

THE CITY AS EDUCATOR:

Design Projections for a
Public Library in Bangkok

by

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Submitted to the Department of Architecture
in partial fulfillment of the requirements of the degree
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OF TECHNOLOGY

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LIBRARIES

To my parents
for the strength and stability they have given

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ABSTRACT

This thesis is an exploration of an architecture of relevance in the context of Bangkok, Thailand. The main concern behind this work is the disparity in values between ancient and modern models of society, and the need to forge a new paradigm that recognizes the necessity for change without losing the continuation of vital themes.

The public library as an institution epitomizes this concern. It introduces concepts alien to the Thai model of the library, yet it is essential for the free access to information that a modernizing society needs. By attempting to understand the underlying structure of the city fabric, potential interpretations as yet unexploited can be accommodated, thus allowing for societal change within understandable and meaningful patterns. Six patterns are explored, and these are innovated on in the design section. The library thus challenges the conventional institution in terms of its programme of communication, its degree of insulation from the outside world, and the ease of access to its collections.

Thesis Supervisor: William Porter

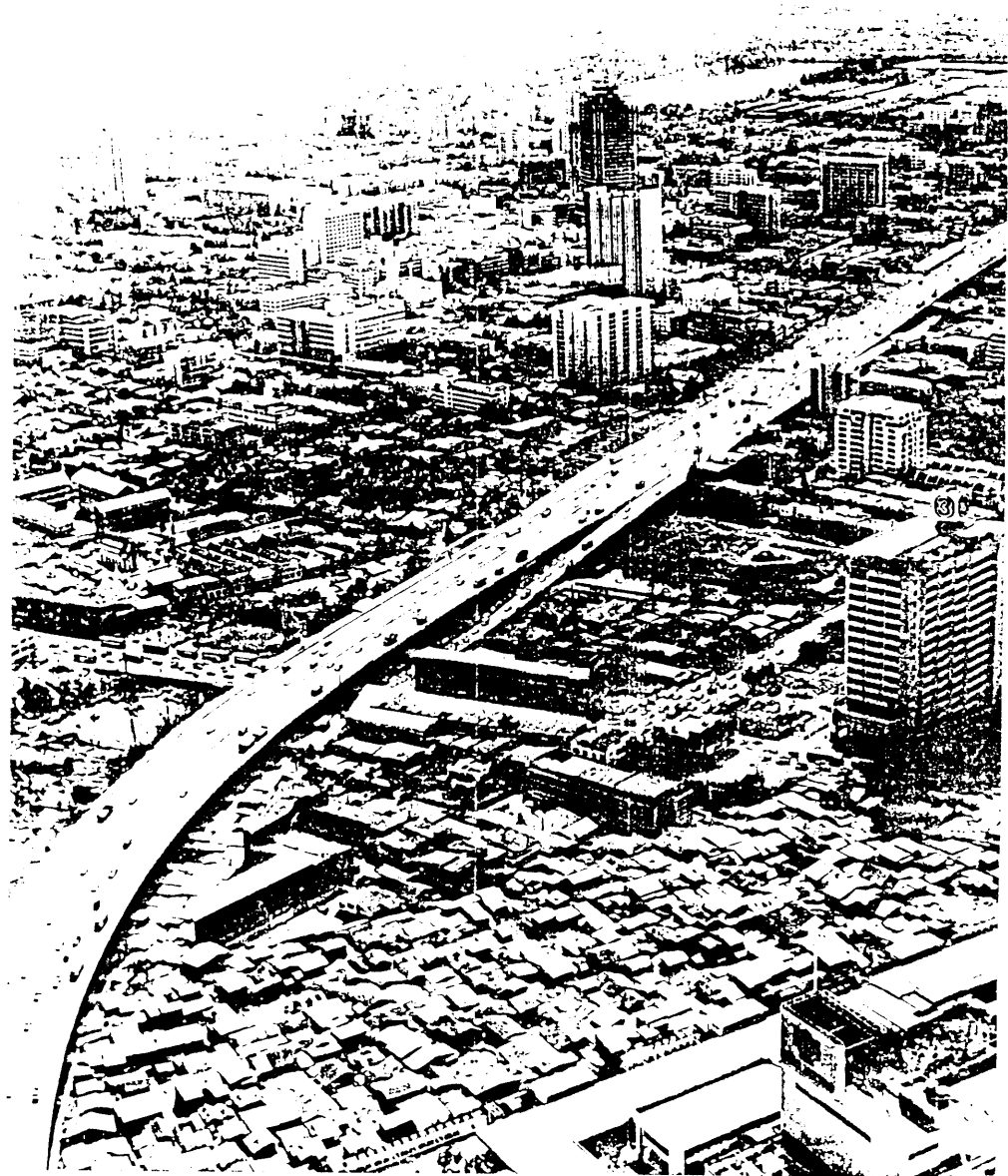
Title: Levanthal Professor of Architecture and Planning

We are in a kind of lull or interregnum in which we can no longer practise the dogmatism of a single truth and in which we are not yet capable of conquering the skepticism into which we have stepped. We are in a tunnel, at the twilight of dogmatism and the dawn of real dialogues.

*Paul Ricoeur
History and Truth*

The critical attitude may be described as the conscious attempt to make our theories, our conjectures, suffer in our stead in the struggle for the survival of the fittest. It gives us a chance to survive the elimination of an inadequate hypothesis - when a more dogmatic attitude would eliminate it by eliminating us.

*Karl Popper
Conjectures and Refutations*



1 CONCERNS AND INTENTIONS

The march toward modernization has, in many cultures, led to the subtle destruction of their creative nuclei. With the growth of technology and the rational mind governing economy, the ancient healing bond between man, his place in this society and his place on this earth has become most tenuous. "Somewheres" are rapidly being destroyed and replaced by "nowheres". Paul Ricoeur has noted the paradox: "How to become modern and return to sources; how to revive an old, dormant civilization and take part in universal civilization." This arises from "the tension between the necessity for the free access to progress and, on the other hand, the exigency of safeguarding our heritage."¹

This paradox will be examined in the context of Bangkok, Thailand. Despite its rich Buddhist tradition and its sensitively evolved vernacular, it, as with most other developing countries, is blindly incorporating knowledge developed in the West, often eroding the power of its past in the process. How can a society decide what is relevant in an age where a multitude of conflicting forces are acting to shape it? A new paradigm needs to be forged, that of critical thinking. For a society to resolve its paradox, it has to be willing to question tradition and superstition, to recognize that change is continuous, and to plan its necessarily unique future instead of adopting foreign standards. Both the past and the present have to be critically evaluated in the formulation of a viable future, one that restores to society its sense of being.

The only way anyone has of applying in their situation any of the propositions I have made is precisely by redoing what I have done, that is by not following me. In order to follow me, it is essential not to follow me.

*Antonio Faundez
Learning to Question*

One of the first tasks of education, then, is to return man to himself; to encourage rather than stifle awareness; to educate the emotions, the senses, the so-called automatic systems; to help people become truly responsive and therefore truly responsible.

George B. Leonard
Education and Ecstasy

A place is immediate, concrete, particular, bounded, finite, unique. Abstract space is repetitive and uniform. Abstraction moves away from the fullness of experience.... A renewal of connection to the totality of experience may end the drift of an abstraction toward irrelevance.

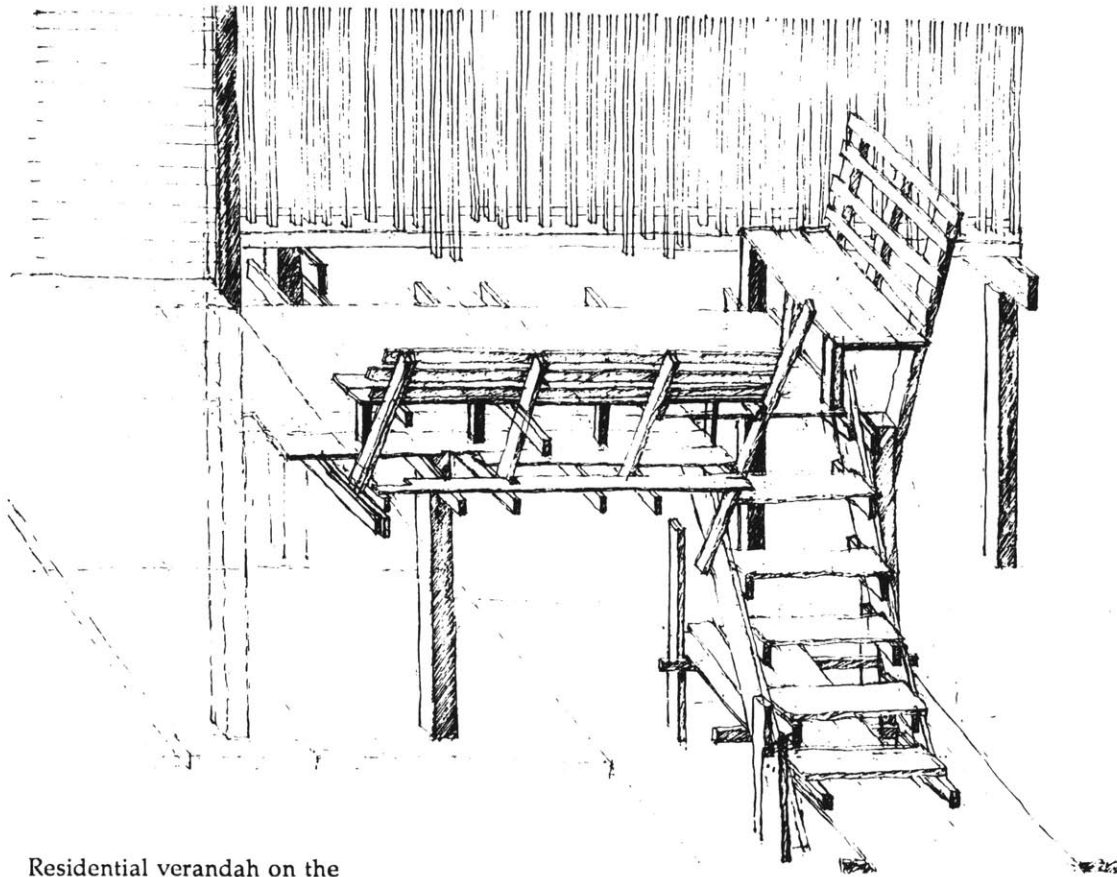
E. V. Walter
Placeways

My quest is to build a place for the development of the inquiring mind, a place that offers discovery, awareness, continuity and change. This will be explored in the design of a library, which “belligerently attacks the mediocre, the slick, the sentimental, the commercial, that is typical of the mass culture of our day.... aimed more or less to make us all think, vote, buy, read, listen to, and look at the same thing.”²

As late as a century ago, it was still possible to maintain an encyclopaedic cultural and learning ideal that was supposed to impart familiarity with all areas of learning. But with the knowledge explosion and the seemingly endless ramification of disciplines, what is at issue now is less the acquisition of knowledge than the skills bound up with the acquisition of knowledge itself. It is the pedagogy of asking questions, which encourages people to take the risk of formulating and reinventing linkages in order to find a new and relevant paradigm for their local context.

The central issue that this thesis deals with is the built form that this philosophy of learning might take. Initially two lines of inquiry were examined. One was the notion of a “place-conscious poetic”, which is a layering of the urban fabric, climate, tectonic form and resonances of the place to achieve “a manifest critique of modern civilization”.³ The other was the potential of place to be “educational”, to stimulate learning and cultivate awareness by implying “hidden possibilities, evocative but not openly stated”.⁴ However, as my observations of the Bangkok vernacular progressed, I discovered that the presence of the educational notions of discovery, awareness, continuity and

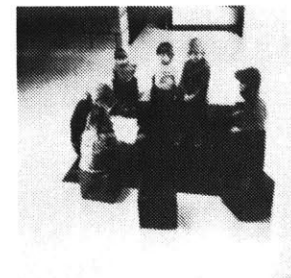
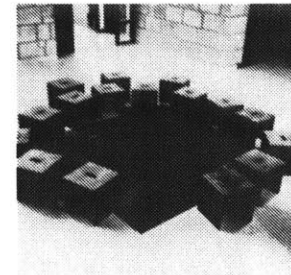
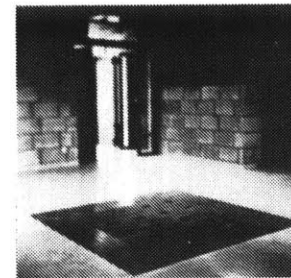
change were inherent in the fabric itself. The two inquiries, then, collapsed into each other. The density and coherence of the experiences of *place* are potentially liberative, in terms of both their educational openness and their ability to define the society's "self". The city, as *place*, can thus play the potential role of educator.



Residential verandah on the Chao Phraya River, Bangkok

In order to confront a self other than one own's self, one must first have a self.

Paul Ricoeur
History and Truth



Montessori Primary School in Delft, Holland, by Herman Hertzberger

REMARKS CONCERNING THE SAVAGES OF NORTH AMERICA

Pamphlet by Benjamin Franklin, ca. 1784

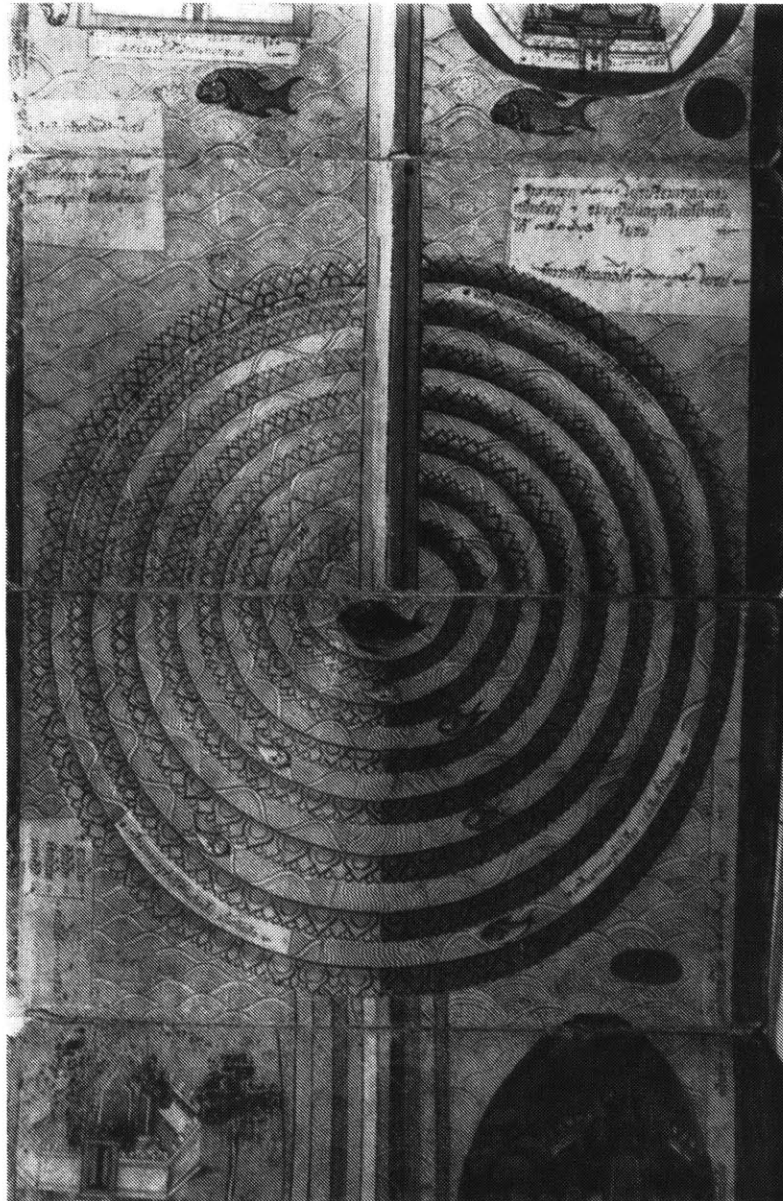
Franklin wrote: At the treaty of Lancaster, in Pennsylvania, 1774, between the Government of Virginia and the Six Nations, the Commissioners from Virginia acquainted the Indians by a speech, that there was at Williamsburg a college with a fund for educating Indian youth: and that if the chiefs of the Six Nations would send down half a dozen of their sons to that college, the government would take care that they be well provided for, and instructed in all the learning of the white people.

