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A Place of Refuge

by

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Abstract

As members of a collective whole, each of us, as a necessary event, must interact with others for our livelihood as well as the prosperity of society as a whole.

However, just as we are part of a collective whole, we are also solitary individuals. As such, we need places which do not express community values, but rather, affirm our own identity and offer security and separation from the public realm.

This thesis explores the historical precedents and generative principles for achieving refuge by varying the architectural character of spaces along a processional path to generate a subtle progression from the public to private domains. Following this, a design for a residence is presented which explores the potentials of the principles discovered.

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Introduction

"In the house our wandering has come to an end. We have experienced the forces and forms of the landscape, have approached the settlement as a place of arrival, and have been excited by the meeting and possibilities offered by the meeting and possibilities offered by urban space. We have also discovered the facade of the public building and been invited by its promise. After having received the explanation inside and gained a foothold in a shared world, we have withdrawn into our house, where the world is again present in its immediacy. And still, the world of the house is different from the world outside. What was given there, is here understood and er-lebt. Thus the house brings the inhabited landscape close to man, and thus it becomes the cradle from where we can start our wandering again." (Norberg-Schulz, 1985, p. 108)

From the earliest time man has seen the need for places which separate and protect him from the hostile forces of his world, both physical and psychological. Often it was his dwelling which best expressed this need, for unlike the architecture of the public realm, the house symbolizes man's spiritual need for his own individuality and expresses the emotional security of sole ownership and control of place. The generation of a place of retreat from the public realm is therefore a primary architectural characteristic of the dwelling which must be realized in its design.

Integral to this concept of retreat, or refuge, is the physical separation between the public and private realms, or seclusion.

"Seclusion in building is introverted and self-existent. It is a microcosm in which man can search and unfold his personality, unobstructed by his demanding fellow man or by an obtrusive environment. ... Seclusion in building, both as the withdrawn room and as the hidden house, is not antisocial. Instead, it is the affirmation that man is primarily individual rather than component of family and, again, that ties within family are stronger than those to society." (Engle, 1964, p. 278)



1 Chinese place of refuge

We have characterized refuge as having both the qualities of physical and spiritual protection obtained by providing barriers to hostile forces as well as the removal of oneself physically from those forces. If then the character of refuge is fundamental to the design of a residence, there exists a need for an architectural model for the generation of such places.

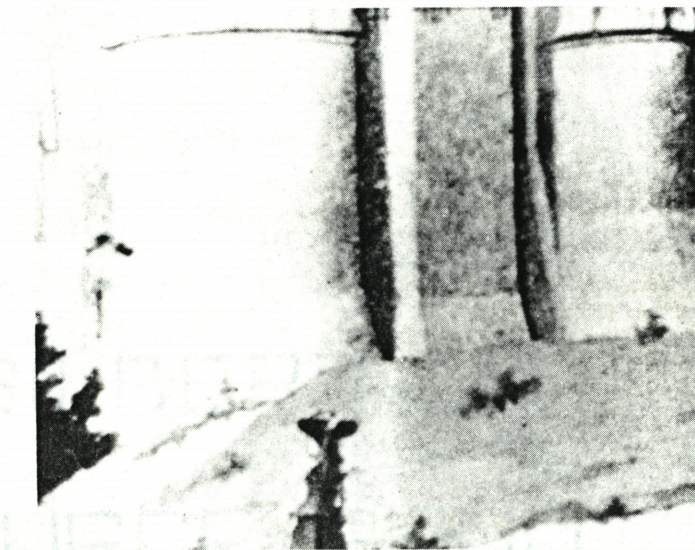
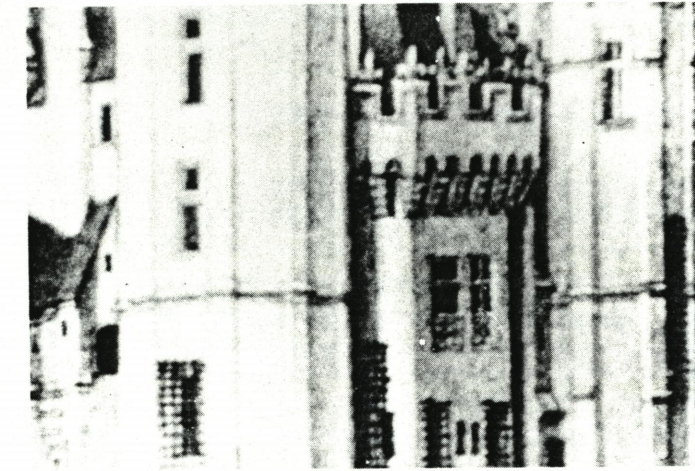
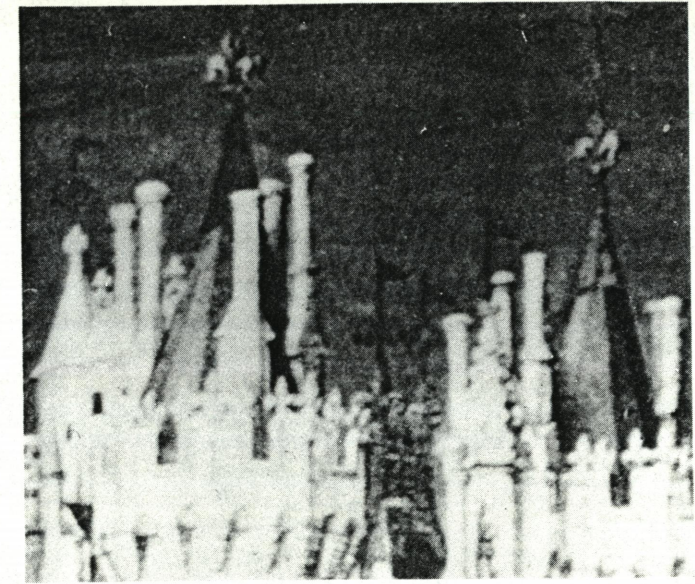
One such model is suggested in Edmund Bacon's *Design of Cities*. In a discussion of the perception of space and environment, he refers to a medieval castle and distinguishes three zones within its structure designated as the inward, intermediate, and outreaching zones (see illustration 2). Through these zones the castle is able to respond to its corresponding hostile, intermediate, and favorable environments by establishing a series of realms which offer protection from, to involvement with, the outside environment in a processional manner. The inward-looking zone is represented by the lower third of the castle structure, which by its mass and restrictive entrances provides the initial security from hostile forces. The intermediate zone, which is represented by the middle third, represents the next level of the environment, in which some fortification is still needed. However the desire to interact with the outside is suggested by the limited fenestration at that level. Third is the outreaching zone, where having achieved physical safety, an outside relationship with the environment is desirable and possible.

This model suggests that it is possible to achieve places that, although they interact with their environment, contain the quality of refuge. Refuge of this type is generated by separating oneself from what is believed to be a hostile environment by a series of places of greater and greater removal from that environment.

Dependent upon the needs of the dweller, there can exist places which offer varied degrees of separation. These places are generated and differentiated from each other either overtly by the use of strong architectural barriers, as when the need for physical separation exist, or subtly by a small change in the architectural characteristics of the place. History provides a wealth of examples where changes in material, direction, level, illumination, or degree of enclosure are utilized where for religious, symbolic, or protective reasons there was believed to be the necessity for establishing a series of domains in a processional fashion to separate the anointed from the intruder. Focused upon below are a few such

expressions, which, in addition to containing sheltering and protective characteristics, also possess the duality of exemplifying architecture of a seemingly extroverted nature.

Manifested in the following examples is the belief that no one element represents the barrier between public and private by itself. Instead, although there is a range in the severity and degree of separation that each element generates, each by their own properties, be they physical or symbolic, and the order in which each element is passed, contribute to this filtering process.



2 Medieval castle

Historical precedents

Japanese

The designing of places which are conceived of as layers of spaces separating public and private is illustrated in many architectural examples, and indeed it could be said that every culture employs them to some extent. Of all these examples, however, the domestic architecture of Japan provides one of the best illustrations. The traditional house-garden typology is important not only for the subtle differentiation between public and private spaces, but also in the duality of the opposition and interrelation of the house and garden.

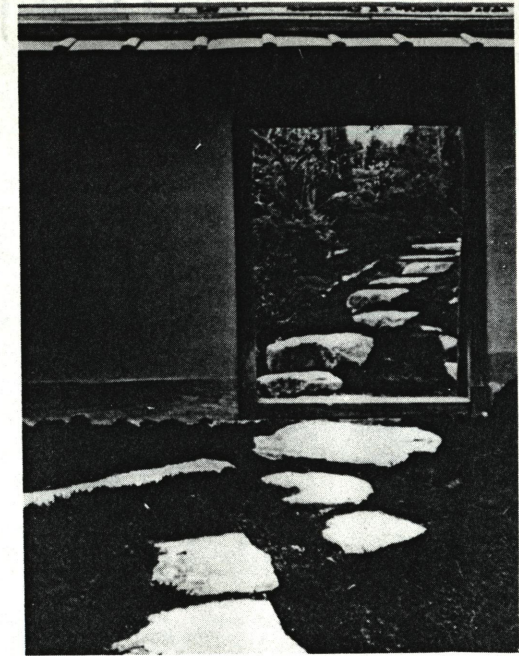
As may be seen in illustrations 7 and 8, the Japanese garden utilizes subtle differentiation in material, direction, elevation, and view along the path of entrance to distinguish places along that path. Separated and connected to the public realm by the traditional gate, "the garden functions as a mediatory space through which man walks, leaving behind the hurried world of profession and competition and entering the secludedness of his home" (Engle, 1964, p. 261).

The small-scale Japanese garden, as Engle points out to us, is conceived of as being integral to the home, and "serves the role of just another room in the ensemble of room cells that form the Japanese house" (Engle, 1964, p. 268). At the same time, however Engle points out that there is "no flow of space between interior and exterior, but only a succession of clearly defined spaces" (Engle, 1964, p. 261), for which the veranda and roof overhang act as mediating agents.

Once inside the home, "the anteroom, hiroma, can be considered an intermediate stage in the process of integrating man into the house. ... This concept of entrance hall has since taken on much human meaning as the space where man takes leave from an outside world which is increasingly indifferent or in contrast to his inner life. In this regard, the entrance hall symbolizes the first stage in removing this antithesis of man and his environment until both are finally reunited within the house and receive from each other confirmation and meaning of their existence." (Engle, 1964, p. 242)

As one studies the relationship of path to garden, garden to house, and house to individual spaces within the home, it becomes evident that "the Japanese concept of space is that of a continuous sequence of various units and not of

one single space" (Thiel, 1964, p. 27). Here then, an explanation is offered to the duality of connection and separation from space to space and inside to out. For, as this relationship demonstrates, when architecture is designed as a sequence of spaces, it is possible to distinguish between two spaces and yet, by the use of a comprehensive ordering device such as the order of passage, establish a link which retains the identity of the series as a whole.



3 Katsura Palace garden entrance

The gateway acts as a connecting element which gives continuity to that which has been passed, that which is being passed, and that which is yet to come.

4 Katsura Palace garden path

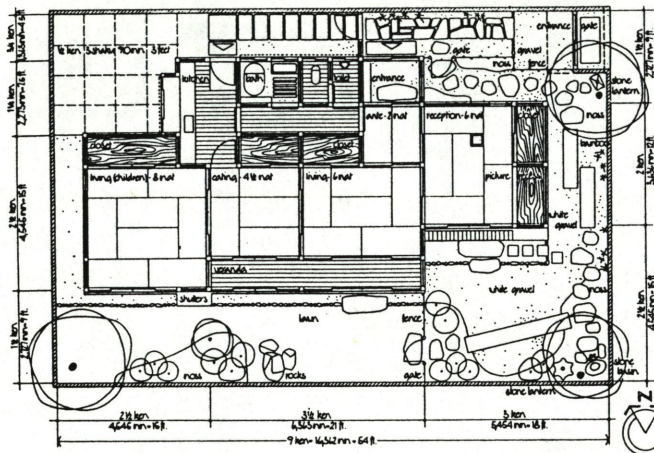
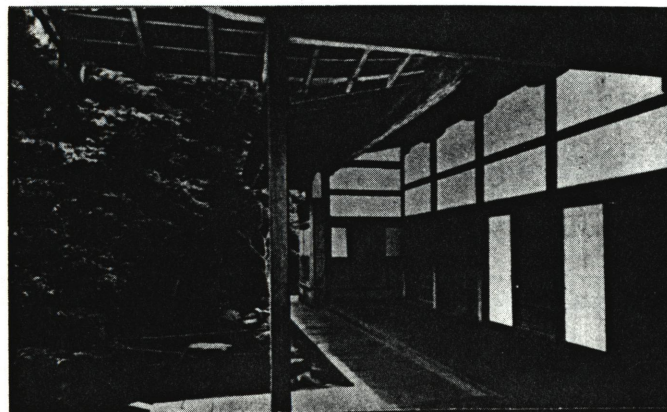
The stone path distinguishes that which is possible from that which is desirable.





