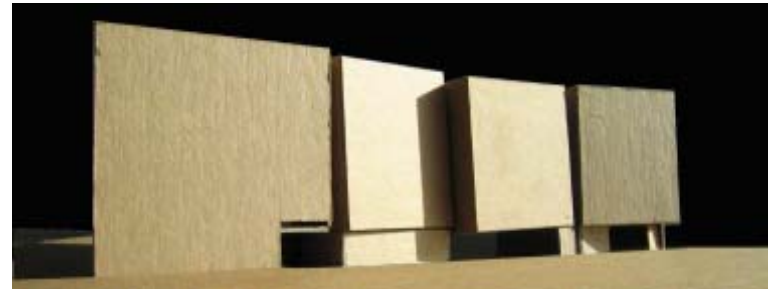
B



C

URBAN DESIGN STRATEGY

Based on the environmental context and site analysis, this building presents two faces to the urban area. One faces the commercial area, which is modest and steady, contrast to the busy region. This part of the library represents the past and present. The function in this part will be more conventional. The other main facade is looking toward the public plaza and a low-rise historical area, which is active and attractive. This part represents the future library. In this part, digital technology will be the most popular media and people will be encouraged to apply some digital system in their readings and studying.



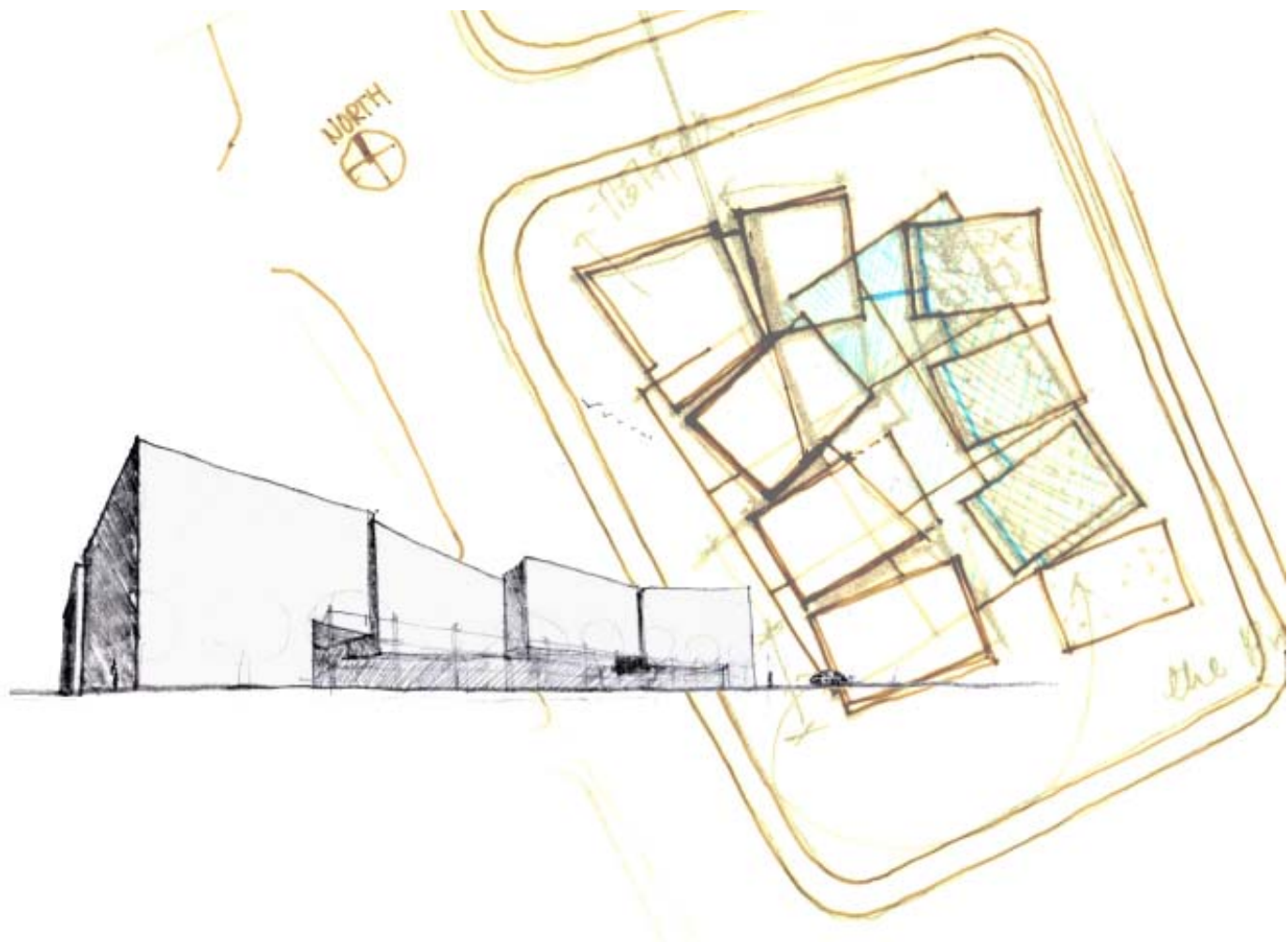
WEST FACADE



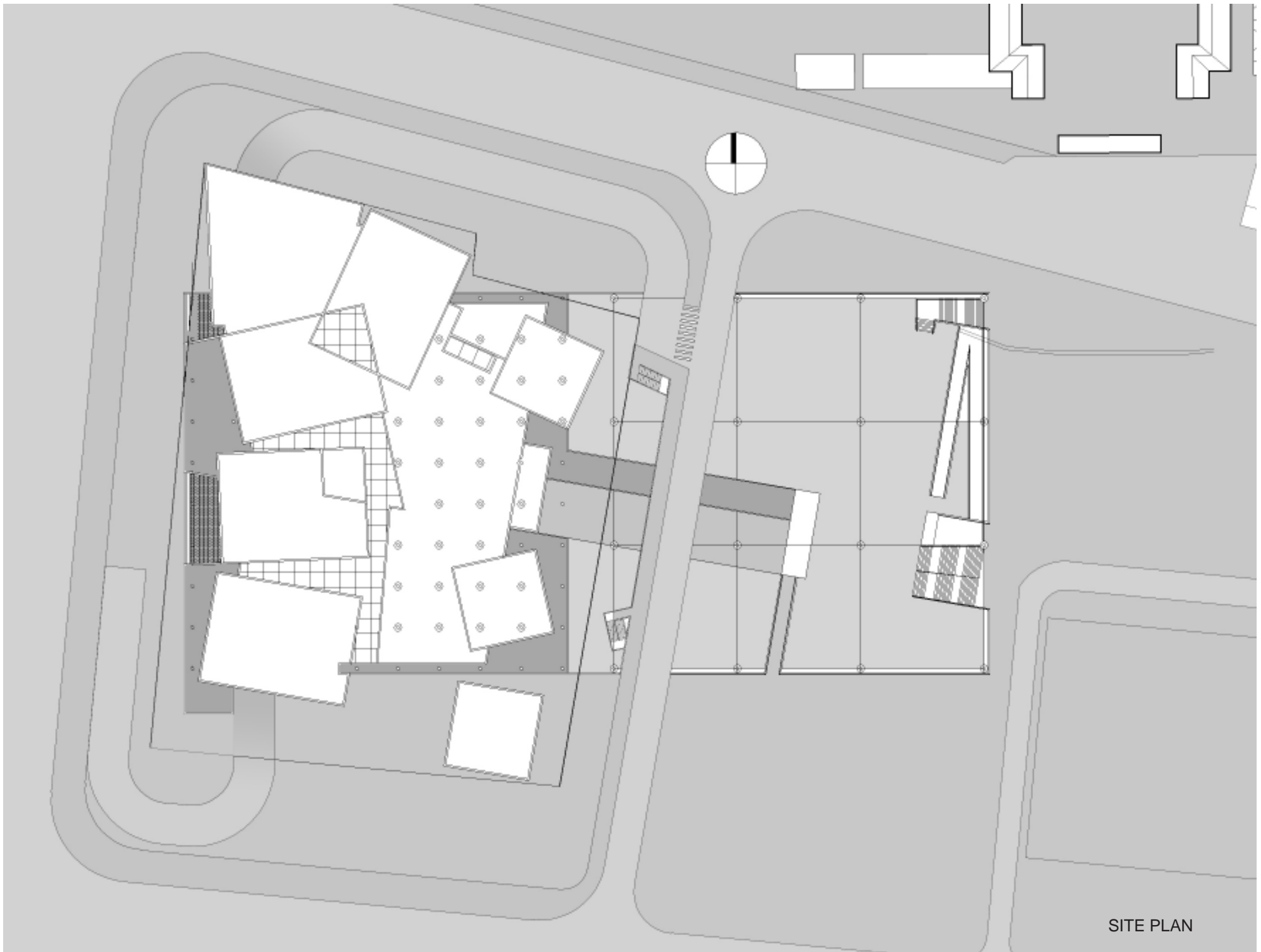
EAST FACADE

To visually connect the new library with the old President Palace, a number of pavilions are elevated so that people can appreciate the beautiful configuration between the old and the new.

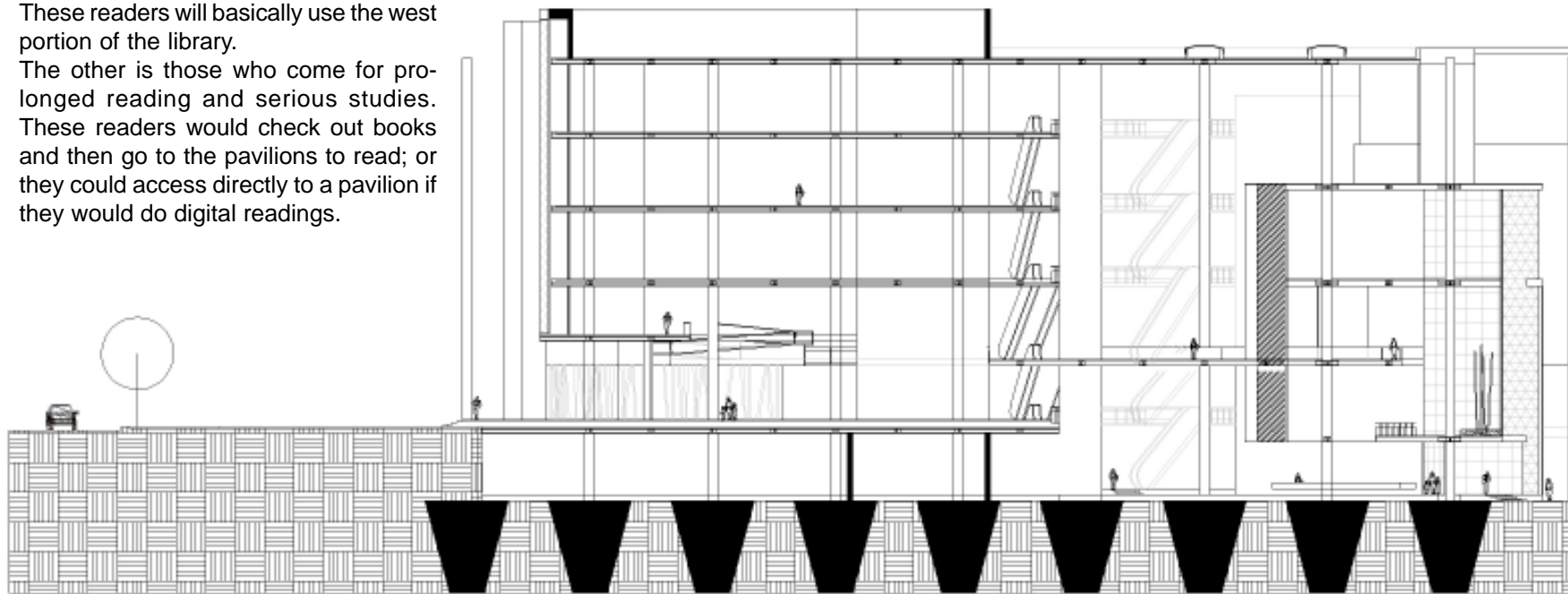
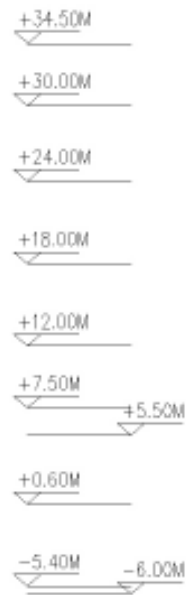