The Indian spokesman replied:

We know that you highly esteem the kind of learning taught in those colleges, and that the maintenance of our young men, while with you, would be very expensive to you. We are convinced, therefore, that you mean to do us good by your proposal and we thank you heartily.

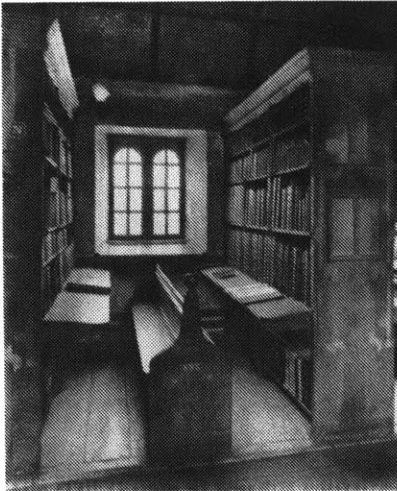
But you, who are wise, must know that different nations have different conceptions of things; and you will not therefore take it amiss, if our ideas of this kind of education happen not to be the same with yours. We have had some experience of it; several of our young people were formerly brought up at the colleges of the northern provinces; they were instructed in all your sciences; but when they came back to us, they were bad runners, ignorant of every means of living in the woods, unable to bear either cold or hunger, knew neither how to build a cabin, take a deer, nor kill an enemy, spoke our language imperfectly, were therefore neither fit for hunters, warriors, nor counsellors; they were truly good for nothing.

We are however not the less obligated by your kind offer, though we decline accepting it, and to show our grateful sense of it, if the gentlemen of Virginia will send us a dozen of their sons, we will take care of their education, instruct them in all we know, and make men of them.

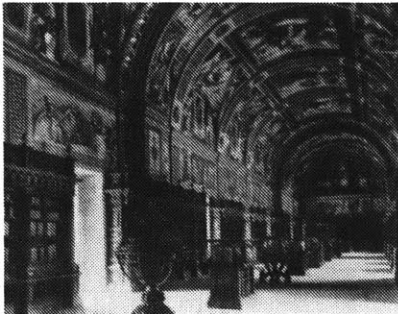


Hindu-Buddhist cosmological diagram

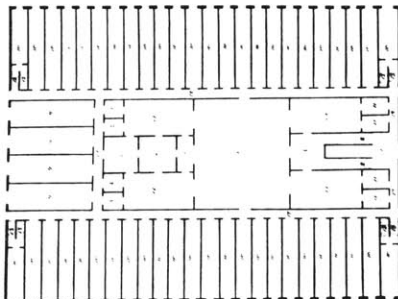
2 THE LIBRARY AS INSTITUTION



The stall system at Corpus Christi College, Oxford, c.1604



Escorial library, c.1567



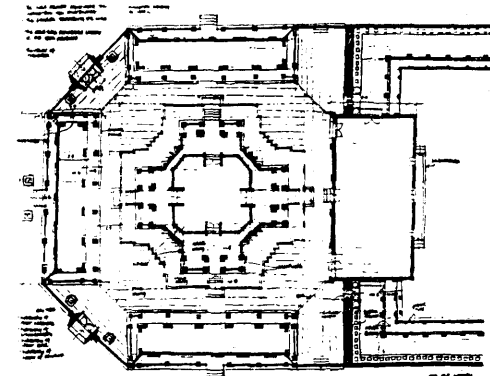
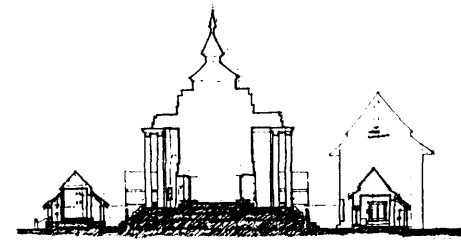
Design for a library, c.1816,
by Leopoldo della Santa

The public library in Thailand, as with so many other institutions, is an institution borrowed from countries at a different stage of development and a different cultural background. The history of the Western library can be traced back to the third century, and up to the thirteenth century, the monastery was the main producer and collector of religious, philosophical and theosophical works. These were kept in book-cupboards in niches of the cloister walk. Around the thirteenth century, universities were established to accommodate the growth of secular learning. Their libraries were usually for community use on certain days of the week, with books chained to lecterns. With the advent of printing and the subsequent multiplying of books, shelves were added above the lecterns, forming alcoves. In the Escorial library of 1567, a new type of library space emerged where bookcases lined the walls, resulting in a large hall. These rooms became correspondingly higher as the number of books grew, until ladders became awkward and galleries were introduced. In 1816, Leopoldo della Santa devised an alternative principle, that of separating the stack space from the reading room and offices. This tripartite division was used in the organization of many libraries for the next hundred years. The most important nineteenth century development is the free public library, stimulated in large part by the Carnegie Trust and by the demand by people for books to enrich and enlighten their lives. The public library thus came into being as an institution to which "the curious and impatient Enquirer... and the bewildered Ignorant might freely repair."⁵

In Thailand, libraries can be traced back to the beginning of the kingdom in the thirteenth century. They have the same monastic roots as their Western

counterparts, being housed in temple compounds. Restricted to use by monks or serious scholars, these libraries were repositories of ancient religious doctrines.⁶ These were written on palm-leaf manuscript or carved on stone tablets, and kept in locked cabinets. The building was as axially formal and hierarchical in level change and material as the main halls of worship in the temple to reflect its sanctified function. For seven hundred years, the role of the monastery as the centre of instruction and learning remained unchanged. It was only in the 1930's that secular education was formalized in state schools and universities.

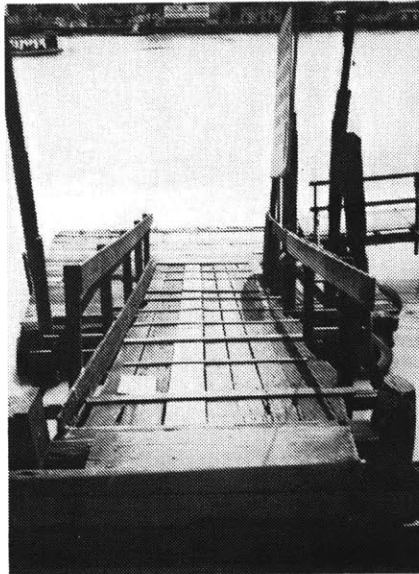
The introduction of the public library into Thailand in 1949 brought with it Western ideas alien to the Thai conception of the library. Books are stacked in open shelves, are freely accessible, and can even be brought home. A great mass of the people do not know what to expect of public libraries, and make little claim on them. Another problem is the lack of wide appreciation of good literature; reading among the Thai is mainly confined to sensationalist magazines and gossip columns. A third problem closely connected with the second is the dearth of a wide range of books in Thai. A Catch-22 situation has emerged where Thai books are not written and published in sufficient range and quantity, and Thais view books as costly and unnecessary luxuries. The government has encouraged authors and publishers to produce indigenous material, but until the attitude of the people towards reading changes, there will be no real incentive to do so. The most fundamental challenge to the public library in Thailand is then the need to engage the ordinary person in the world of books and information, to demystify it and make it freely accessible and familiar.



Plan and section of the old library at Wat Po, Bangkok

Partly through the thoughtless application of economic and social theories derived from Western experience, partly from the demonstration effect of rich societies which has led poor ones to adopt their ways, the early stages of development in many developing countries have been distorted and disrupted by borrowings unsuited to the real stages and sequences of their own paths of growth. Not only is this true in economic terms: it is the whole matrix of society which has to change - politics, administration, institutions, education.

Guy Hunter
Modernizing Peasant Societies



Boat landing along the river

3 THE UNDERLYING STRUCTURE OF THE ENVIRONMENT

To engage the public in an institution as alien (but as necessary) as the public library, a large part of it should mediate between the familiarity of the everyday and the sanctuary of the library proper. To this end, the urban fabric of the city and the patterns of inhabitation within it are analysed. The concepts of potential, influential and latent environments developed by Stanford Anderson⁷ are useful in clarifying this approach. The physical environment is "an arena for *potential* actions and interpretations." The version of this potential environment that is "manifestly or implicitly adopted by users" in a societal sense yields the influential environment. The unrealized or unexploited potential environment is termed the latent environment, meaning its degree of resilience. Because the potential and the influential environments rarely approach coincidence, latency assumes great importance, for it "allows for societal change without physical change." By attempting to discover the richness and range of the potential environment, meanings as yet unexploited can be accommodated, yet without losing the continuation of patterns. This can thus form a viable bridge in the paradox of becoming modern and returning to sources.

The true vernacular basically consists of two forms of houses, each dealing with the problem of seasonal flooding on the flat Central Plain of Thailand where Bangkok lies. These are the floating house and the house on stilts, both built in timber. The former is virtually non-existent now, eradicated by urban development and the filling in of canals that functioned as the original

transportation web. Vestiges of the concept of floating a living space, however, remain in the numerous boat landings that occur along the river and its canals. Raising a structure on stilts has become the primary way of handling the daily and seasonal changes in water level for buildings along the edge. The everyday fabric that covers the older parts of the city is that of the shophouse, built in rows with party walls separating and articulating each unit. Dating from the mid-nineteenth century, these shophouses have become the new vernacular, representing a layer of the archaeological (but still living) past when the Chinese community established their retail-cum-residential districts.

This fabric is analysed to understand the patterns of movement, access, continuity, transition, territorial claim and gathering. The monumental temple fabric is similarly analysed, being particularly relevant because of its role as a centre for the community. Despite the sanctity of its grounds, it serves a vibrant community life ranging from the education of children, the celebration of festivals, the gathering of villagers to relax or discuss politics, and the preservation of cultural artifacts. In the temple, sacred life and public life share a common realm.



Floating houses



Houses on stilts



Typical shophouse units

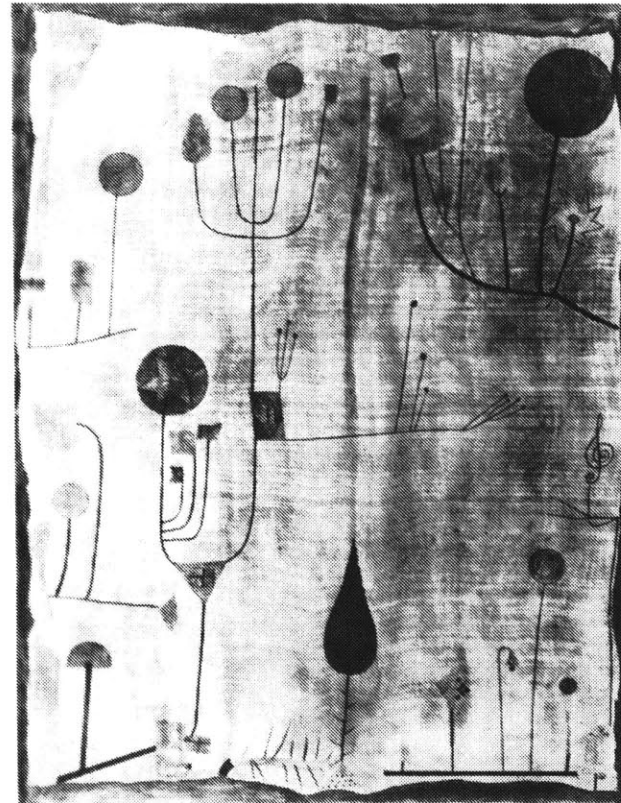
Would it be possible to cultivate the organism, to have it sprout yet another part? Could something grow there in an almost natural way, or did something have to be imposed, alien and artificial - a dead stone in living vegetation? Here you can see the themes that have fascinated me for so long: growth and change, the continuation of patterns as results of human action; the way urban living tissues are developed out of many small individual entities; and above all, the underlying structure, the relatively constant holding the relatively ephemeral; the unity and diversity; the beauty of the extraordinary that compliments the beauty of the ordinary - the leaves and flowers that speak of the same tree.

John Habraken
The Leaves and the Flowers

The situation and the approach ... can be illustrated with the image of a carpet or tapestry with a multitude of colours and scenes, full of different patterns that have been patched up on many previous occasions and that now has a hole in need of repair. We could certainly improve the tapestry by taking up the torn threads, adding new ones and continuing the same pattern but in the sense of a living story, it would be even better to weave in a pattern taken from our own times. Whether this pattern turns out large or small, discreet or dominating depends on the importance of the existing fabric and our own creative powers.