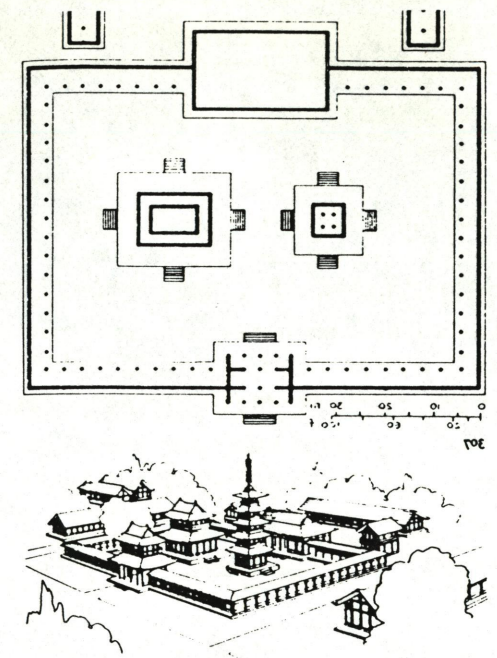
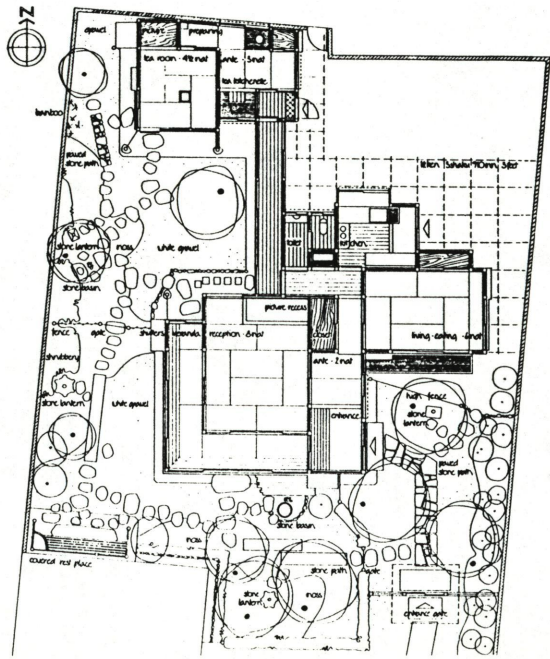
5 **Kojo-in guest apartments, Mii-dera, Shiga Prefecture, c. 1601**
 The "broad roof overhangs prevent glare and expanse of sky from becoming dominant and thereby affecting the atmosphere of the 'in' feeling." (Engle, 1964, p. 258)

6 **Kojo-in Kyakuden exterior**
 "The mediating agent from the interior is the veranda" (Engle, 1964, p. 261)



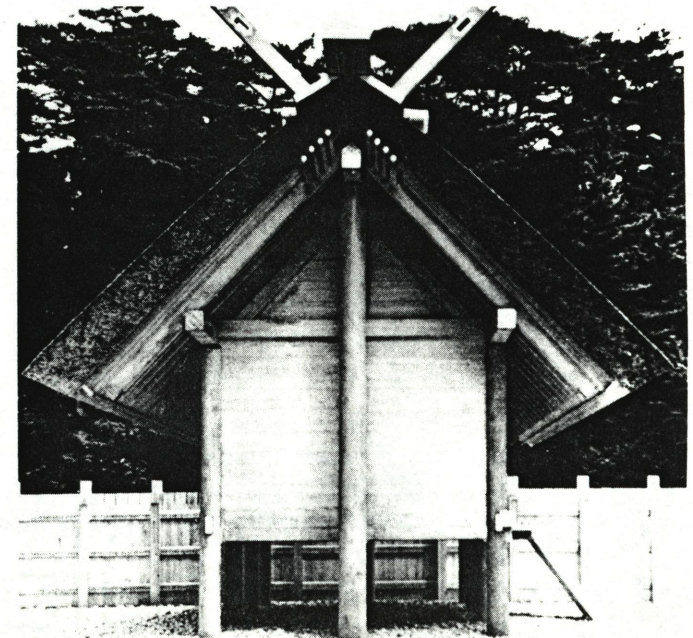
7 **Representative example of house-garden design**
 "The garden ... functions as a mediatory space through which man walks, leaving behind the hurried world of profession and competition and entering the secludedness of his home." (Engle, 1964, p. 261)

8 **Representative example of house-garden design in the Japanese residence**
 "The concept of entrance hall has since taken on much human meaning as the space where man takes leave from an outside world which is increasingly indifferent or in contrast to his inner life." (Engle, 1964, p. 242)



9 **Horyu-ji temple, Nara. A.D. c. 607**
 The walled courtyard gathers all together while changes in elevation and material give each within their identity.

10 **Ise Naiku. Honden (Treasure House)**

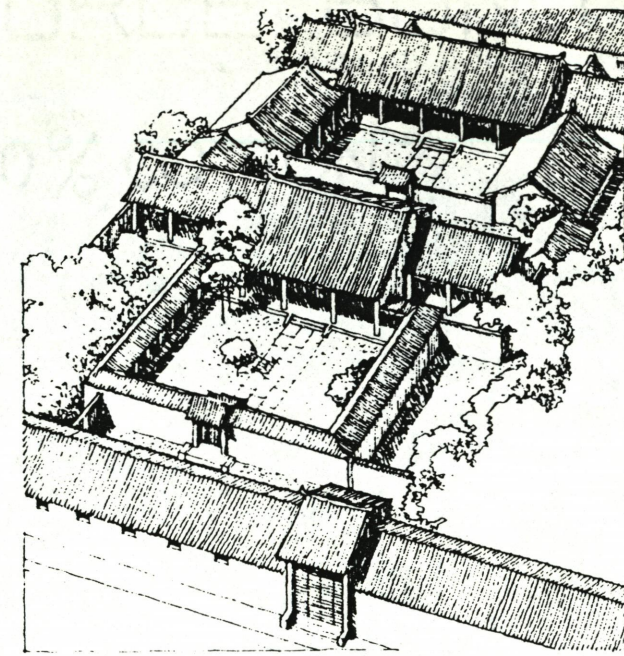


Chinese

As with Japanese architecture, spacial layering for the purposes of separation may again be seen in Chinese architecture, as illustrated in China's vernacular courtyard house. Here a series of gated courtyards, each representing a greater degree of enclosure and separation from the outside world, is employed to distinguish between public and private place (see illustrations 11 and 12).

Another illustration, the approach to the Temple and Alter of Heaven in Peking (see illustrations 13 and 14), demonstrates the range of subtle differentiation of place which can be achieved where the courtyard, formal gateway, and series of tiers serve the need for separation without strict enclosure of space.

In a more comprehensible example, the approach to the Imperial Palaces (see illustration 15), in particular the Hall of Supreme Harmony in Peking (see illustration 16), a wide range of examples can be seen. Here the need for intricate levels of public to private space to separate commoner from emperor leads to an enormous, albeit subtle, range of gateways, terraces, material differentiation, view, light, and degree of enclosure, to provide an ordered sequence throughout the entire journey.

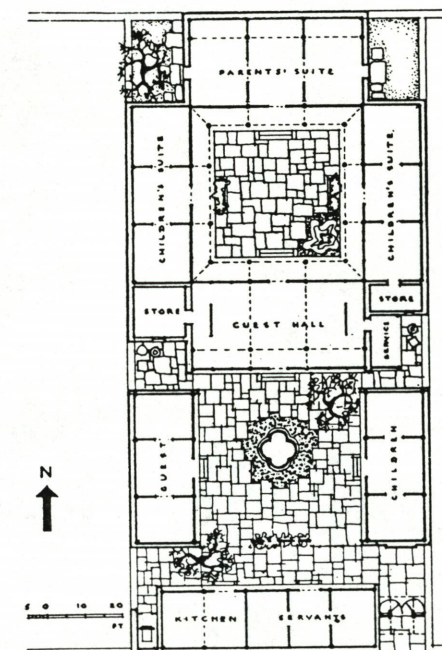


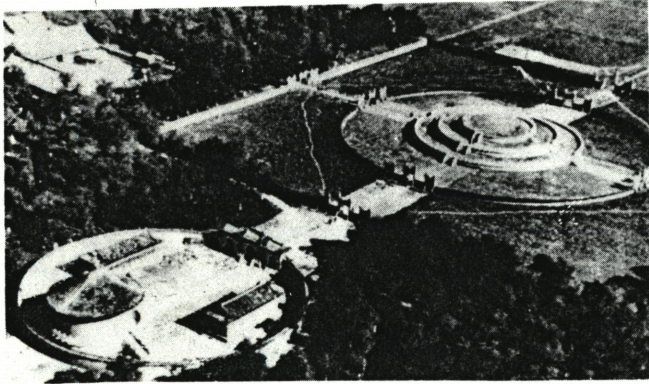
11 Chinese Courtyard House: Peking, China

"The street gate is an important adjunct to the process of entering..., signifying as it does the connection between two different worlds." (Thiel, 1964, p. 26)

12 Plan of typical Peking house

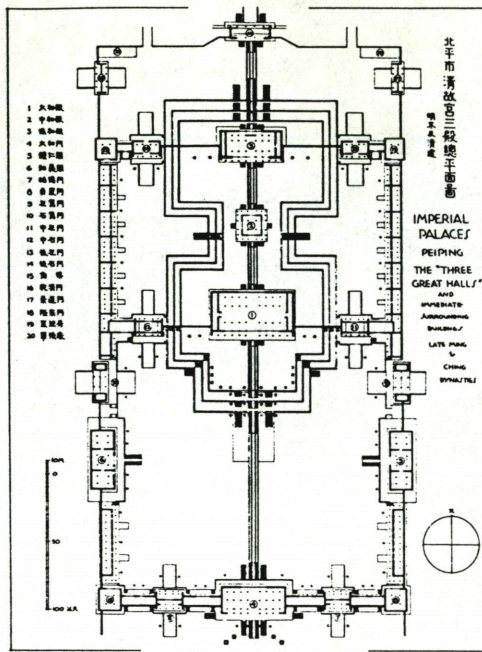
Often a series of courtyards, each representing a greater degree of enclosure, is employed to slowly remove one from the busy street to the peacefulness of the home.





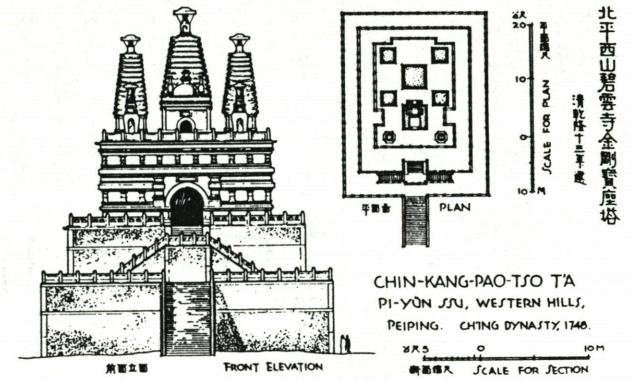
13 Temple and Altar of Heaven, Peking, China

A subtle differentiation of place can be achieved where the courtyard, formal gateway, and the series of tiers serve the need for separation without strict enclosure of space.



15 Imperial Palaces, Peking

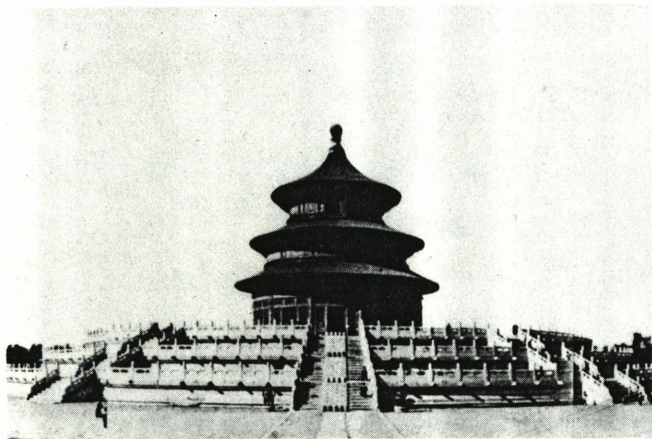
"From the moment one crossed the outer moat he would have been forced into an automatic dance, its rhythms set by the changing masses and spaces of each successive stage over which he made his way." (Thiel, 1986, p. 108)



17 Plan and elevation of Chin-kang Pao-tso T'a, Pi-yun, Ssu, Peking, 1747

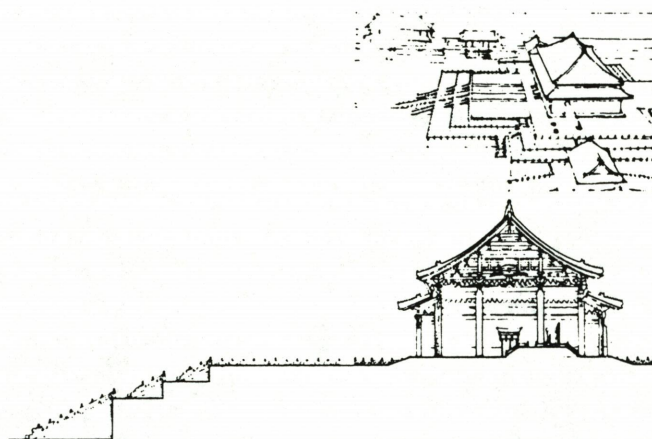
The base utilizes changes in elevation as well as direction of approach to separate the pagodas from the ground.

14 The Temple of Heaven or Ch'i-nien Tien, at north end of the ensemble

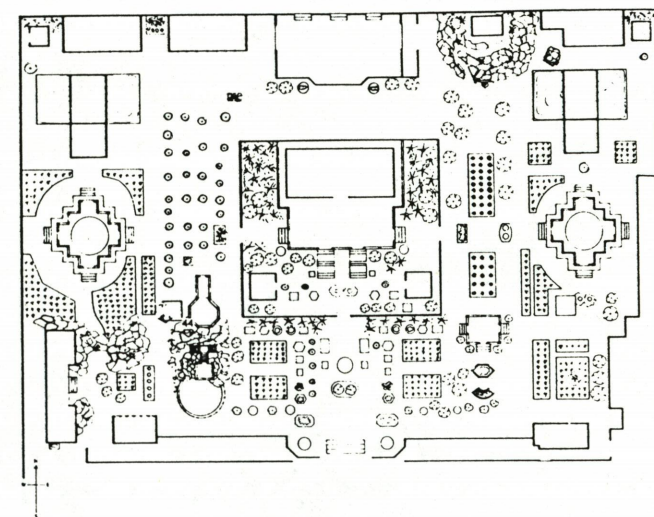


16 Taihe Dian (Pavilion of Supreme Harmony) Peking, The Forbidden City

An intricate series of levels separates commoner from emperor.