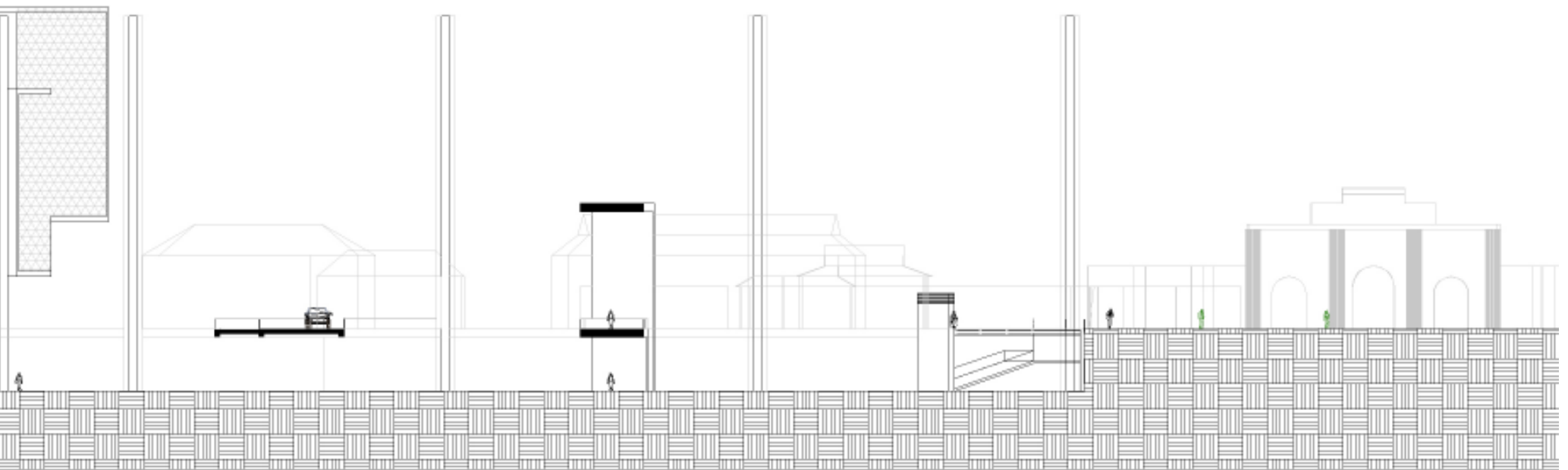


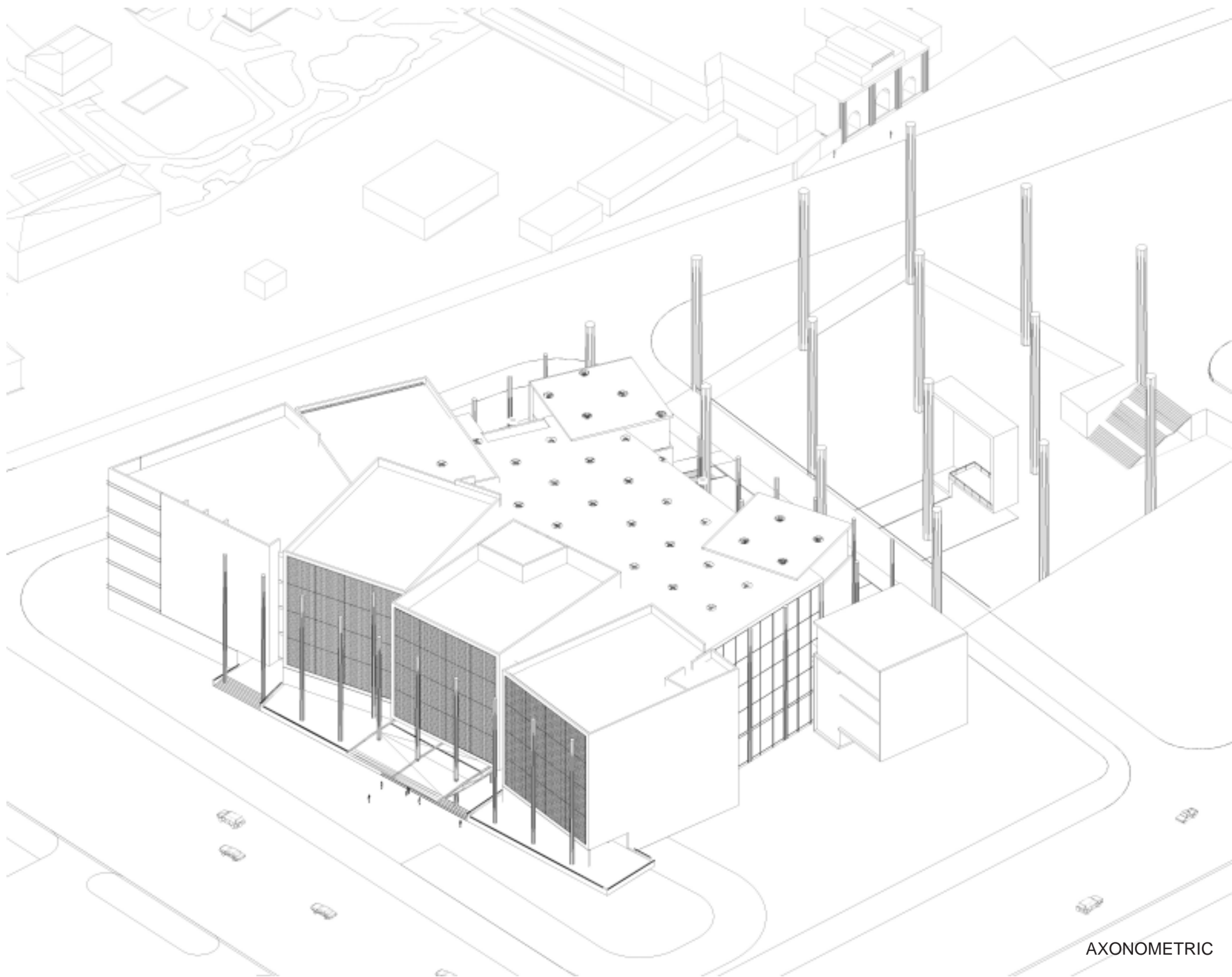
SKETCHES



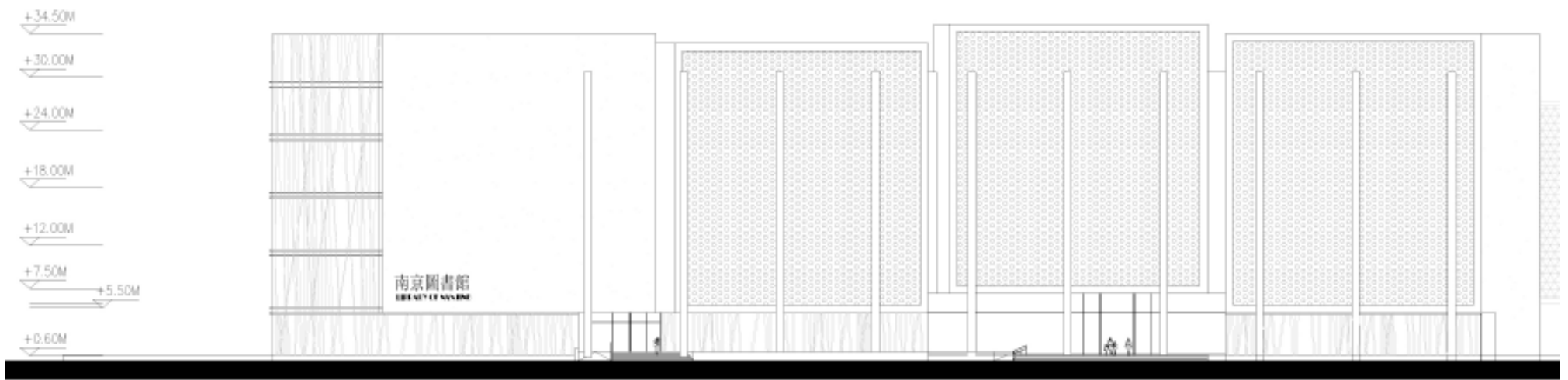
Functionally, this library serves for two different types of readers. One is those who are short-term users. These readers will basically use the west portion of the library. The other is those who come for prolonged reading and serious studies. These readers would check out books and then go to the pavilions to read; or they could access directly to a pavilion if they would do digital readings.