Gunter Behnisch
Architecture in an Urban Context

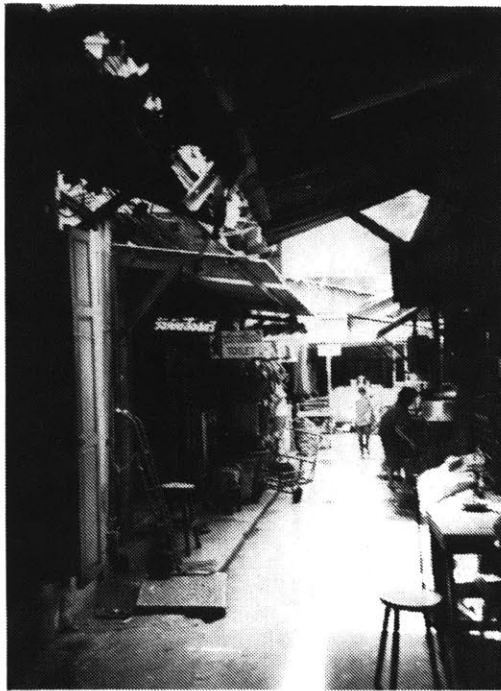
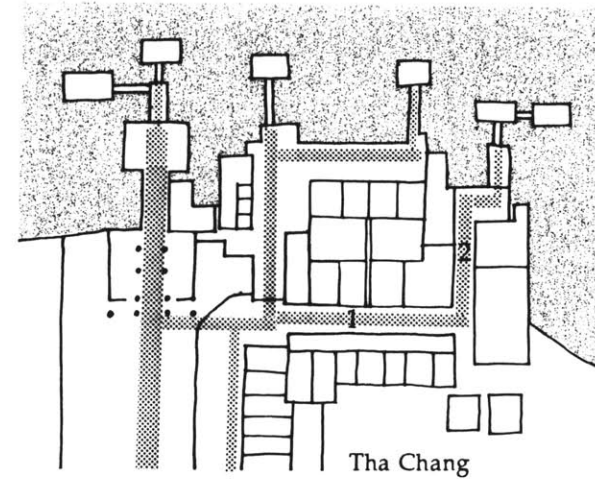
The scale of the spaces in the vernacular and the monumental fabric is quite different, but commonalities abound when one searches for underlying patterns, as well as for the dimension of the monumental in the vernacular and the dimension of the vernacular in the monumental. These common denominators will then be used to develop an architectural theme that "in its spatial variations and dimensional rhythm picks up the themes that reverberate from a past that is still alive."⁸ The areas studied here are located along the river where the library is sited.



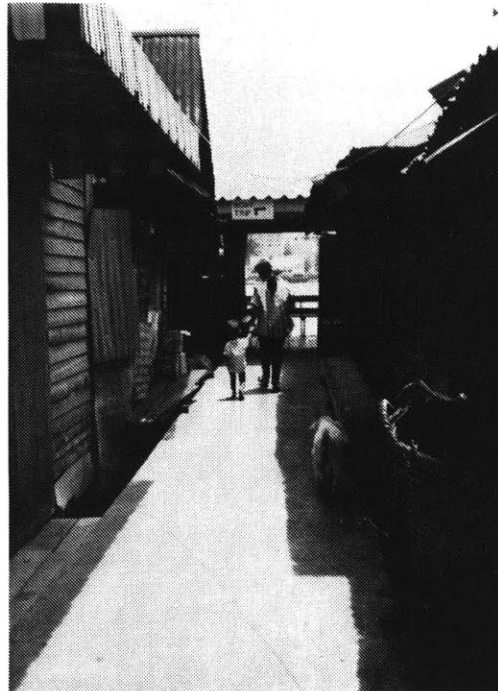
"Fruit on Red", Paul Klee

3.1 Discovery and choice in patterns of movement

In Tha Chang (“tha” means pier), multiple branch movements occur off the main path, with changes in direction establishing a sequence of short, linked paths leading to smaller piers. Each of these paths has shops or food stalls lining both sides, different relationships to the water, and varying degrees of overhead cover articulating the inside-outside transition space.



Tha Chang, path 1



Tha Chang, path 2



Tha Prachan, branch path

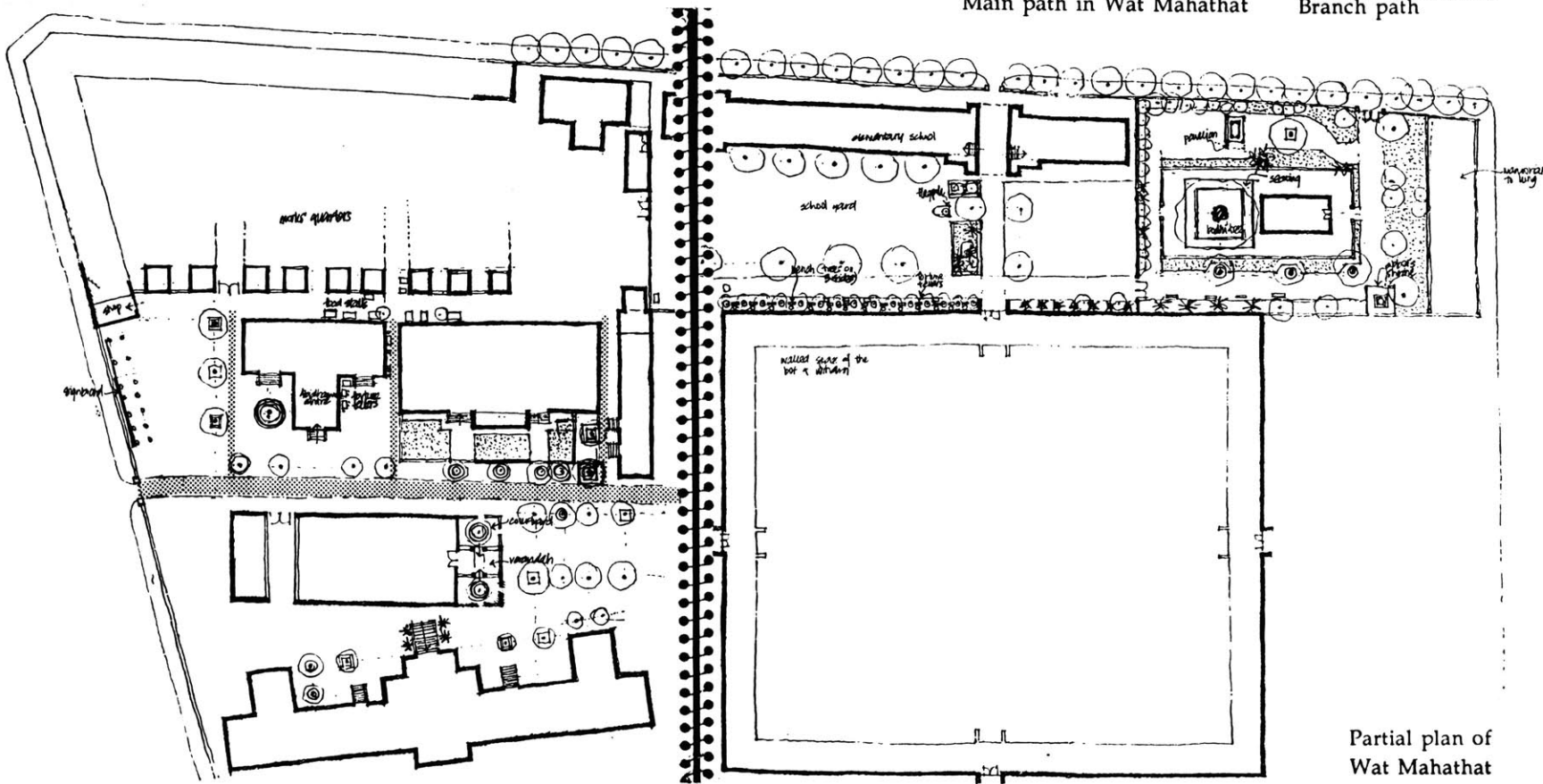
In Wat Mahathat ("wat" means temple), changes in direction from the main path establish more private streets which allow for quiet gathering. Perhaps the general freedom of movement within the compound illustrates the Buddhist concept of karma, which emphasizes the individual's right to choose. There are no must-nots in Buddhism (unlike many other religions), only ought-nots or should-nots.



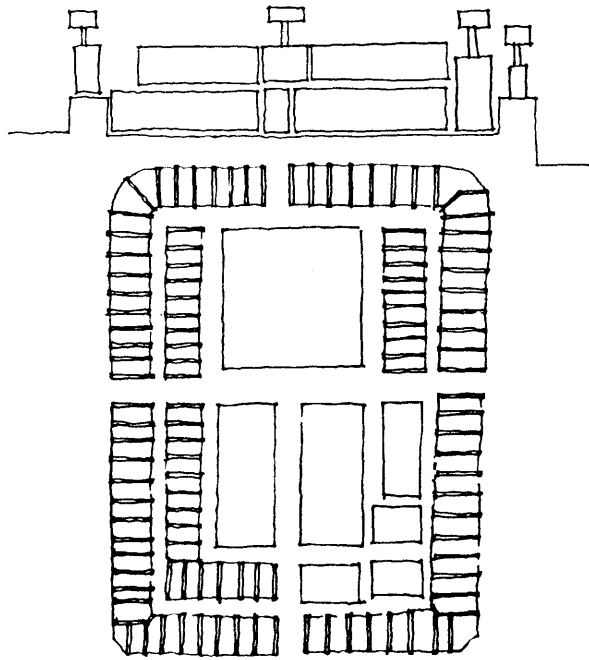
Main path in Wat Mahathat



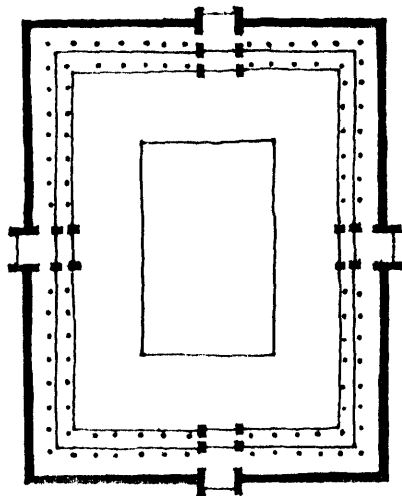
Branch path



Partial plan of
Wat Mahathat



Plan of typical shophouse fabric



Plan of typical gallery space enclosing a bot

3.2 Protection of the inner core

A typical riverside vernacular form is the ring of shophouses, with commercial street frontage, enclosing a shared courtyard which is used for storage of goods or for residential units. There is usually a cross axis of movement through this semi-public space, with more private, intimately-scaled alleyways branching off. The first theme of discovery and choice in patterns of movement is again present. In the shophouse fabric, each unit is articulated by party wall divisions so that the individual size can be read from the external facade.

All temples establish their territory using a high wall to separate the sacred world from the profane world outside. Sometimes a further layering is achieved by enclosing the main hall of worship, the bot, within another wall. A roofed circumambulatory space is built within this wall, and the internal face of the wall is painted with religious murals or lined with Buddha images. A secondary roofed circumambulatory space mediates between the space of this ritualistic movement and the free space around the hall of worship. The external face presents a continuous monumental wall, and the individual structural unit of the column can only be read on the interior.

3.3 Ritual of Transition into the inner core

In the vernacular fabric, one unit from the ring of shophouses is removed for access into the inner core. The roof over this point of access is continuous in direction and size with the larger whole. From this semi-public inner core into the private realm of the residence, changes in level, material and overhead cover define the realm of the threshold.

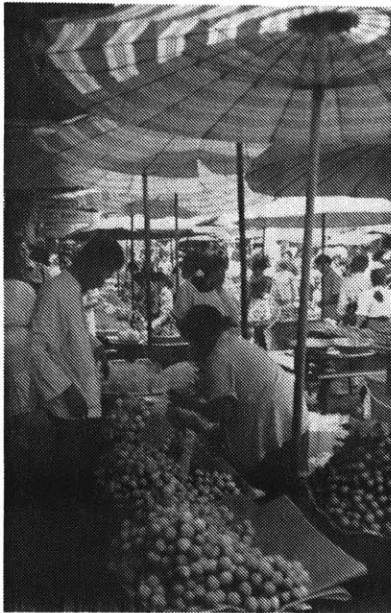
In the monumental fabric, the point of access into the inner core is celebrated by a change in direction of the wall and an elaborate roof form. The movement into the sacred building is strongly axial, with a hierarchy of floor level, material and ornamentation establishing a powerful ritual of transition. The threshold itself is always significantly raised above the surrounding floor level, with one having to consciously and carefully step over it, so that awareness of this ritual is heightened.



The shophouse fabric



Gallery space enclosing the Grand Palace



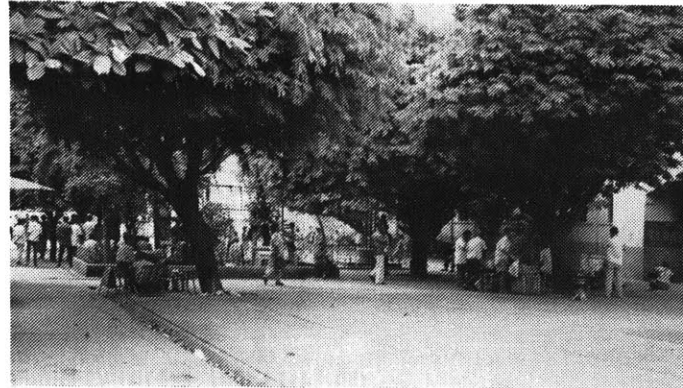
Street hawkers, Tha Prachan



Remains of a Buddha image, Ayudhaya

3.4 Gathering under shade

Because of the hot humid climate, overhead shelter with maximum openness on all sides is essential for comfort. The quintessential example is the portable umbrella used by itinerant street hawkers. When gathered in numbers, these individual circles of shade form a continuous shaded zone. To reduce the intense glare from the sky, eave heights are kept low, sometimes even below eye level.

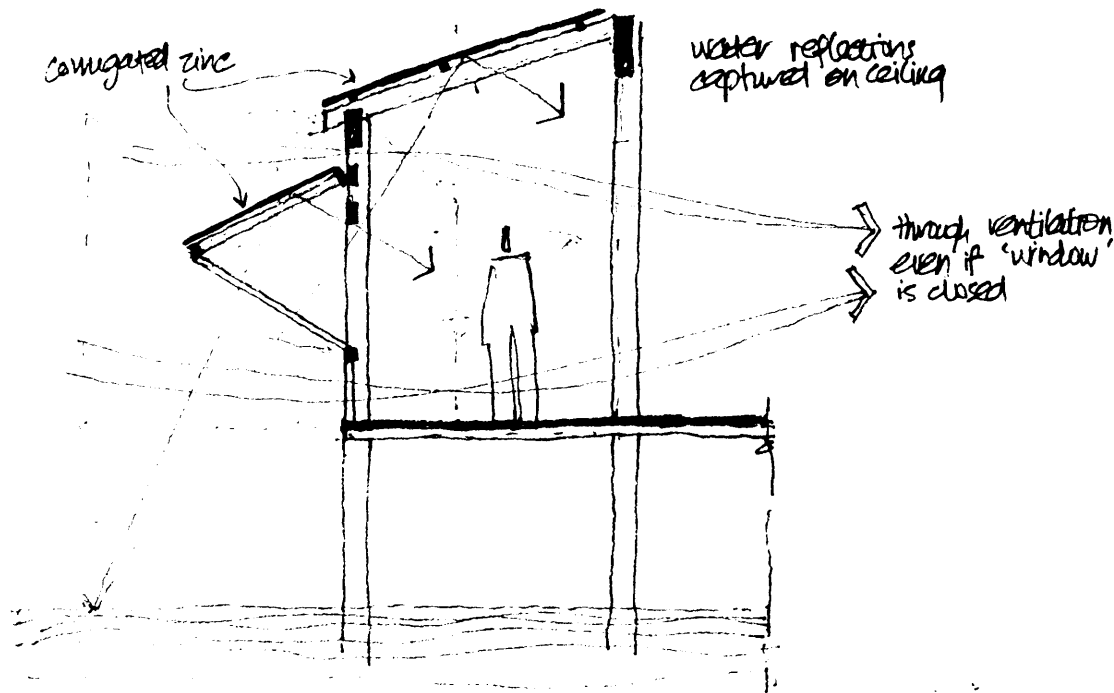


Public courtyard, Wat Mahathat

In the temple, shade trees with seats built around each trunk become foci of gathering. These are used architecturally to define paths of movement and open spaces. Each temple contains at least one bodhi tree, which is believed to be the tree under which the Buddha attained enlightenment. Hence the symbol of education is the “khru” or guru speaking his message under a tree.