18 Back garden of the Imperial Palace, Peking

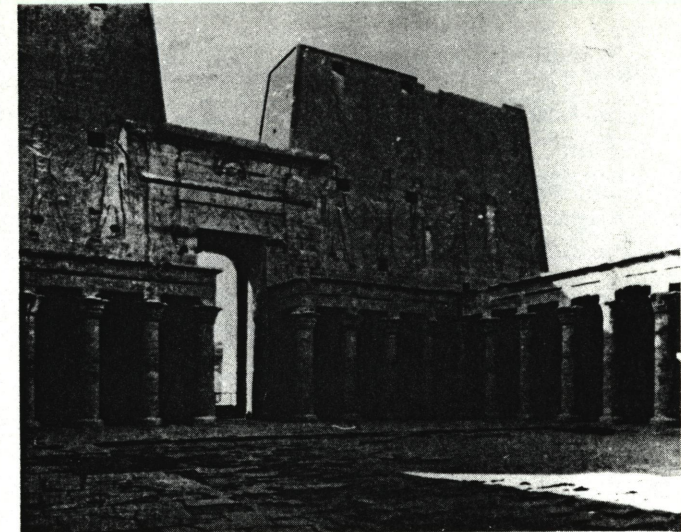


Egyptian

The ancient Egyptian residence offers many illustrative examples of the use of a wide range of architectural elements to separate public and private realms in a processional manner. It was not unusual for the transition between street and residence to be celebrated and, indeed, with respect to the elements of transition chosen, the similarities to Chinese and Japanese architecture are striking. In one such example, the approach to a Egyptian residence of about 1400 BC, at Tel-el-Amarna, described here by Philip Thiel, the importance of an ordered sequence of approach is clear.

"Leaving the public street by means of a gate in a high wall, one found oneself in a large courtyard. A formal path led directly to a private chapel. In front of this the path turned at right angles and penetrated another wall, into a smaller walled court. In this space another right-angle turn took one up some steps and into a small enclosed porch. A right turn again then brought one to the vestibule of the dwelling: the whole approach amounting to a linear decrescendo in size, and an increasingly explicit degree of enclosure. The transition from the public domain to the private world is underlined and made ceremonious." (Thiel, 1964, p. 26)

Similar to its residential architecture, the temples of ancient Egypt seem to revel in the places which separate public and private realms. The enormous scale of these complexes offers the possibilities for a great range of illustrations from a single example. As illustrations 25 and 26 demonstrate, these temples achieved separation "by means of an almost purely horizontal linear gradation of increasingly explicit space definition, decreasing space size and decreasing level of illumination" (Thiel, 1964, p. 24). In comparison to their residential counterparts, however, the degree of subtlety of differentiation in these temples is greater.



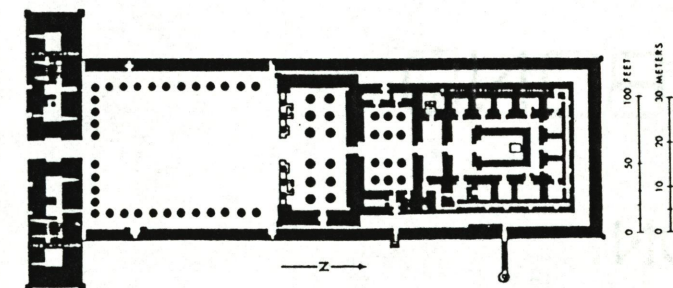
19 Temple of Horus, Edfu, Ptolemaic Period

A strong architectural barrier provides the initial security and separation.

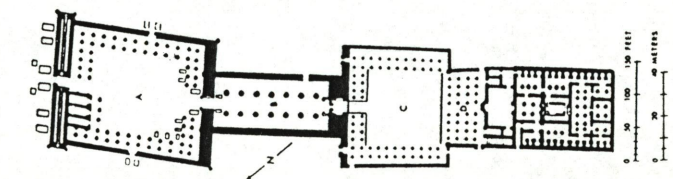
20 a. Temple of Horus, Edfu. Ptolemaic Period

b. Temple of Amen-Mut-Khonsu, Luxor. Dynasty XVIII

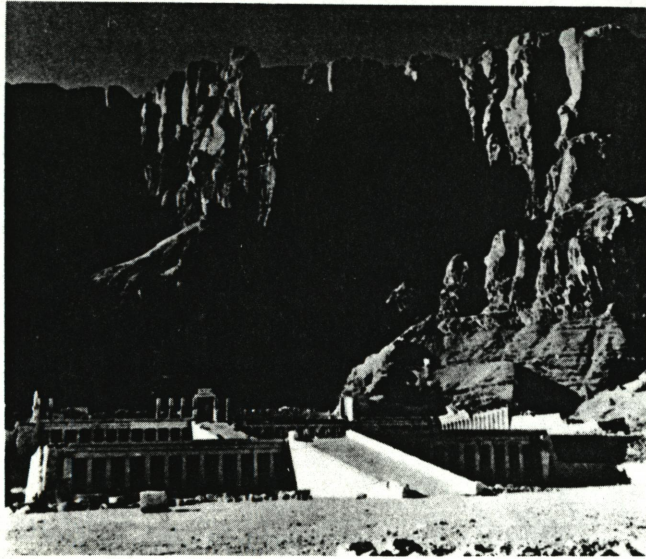
The intent was to produce a deepening sense of mystery and awe by means of an almost purely horizontal linear gradation of increasingly explicit space definition, decreasing space size and decreasing level of illumination. (Thiel, 1964, p. 24)



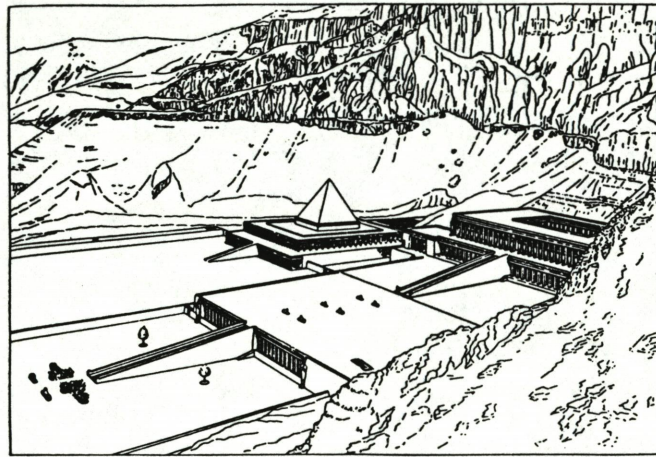
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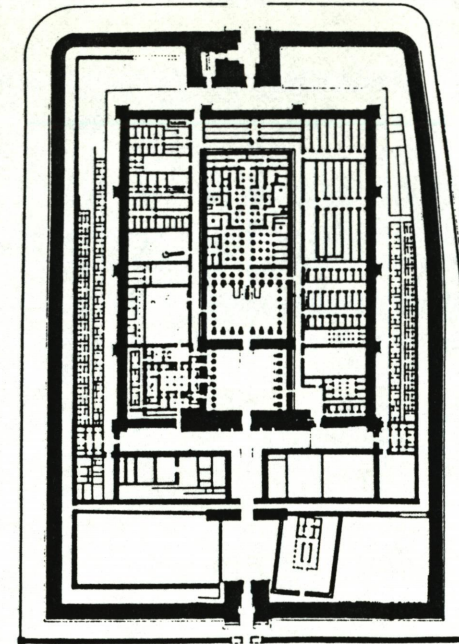
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21 Dier-el-bahari. Temple of Queen Hatshepsut, 1520 B.C.

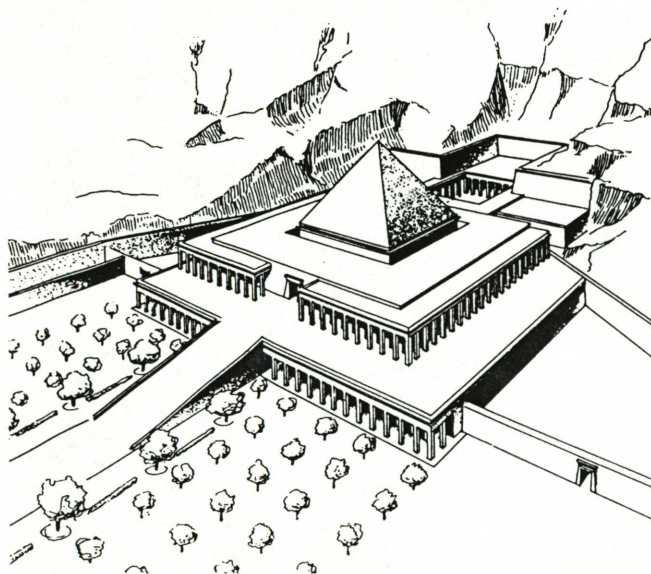


23 Funerary Temple of Queen Hatshepsut, Deir el Bahari. Dynasty XVIII

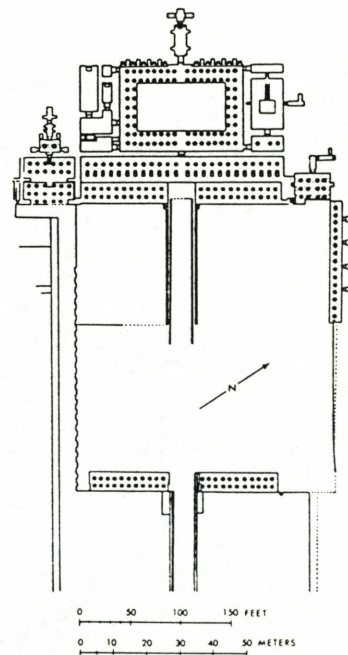


25 Medinet Habu. Plan of the temple of Ramses III

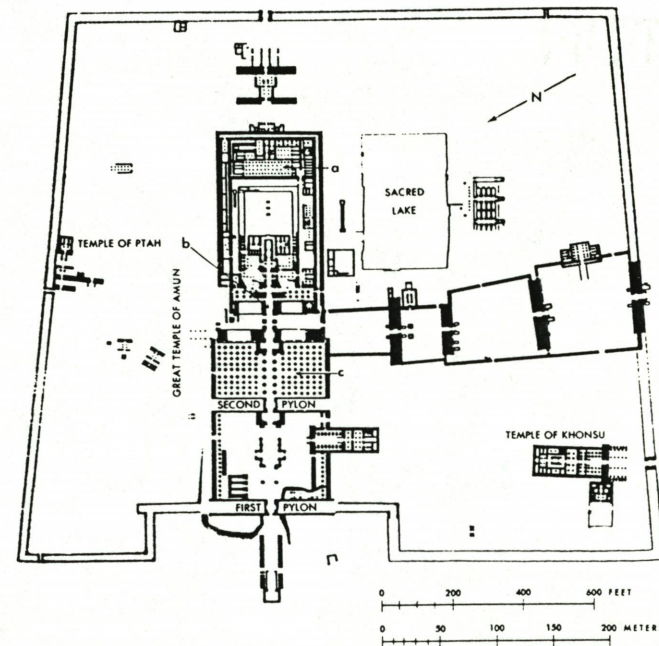
22 Funerary Temple of Mentuhotep, Deir el Bahari, Dynasty XI



24 Funerary Temple of Queen Hatshepsut, Deir el Bahari. Dynasty XVIII



26 Temple of Amun, Karnak. Dynasty XVIII-XIX. General plan



Wright

Frank Lloyd Wright recognized the spiritual need for places of separation and seclusion. His concept of space, however, enabled him to find a new means to that end, which existed in other cultures, but was to be reinterpreted by Mr. Wright.

"The suburban house was given a new interpretation by Frank Lloyd Wright. Or rather, Wright brought back to our attention the essential nature of the house as point of departure and retreat. Thus he opened up his plans to make them interact with the environment, at the same time as he created an inner world of protection and comfort. He himself characterized the house as a 'broad shelter in the open'. To achieve this result he worked with planes parallel to the earth which make the building identify itself with the ground, in juxtaposition with vertical elements that direct space and fix it where needed." (Norberg-Schulz, 1985, p. 99)

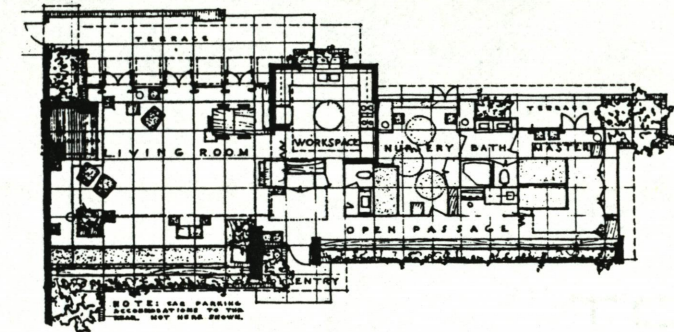
Two key aspects of Wright's work are illustrated above. First, Wright's residential architecture did, in fact, offer protection to its inhabitants. Second, there exists the dichotomy, explained earlier, in his architecture which makes it a place that both separates itself from the outside environment, and at the same time interacts with it. Both of these traits make the designs of Frank Lloyd Wright of particular importance to this work.

It is generally accepted that Frank Lloyd Wright's residential work is at least in part based upon the connection with the outside environment to the home. Mr. Wright often writes of the site as being designed integrally to the home; in his own descriptions of his architecture the distinctions between natural and man-made places were often blurred. However, his homes also act as a protective separation from the outside world. In this regard, it is helpful to consider the previous historical examples as they apply to Wright's work. Once again, the ordered sequence of entry and the use of architectural elements to transition between public and private are evident. Having achieved the necessary refuge in this manner, Wright was able to reinterpret the traditional American dwelling so that "walls as walls fell away" and "enclosing screens and protecting features of architectural character took

the place of the solid wall." (Wright, 1955, p. 218). In the use of these protective characteristics Wright was a master. When given the luxury of space which he preferred, as in his homes of Taliesin East and West (see illustration 31), Wright leads the visitor through a series of gateways, courtyards, ascents, and changes in direction before reaching the customary dark and restrictive entrance to the home. Once within the home the theme continues, but in a much more subtle manner. Here Wright uses variations in the architectural elements of the space to form space and control view.

