

"Six House Types"

By

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MASTERS OF ARCHITECTURE

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May 1985 Blacksburg, Virginia

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## SIX HOUSE TYPES

by David M. Dugas

Committee Chairman: Dayton E. Egger, Architecture

(ABSTRACT)

This thesis seeks to explore, through making.

The object of this making is, as Kahn has said, house, as opposed to a house; or, the house type seen as a generative tool rather than as a singular definitive manifestation of some set of circumstantial needs.

The house is the one intellectual model in architecture which can bring to thinking in design a set of questions in which dwelling in its richest sense can be studied.

Questions of how dwelling is made more possible through the configurations of architecture without the necessity of introducing artificial symbolic structures which cast the physical, material reality of architectural elements into a secondary level of significance, are raised in this thesis through the making of six house types.

The houses are made as a series and are seen as typological structures in which the configuration of possible ways of dwelling are sketched.

Consider the haiku:

No one spoke,  
The host, the guest,  
The white chrysanthemums.

In three lines the Japanese poet Ryota places before us fundamental relationships which are the basis of tectonic combination.

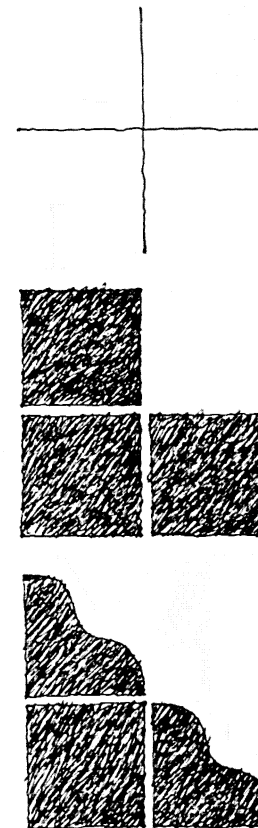
The first line establishes the existential condition in space, the condition of silence. (space)

The second line establishes man, placed in space, objectified. (object)

The third line establishes the natural world in microcosm, the cycle of seasons, birth, death, and time. (nature)

The intentions generating my work are founded on a desire to understand, through making, this constructional combining.

Architecture is an event of combination, not a combination of events.



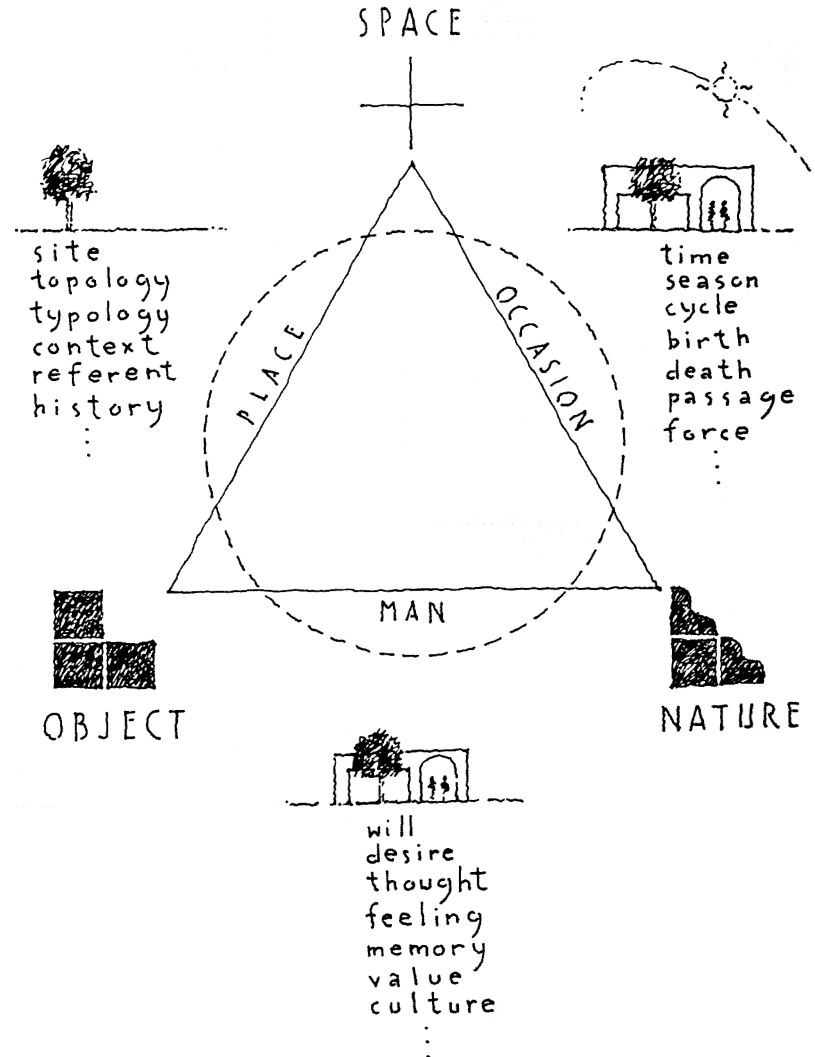
The relationships which arise from the interaction of space, object, and nature, as expressed in the poem above can be diagrammed as a triad of interconnected dualities.