3.5 Openness and narrowness of building forms

Air movement through buildings is needed to make the humidity tolerable. Thus besides maximum openness of walls, building widths must be limited to a narrow dimension to encourage air flow. The roof vent is a common architectural feature which facilitates the removal of hot air.



Typical riverside structure

Haptic perception... is a sense of touch that means just not contact with the fingers or the skin but an entire perceptual system conveying sensations of pressure, temperature, pain, and the sense of movement within the body as well as the feelings of the body moving through space. It is the perceptual system by which animals and men are literally in touch with the environment. The body feels the articulations of shapes and surfaces in the world by means of its own inner articulations.... we literally feel the world in our bones.... active exploratory touch permits both the grasping of the object and a grasp of its meaning.

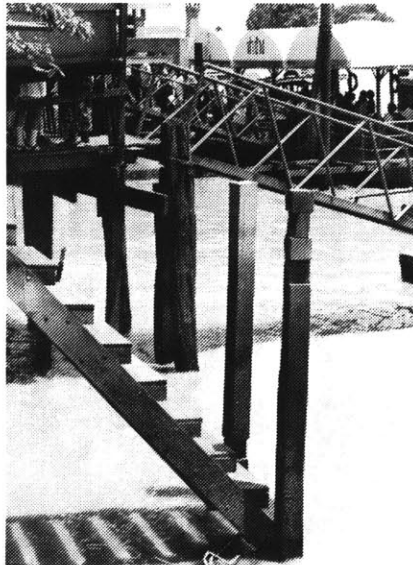
E. V. Walter
Placeways

3.6 Revealing the qualities of water

Every building on or by the water builds the opportunity to touch the water, whether for getting on or off boats, washing clothes, bathing or playing. These platforms are either fixed or occur at different levels (to accommodate the rise and fall of the water) or are floating. On the latter, the movement of waves caused by passing boats, by the wind, or by a dramatic prelude to a thunderstorm, is all sensed directly underfoot. From a water-level platform, the building is seen to be supported on a forest of columns. The sound of waves reverberates in the space under the building.



Private verandah

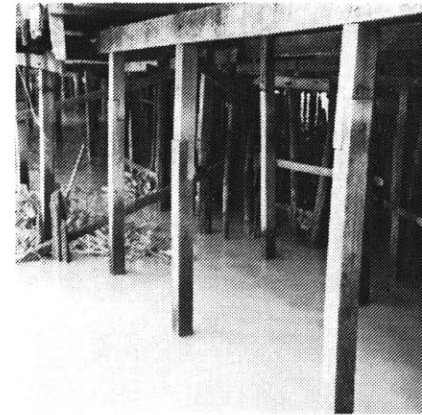


Private access to the water



Boat landing at a floating market

The muddy brown colour of the river becomes a rippling canvas for the patterns of light and shadow formed by gaps between floor planks. The ceiling of the building, usually zinc, captures light reflections from the water - water movement is translated into light. The simplicity of the timber construction gives the space a distinct resonance when a person walks across the floor.



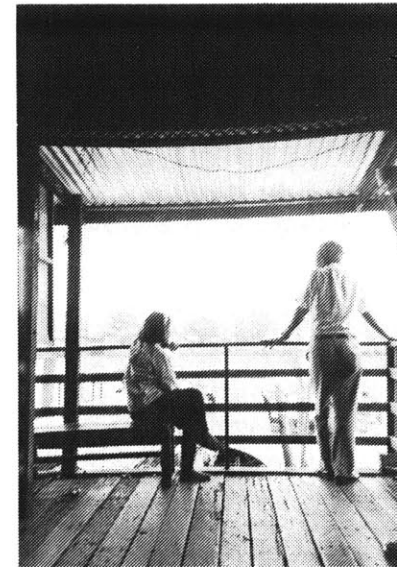
A forest of columns



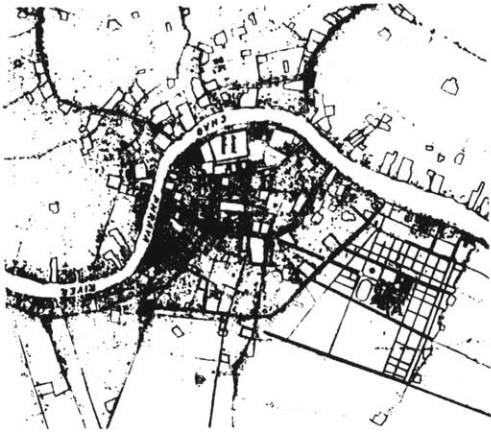
Choppy waters before a thunderstorm



Pattern of light and shadow



Tectonics of riverside construction



Map of Bangkok from the 1890's



Silpakorn University as seen from the northeast corner of the site



Shophouse row along Tha Chang

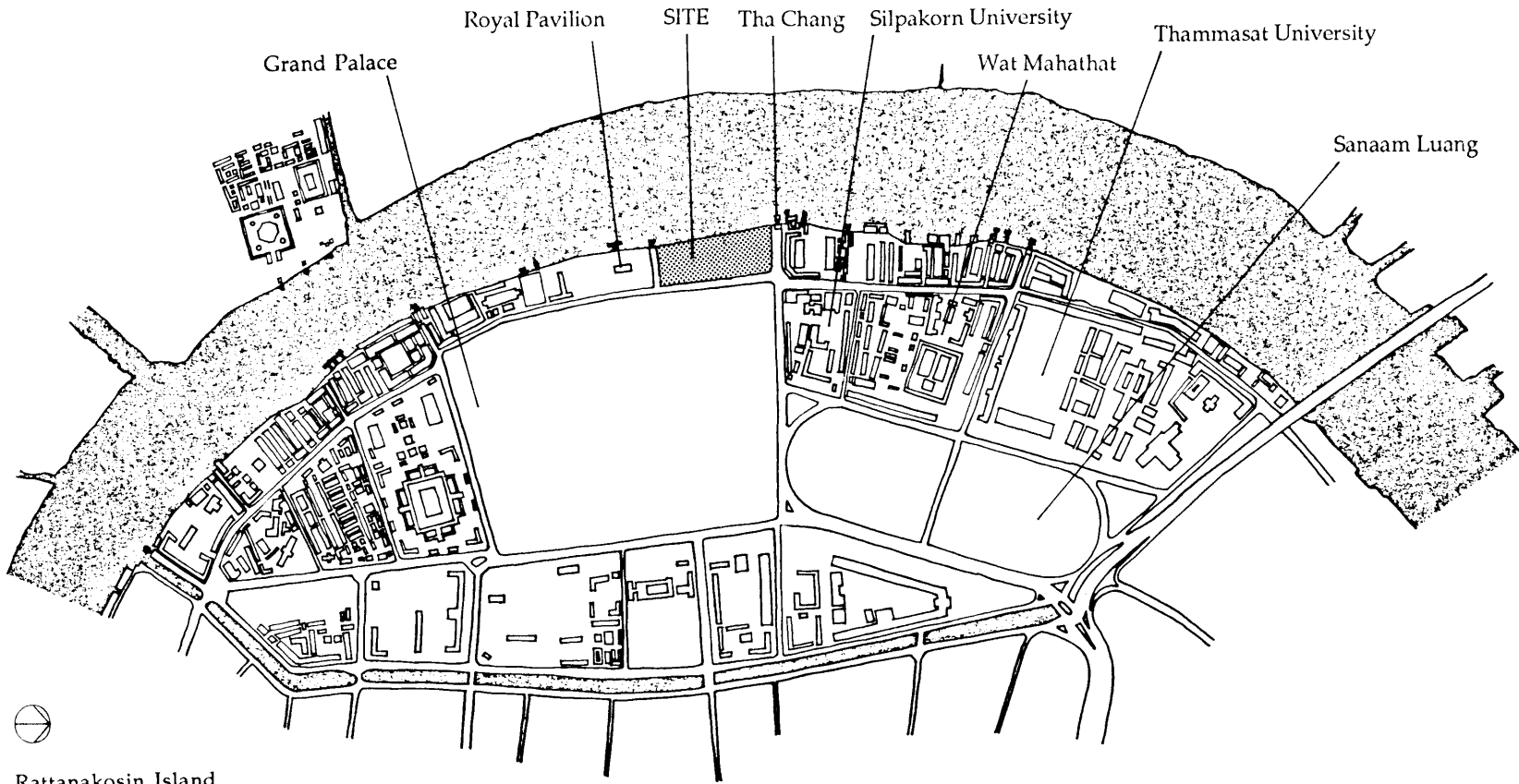
4 THE SITE

On the founding of Bangkok in 1767, two parallel canals were dug around the city which, together with the ox-bow bend of the Chao Phraya River on which it is strategically sited, effectively created an island. This was named Rattanakosin. The site chosen for this project lies along the river in the heart of this historical centre, allowing for opportunities to recognize the relationship to the larger, enduring order of the cultural past. The river speaks of beginnings - as represented in the Buddhist cosmological model and in the history of the city - and also of the future - as it is only by returning to the river and its canals that the unbelievable traffic congestion within the city can be alleviated. On Rattanakosin Island are many important institutions - the Grand Palace, symbolic seat of the monarchy; Wat Mahathat, an important centre of Buddhist teaching and meditation techniques; Sanaam Luang, a vast open field for public festivities; Thammasat and Silpakorn Universities; and vibrant streetside bazaars. The area thus generates a diverse public for the library, focussed on the north side



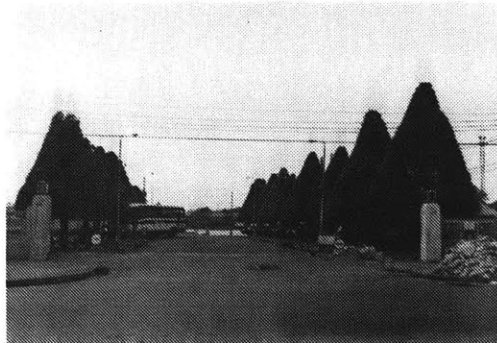
Aerial view of northeast corner of site (currently occupied by the Ministry of Defence)

of the site where Tha Chang, a major pier, is located. It is by building patterns of movement off this street into the site that the public becomes engaged in the library and its spaces. Also, by providing public access to the river, rare in the densely developed length of this economic lifeline, the library allows for gathering of these diverse groups.

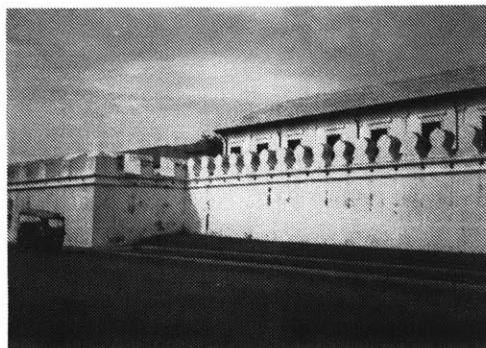




The Royal Pavilion



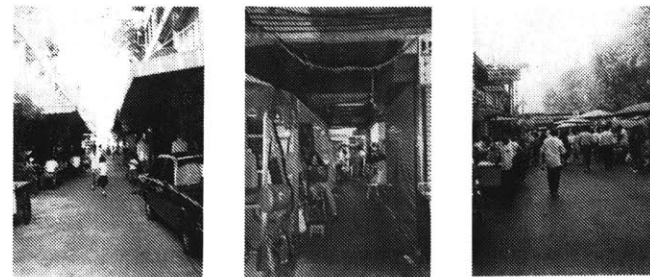
The formal allee of trees



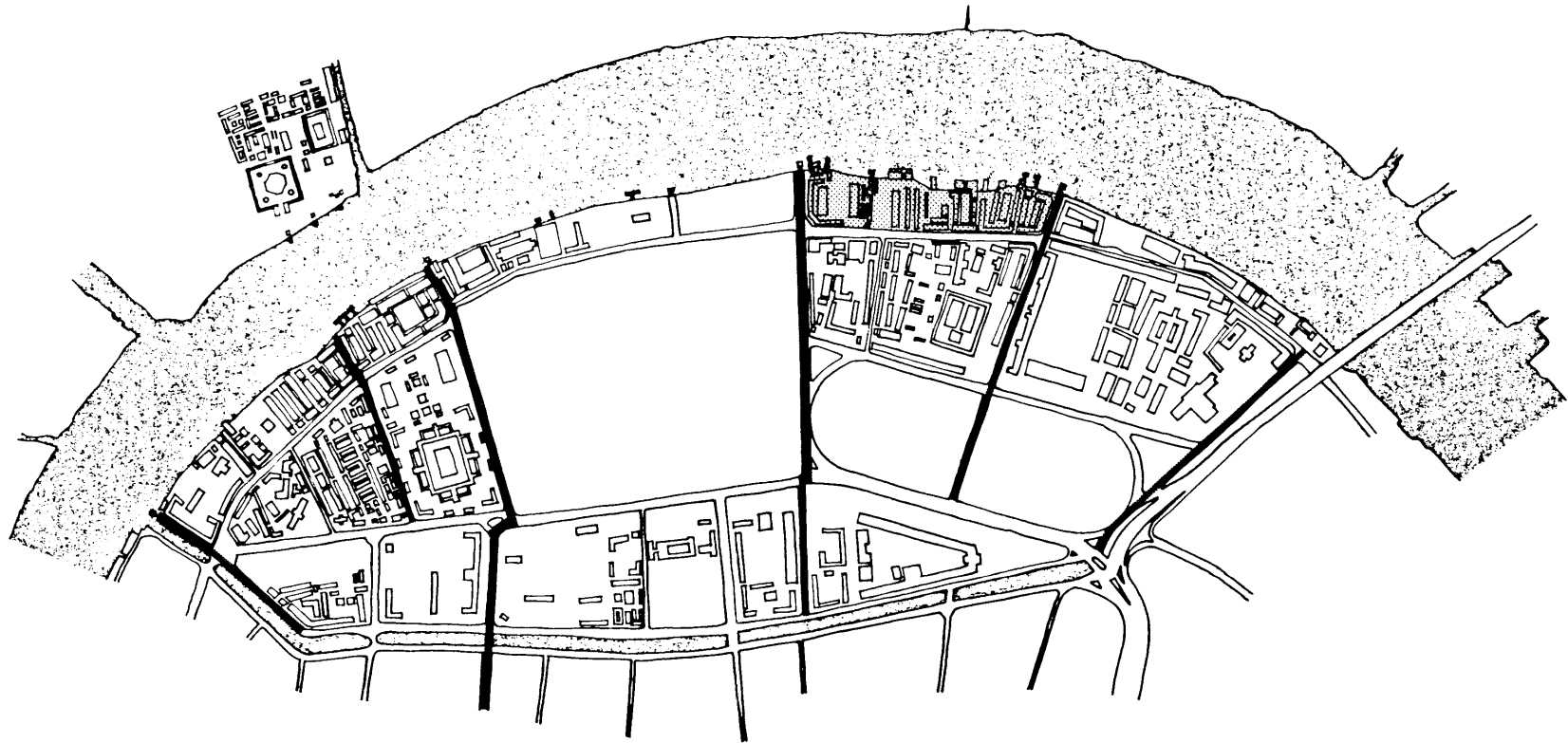
Wall of the Grand Palace

To the south of the site is the Royal Pavilion, where royal ceremonies are held. The street separating them is planted with a formal allee of trees, and leads to a pier. Contiguous with the need for the library to engage the public life and layer that into its inner sanctum is then the need to layer the site in from its active, vibrant north side of the everyday to the courtly, sanctified south side of the monumental.