When designing for a small city lot where the site offers no natural environment with which to involve, Wright generates through these elements a buffer between city and building which his architecture can then open to. In an early work, the Robie house, which is located on a busy city corner, Wright raises the building from the ground onto a base (see illustration 29). The base not only acts as a wall to the city but also as transitional space between city and house, where changes in elevation, direction, and confinement of space separate the two realms. Again in a later residence for the 1953 housing exposition in New York City, Wright generated walled terraces and a clerestory lighting system that serve to buffer the inside of the house to the city (see illustration 27).

"In such a spirit, Wright made his city buildings more intense and self-enclosed; he wanted them to take the place of a lost nature, to make reparation for their dismal sites, which he described as barren town lots devoid of tree or natural incident. (Hoffmann, 1986, p. 80-81)

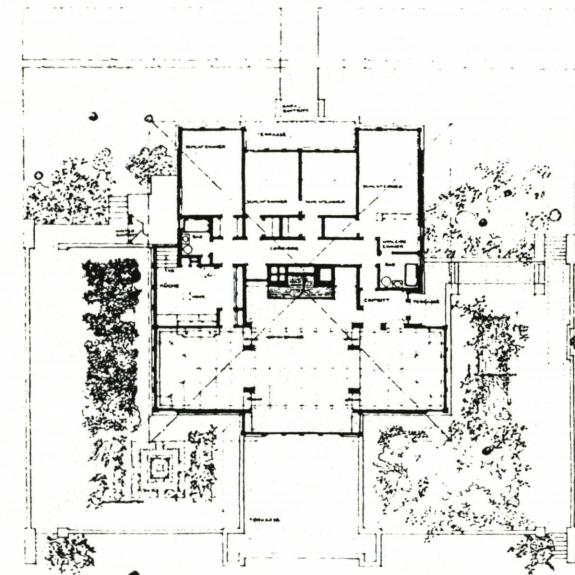


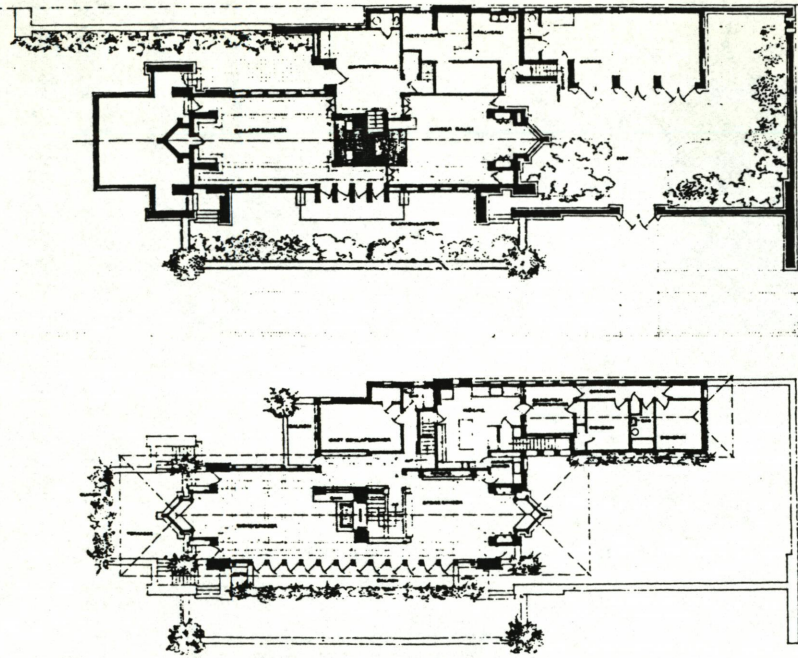
27 New York Exposition house

In this design, walled terraces and clerestory natural lighting act to mediate between city and home.

28 Ground plan of the E.H. Cheney house

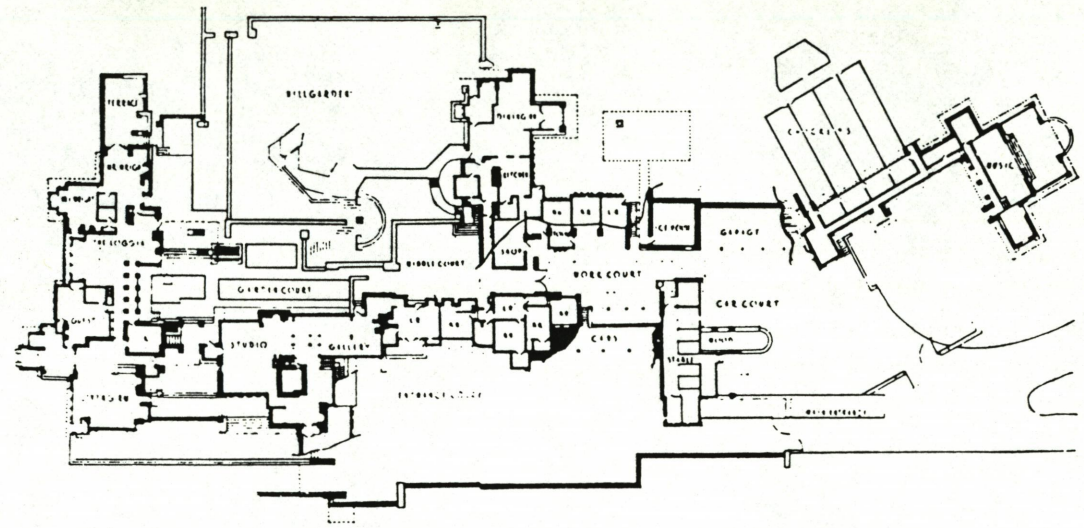
The garden court acts as a filter between the street and the house.





29 Ground plan of the Robie house

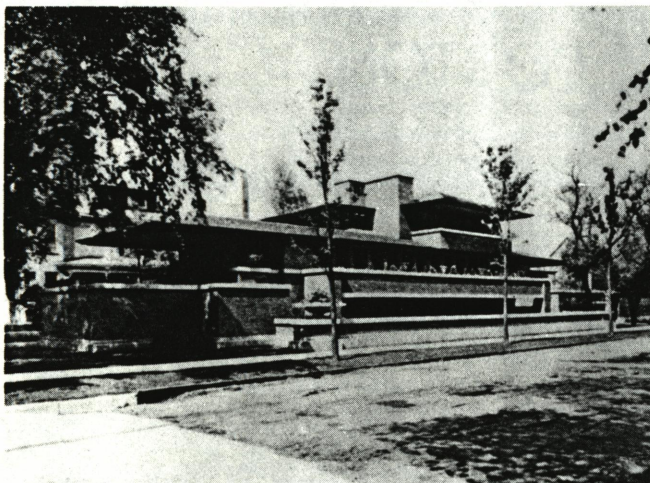
The base not only acts as a wall to the city but also as a transitional space between city and house.



31 Floorplan of Taliesin East

Wright leads the visitor through a series of gateways, courtyards, ascents, and changes in direction before reaching the customary dark and restrictive entrance to the home.

30 Fred C. Robie house, Chicago, Illinois, 1906



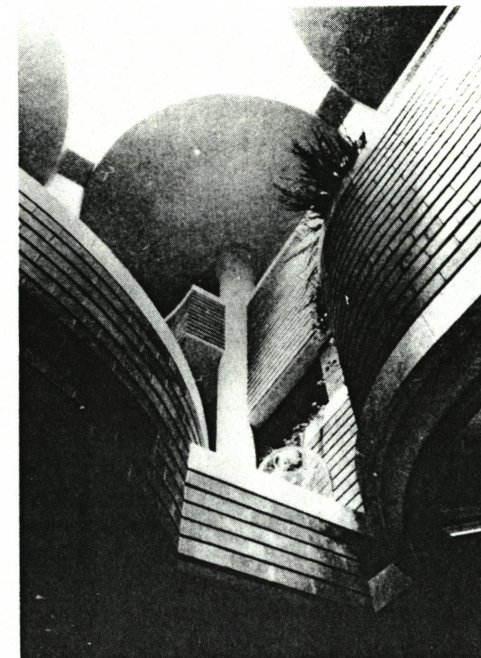
32 Dana house, detail of entrance

Almost invariably in Wright's architecture passage from one realm to the next is denoted by a change in light and confinement of space.



33 Lobby detail, Johnson Wax Building

Here Wright generates enclosed space which is not confining.



Summary

From the above examples, I believe it is possible to conclude that seclusion need not be described solely in terms of enclosing walls. Rather, a change of floor or roof level, materials, a restricted view, or the turn of a corner can, when carefully placed, provide a more gradual transition between public and private place. As a result, in the above examples of filtering between public and private, there is a corresponding gradual transition from site to building. For example, a garden becomes an extension of the natural landscape, or the platform which a building rests upon becomes an extension of the ground. This architecture thus becomes part of a progressive domestication of the natural landscape, rather than a object set upon it, and provides the connecting element which gives continuity to that which has been passed, that which is being passed, and that which is yet to come.

Design

The remainder of this thesis presents a design for a residence which builds upon the historical precedents presented. The design utilizes filters which separate public and private places to generate a residence, which despite the lack of strict enclosure, demonstrates the characteristics of refuge.

Like those in the preceding examples, these filters are inhabitable in that their material and spacial qualities form places to serve the routines of the dweller. Thus, the daily events of dressing, grooming, dining, reading, sleeping, and relaxing are given place within the structure of these filters.

In determining the character of each filter, both the degree of separation desired between places and the function of the space served as the basis for its design. For example, where a strong architectural barrier was needed, a single strong single element or a number of weaker ones were employed. However, when a more subtle distinction was desired, the number, degree, or spacing of elements were varied to meet the needs of the space.

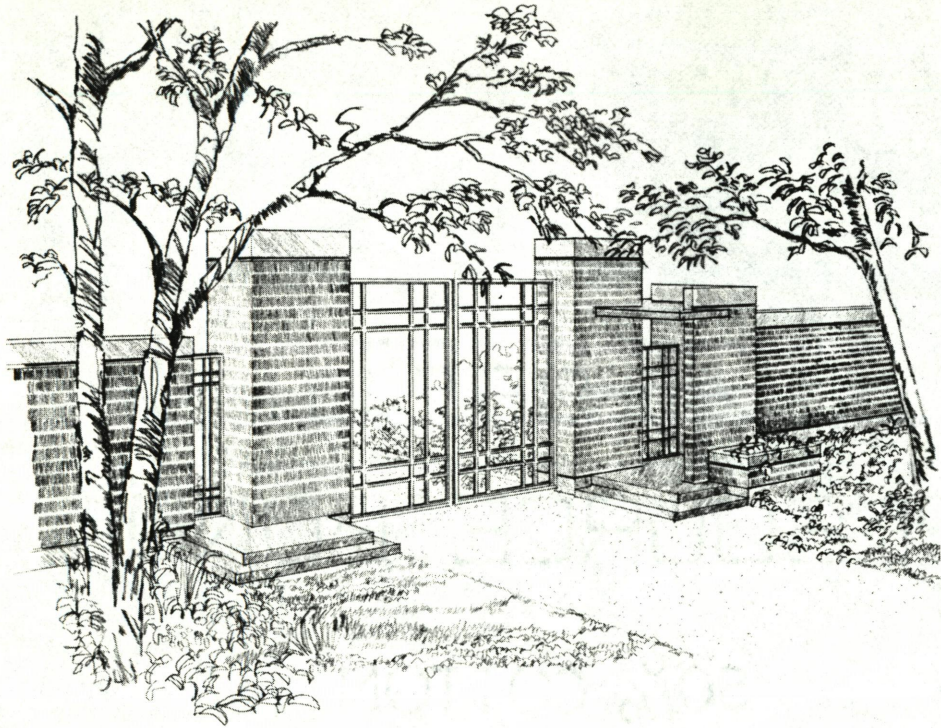
To establish the basic zones of separation necessary to achieve refuge, it was helpful to return to Bacon's model. In implementing this, however, the site and the house are treated separately in terms of their identity as individual realms nested one within the other. The first zone is the zone of protective separation from the hostile environment. For the site the mountains which surround it serve as this zone, thus isolating the site from its environment. For the house this zone is achieved by the base, which separates the residence from the site. The second, or intermediate zone, can be seen as the valley and the columnaded area of the home, where a certain degree of security and removal has already been achieved but which still seek further separation. The third or outreaching zone is achieved as the base of the house forms micro-environment separate from the site and as the inner spaces of the house achieve separation by subtle changes in the architectural characteristics of the space. Here then, a state of separation exists which allows these places to then open back into the environment, having achieved a state of protection.