There are three primary relationships: SPACE:::OBJECT  
OBJECT:::NATURE  
NATURE:::SPACE

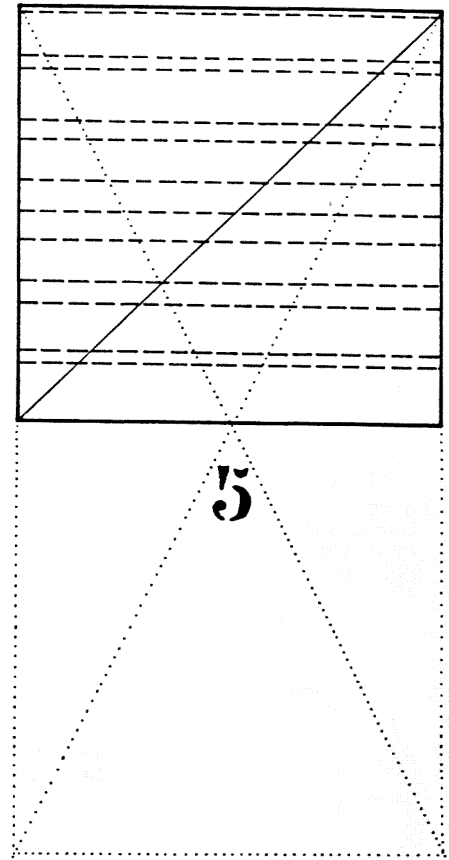
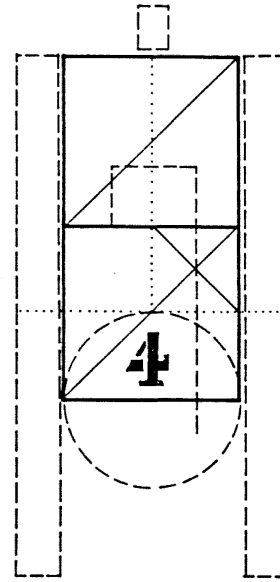
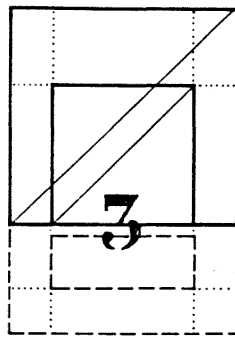
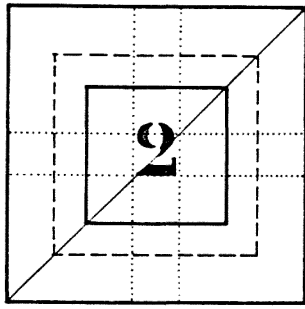
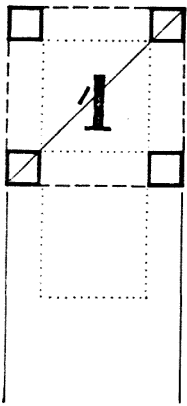
Each of these relationships generates, as a result of their interactions, three secondary attributes:

SPACE....place....OBJECT  
OBJECT....man....NATURE  
NATURE..occasion..SPACE

These secondary attributes enrich and carry the primary relationships into architecture.