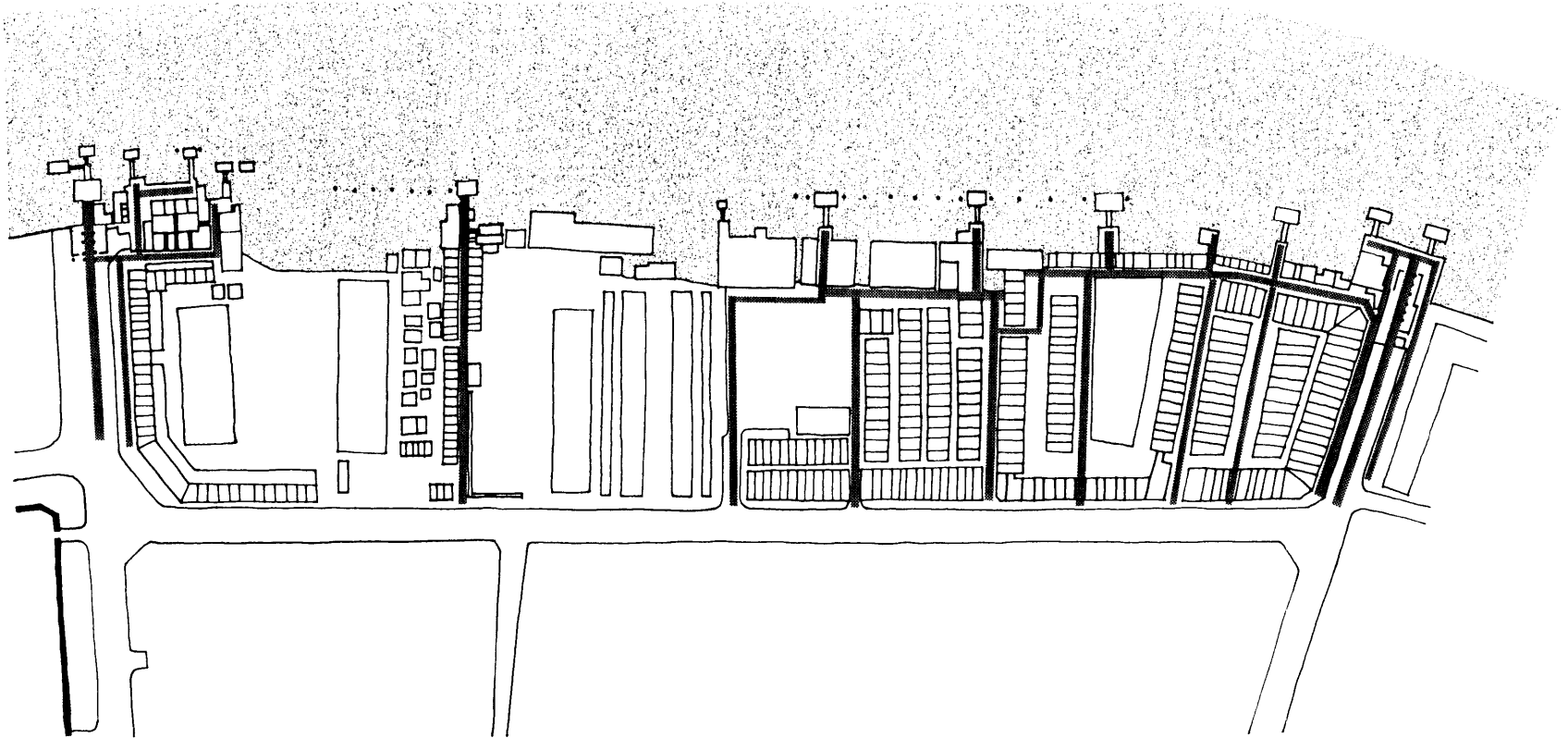
Maharaj Road, running parallel with the river, defines the east boundary of the site. Across from this street runs the monumental wall of the Grand Palace. The fabric of the 70-metre wide zone between the street and the river builds awareness of its condition by the water. At the large urban scale, this zone is articulated into blocks by perpendicular streets which run from the city and end in major piers. Within these large blocks, side streets leading to smaller piers form a finer grain to this pattern. Commercial activity grows along each of these streets to tap the heavy pedestrian flow. Elaborate branching of the path (as illustrated earlier) occurs at the major piers, and the path parallel to the river usually grows to form a promenade that gives screened views to the water.



Pedestrian streets leading to piers



Connections to the river - city scale

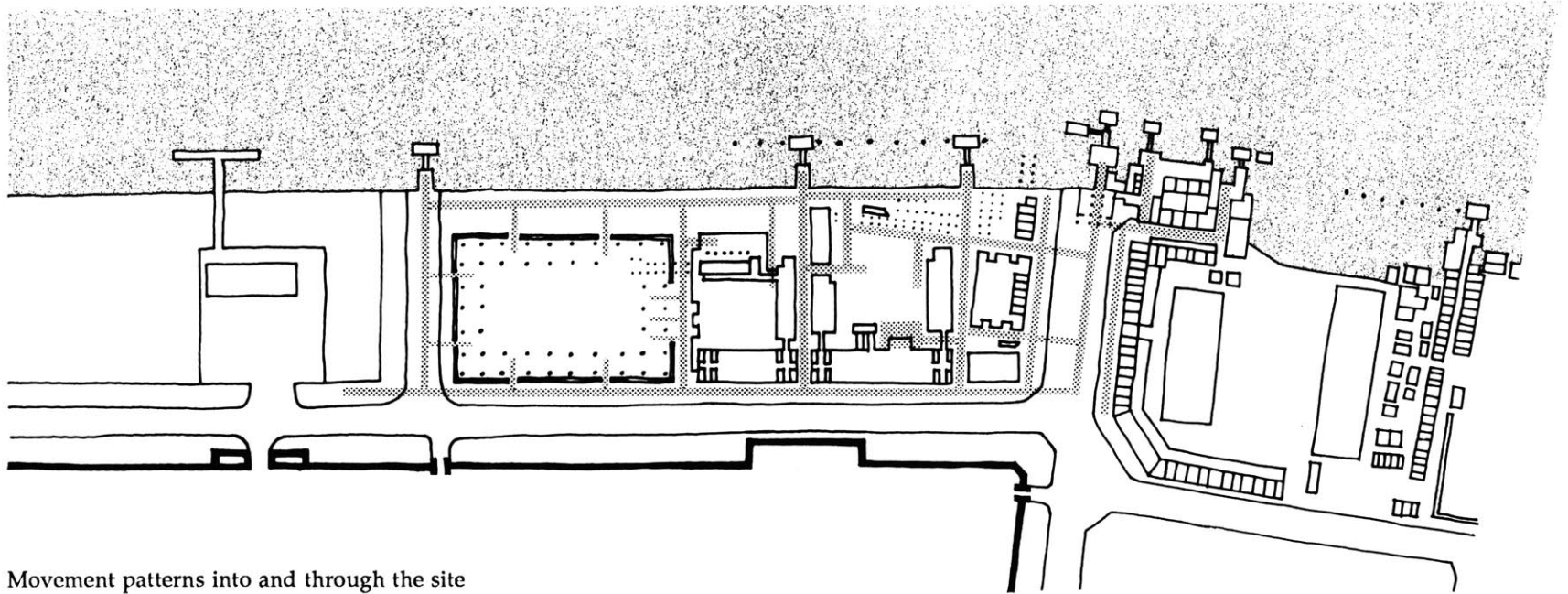


Connections to the river - block scale

5 THE PROGRAMME

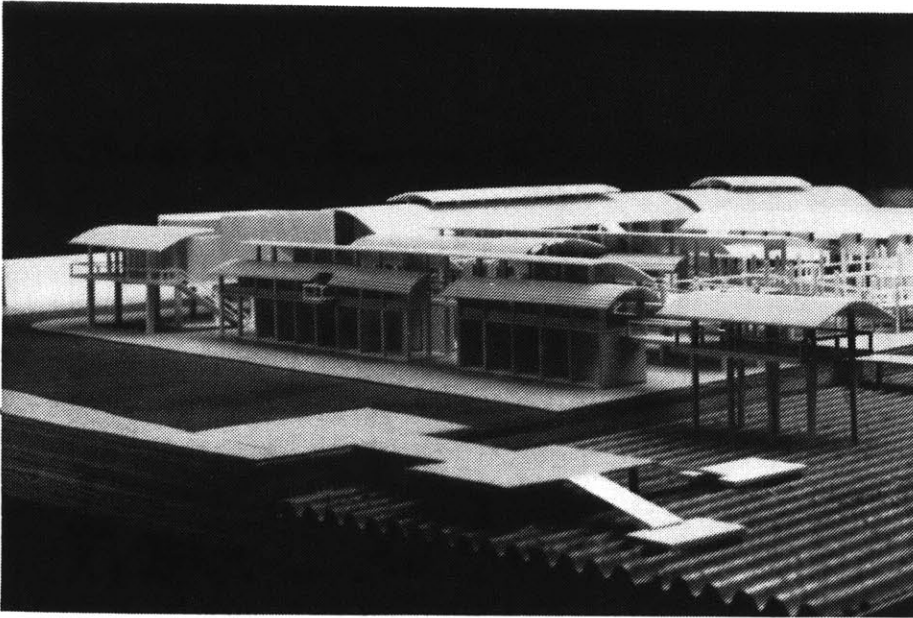
The library will accommodate different ways of communication and generating awareness which correspond to the different levels of engagement in the world of books and the realm of critical thinking. Space for commercial activity is provided to generate pedestrian flow. An exhibition hall and theatre hold events which raise critical awareness and question the state of things, yet are accessible to the illiterate. The library itself actively engages the casual pedestrian through its transparency and its articulation of public gathering spaces. Inside, it contains different reading spaces, from quiet niches to larger reading rooms. Besides books, information is also available in audio-visual form. Rare historical material is held in the Special Collections Room. Meeting rooms are provided where workshops, seminars or community group meetings can be conducted.