In adapting the site, a strong effort was made not to destroy the natural elements of the site but rather to discover, in each, its potential to be

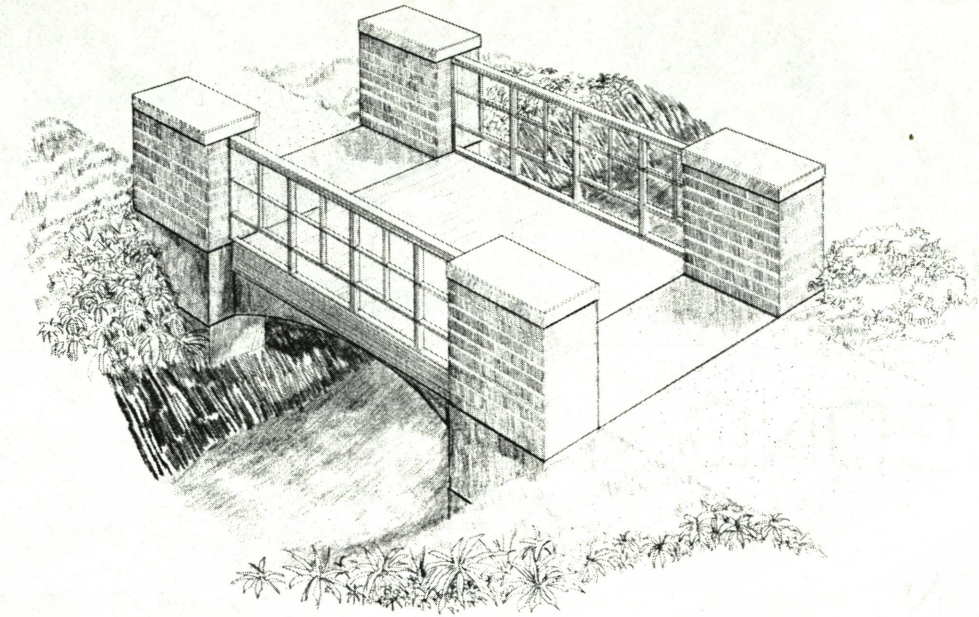
architecturally redefined into the places I sought. In this regard the pre-existing natural elements of the site enabled me to elaborate upon this concept. With modest intervention a series of natural places was made that, by passing through or by, generate, in an abstracted sense, a series of gateways and enclosed spaces, all of which are referenced by the drive.

Because of the semi-private setting of the house upon the site, the house need not turn its back upon its surroundings but may instead open itself to this environment, confident in the protection already offered. However, as we seek the further safety and warmth of more enclosed places, the house then acts as a series of filters which slowly bring the individual to places of greater introspection and privacy within. As stated above, the concrete base of the house represents the first instance of the house separating itself from the site. To accomplish this separation at the entry points to the home, the base is layered to form a series of risers and landings; each landing forms one in a series of transitional spaces between the ground and the final landing upon which the house rests. Wherever the base meets the site, however, changes in level, physical barriers, or restricted space are employed in making the transition between site and house.

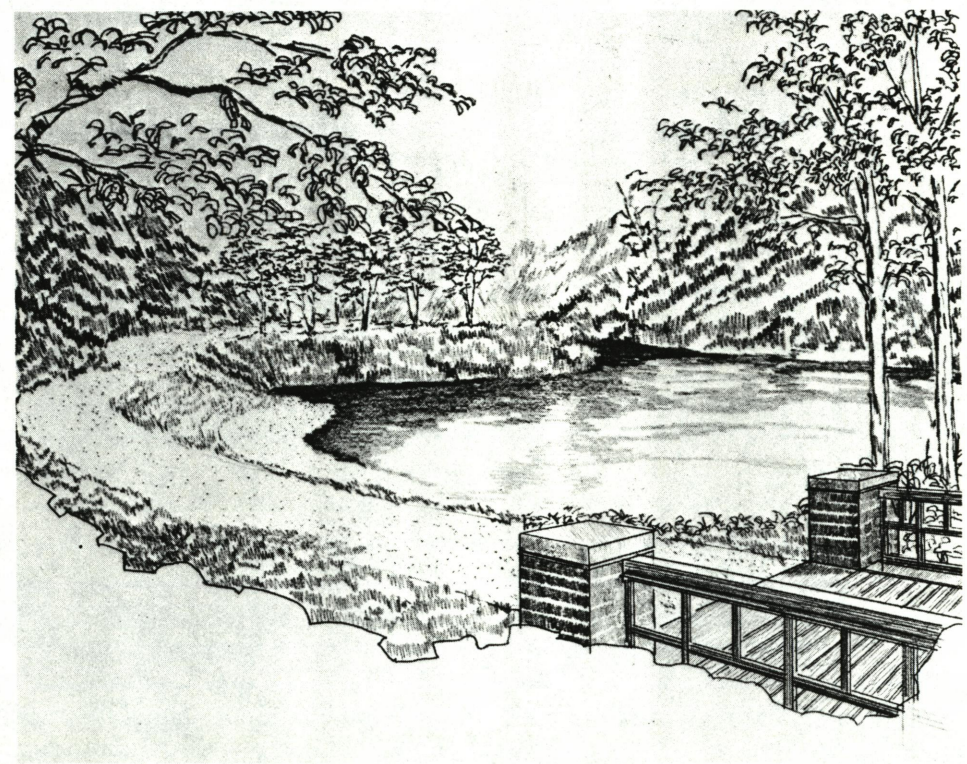
Within the house, a thematic series of zones generates the character of each room, by variation of the degree to which each element is used, in addition to its specific form. Beginning on the terrace, involvement with the outside is almost total and only the concrete beneath us is of the house. Then, by using the potentials of roof depth to make a place of shade beneath, columnade depth to make a space between, door which serves as switch to all but light, clerestory which brings light into the interior and forms an inner room within the room, lighting to accentuate and delimit spaces within the room, changes in elevation and floor surfaces, embracing and enclosing wall, we are, by degree, brought INTO the house.