My work then, is under taken in order to understand the relationships generated in this diagram, in order to learn its operations and its mutually enriching structure.



The modern house is by nature an experiment.  
It is the anvil by which we form and are formed by our notions of dwelling.

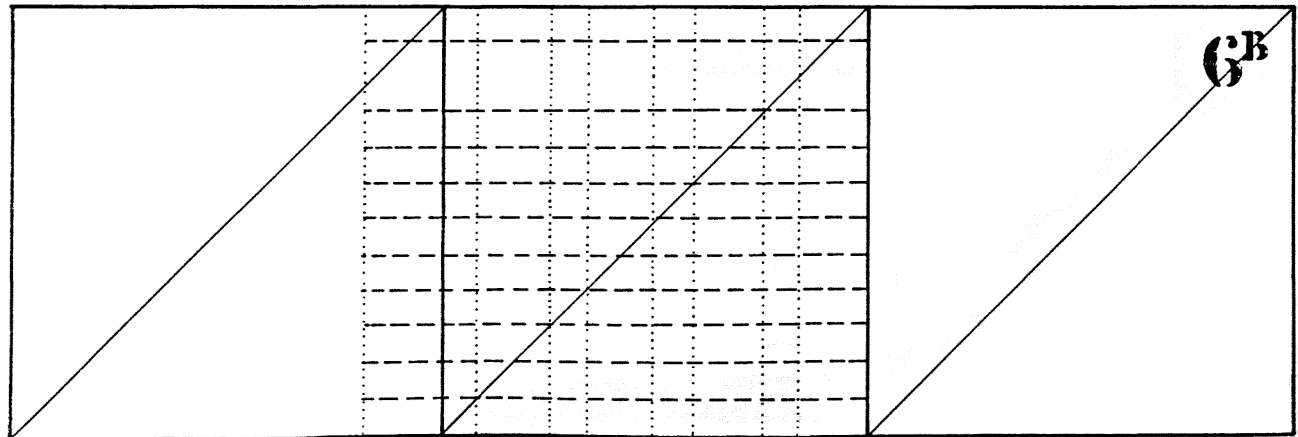
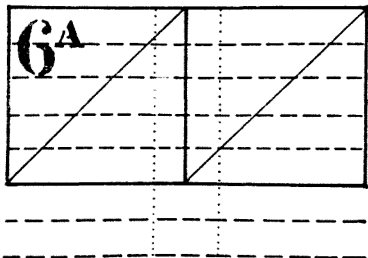
It is the most resistant of all building programs, and through this resistance we gain limits within which we are more able to construct.

The house is unavoidable.

This work is comprised of six house types in two sets of three. Three are configured as autonomous self-referring objects; three are configured as dependent world-referring fields.

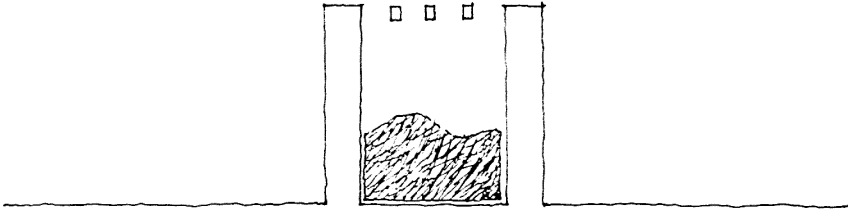
Each house is a confrontation of the rationale inherent in the space-object-nature diagram and intuitive choices arising from the basis of the individual situation.

The space-object-nature diagram is held as a constant in the six houses. The changing nature of my intuitive choices generating the houses, create the division between the two sets.



6B

6A



The autonomous house makes itself through itself-- makes a site on the inside.

A house in which one must dwell as a partner; a companionship which must arise from engagement with the problematic conditions of the house.

The autonomous house stands as a pure structure in conflict with circumstance.

The autonomous house is self-referring; its rationale building on itself.

This is a concentricity; a pure form of being.