6 DESIGN PROJECTIONS

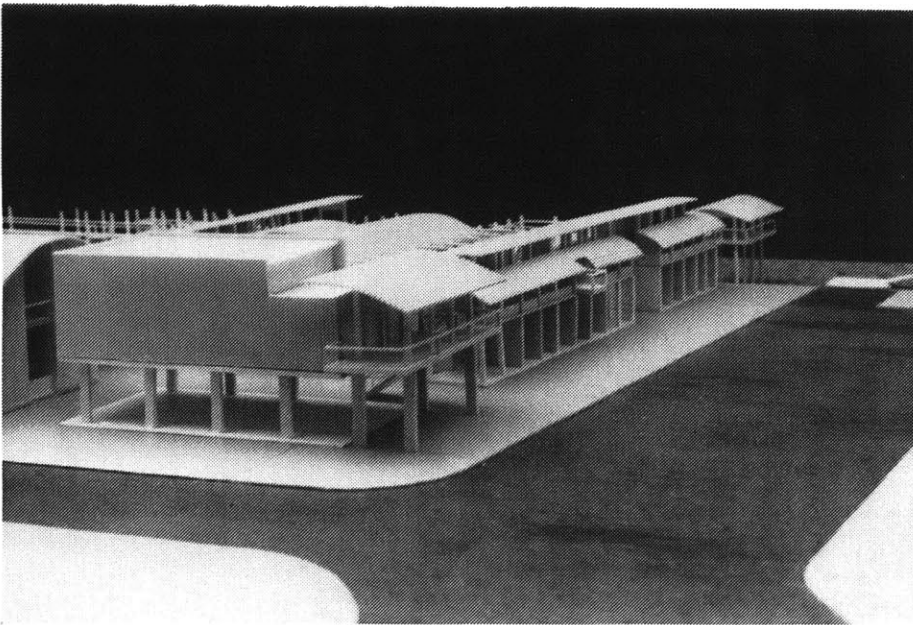


Movement patterns into and through the site

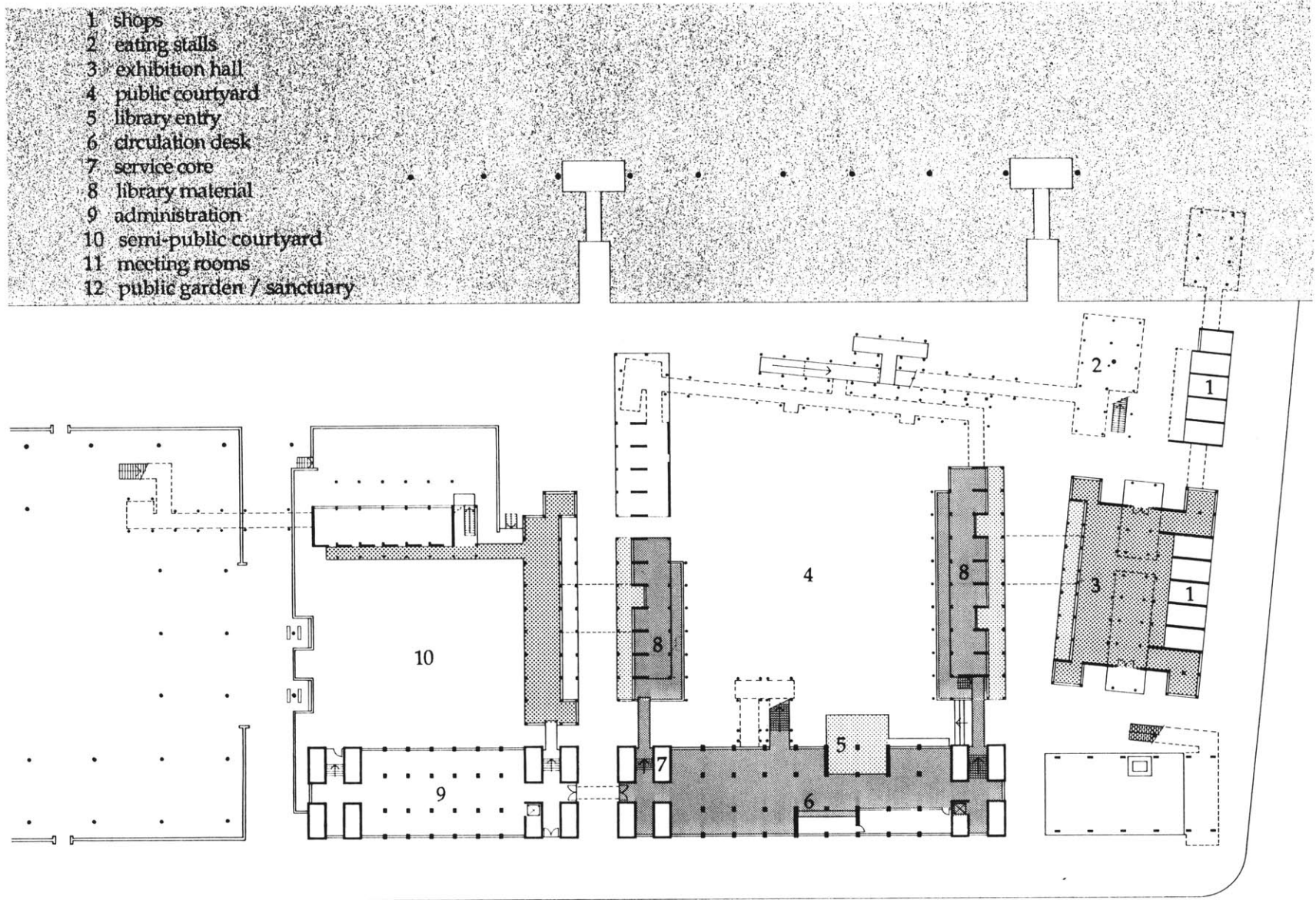
Tha Chang has, through many decades of growth, evolved into a complex network of spaces and paths. These patterns are extended into the site to encourage the same density of pedestrian use. The row of ground-floor spaces defining the street could house bookshops, cafeterias, a small post office, or other commercial uses. At the street corner stands the theatre. Its open ground floor offers shelter to itinerant street hawkers who give the street its life and vibrance. The verandah-like lobby on the second floor further celebrates the publicness and accessibility of the building.



View from Tha Chang



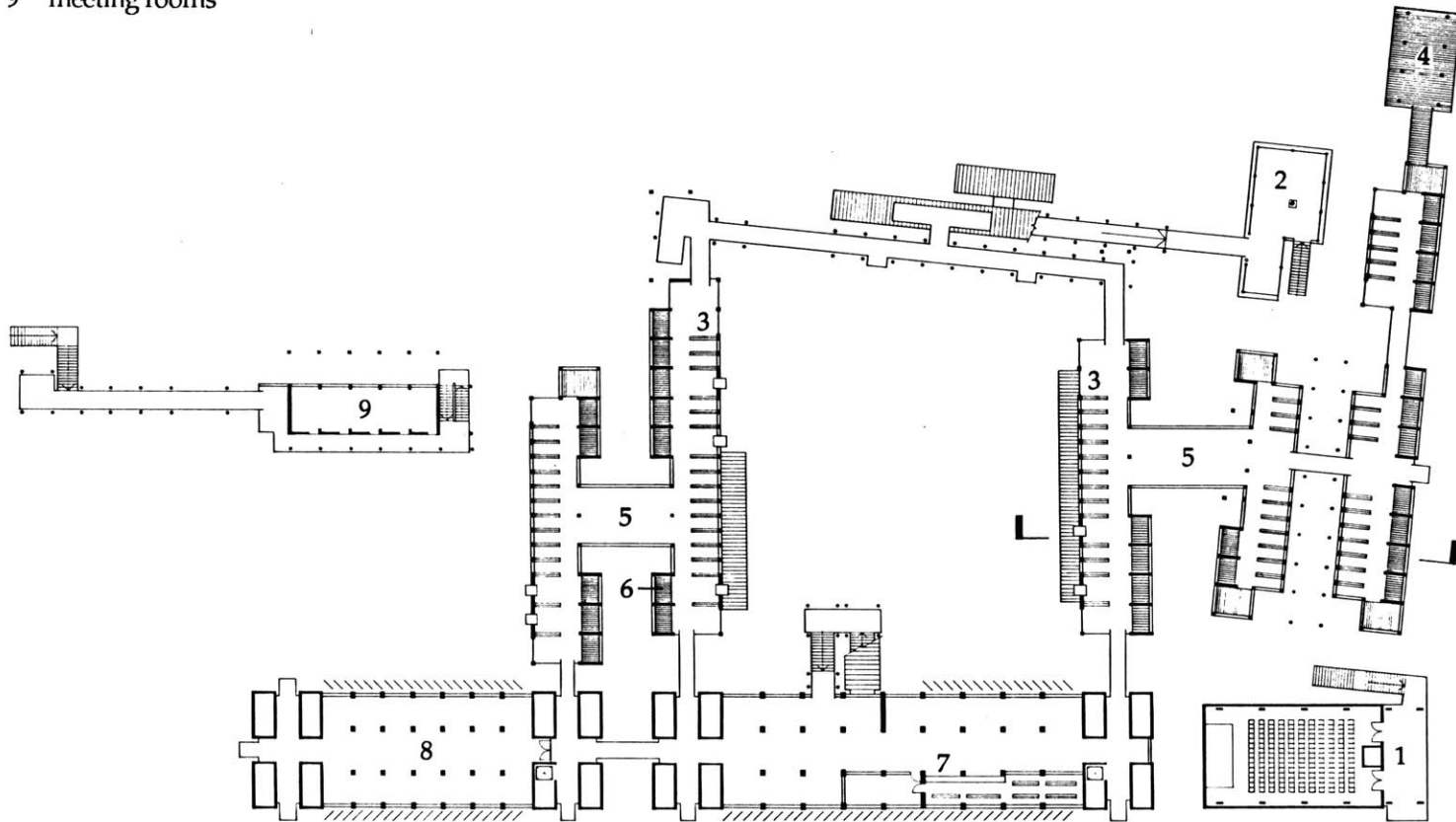
The theatre



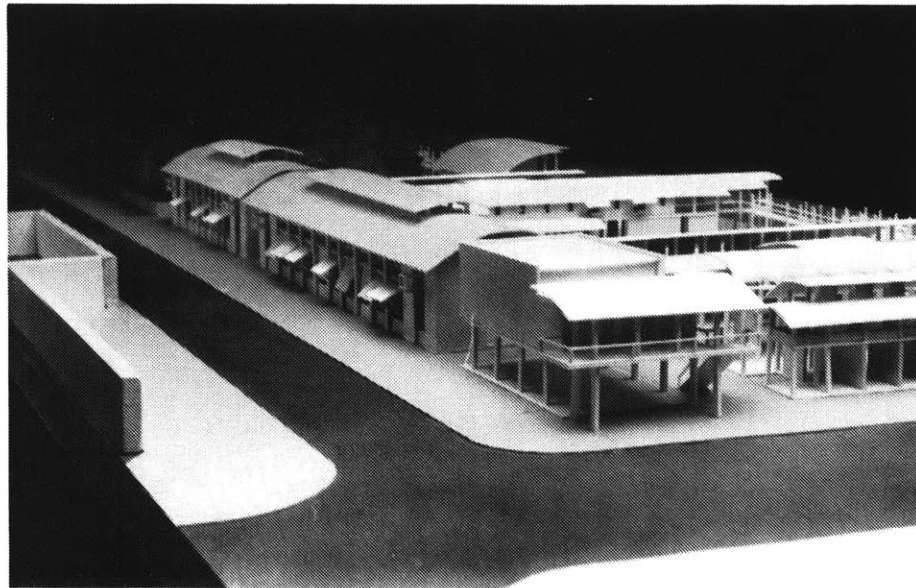
Ground floor plan showing the hierarchy of engagement in the library spaces



- 1 theatre
- 2 eating stalls
- 3 library material
- 4 reading pavilion
- 5 reading room
- 6 reading niche
- 7 reference desk
- 8 Special Collections Room
- 9 meeting rooms



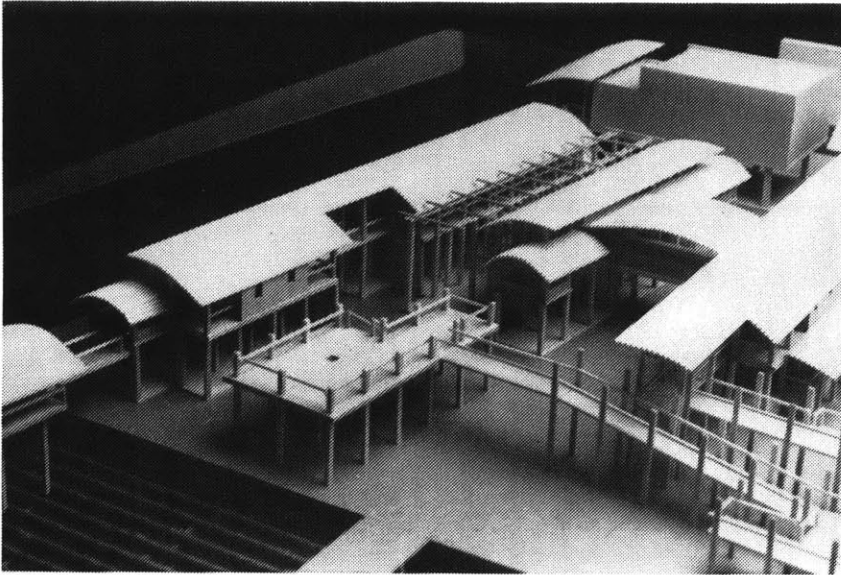
Second floor plan



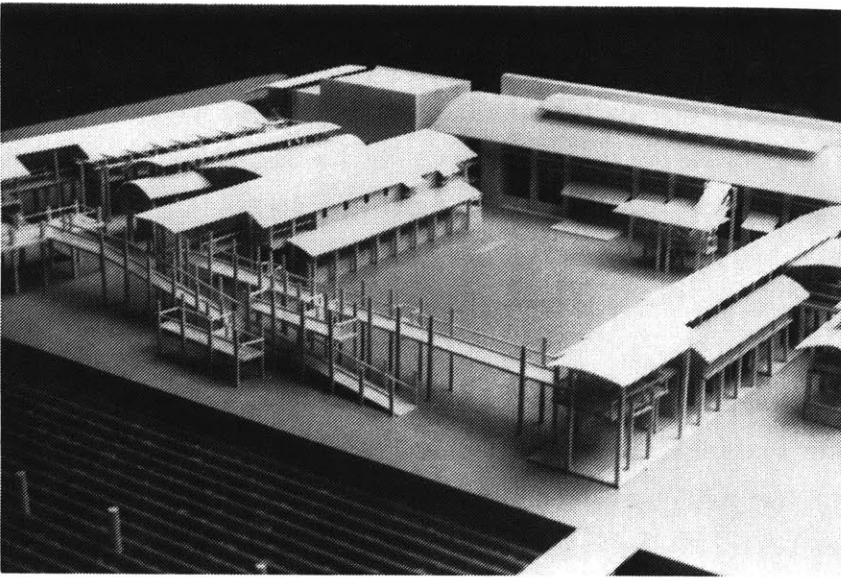
View along Maharaj Road

The main buildings of the library, where entry, circulation desk, and administration spaces are located, line Maharaj Road. They reinforce the continuity and formality of the Grand Palace wall. The second floor of the building furthest from the street corner contains the Special Collections Room. This repository for rare historical material looks over the wall to the Grand Palace, and, on the other side, to a quiet courtyard.

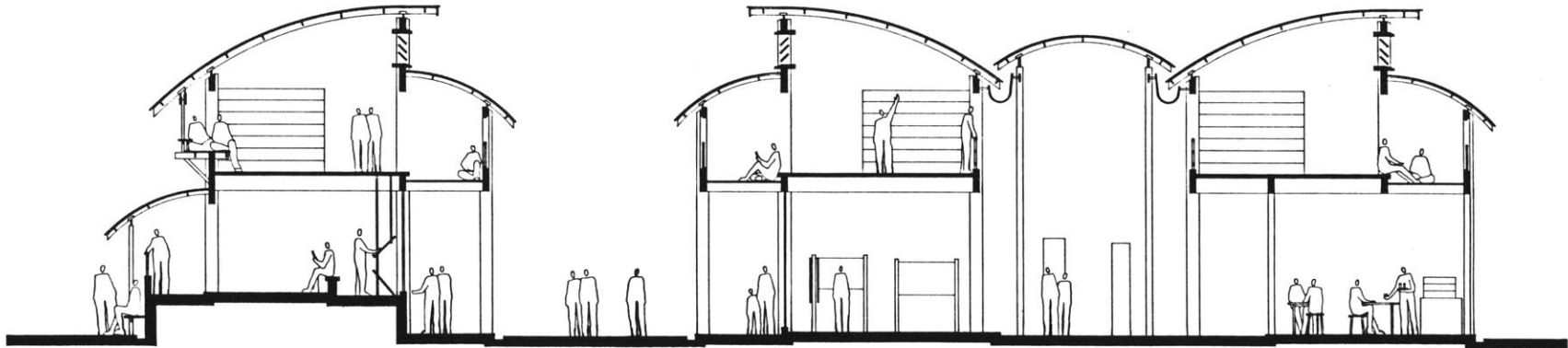
Besides the programmatic layering into the site from Tha Chang, the buildings also articulate the transition from land to water. The theatre and the main library buildings form a spine from which the library blocks register. These become more pier-like and elemental near the water.