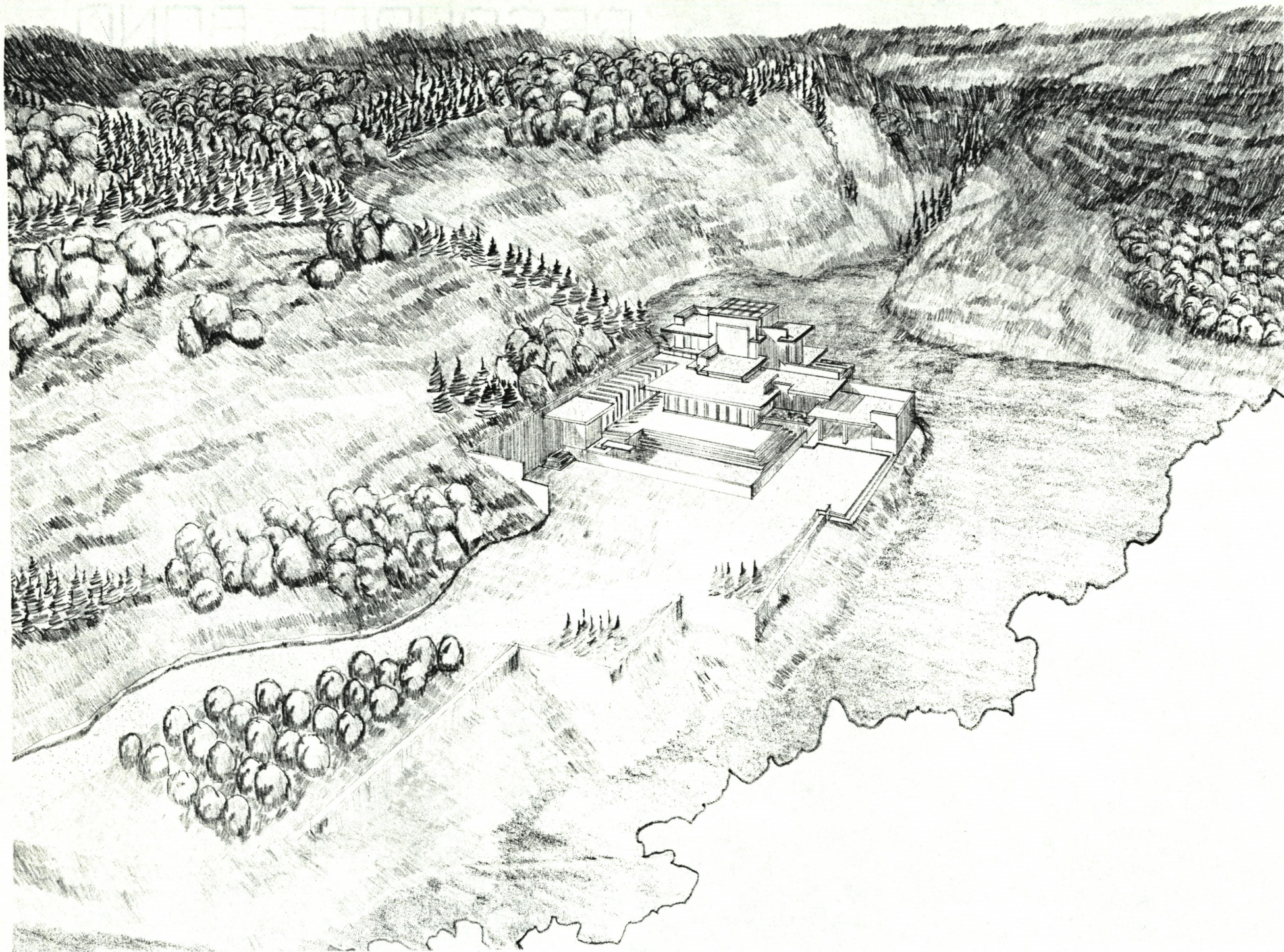
34 Gateway at entrance to forest



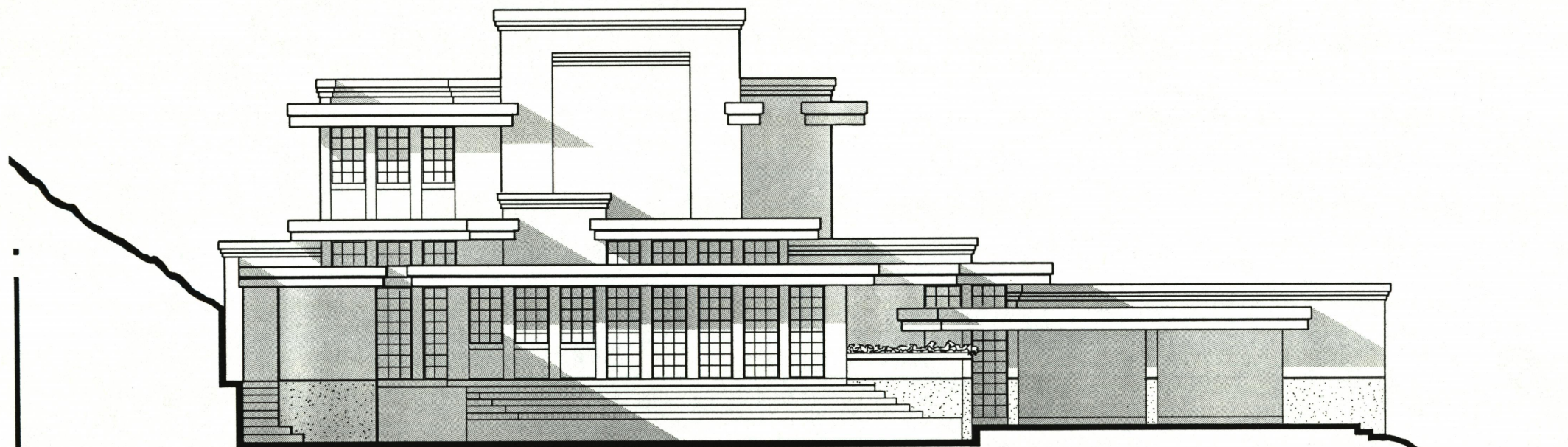
35 Bridge at entrance to valley



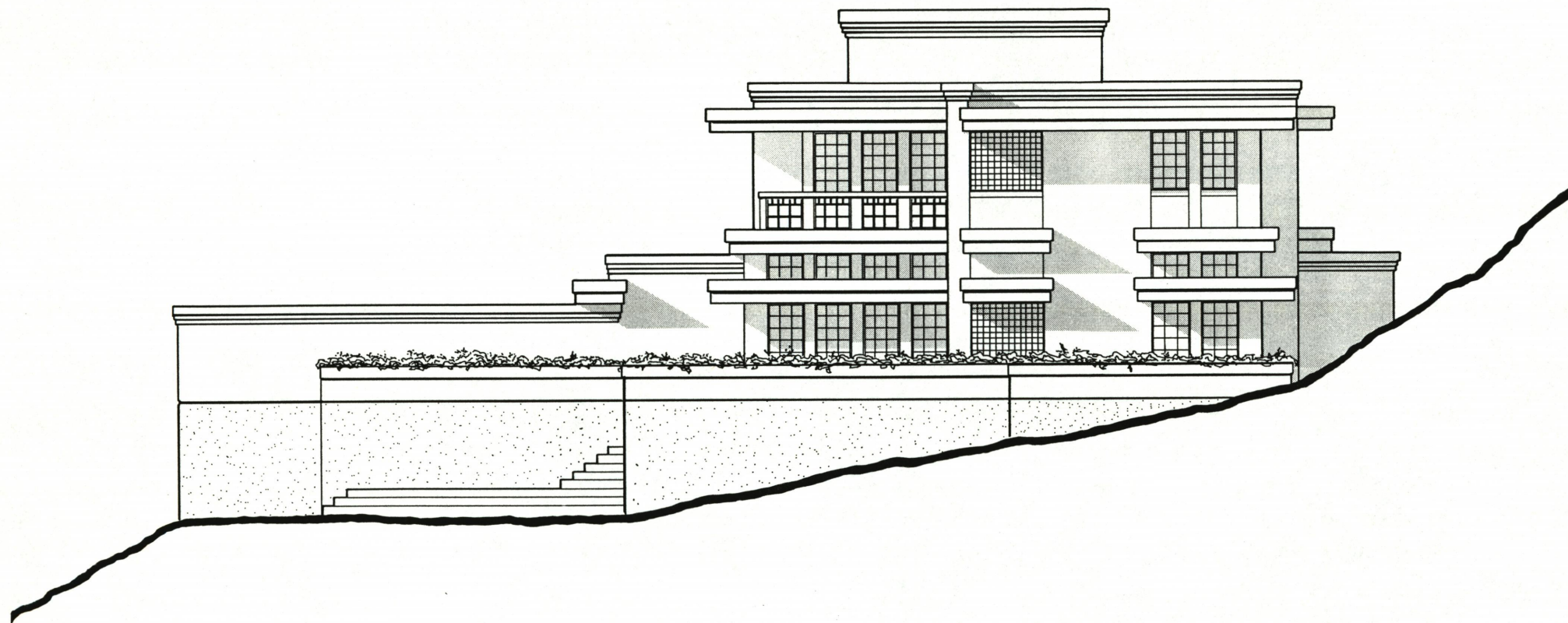
36 Valley and orchard beyond



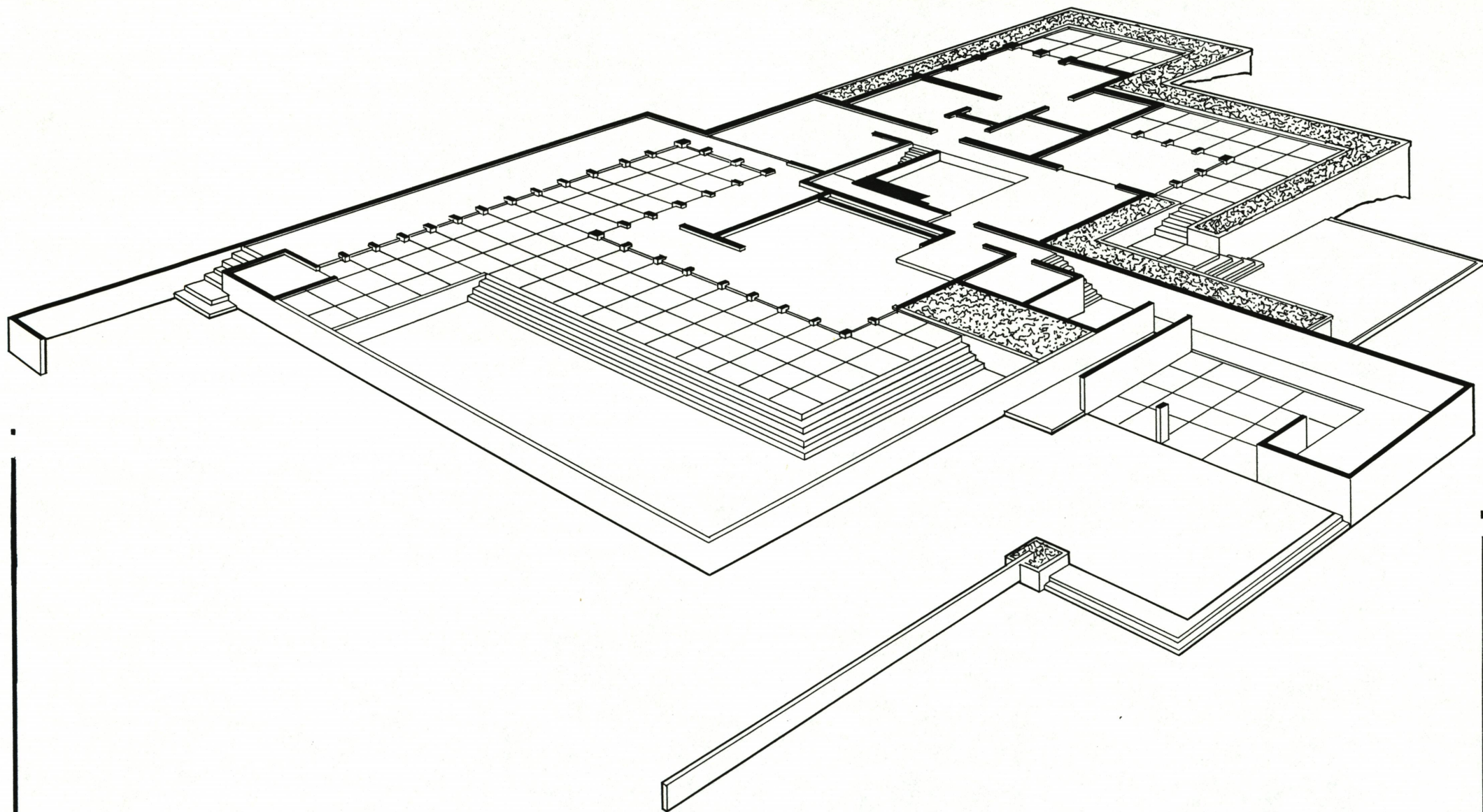
37 Perspective site plan



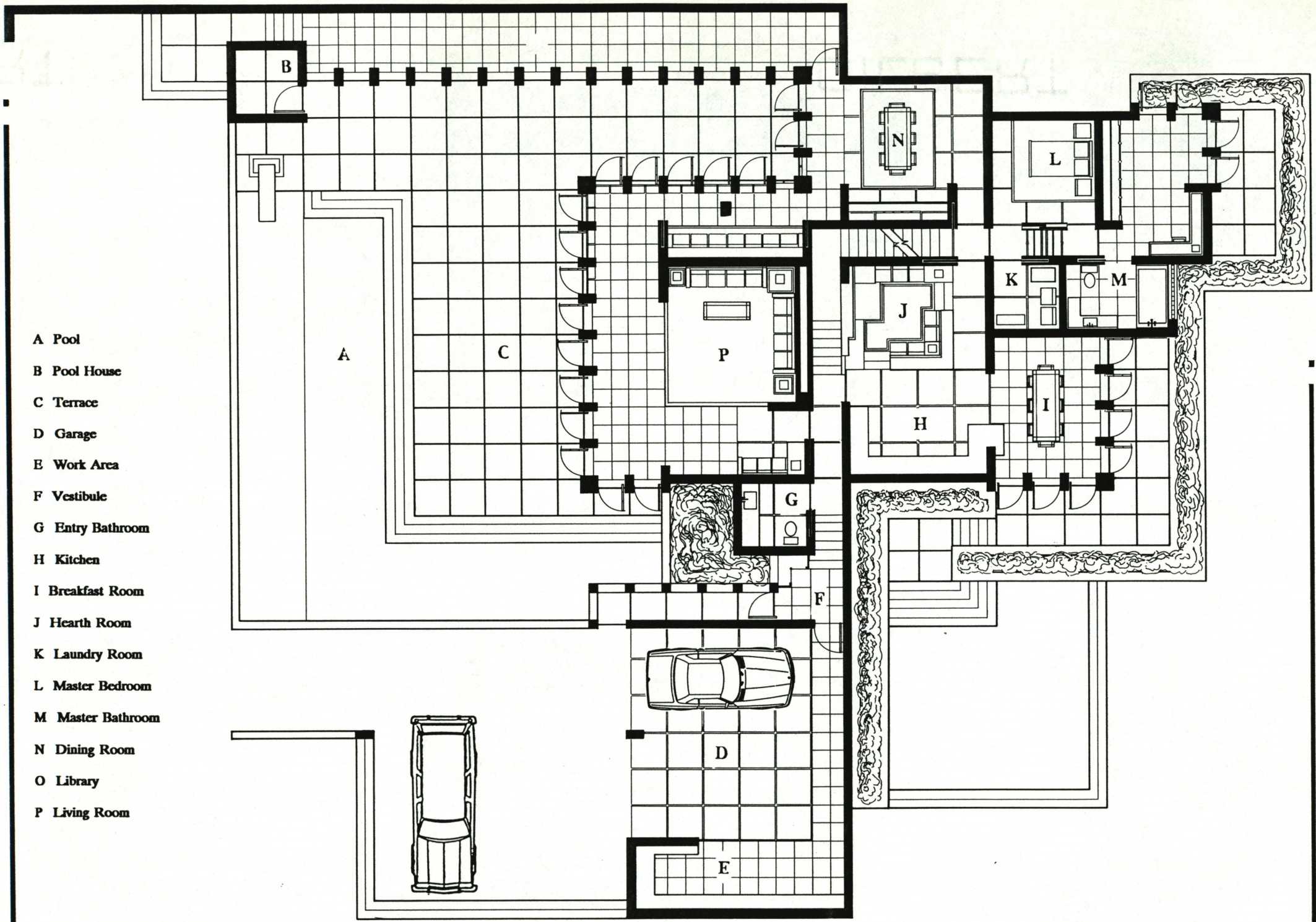
38 West elevation



39 East elevation

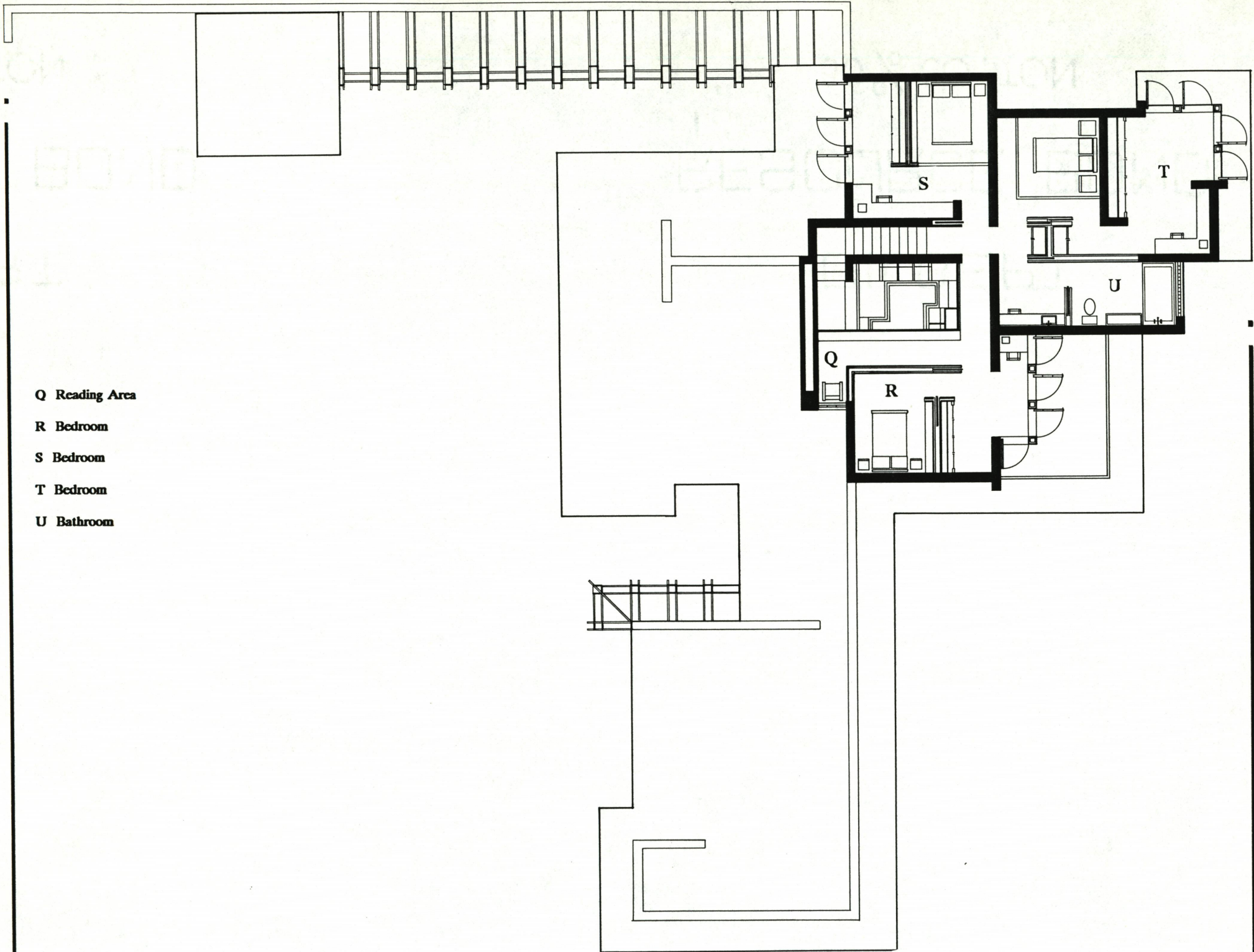


40 Base plan perspective



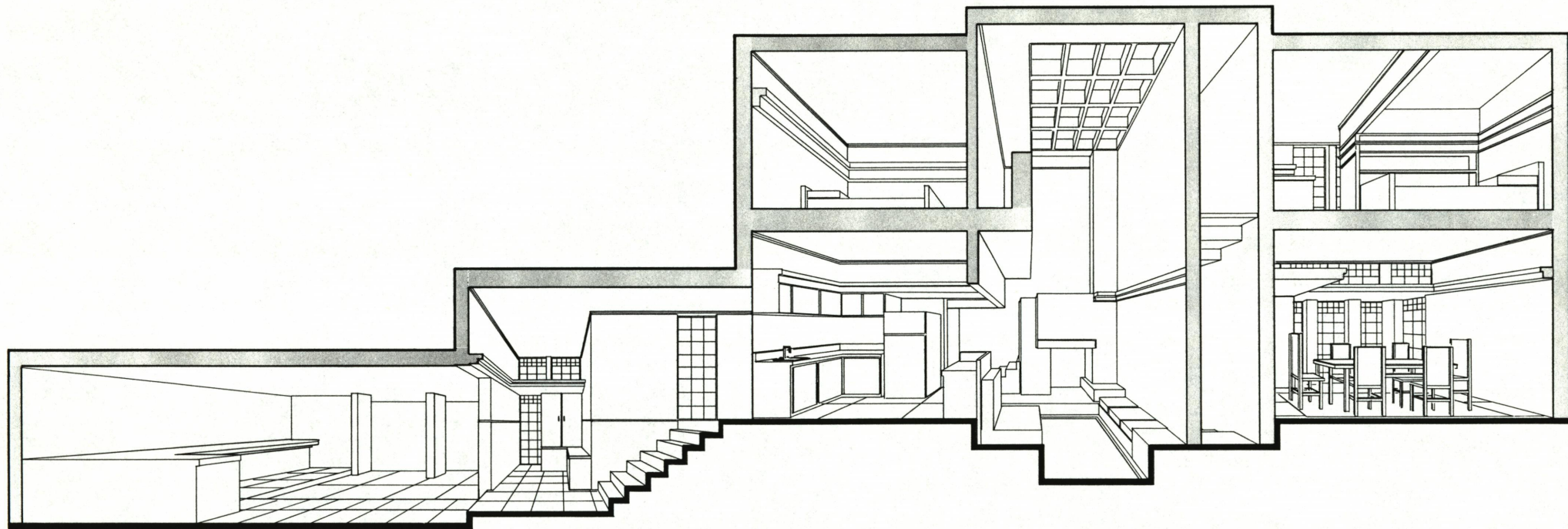
- A Pool
- B Pool House
- C Terrace
- D Garage
- E Work Area
- F Vestibule
- G Entry Bathroom
- H Kitchen
- I Breakfast Room
- J Hearth Room
- K Laundry Room
- L Master Bedroom
- M Master Bathroom
- N Dining Room
- O Library
- P Living Room