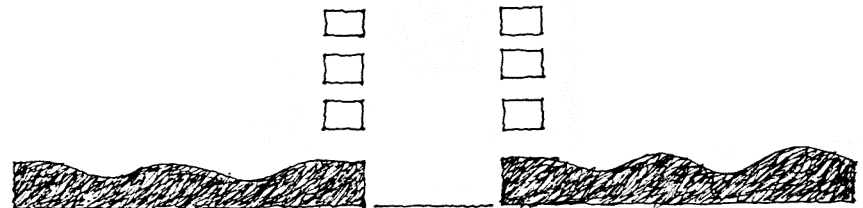
The dependent house is made by an external world of force and circumstance; slipping, colliding and passing through.

It is the juxtaposition of interior and exterior worlds, and the dweller another function of those worlds; a part of the conflict, unsheltered, in an ongoing production of tension and resolution.

The dependent house is an impure structure deformed by circumstance.

The dependent house is world-referring; its rationale building on external conditions.

This is an eccentricity; an impure form of being.



autonomous self-referring house

individual  
concentric  
enclosure  
pure static space:

geometric  
static  
additive

Concentric plans which create enclosure and pure geometric space; a neutral relationship to the site and the cycles of nature. They are autonomous and self-referring; they have one center and the beginnings of a simple hierarchy; the center makes a symmetry; strong, but often interrupted by circumstantial events; events accepted as a level of disunity, a necessary rattle in the system.

SPACE static pure geometric  
OBJECT technological neutral  
NATURE chaos non-rational

dependent world-referring house

social  
eccentric  
extention  
circumstantial dynamic space:

organic  
dynamic  
subtractive

Linear plans which create extended, event generated space; an active relationship to the site and the cycles of nature. They mediate between and react to the external world. They are many centered and are non-hierarchical. Many centers create a dynamic space determined by events within a static order; structure accepted as a level of unity, a necessary tightness in the system.

SPACE dynamic organic  
OBJECT archaic active  
NATURE order rational

1

2

3

4

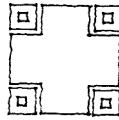
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6<sup>A</sup>

6<sup>B</sup>



# 1



The first house is formed by the configuration of four columns in a square. Each column is square in plan and the internal space formed by the columns makes the interior of the house.

The columns form a mediating zone between the internal space of the house and the external world of the site.

The columns are open to the sky and all views to the horizon pass through openings in the columns. Therefore to see distant nature (macrocosm) the view must pass through proximate nature (microcosm).

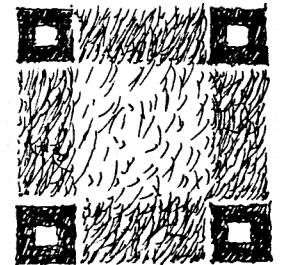
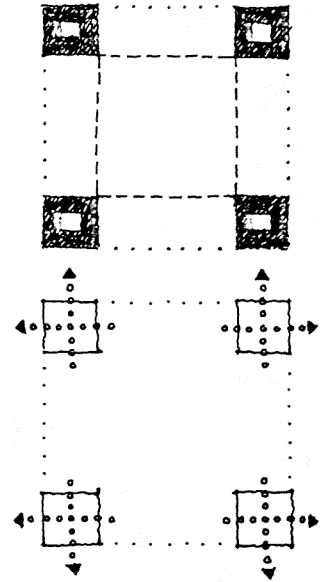
The columns of the house are masonry, a part of the site, and the earth, (the part that remains as ruins). The internal parts of the house are concrete, a technological material, more associated with the timely circumstances of the house.

The house is a tower with three rooms atop one another. The rooms consist of the square formed by the columns plus the zone between the columns which form the perimeter of the house. This exterior zone is given to the circumstantial elements of the house (bath, kitchen, storage, stair), this leaves the center space as a pure geometric volume.

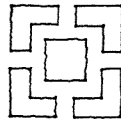
The first floor of the house contains the kitchen and dining areas, and is directly connected to the exterior and the ground. It is partially subterranean and is, as such, a part of the earth.

The second floor contains the main room and is internally oriented. The views are directed through the mediating corner columns and are oriented to the horizon. Light is brought in to the room indirectly and only in small amounts. The room would therefore be a dark quiet place.