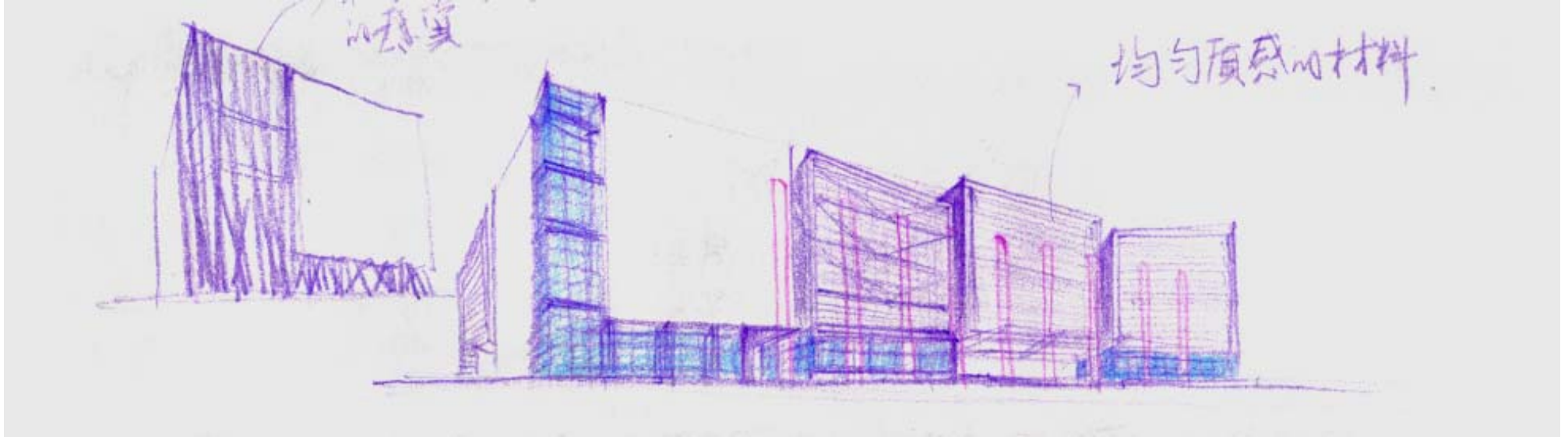




AXONOMETRIC



WEST ELEVATION



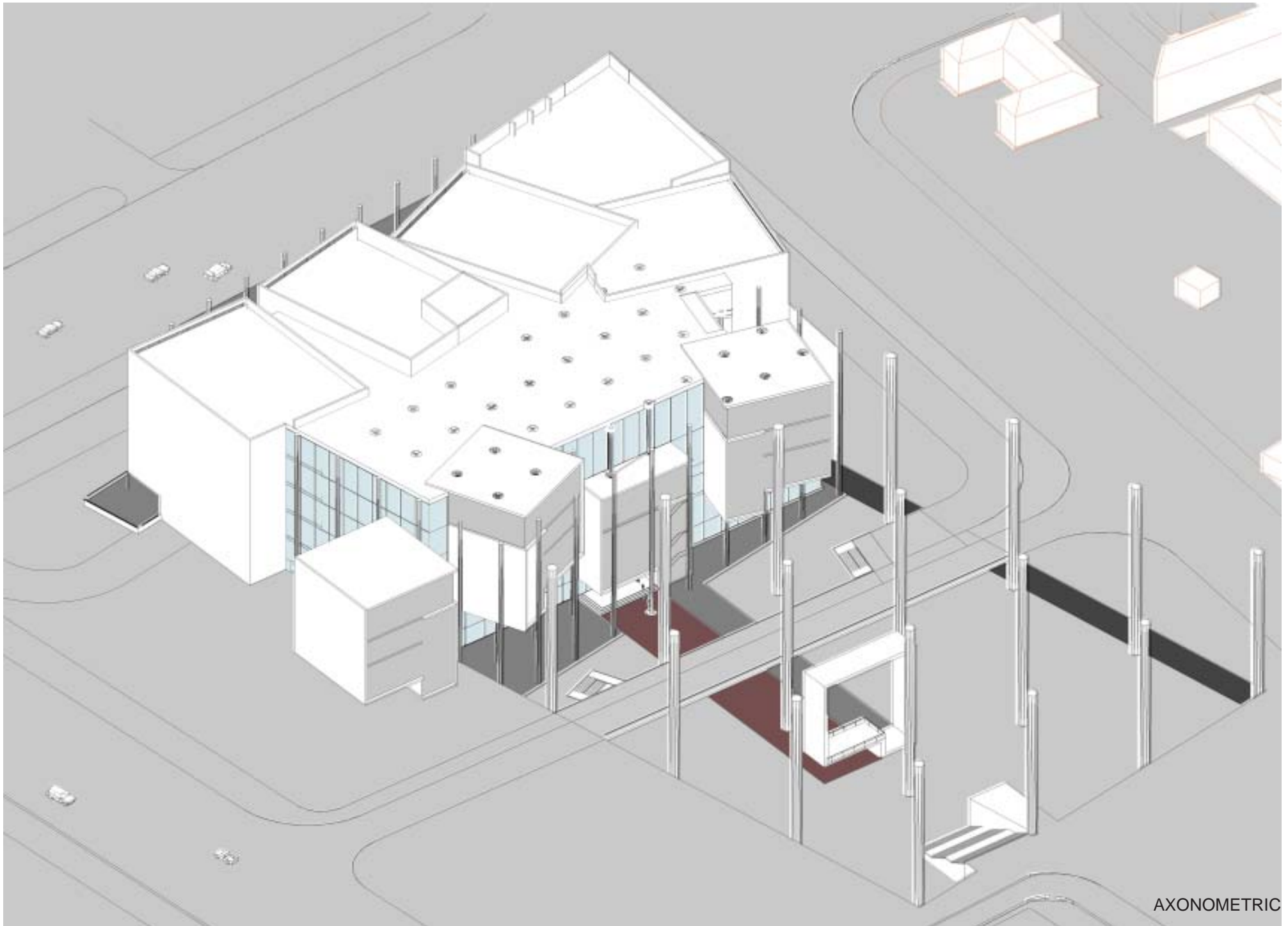
SKETCHES



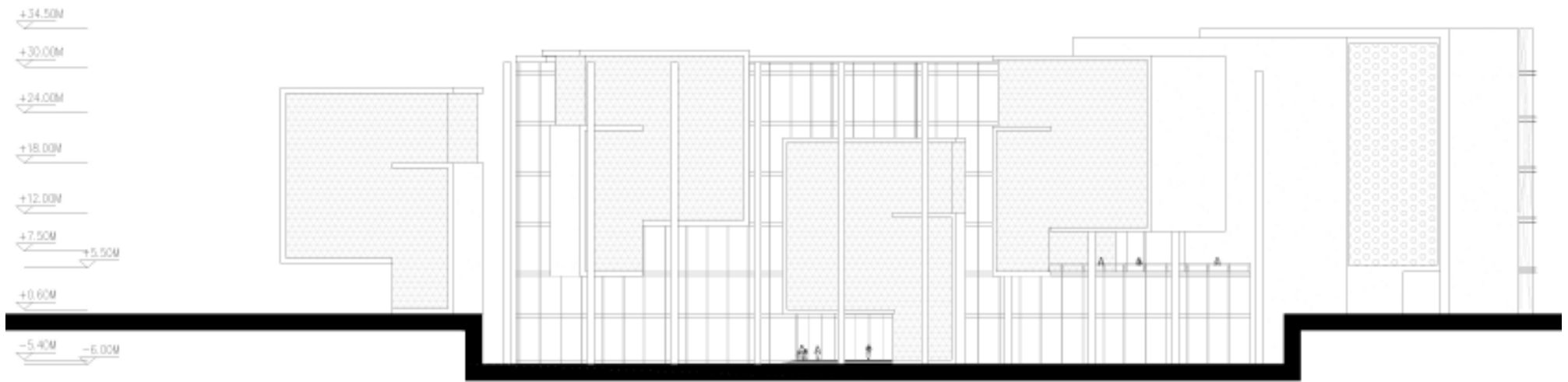
GENERAL VIEW ACROSS THE STREET



GENERAL VIEW ACROSS THE STREET



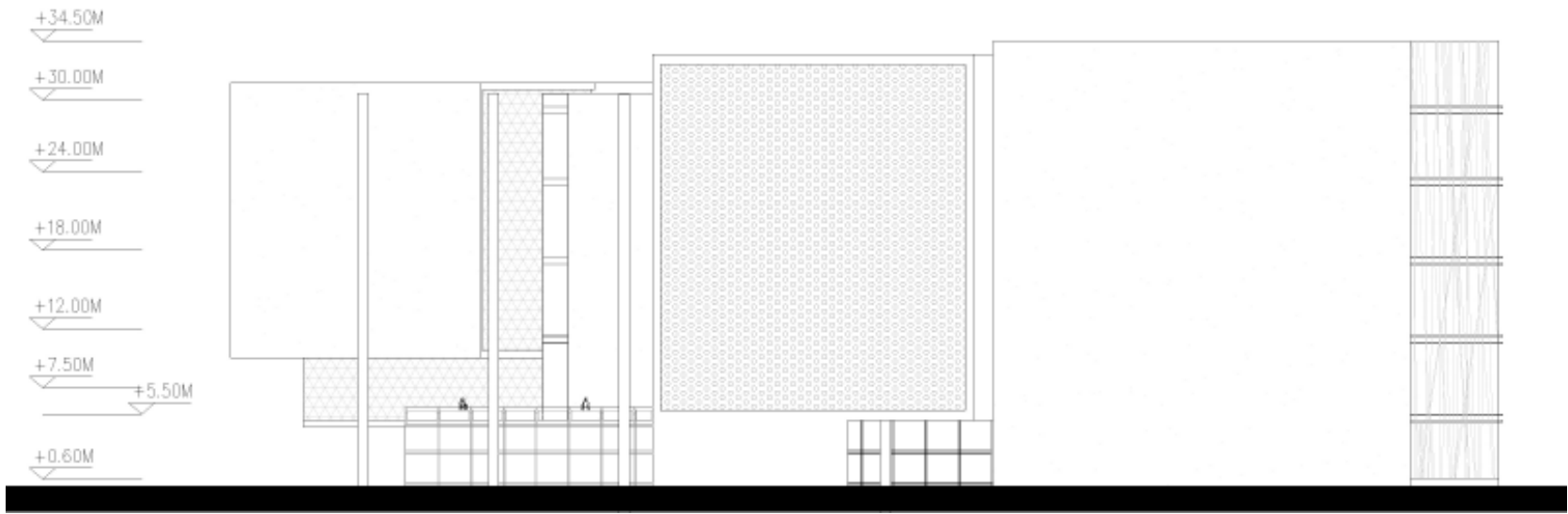
AXONOMETRIC



EAST ELEVATION



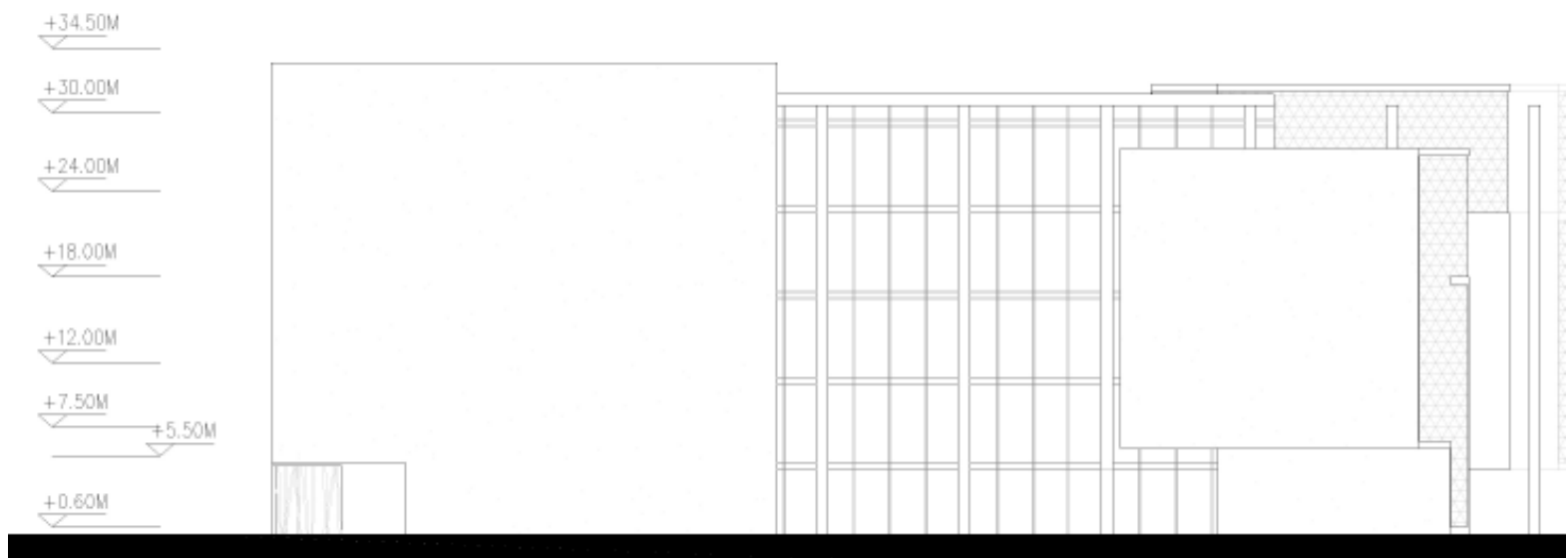
GENERAL VIEW FROM PUBLIC PLAZA



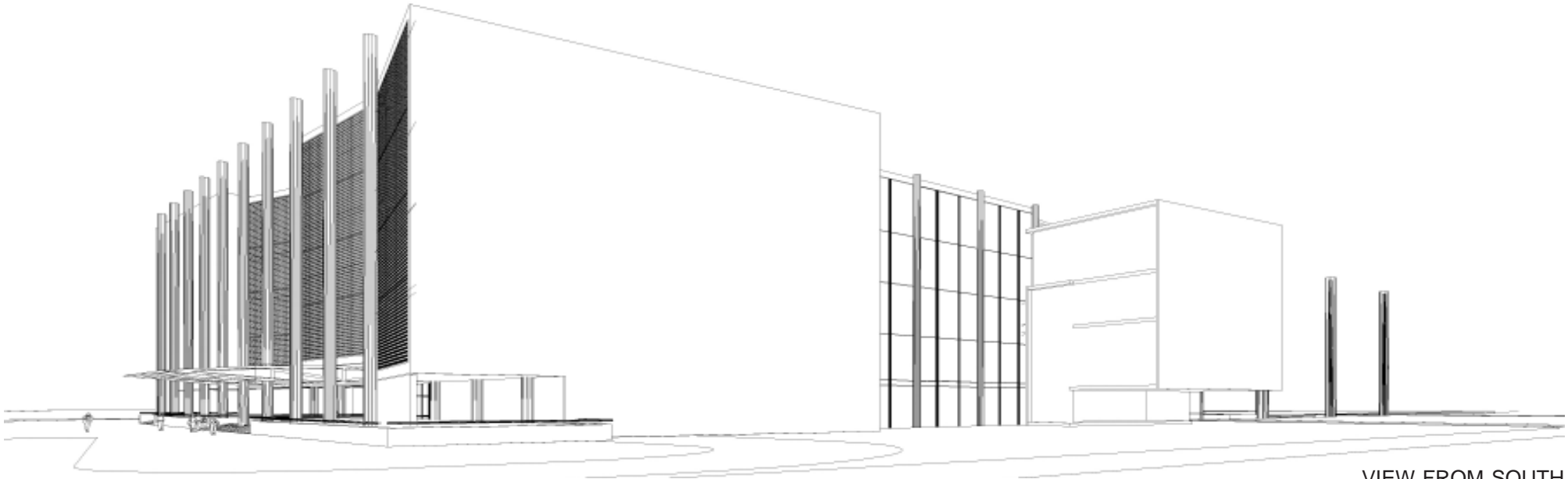
NORTH ELEVATION



VIEW FROM THE PRESIDENT PALACE



SOUTH ELEVATION



VIEW FROM SOUTH

The spatial transition between east part and west part automatically generates an atrium. This atrium acts as an important role in this building. It is like a bridge that connects the current world with the future world, and meanwhile, creates sufficient physical and psychological distance between the east portion and west portion.

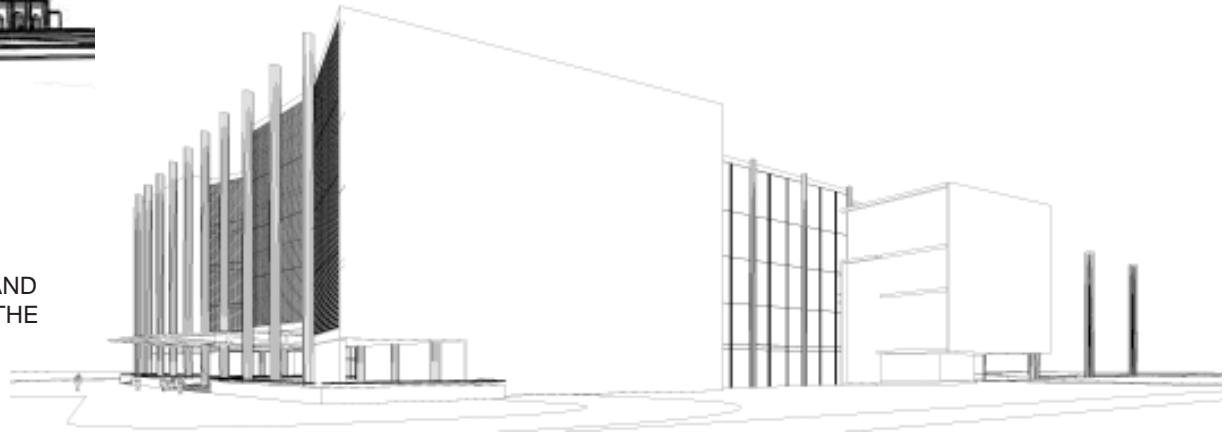
How far is too far, how near is too near?

Louis I .Kahn offers the best explanation of the distance I created here.





THE ATRIUM SPACE OFFERS A SUFFICIENT PHYSICAL AND PSYCHOLOGICAL DISTANCE BETWEEN THE EAST AND THE WEST SECTIONS OF THE LIBRARY.





A PROPOSAL THAT RESPONDS TO THE THREE ANALOGIES

Architecture lives and survives because of its beauty, because it seduces, animates and even inspires people, because it is matter and because it can -- if only some times -- transcend matter.

--- Herzog & de Meuron

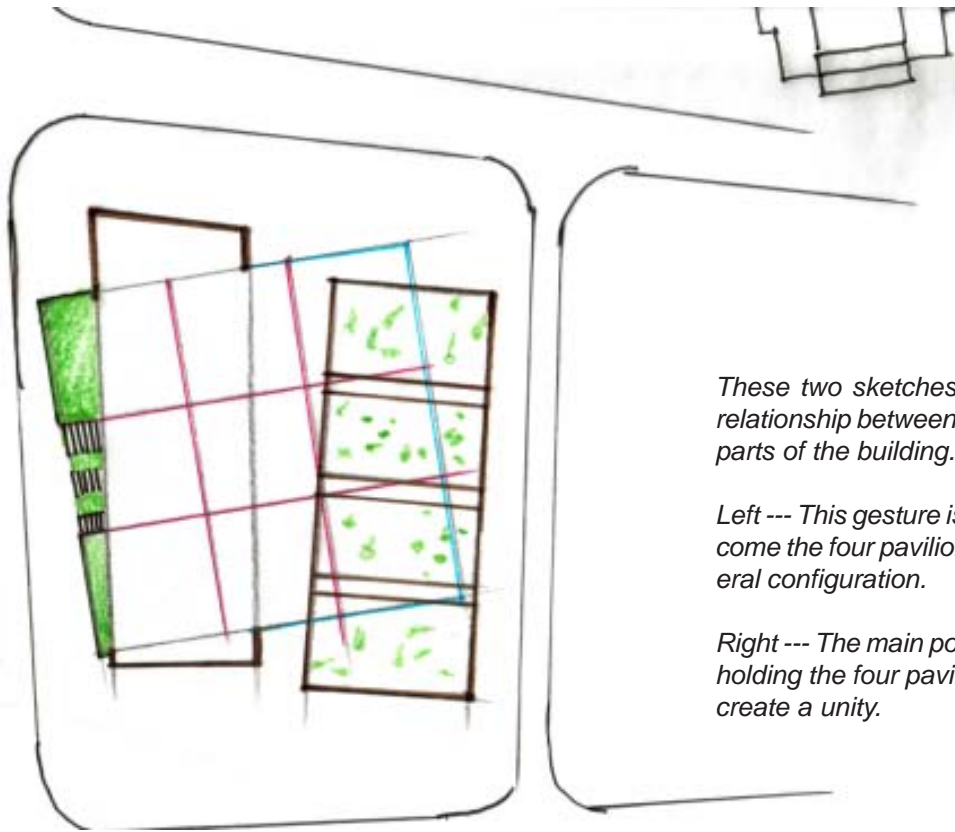
This building is just this kind of creature, it is hoped that it will attract you to breathe your life in this architecture.

The proposed library design uses an urban site in Nanjing as its context. The essence of traditional Chinese architecture, philosophy and art are also heavily implicated and instilled in the design decisions. As a measure of *success* towards my design goals, a revisit of the three analogies as outlined in Chapter Two is appropriate.

RESPONDING TO THE FIRST ANALOGY ---

The configuration rule of Chinese calligraphy analogizes the gesture regulated by structure and guides the structure system in this project. The structure system also shows the order that lies in this architecture.

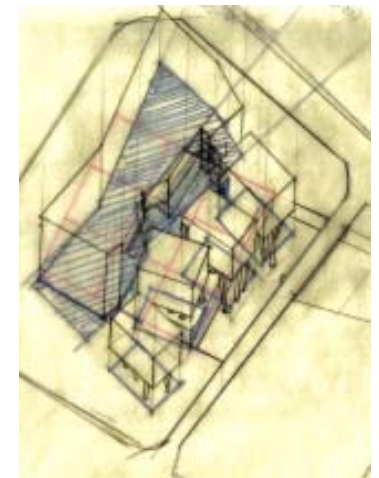




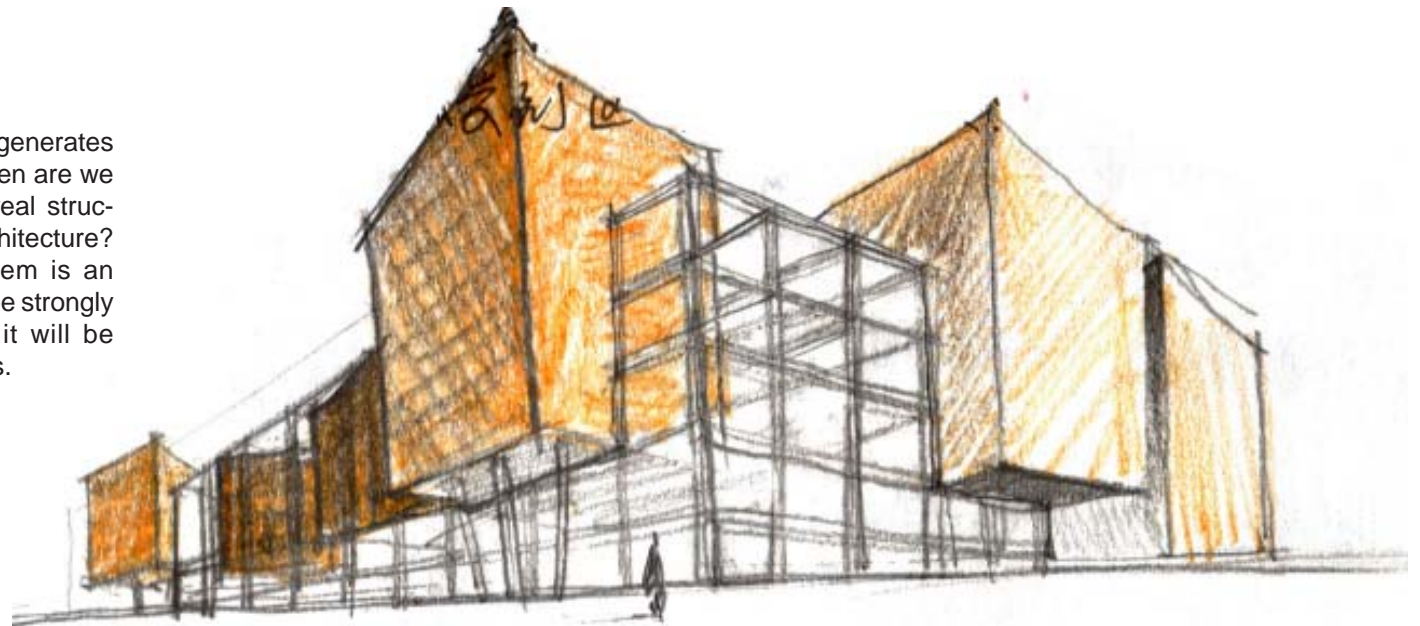
These two sketches express the relationship between the two main parts of the building.