41 First floor plan

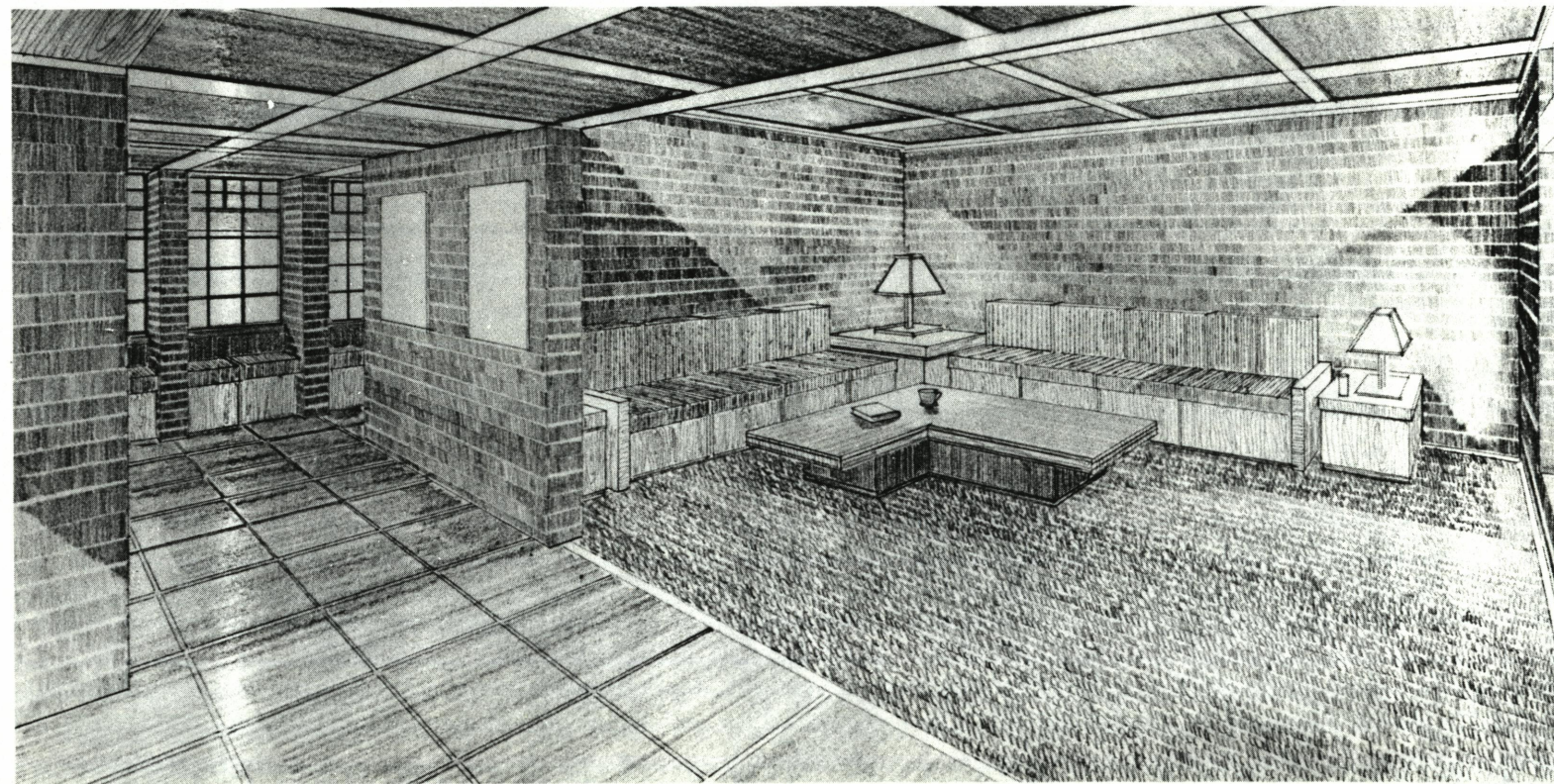
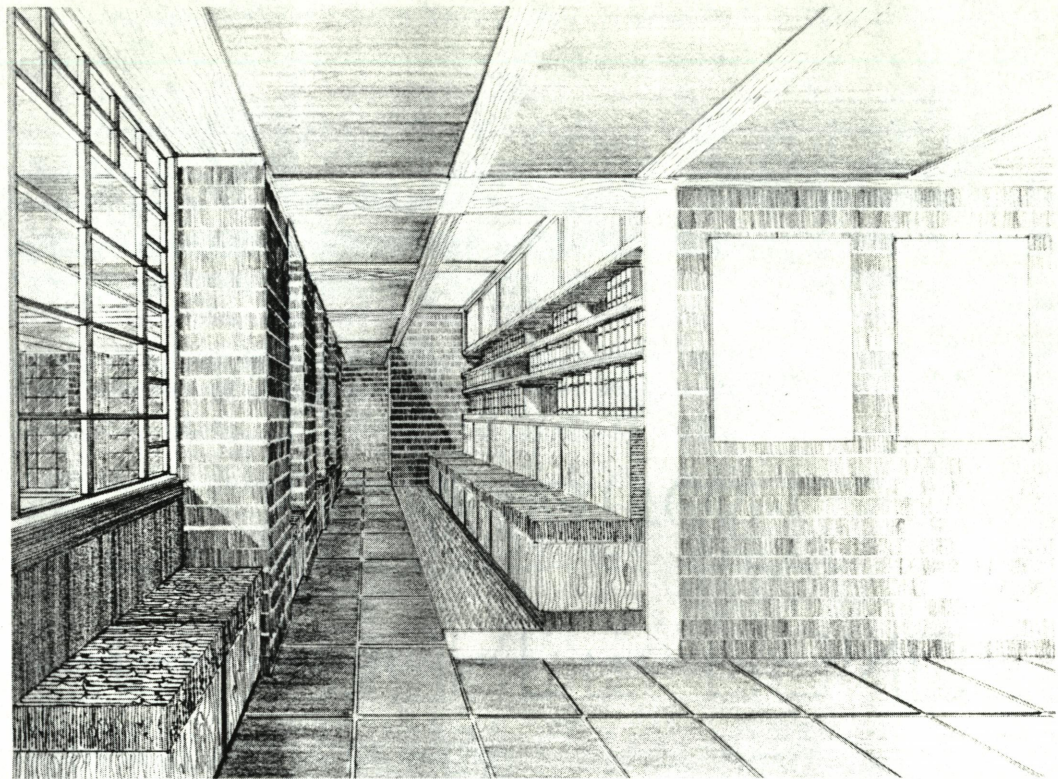
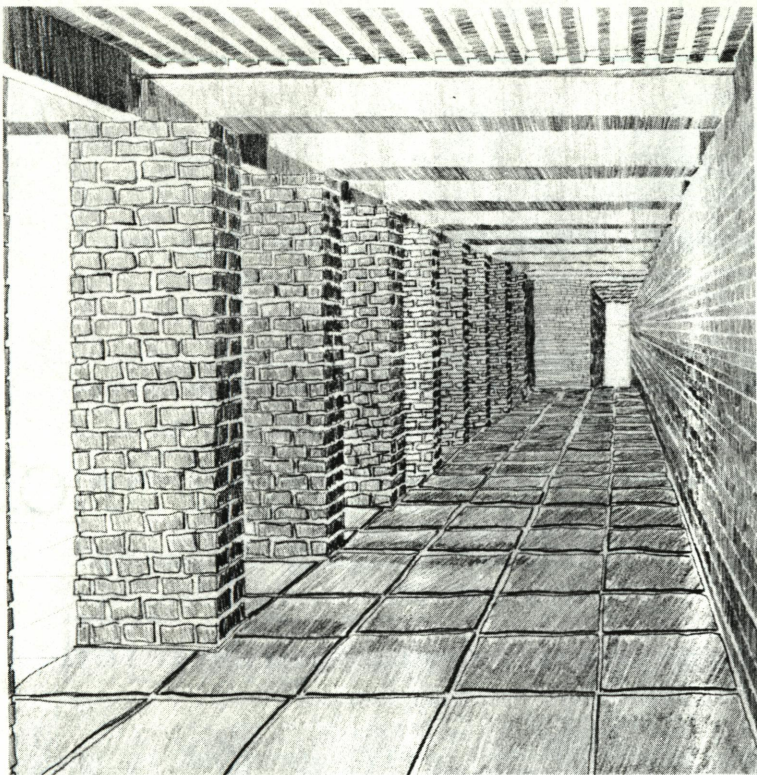


- Q Reading Area**
- R Bedroom**
- S Bedroom**
- T Bedroom**
- U Bathroom**

42 Second floor plan



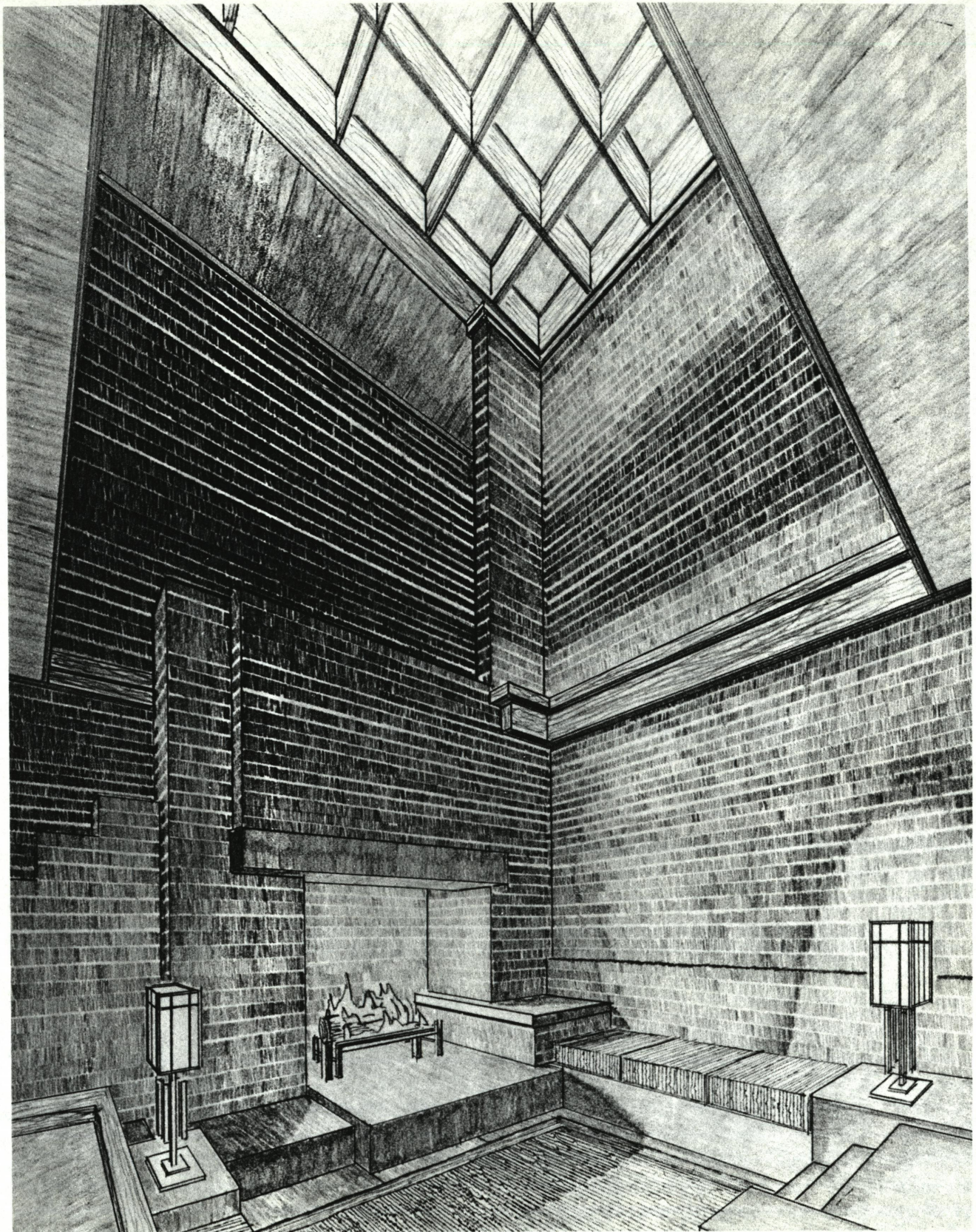
43 North-south building section perspective