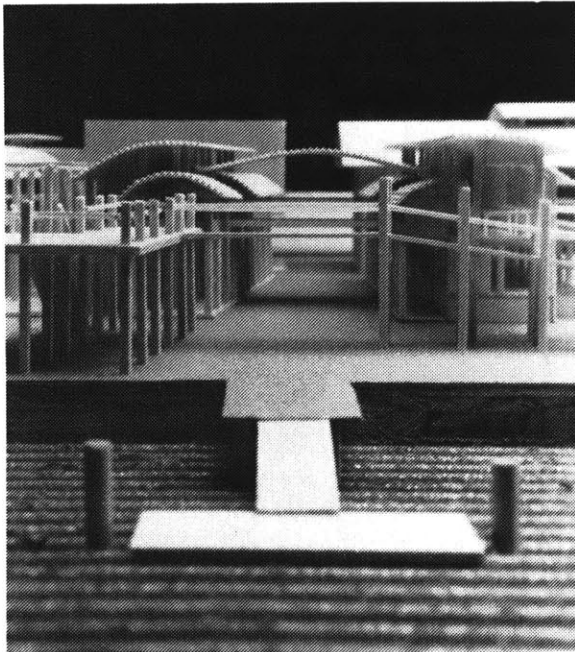
Layering into the site from Tha Chang



The public courtyard and library entrance



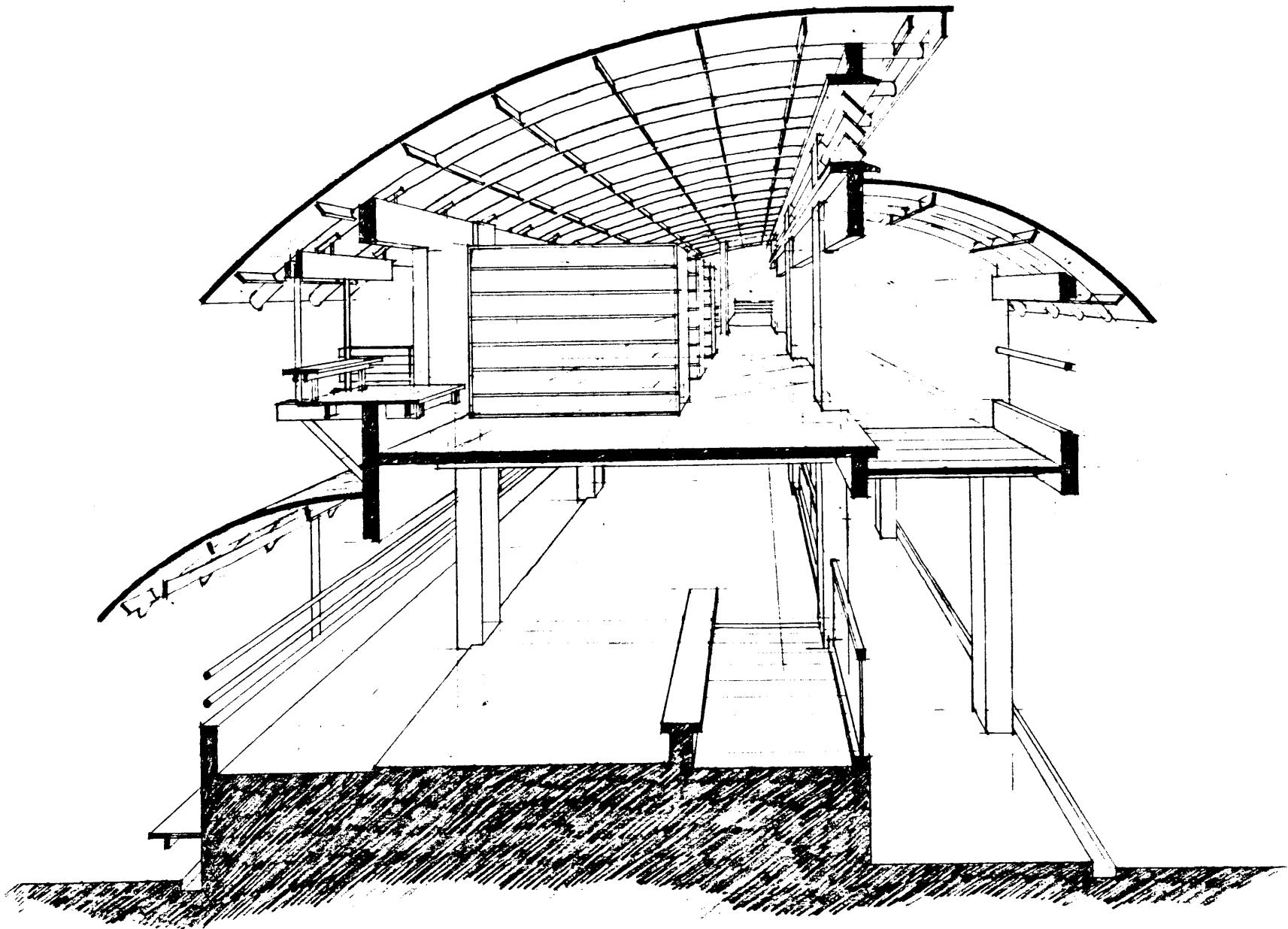
Section through the library and exhibition hall



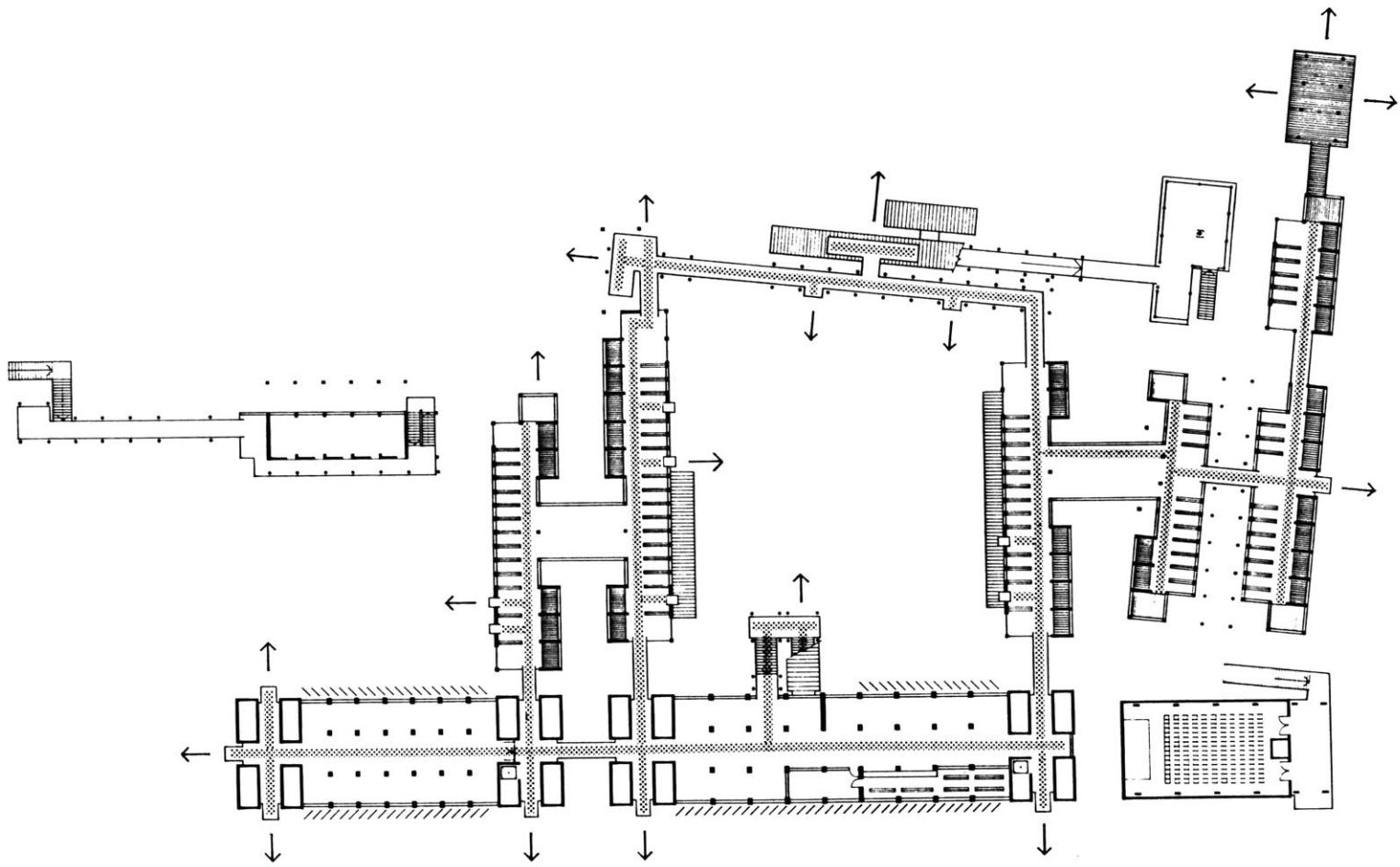
View from the pier by the eating stalls

The pattern of small streets leading from the road to the water and ending in piers is used to articulate the site as a piece of the city. The library directs its displays to the pedestrian moving through the site, serving to inform, entice and motivate people to use its resources. The reading room spanning each street reveals the world of the library to the uninitiated.

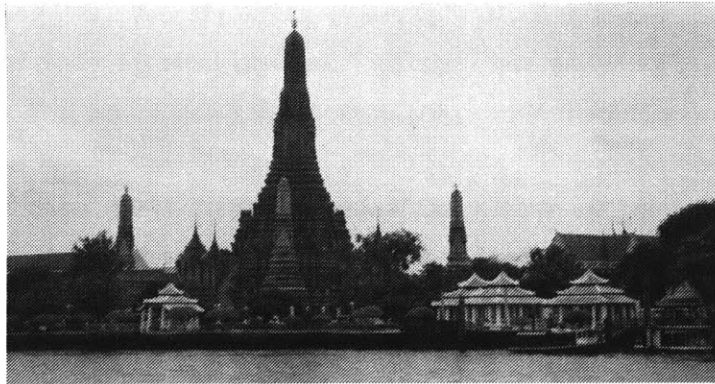
The larger roof over the library block defines the space of the world of books, and the smaller roof the space of the individual reader. The gap between the two roofs allows for natural overhead lighting and for ventilation. The reading niche, depressed below the general floor level, is a wooden platform where the reader can take off his shoes and relax on the floor.



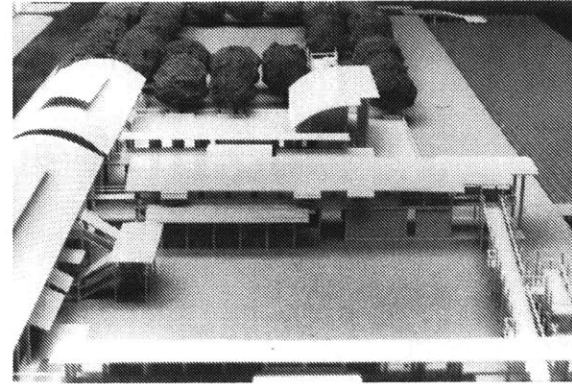
Sectional perspective of a library block



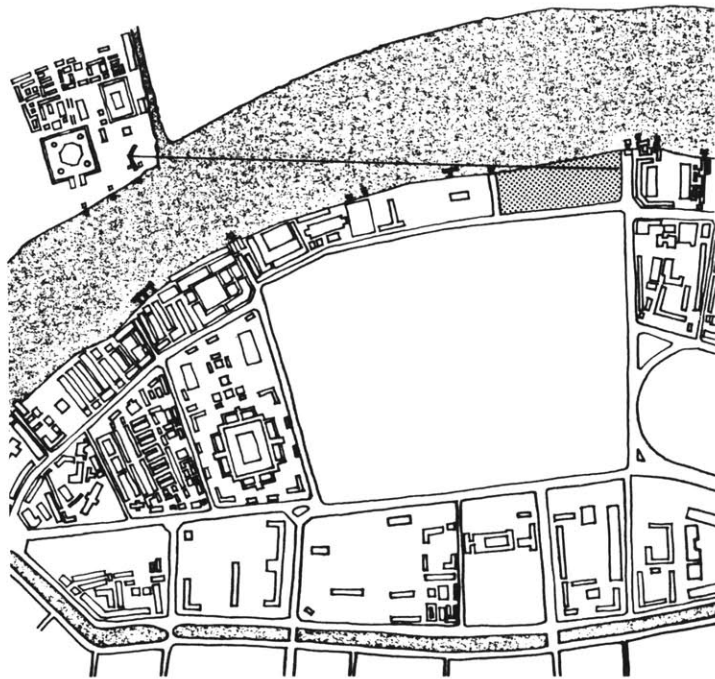
Second floor plan showing library circulation path and special places along the path that relate to the city around