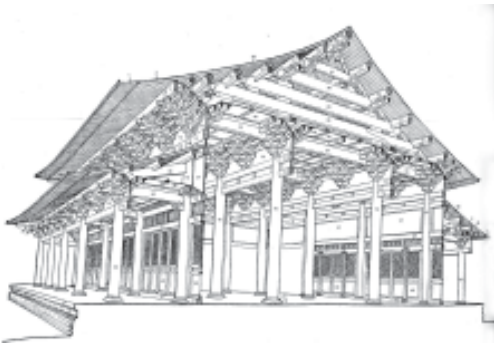
Left --- This gesture is used to welcome the four pavilions in the general configuration.

Right --- The main portion acts like holding the four pavilions firmly to create a unity.



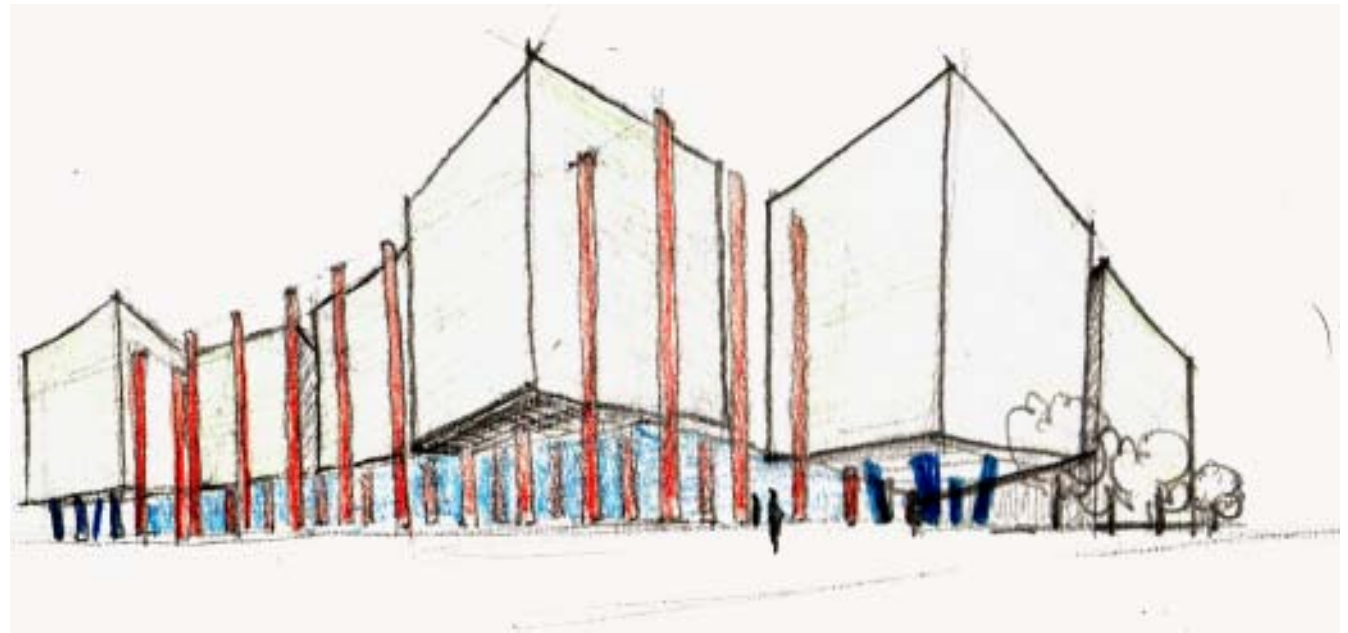
The nine-chequer grid configuration rule generates a spatial volume as shown here. How then are we going to transform this volume to the real structural system that supports the whole architecture? Meanwhile, as the nine-chequer system is an equally balanced organization, it should be strongly expressed homogeneously although it will be slightly influenced by the other elements.

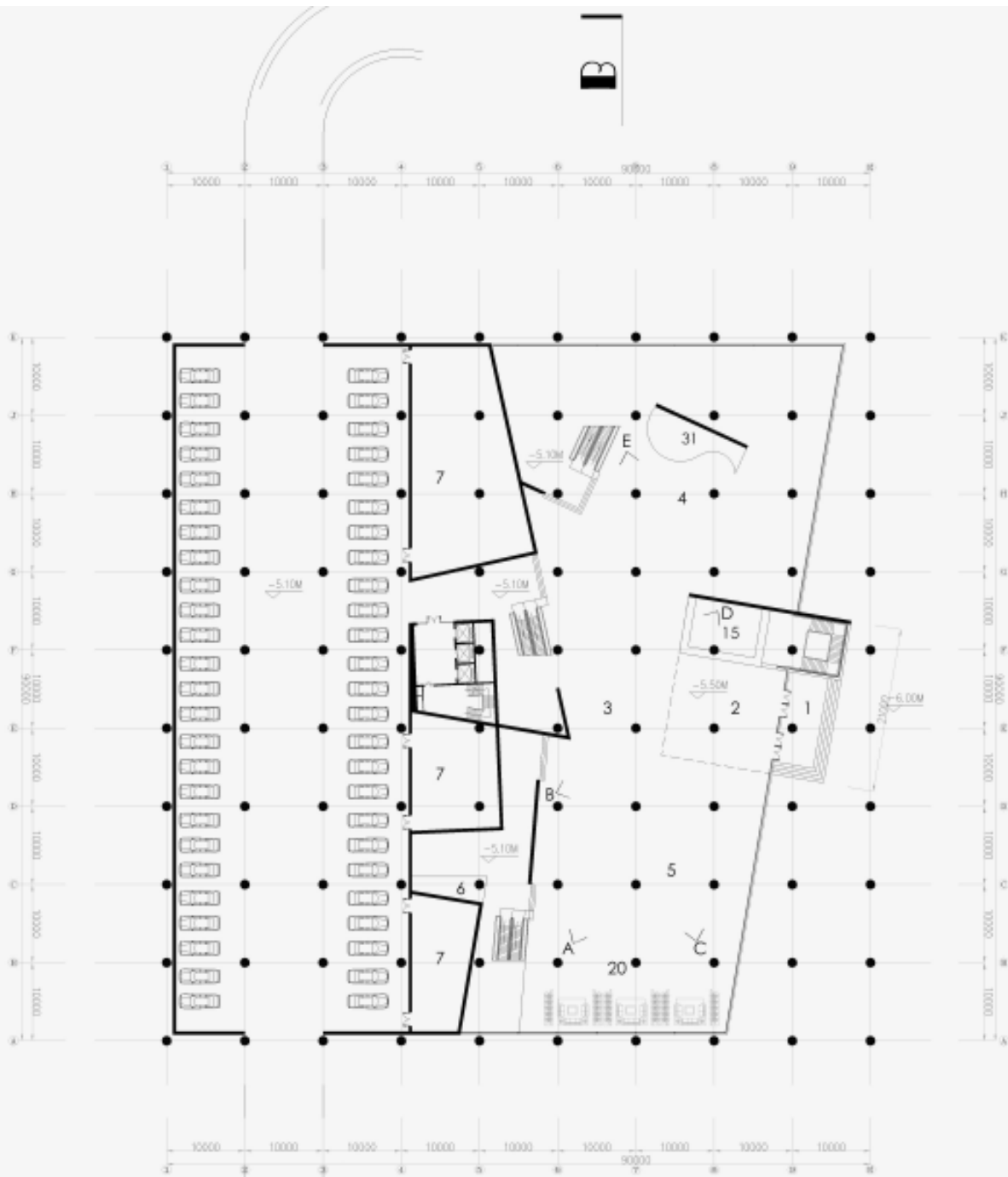




This system has a strong relation to traditional China architecture. The column (vertical elements) is the only load-bearing member in the whole building.

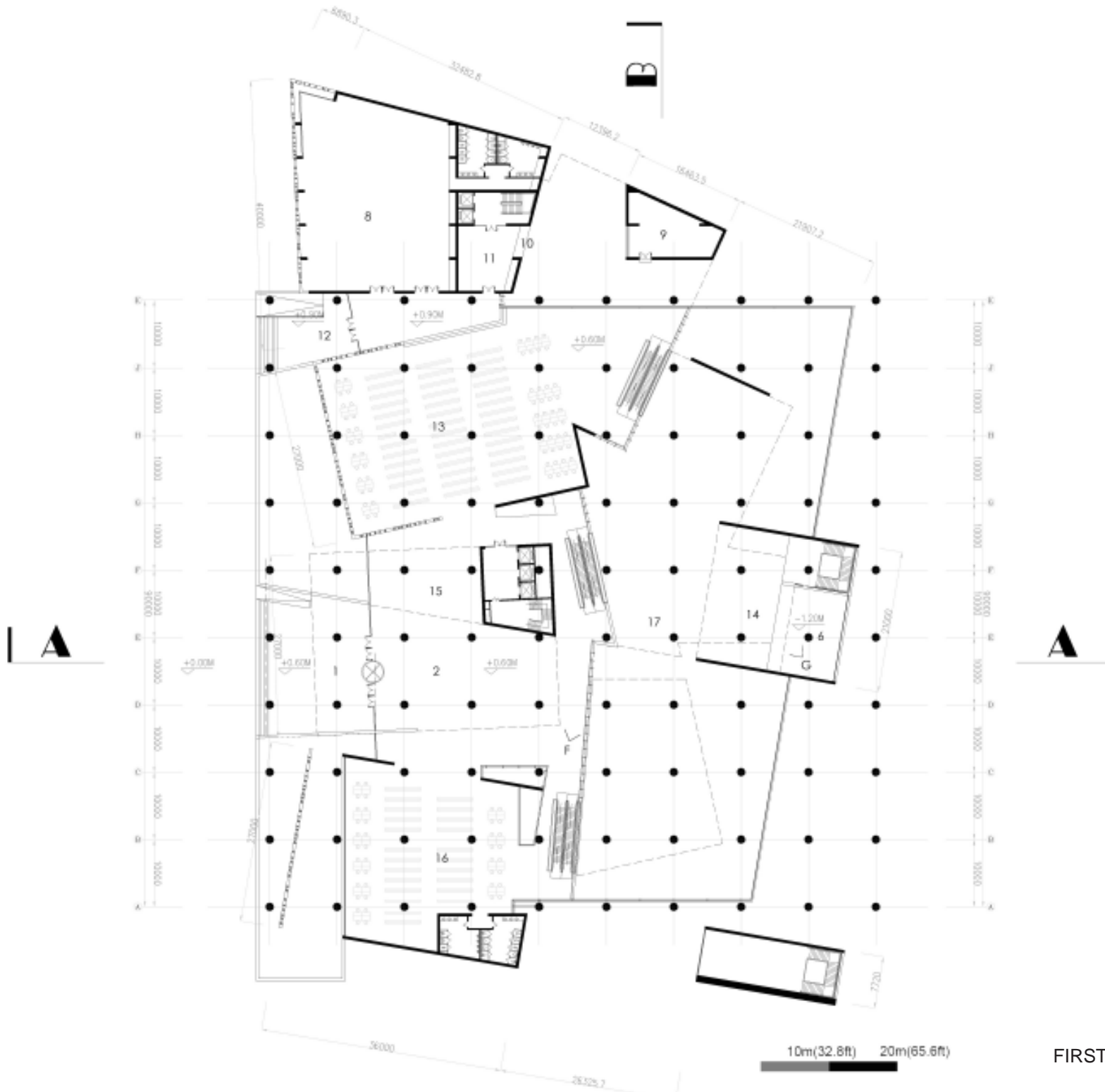
How about using a matrix of columns to support the library and express the homogenous concept at the same time? It will satisfy this situation.