44 Colonnade perspective

45 Library perspective

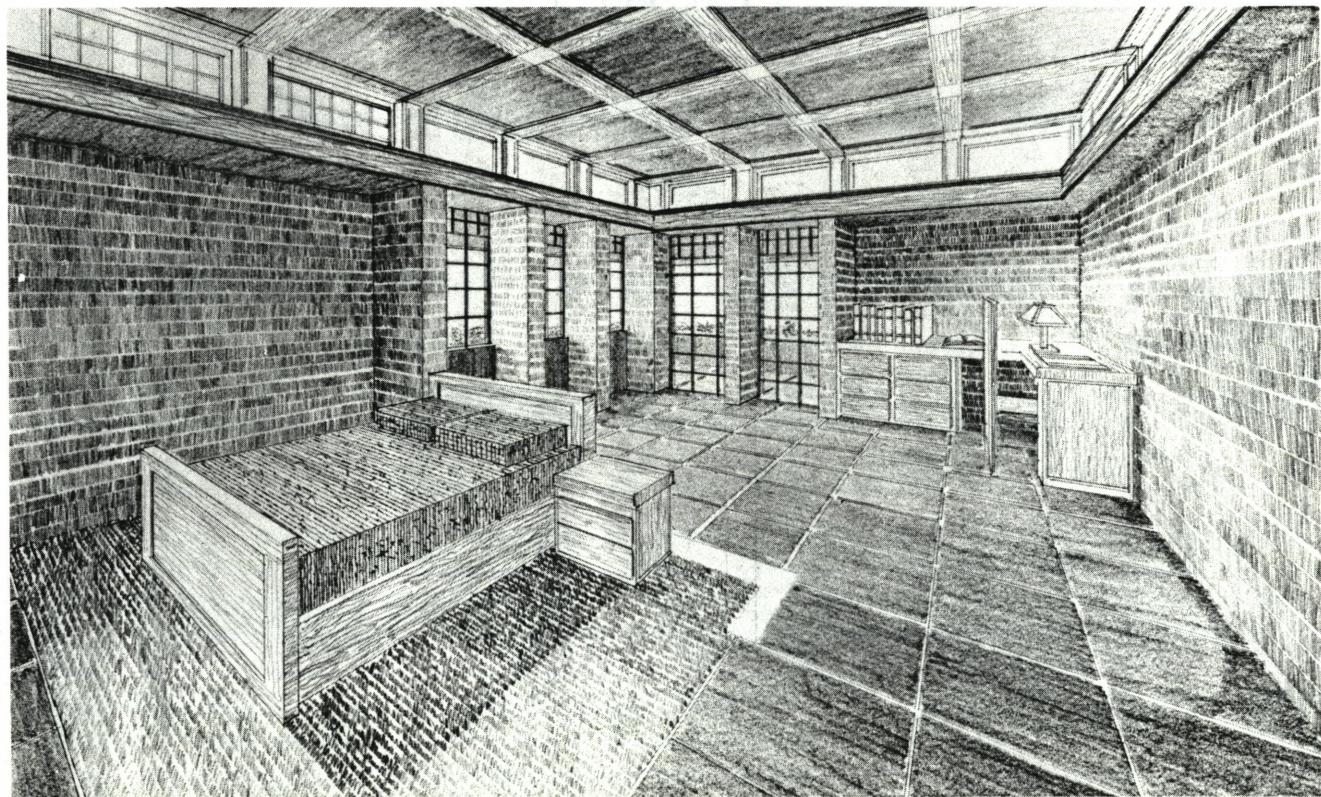
46 Living room perspective



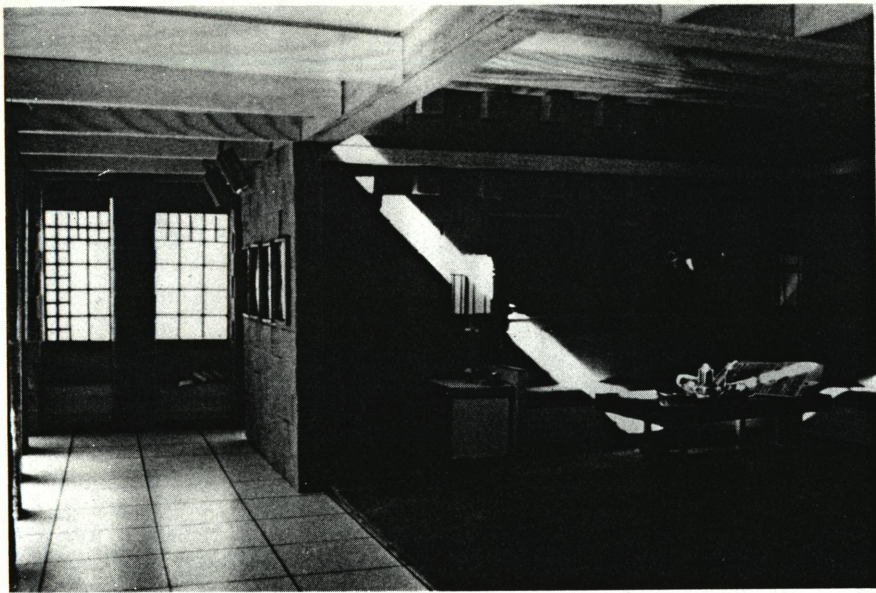
47 Hearth room perspective



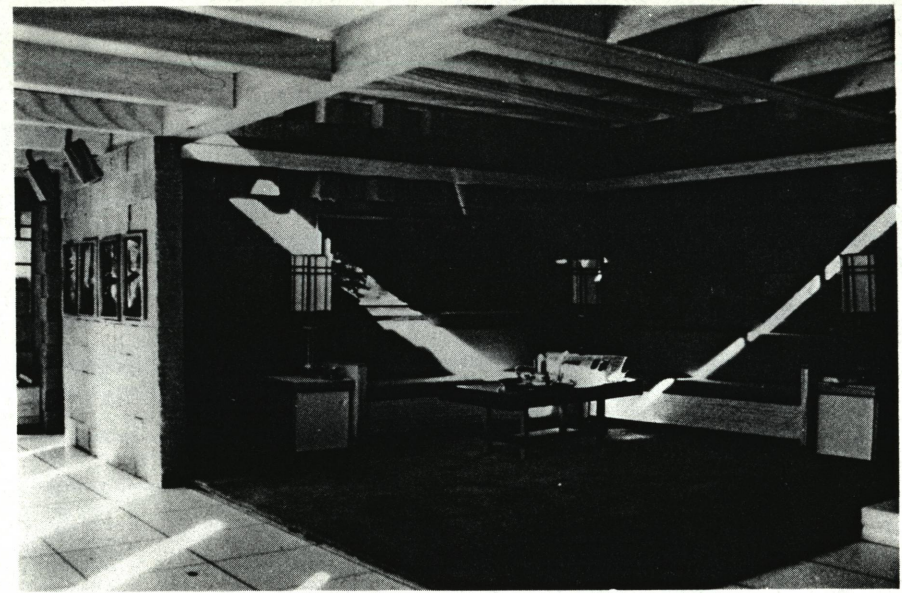
48 Upstairs bedroom perspective



49 Downstairs bedroom perspective

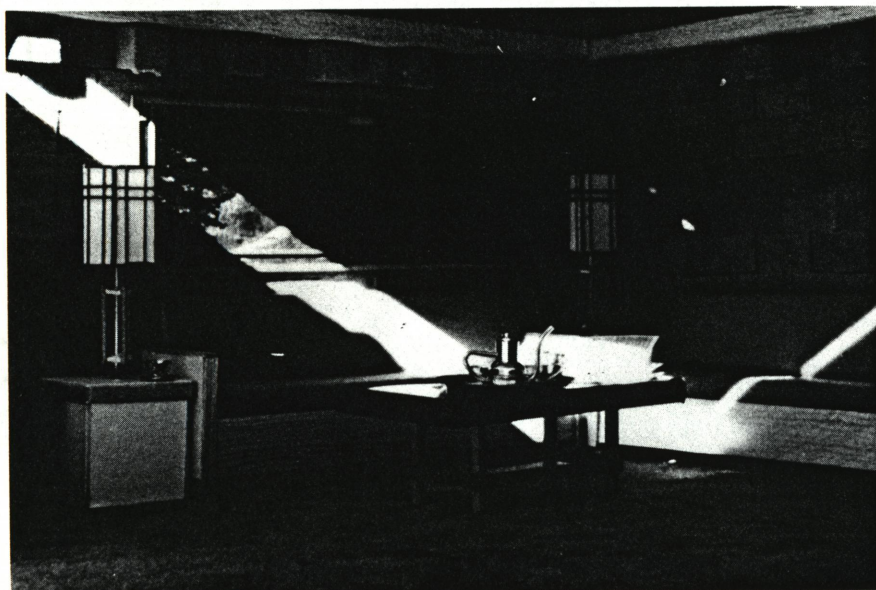


50 Daylighting study of living room area

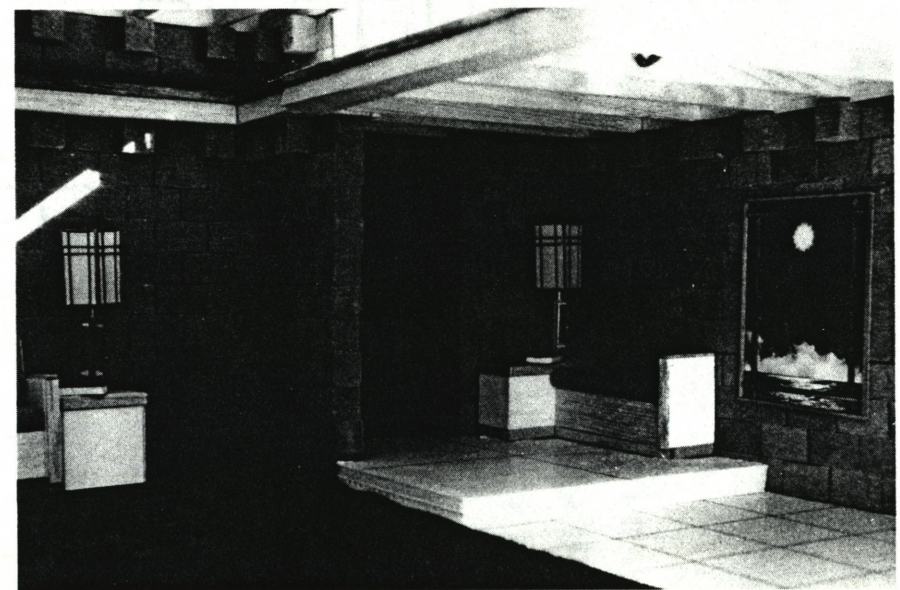


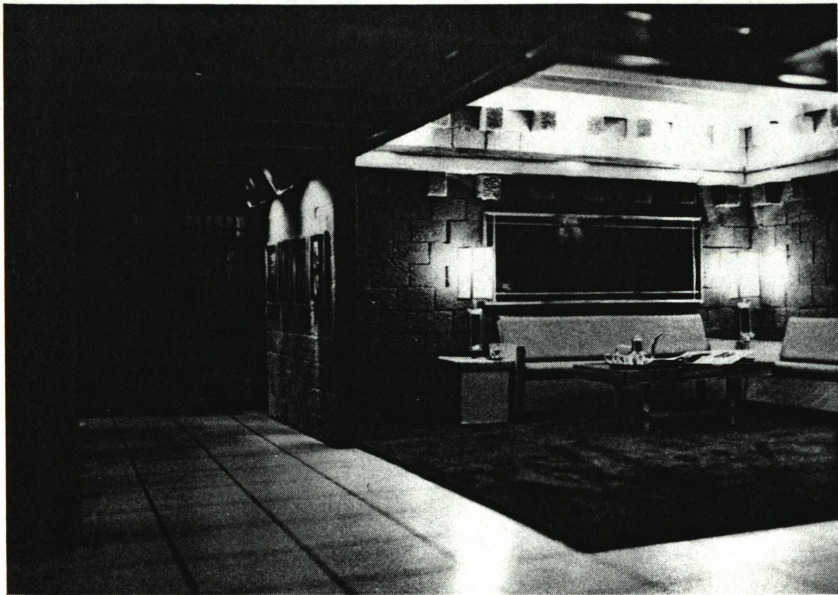
52 Daylighting study of living room area

51 Daylighting study of living room area

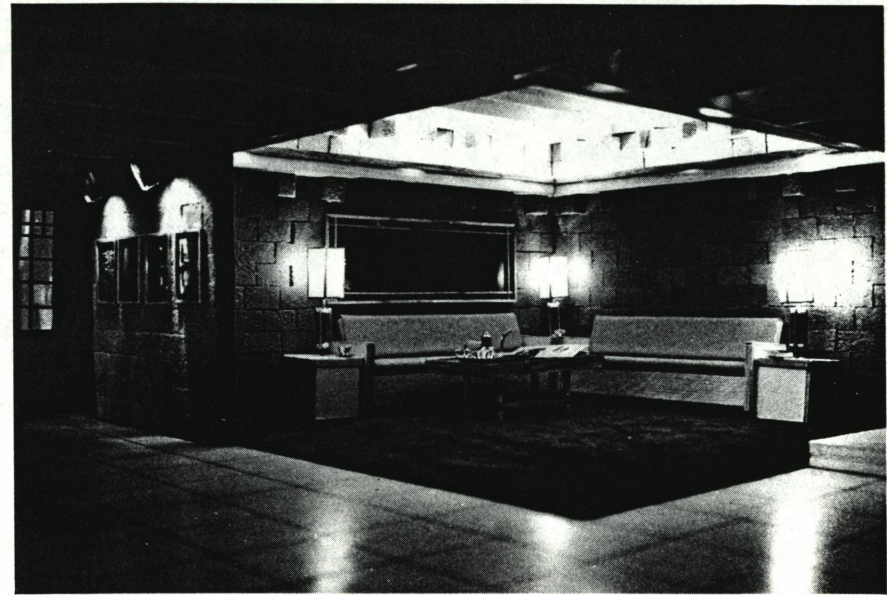


53 Daylighting study of living room area





54 Lighting of living room area at night



55 Lighting of living room area at night



56 Lighting of living room area at night

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