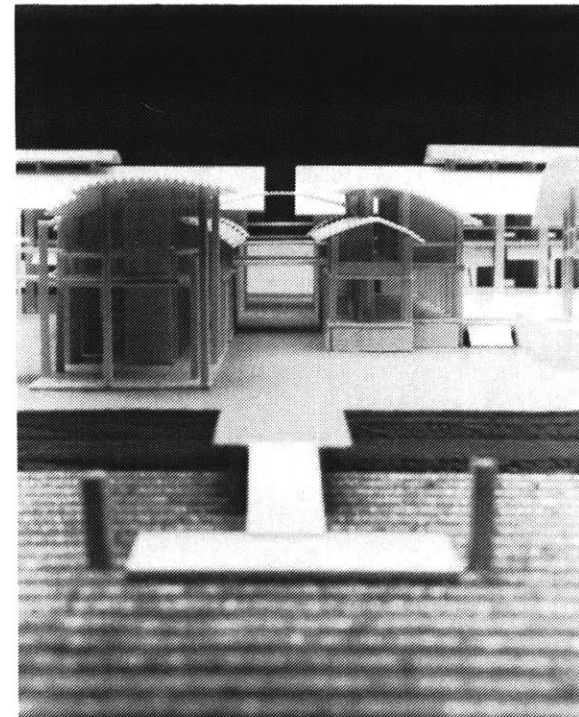
Wat Arun



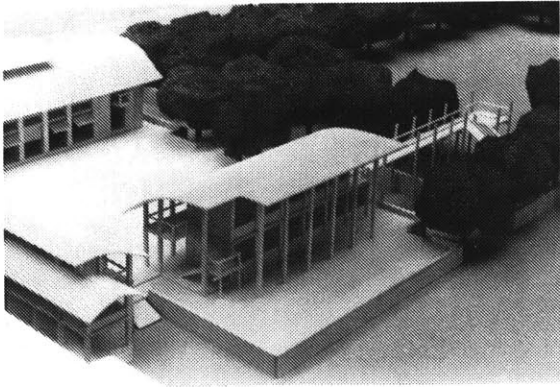
Bridge with view to Wat Arun



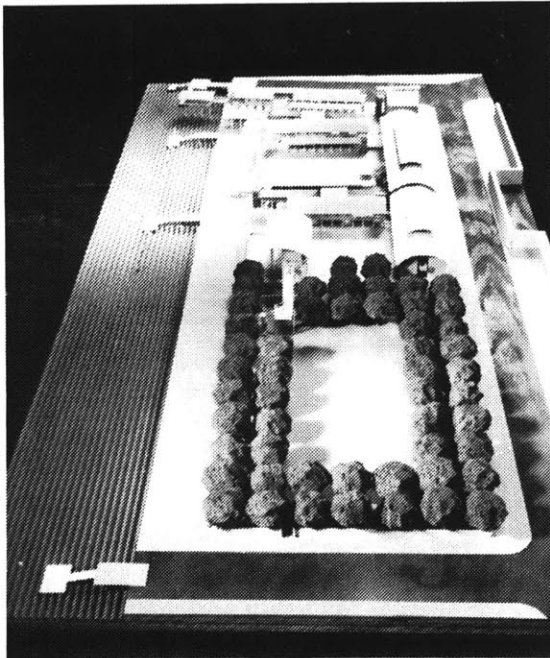
View from site to Wat Arun



View from pier showing special places
at end of library blocks



The meeting rooms

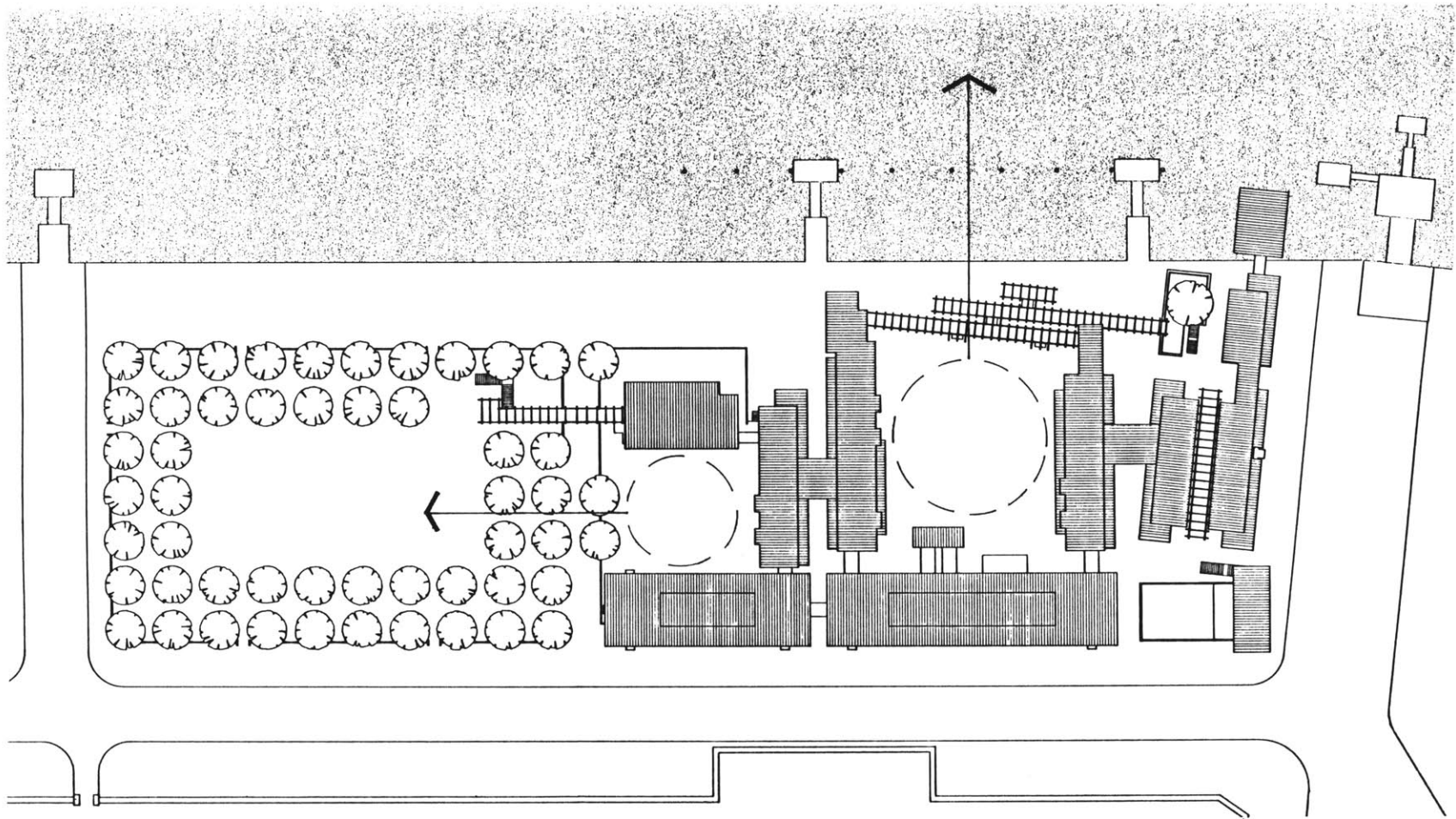


View from the public garden

At the south end of the site is a walled public garden planted with trees, the ancient symbol of gathering and learning. This oasis from the surrounding urbanity is also a response to the sanctity of the Royal Pavilion next to it.

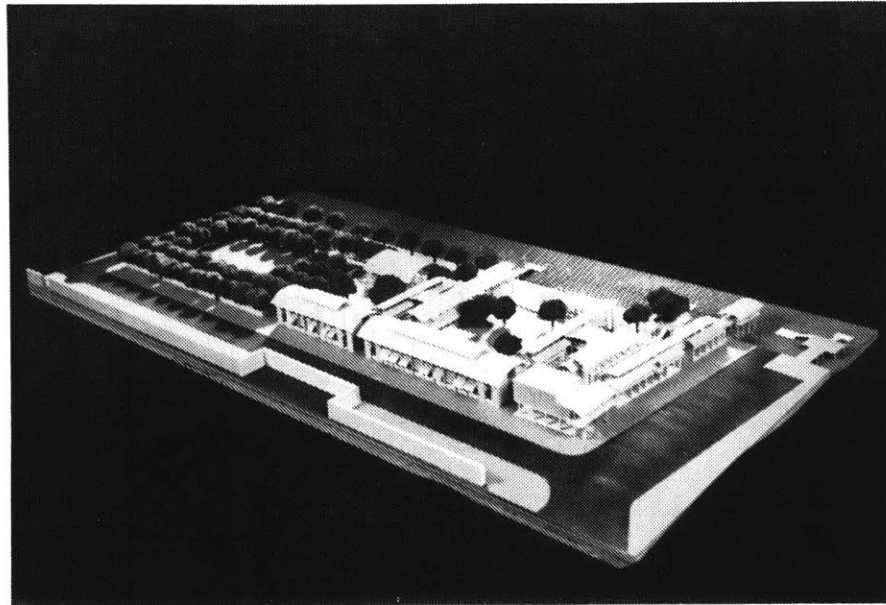
The building containing the meeting rooms sits on a raised podium, establishing a hierarchy between it and the public pedestrian flow around. Together with the library buildings, it defines a courtyard onto which its activities can overflow. Classes for adults and children, workshops, seminars and community group meetings can all be held here. This space of production of knowledge stands counter to the space of consumption of knowledge as represented in the theatre and exhibition hall at the other end of the site. A bridge connects the meeting rooms to the public garden, breaking into the order of trees to form the linkage.

Most of the riverfront is left open to allow for the large-scale public gathering that water-related ceremonies generate. One of these is the royal barge procession. Another is the Loy Krathong festival where miniature floats containing flowers, joss sticks and candles are launched as an offering to the water spirit.



Roof plan showing relationship of courtyards to larger zones

By developing and innovating on the six architectural themes elaborated earlier, the library encompasses a full range of closures, dimensions, uses, privacies and light, establishing a continuity from the world of the everyday to the world of the sanctuary, and from the public realm to the private. The library thus challenges the conventional institution in terms of its programme of communication (vigourous versus passive), its degree of insulation from the outside world, and the ease of access to its collections.

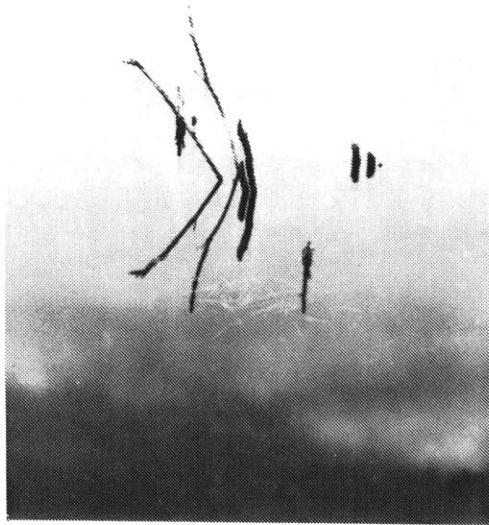


7 EPILOGUE

Time is but the stream I go a-fishing in. I drink at it; but while I drink I see the sandy bottom and detect how shallow it is. Its thin current slides away, but eternity remains. I would drink deeper; fish in the sky, whose bottom is pebbly with stars.

H. D. Thoreau

Walden



NOTES

- ¹ Paul Ricoeur, History and Truth, Evanston, 1965, p.277.
- ² Frances Clarke Sayer, Summoned by Books, New York, 1965, p.36.
- ³ Kenneth Frampton, "Towards a Critical Regionalism", in The Anti-Aesthetic, Seattle, 1983, p.21. This should be distinguished from nostalgic attempts to revive the past for past's sake, as in Populism.
- ⁴ Herman Hertzberger, "Montessori Primary School in Delft, Holland", in Harvard Educational Review, vol.39, no.4, 1969, p.66.
- ⁵ Nikolus Pevsner, A History of Building Types, Princeton, 1976, p.104.
- ⁶ Royal patronage extended to selected monasteries, however, allowed them to offer specialized secular instruction, e.g. in medicine and astrology.
- ⁷ Stanford Anderson, "People in the Physical Enviroment", in On Streets, Cambridge, 1986, pp.6-7.
- ⁸ John Habraken, "The Leaves and the Flowers", in VIA, vol.4, 1980, p.57.

ILLUSTRATION CREDITS

All drawings and photographs not otherwise credited are by the author. Reference is by page number, and position on page is indicated as follows:

T = top, M = middle, B = bottom, R = right.

Photographs of model by Robert Ruscansky.

4 Architectural Dimension no.3, 1987, journal of the Faculty of Architecture, Chulalongkorn University.

7R Herman Hertzberger, Herman Hertzberger: Buildings and Projects, 1987.

9 Sumet Jumsai, Naga, 1988.

10T Nikolaus Pevsner, A History of Building Types, 1976.

10M Ibid.

10B Ibid.

13T Sumet Jumsai, *ibid.*

13M Ibid.

14 Christian Geelhaar, Paul Klee and the Bauhaus, 1973.

20B Kenneth E. Wells, Thai Buddhism, 1975.

24T Michael Smithies, Old Bangkok, 1986.

45 Minor White, Mirrors, Messages, Manifestations, 1969.

BIBLIOGRAPHY

Anderson, Stanford, "People in the Physical Environment: The Urban Ecology of Streets", in On Streets, Cambridge: MIT Press, 1986.

Brawne, Michael, Libraries: Architecture and Equipment, New York: Praeger Publishers, 1970.

Barthes, Roland, "Semiology and Urbanism" in VIA, vol. 2, 1973.

Dhitiwatana, Palanee, "Buddhism and Thai Education", in Buddhism & Society in Thailand", ed. B. J. Terwiel, Bihar, India: Centre for South East Asian Studies, 1984.

Faundez, Antonio and Paulo Freire, Learning to Question: A Pedagogy of Liberation, trans. Tony Coates, New York: Continuum, 1989.

Frampton, Kenneth, "Towards a Critical Regionalism: Six Points for an Architecture of Resistance", in The Anti-Aesthetic: Essays on Post Modern Culture", ed. Hal Foster, Seattle: Bay Press, 1983.

Eco, Umberto, The Open Work, trans. Anna Cancogni, Cambridge: Harvard University Press, 1989, orig. pub. 1962-68.

Habraken, John, "The Leaves and the Flowers", in VIA vol.4, 1980.

Husen, Torsten, The Learning Society, London: Methuen & Co., 1974.

Hertzberger, Herman, "Montessori Primary School in Delft, Holland", in Harvard Educational Review: Architecture and Education, vol. 39 no.4, 1969.

_____, "Homework for more Hospitable Form", in Forum XXIV-3.

Iser, Wolfgang, The Act of Reading: A Theory of Aesthetic Response, Baltimore: John Hopkins University Press, 1978.

Kuhn, Thomas, The Structure of Scientific Revolutions, Chicago: University of Chicago Press, 1970.

Jumsai, Sumet, Naga: Cultural Origins in Siam & the West Pacific, Singapore: Oxford University Press, 1988.

Keyes, Charles F., Thailand: Buddhist Kingdom as Modern Nation-State, Bangkok: Editions Duang Kamol, 1989.

Leonard, George B., Education & Ecstasy, New York: Dell Publishing Co., 1968.

M.I.T. Department of Architecture, Powers of Inhabitation: Observations in the Via Monserrato, Grunsfeld Programme, Cambridge: 1977.

Popper, Karl, Conjectures & Refutations: The Growth of Scientific Knowledge, New York: 1962.

Phillips, Herbert P., "Siamese Intellectuals", in Change & Persistence in Thai Society, ed. George W. Skinner and A. Thomas Kirsch, Ithaca, New York: Cornell University Press, 1975, orig. pub. 1967.

Proust, Marcel, On Reading, trans. Jean Autref and William Burford, New York: The Macmillan Company, 1971, orig. pub. 1906.

Pevsner, Nikolaus, A History of Building Types, Princeton: Princeton University Press, 1976.

Ricoeur, Paul, "Universal Civilization and National Cultures", in History and Truth, trans. Charles A. Kelbey, Evanston: Northwestern University Press, 1965, orig. pub. 1961.

Smith, Maurice, "Not Writing on Built Form", in Harvard Educational Review: Architecture and Education, vol.39, no.4, 1969.

Spain, Frances Lander, Some Notes on Library Development in Thailand, 1951-1965, Bangkok: Chulalongkorn University, 1965.

Sayer, Frances Clarke, Summoned by Books, New York: Viking Press, 1965.

Von Foerster, Heinz, "To Know and to Let Know: An Applied Theory of Knowledge", in the Canadian Library Journal, vol.39, no. 5, October 1982.

Wyatt, David K., "Education and the Modernization of Thai Society", in Change and Persistence in Thai Society, ed. George William Skinner & A. Thomas Kirsch, Ithaca, New York: Cornell University Press, 1975.

Walter, Eugene Victor, Placeways: A Theory of the Human Environment, Chapel Hill: University of North Carolina Press, 1988.