1. entrance
2. lobby
3. atrium
4. book&stationery shop
5. information check DIY
6. corner rockery garden
7. mechanical
8. multi-purpose room
9. manage
10. loading dock
11. office lobby
12. side entrance
13. magazines
14. lobby
15. reception desk
16. blind reading
17. atrium

BASE FLOOR PLAN

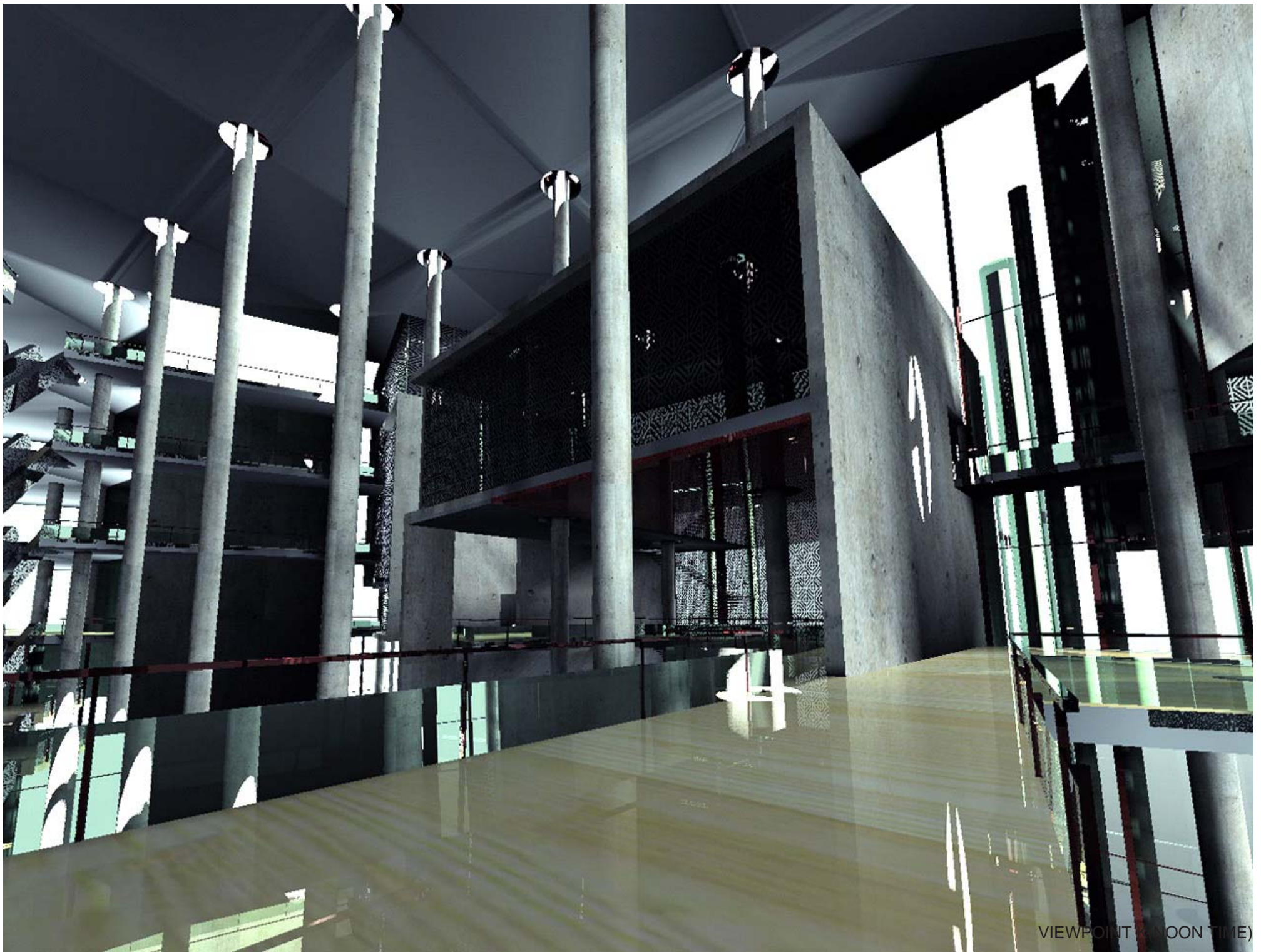




VIEW FROM THE FIRST FLOOR TO THE BASE FLOOR







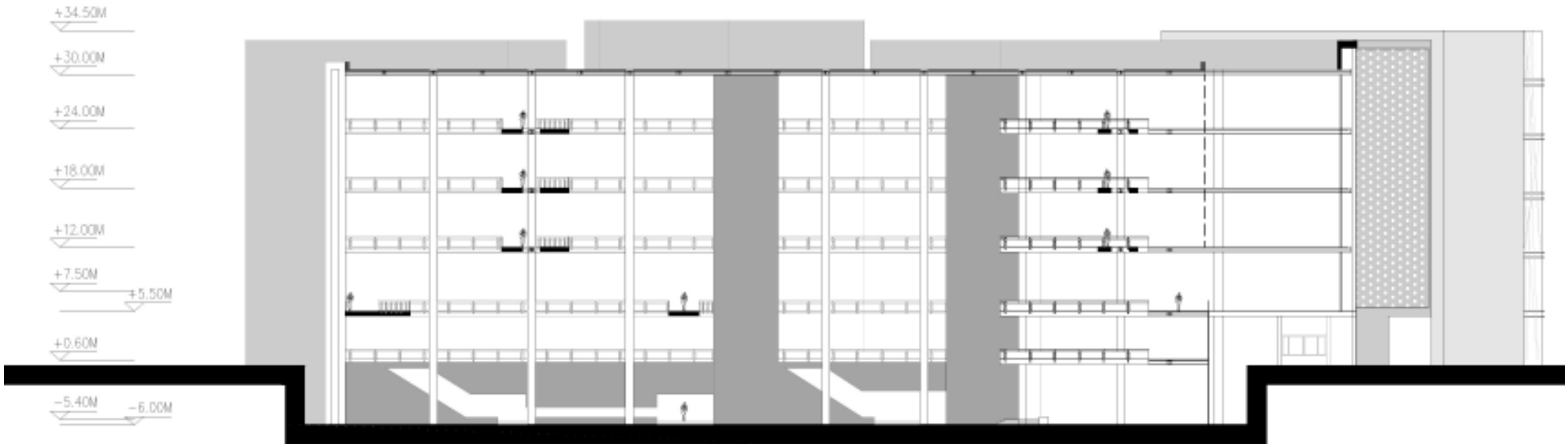


- 18. open platform
- 19. platform
- 20. cafe
- 21. natural science
- 22. social science
- 23. book storage
- 24. lounge
- 25. Chinese language
- 26. foreign language
- 27. art
- 28. office
- 29. manager
- 30. reading pavilion
- 31. exhibition wall

FOURTH FLOOR PLAN

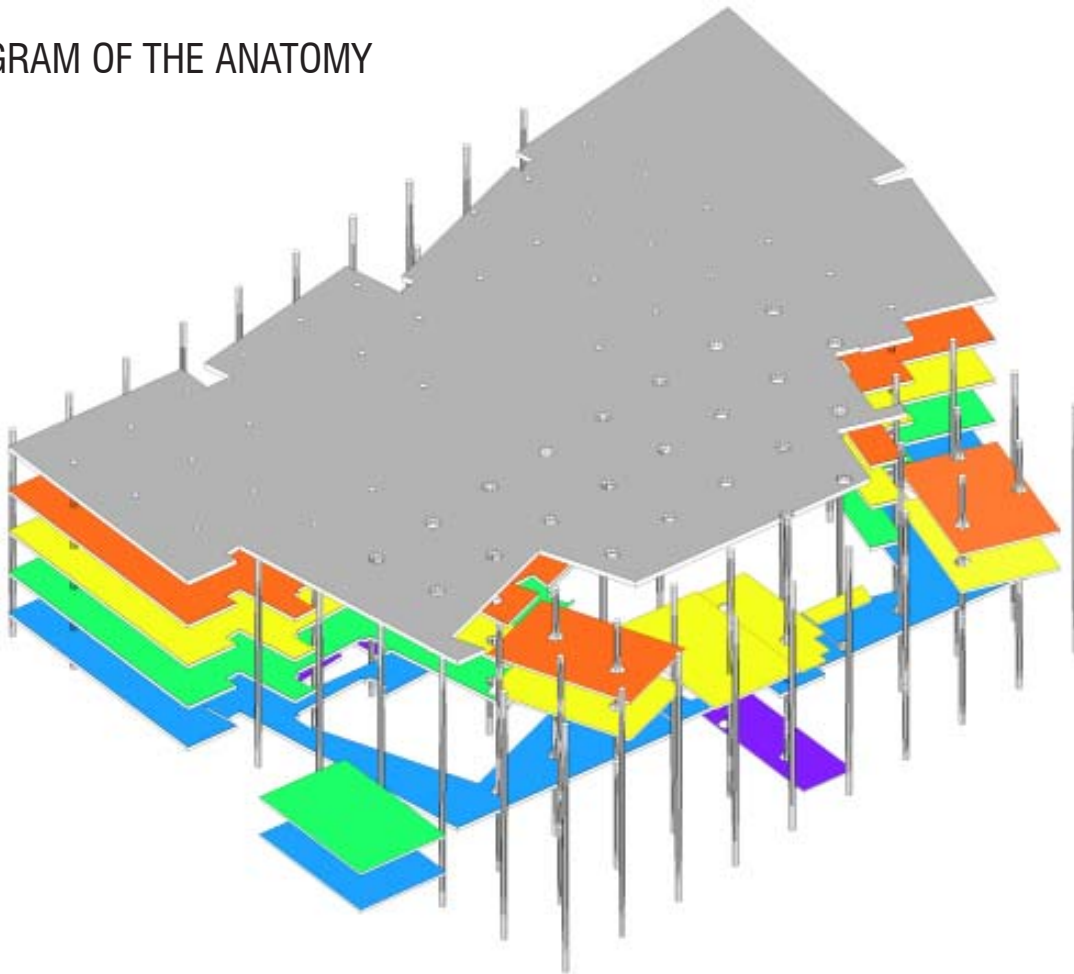


FIFTH FLOOR PLAN



B-B SECTION

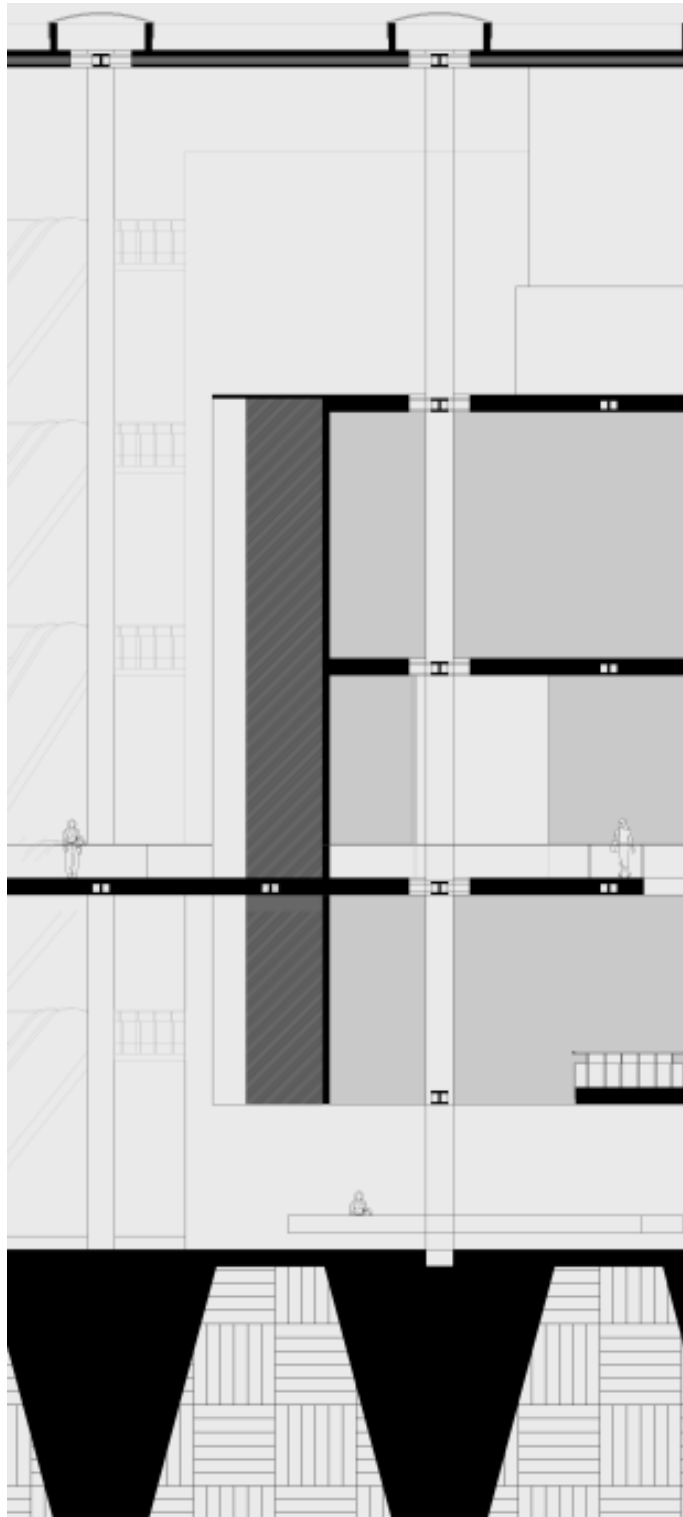
DIAGRAM OF THE ANATOMY



Reinforced concrete is used for columns while wood is for the floor and ceilings. It thus creates an interesting dialogue between vertical and horizontal elements.

The vertical concrete column is articulated as a structural device. It is steady and strong. The horizontal wooden floors and ceilings are circulation and space container for the users.

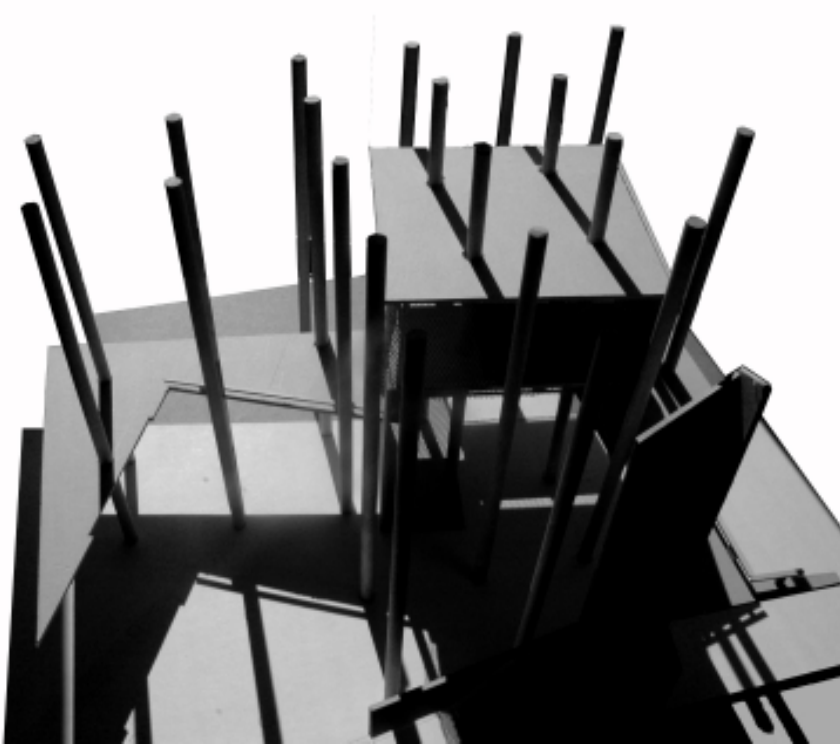
As this building is divided into two main parts. On the eastern part, which is constituted by four pavilions, the columns will penetrate through the floors; on the western part, the columns will not penetrate the floors. Thus it articulates the difference between these two parts. The column is the only load-bearing element in the building.



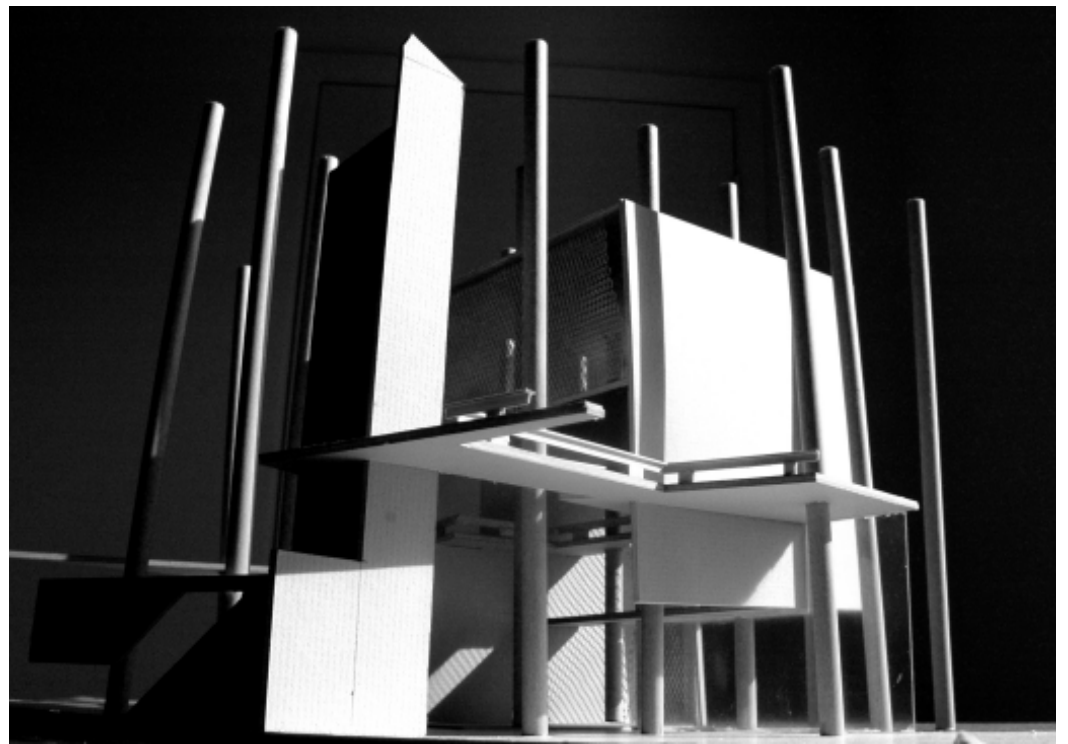
What the light can bring is not only for comfortable reading, it is also an inspiration for people to really touch and even breathe the architecture.

PARTIAL SECTION OF THE COLUMN





MODEL PICTURE



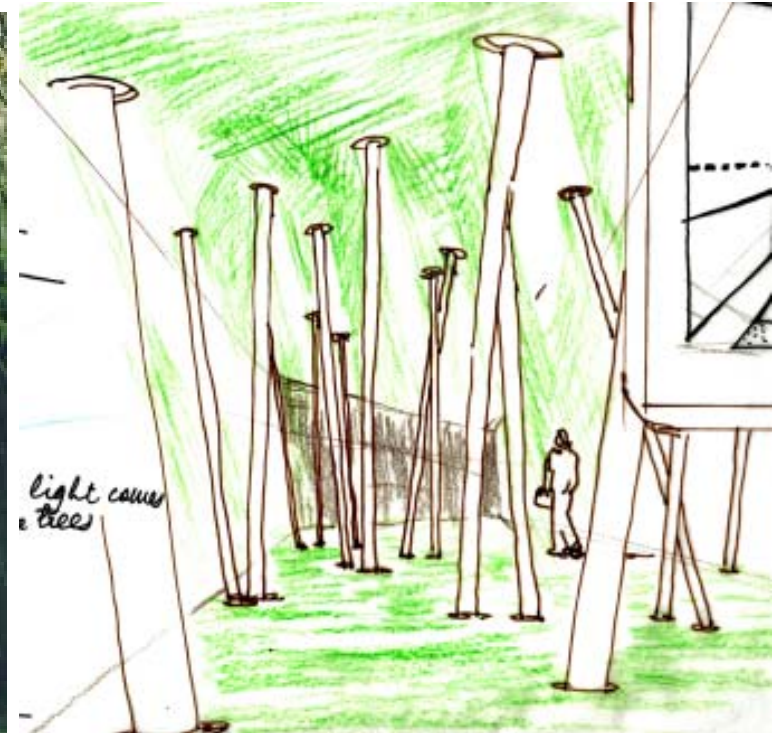
MODEL PICTURE

RESPONDING TO THE SECOND ANALOGY -- The embodiment of Chinese traditional artistic conception of reading and studying.

As the convention of those reading and studying activities mostly happened in a serene place like the bamboo forest or mountain valleys, the quality of this kind of space and its light effectively gives it users a strong recognition of cultural identification that provides an environment of comfort and conducive to learning and studying.



SKECTH OF THE SECTION

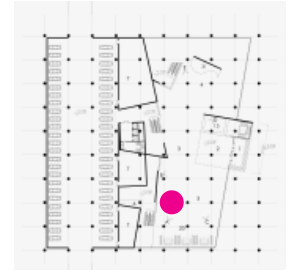


SKECTH OF THE ENTRY



Compare with the natural bamboo forest, this project attempts to create a virtual bamboo forest of concrete and other building materials.





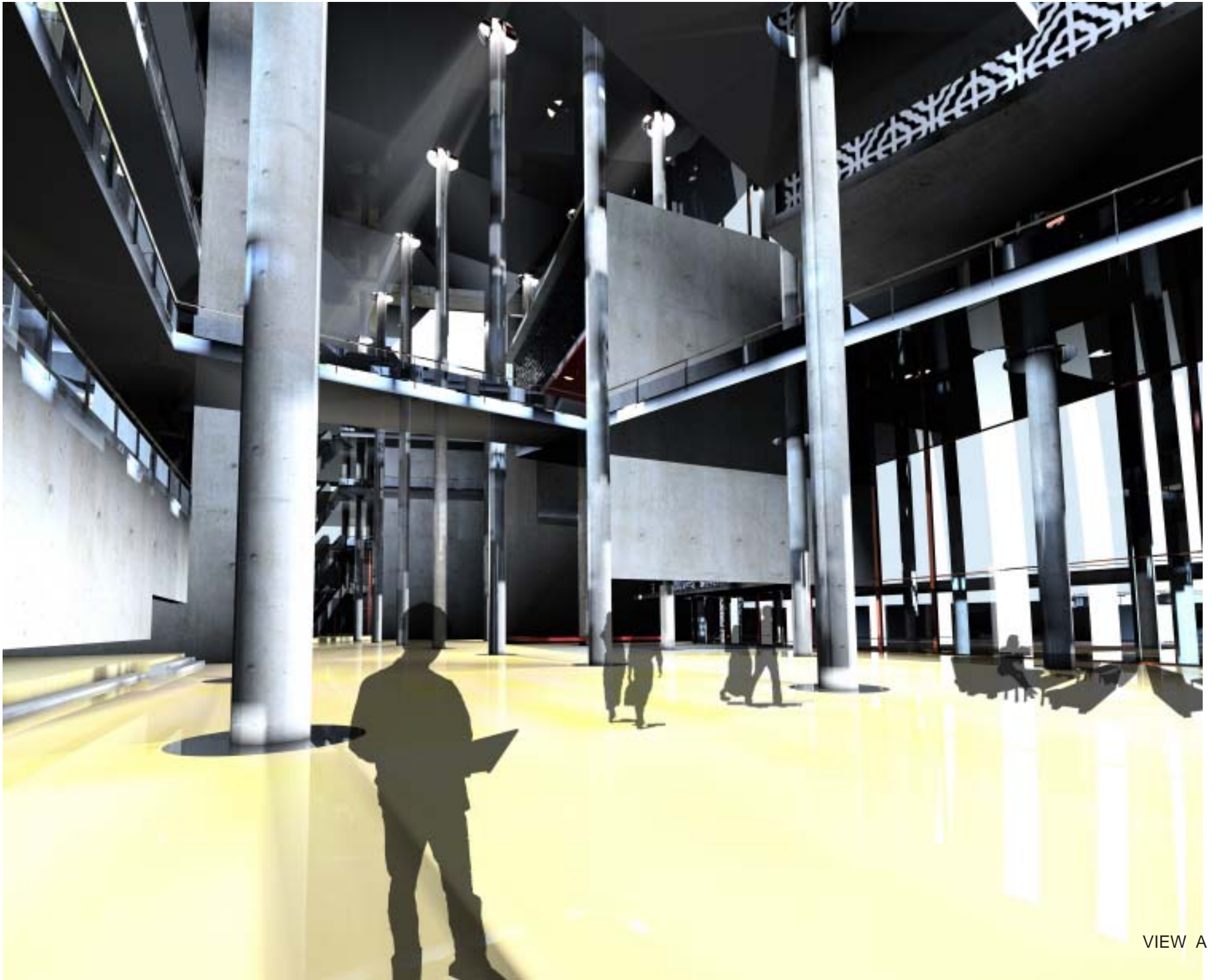
MODEL



CHINESE TRADITIONAL ENVIRONMENT

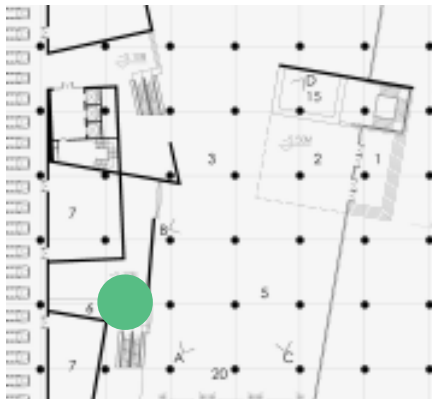
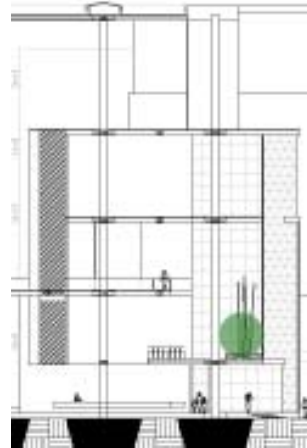
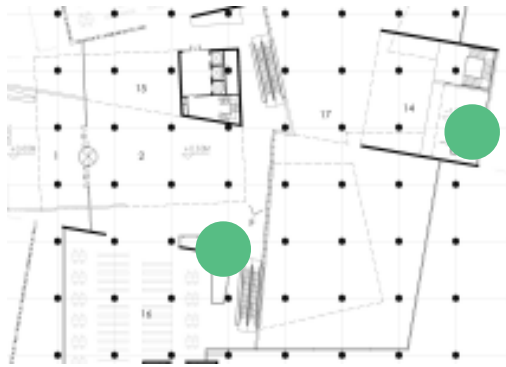


BAMBOO FOREST



VIEW A

ELEMENT: CORNER GARDEN AND ROCKERY

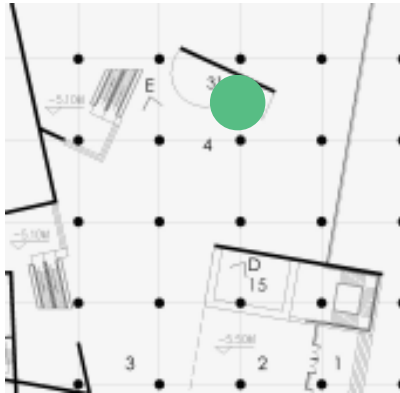


LOCATIONS OF CORNER GARDEN

Some corners of this building will be interestingly designed as small Chinese gardens which can entertain library users and also give them some hint of a traditional reading environment.



AN EXAMPLE OF A CORNER GARDEN



This wall is specially designed for a rockery garden and for some other cultural, such as kites, book marks, posters, etc. of cultural significance.



EXAMPLES OF CORNER GARDEN AND ROCKERY

RESPONDING TO THE THIRD ANALOGY --- The Chinese philosophy of intangibility is manifested of circulations. The paths are used to lead people around the building while experiencing the spatial quality and views along the way.

One of the important features of the Intangibility philosophy is the surprise. The natural elements in this world are always growing and changing. Nothing is absolutely permanent. Some elements that are considered accidental facts actually are prearranged by the Nature. In architecture, the prearrangement is the circulation layout.



FROM THE PLAN, the folding path system presents people with a constantly changing experience of the enjoyment as well as creates an intangible environment in the architecture. Surprises often accompany their walk around the building while the openings along the path provide exterior views and also give people some hint of their orientations.

Curved paths plus bridges and walking galleries serve to define the touring routes of Chinese gardens and lead the beholder toward views in different directions. Their freely curved lines and forms, imitative of nature, greatly contribute to the unity between artifacts and the natural landscape.

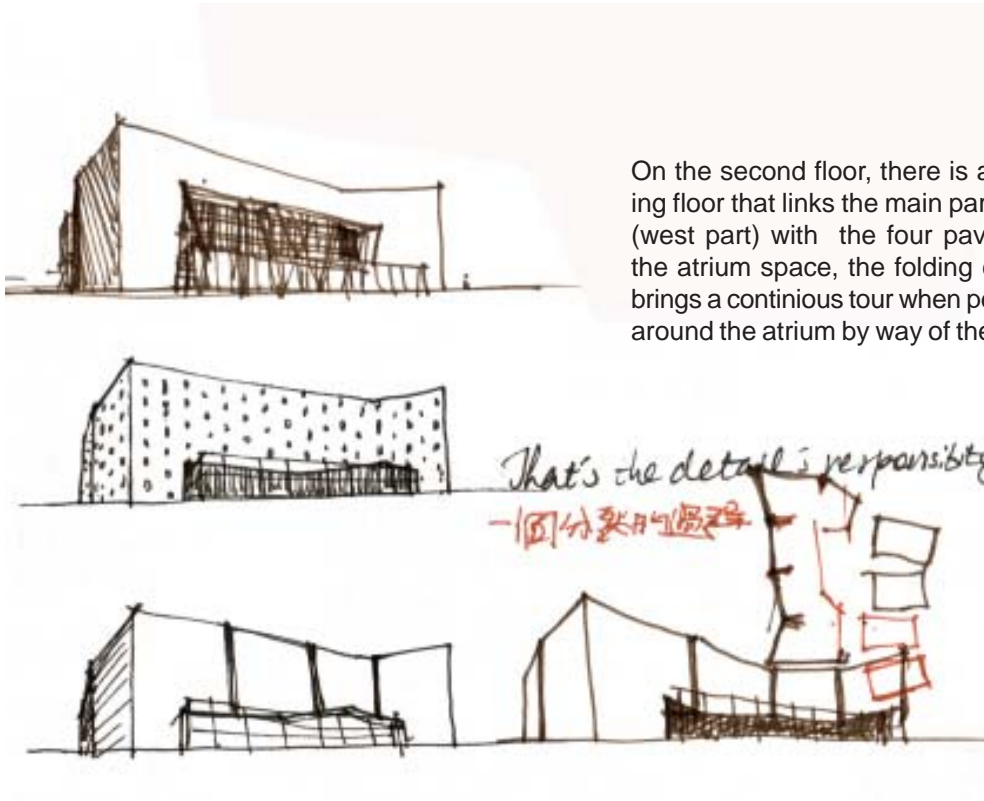
These paths should not be taken merely as an expression of artistic creativity. It is another fundamental way of seeming to enlarge the dimension of the garden. The curved paths take people more time to travel through. It actually prolongs the distance and traveling time, and helps to foster a sense of spatial depth.



From the west entrance, the light and space will attract people to go further. The essence of spatial design in a Chinese garden is that space is divided but not separated. Divisions are formed to conceal or partly obscure scenic spots that will be discovered gradually and later.

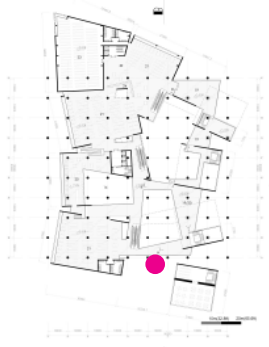


From being united to separated, the building experiences a fission process. This process strengthens the idea of bringing surprises and special events by defining this architecture into different orientations. Each box is uniquely placed and ready to tell a story.



On the second floor, there is a connecting floor that links the main part of library (west part) with the four pavilions and the atrium space, the folding circulation brings a continuous tour when people walk around the atrium by way of the platform.

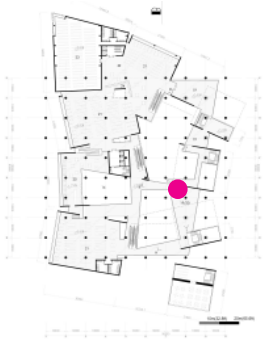




VIEW H



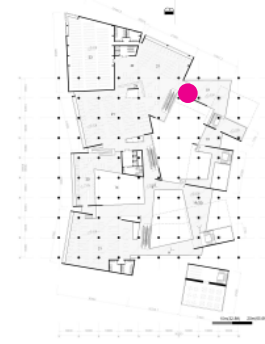
VIEW I



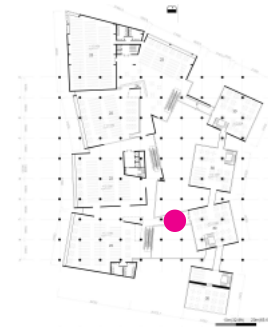
VIEW J



VIEW L



VIEW M



VIEW P



VIEW N

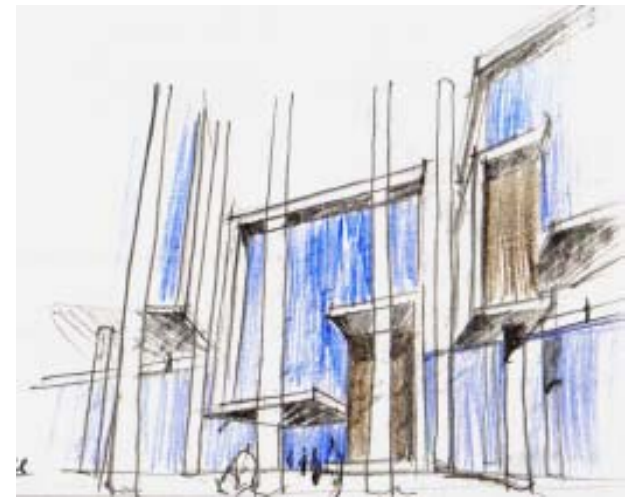
FROM THE SECTION, the reading pavilions stand as the spatial knots of the folding path is another important feature of Chinese gardens. It brings people up and down and offers a spatial platform to appreciate the architecture from various viewpoints.

Meanwhile, as the same area will be toured more than once, on different levels, the space seems larger than the actual size. The zigzag, up-and-down-paths divide the whole building and at the same time also unites it thus defining the different spaces of the architecture into some specialized functions.

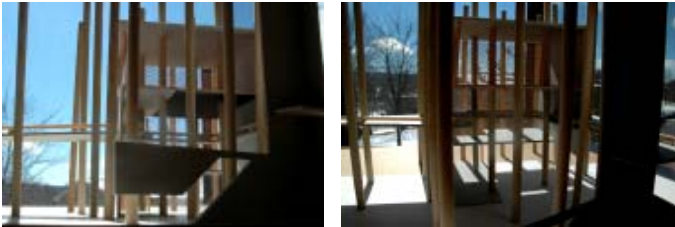
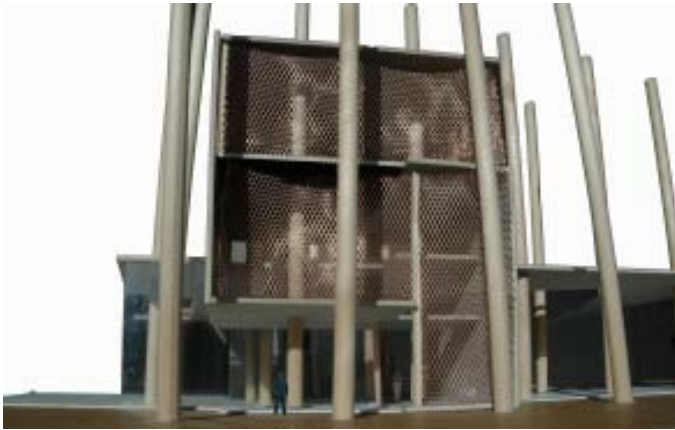




THE ENTRANCE FROM THE PLAZA

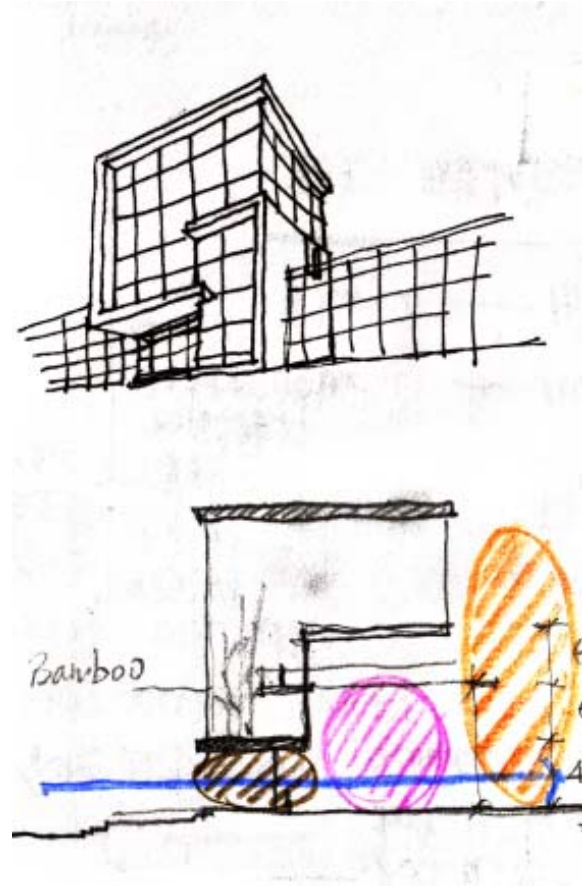


A SKETCH OF THE ENTRANCE

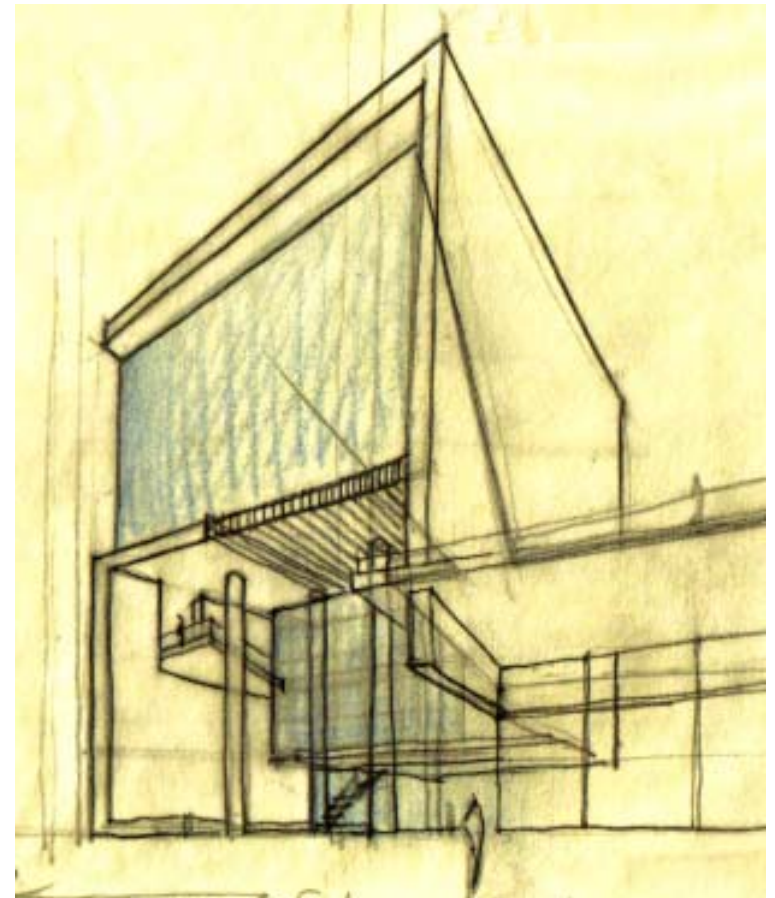
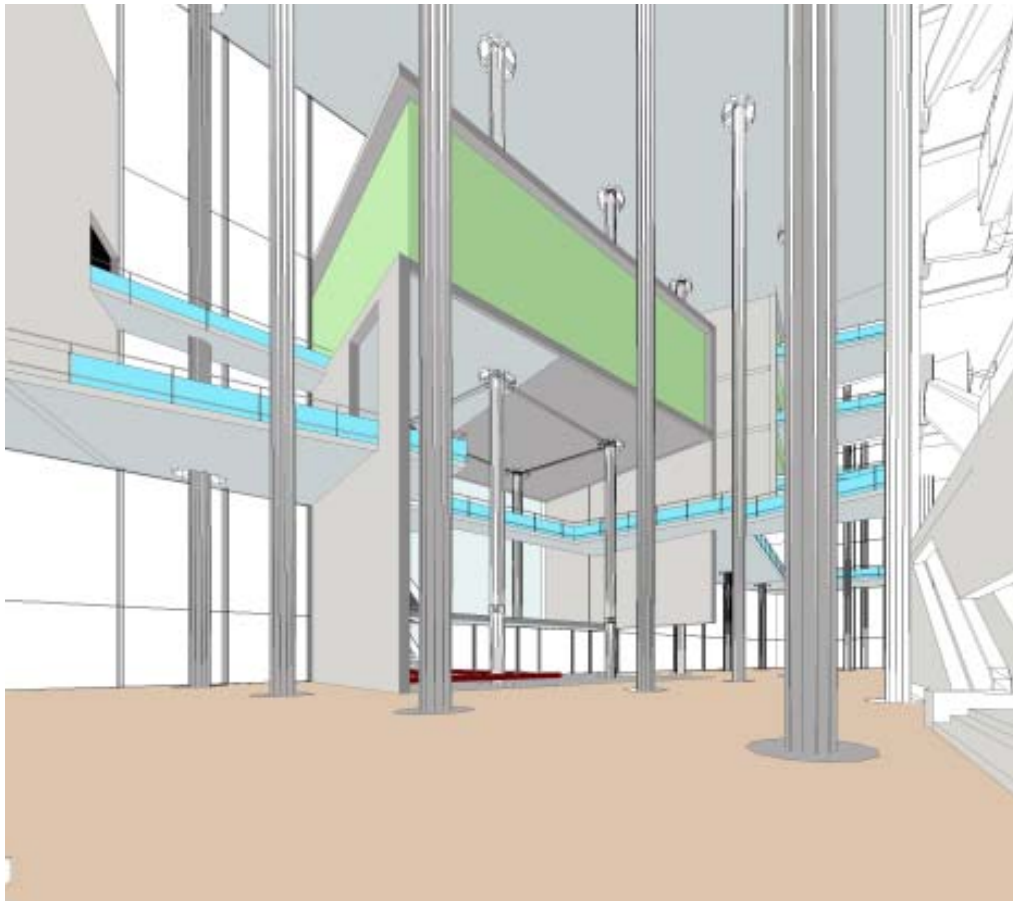


On the east part, the library expresses itself by four different elevated pavilions. These pavilions are structurally supported by columns and resemble the ancient small hub that were built in the forest, which are used by scholars for reading purposes.

In application of these four different leveled pavilions, the interior space is specifically defined and celebrated. For example, to specialize the entry space, one of these pavilions is lowered down to make a comfortable human scale and also to create an interesting spatial transition when people walk through this entry to enter the atrium space.



CONCEPTUAL SKETCHES OF THE ENTRANCE



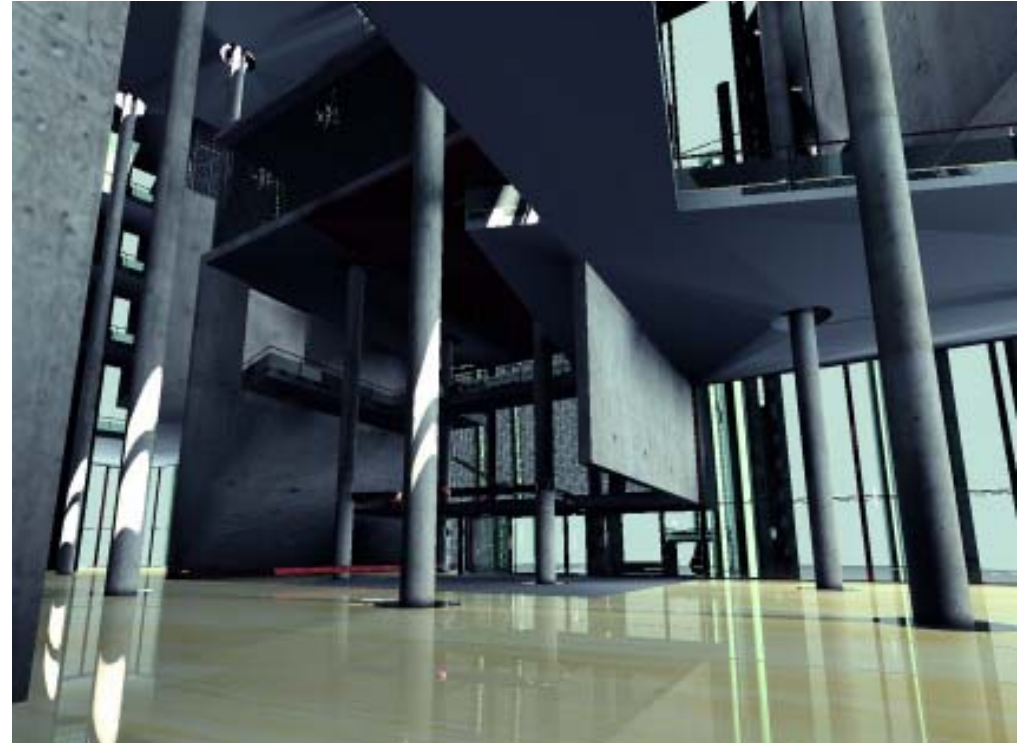


VIEW B, (VIEW OF THE ENTRANCE FROM THE ATRIUM, AFTERNOON)

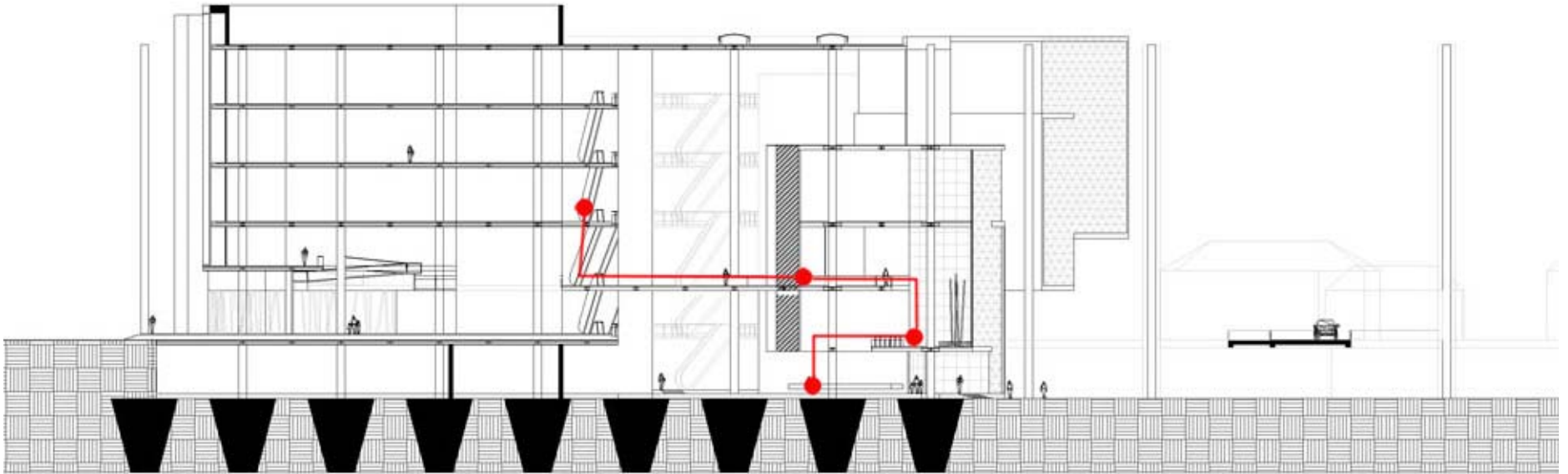
Here the space is celebrated by the light and shadow which vary at the different time of a day.



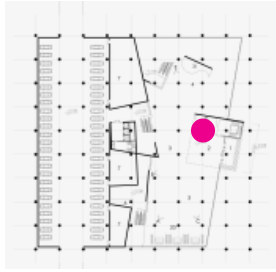
VIEW B(MORNING)



VIEW B (NOON)



FOLDING PATH IN THE SECTION



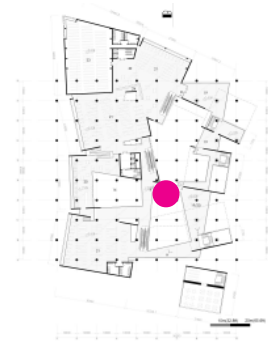
VIEW G



VIEW J



VIEW L

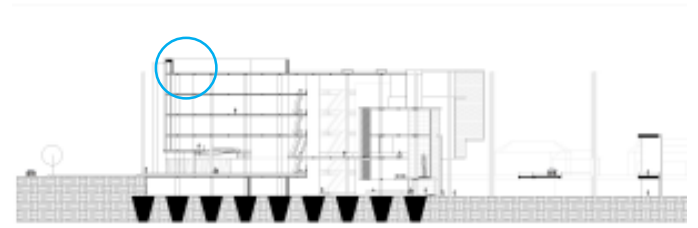
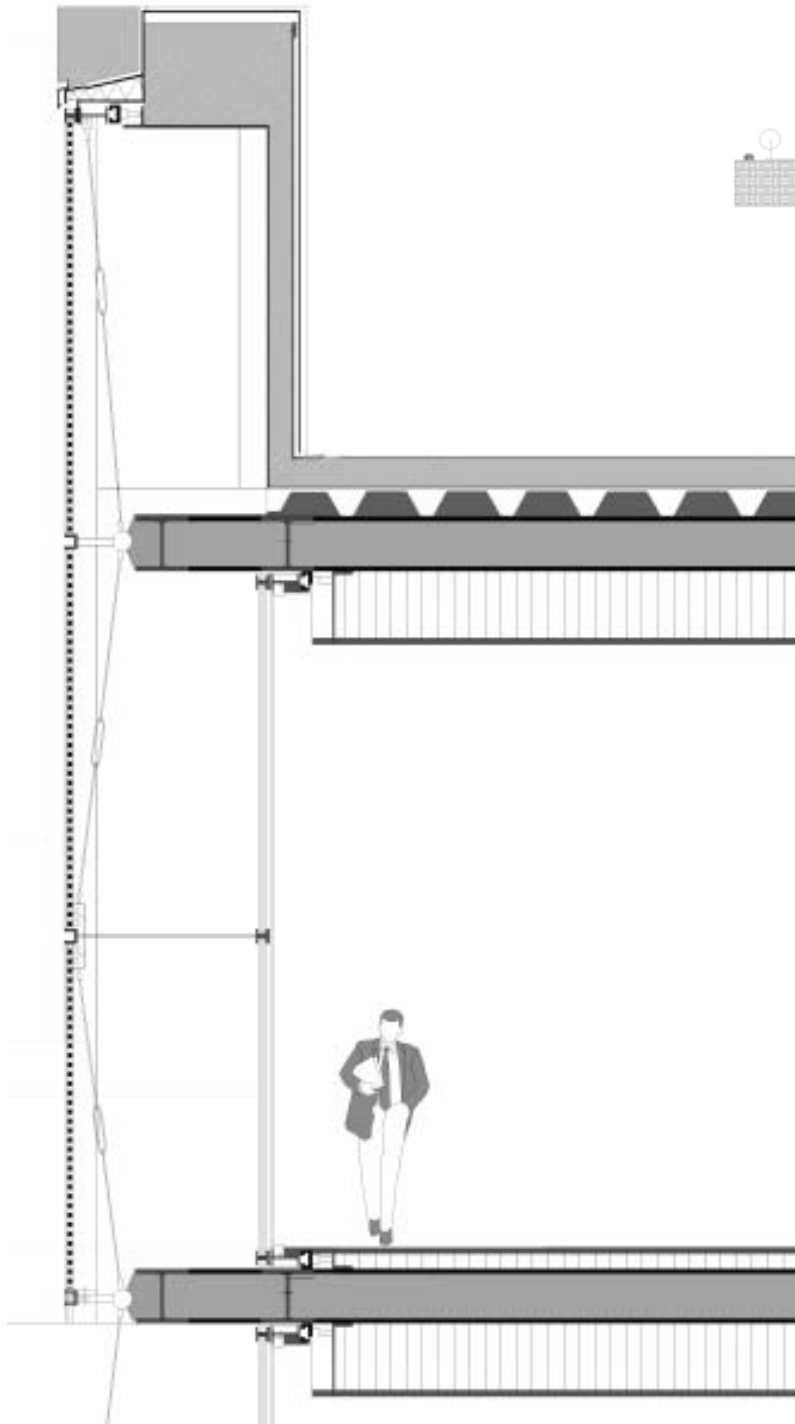


VIEW K



A pavilion over the open platform creates a good sense of human scale and a place for resting and relaxation.





DETAIL OF THE SECTION

CHAPTER FOUR CONCLUSIONS



In this thesis, I have proposed a cultural and philosophical approach to the design. An attempt was made to define Chinese traditional philosophy and art of the Nanjing Library. This approach can be used for the design of some other architectural projects in china and elsewhere

Architecture is not just functional. It also includes psychological influences and cultural identifications of that specific locality and context. Beyond fulfilling the basic needs, architecture is also responsible for the improvement of the quality of life for the users. This can be achieved not only by the choices of materials and light for the physical structure, but also by the embodiment of inherent feelings that may exist in the users. This can be generally called the intangible contents.

My intention in thesis is to bring some invisible elements into architectural design. Although a building is mostly made of tangible elements, such as walls, columns, roof and floors or even light (these tangible elements give the building its bone and flesh, which can be seen, touched and smelled), the intangible elements also make valuable contributions to architecture. As Lao-tzu said, the void can influence or even determine the solid; the intangible concepts or feelings can also influence or determine the tangible existence.

Intangible contents in architectural composition can be said to exist as a general binder of the non-being and the being of any visual entity. Thus, it seems that when an architect composes, he is considering the interdependency of the invisible contents as well as the tangible forms.

Intangible contents give life-quality to architectonic form. It is like the life-quality of humanity itself that exists not only in the realm of the material but also in the realm of intangibility -- the realm that each man must find and conquer for himself.

In this thesis, I consider the quality of intangibility in two ways:

One is the reminiscence of the tranquil images of the learning environment of traditional Chinese scholars,

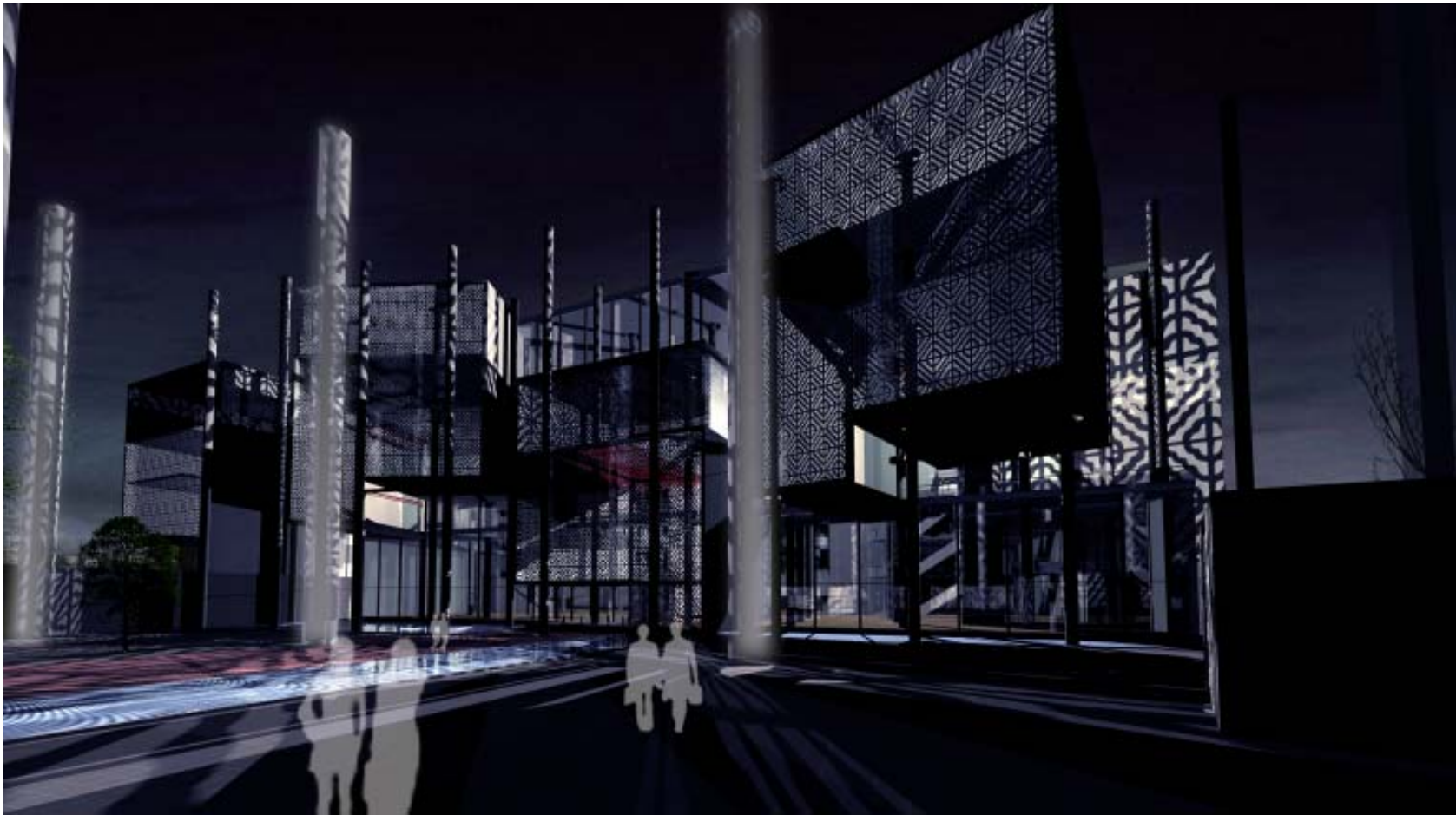
The other is the irregularity and unexpectedness nature of the Chinese private garden.

By ways of architectonic means, I articulate these two influences into two tangible forms:

One is the spatial quality in the design of the library: the quality of light and space conducive to studying and contemplation.

The other is the sequence of circulations in architecture, which creates surprise and delight.

I hope my efforts as exhibited in the book have yielded some useful fruits. As the globalization is sweeping the architecture of the world, the voices of regionalism and cultural identity deserve to be heard.



PHOTOGRAPHIC CREDITS

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| | |
|--|----------|
| 1 Image of Tai-Ji | Pg 9 |
| 2 Chinese Painting and Calligraphy | Pg 11 |
| 3 Diagram of Chinese Building | Pg 15,55 |
| 4 Painting of hut built on top of a mountain | Pg 12 |
| 5 Paintings of a hut built in the mountains | Pg 19 |
| 6 Map of Nanjing | Pg 24 |

BIBLIOGRAPHY

- 01 *LIBRARY BUILDERS*, First Published in great Britain in 1997 by ACADEMY ECITIONS
- 02 *THE TAO OF ARCHITECTURE*, by Amos Ih Tiao Chang,Princeton University Press 1956
- 03 *LEARNING FROM JAPANESE CITY: East Meets West in Urban Design*, by Shelton, Barrie,London 1999
- 04 *YUNG HO CHANG, A CHINESE PRACTICE*, by Laurent Gutierrez + Valerie Portefaix, MAP BOOK PUBLISHER, 2003
- 05 *ARCHITECTURAL ENCOUNTERS WITH ESSENCE AND FORM IN MODERN CHINA*, by Peter G. Rowe, Seng Kuan, MIT Press, 2002
- 06 *LANDSCAPE DESIGN IN CHINESE GARDENS*, by Frances Ya-Sing Tsu, McGraw-Hill,Inc 1988