The third floor contains the bedroom and is associated with the sky through opening in the roof.



2



The second house is formed by a continuous stair which encloses a square internal space. The stair is then enclosed by an encircling wall. The static internal room is opposed to a dynamic stair. The static nature of the center room is reinforced by its relative darkness in relations to the stair which is in turn reinforced by changing light conditions from a skylight above it.

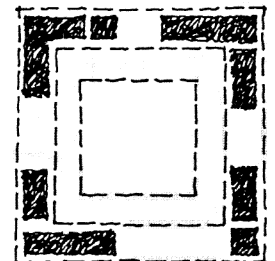
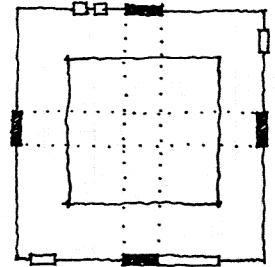
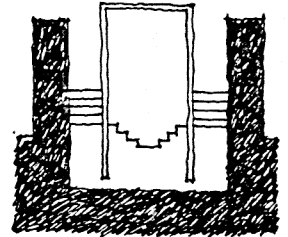
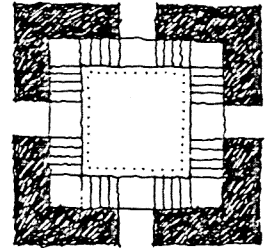
The exterior wall of the house is masonry. It is of the site and is deformed by small circumstantial events generated by the use of the house. The interior is of concrete to reinforce the geometric neutral static nature of the main rooms.

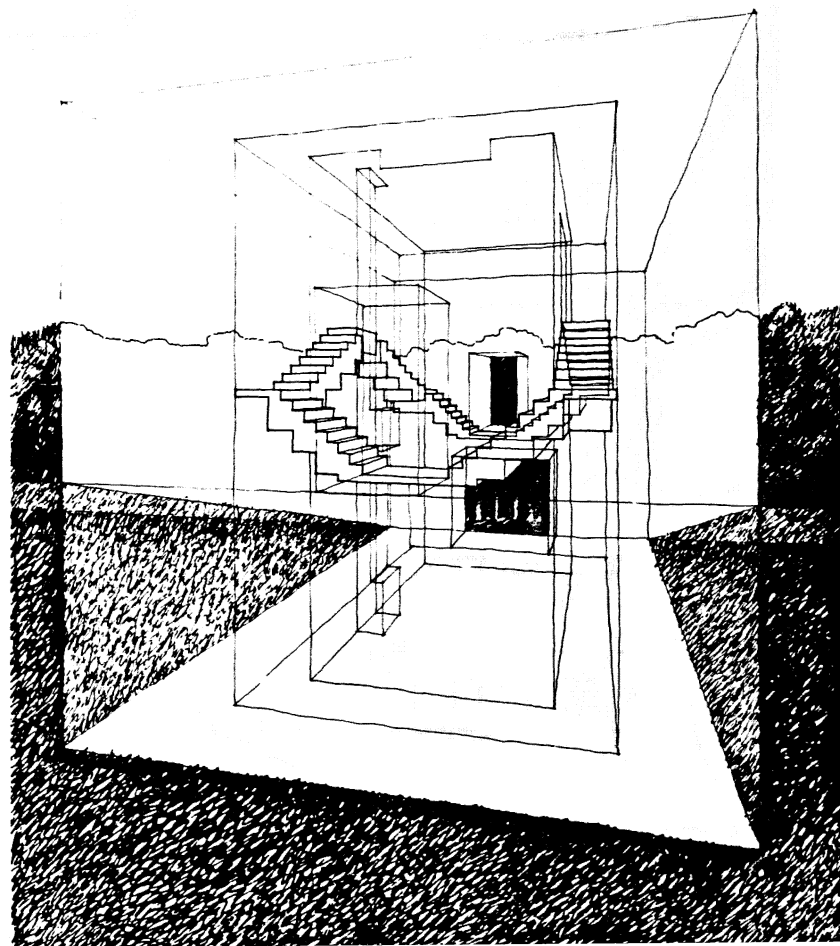
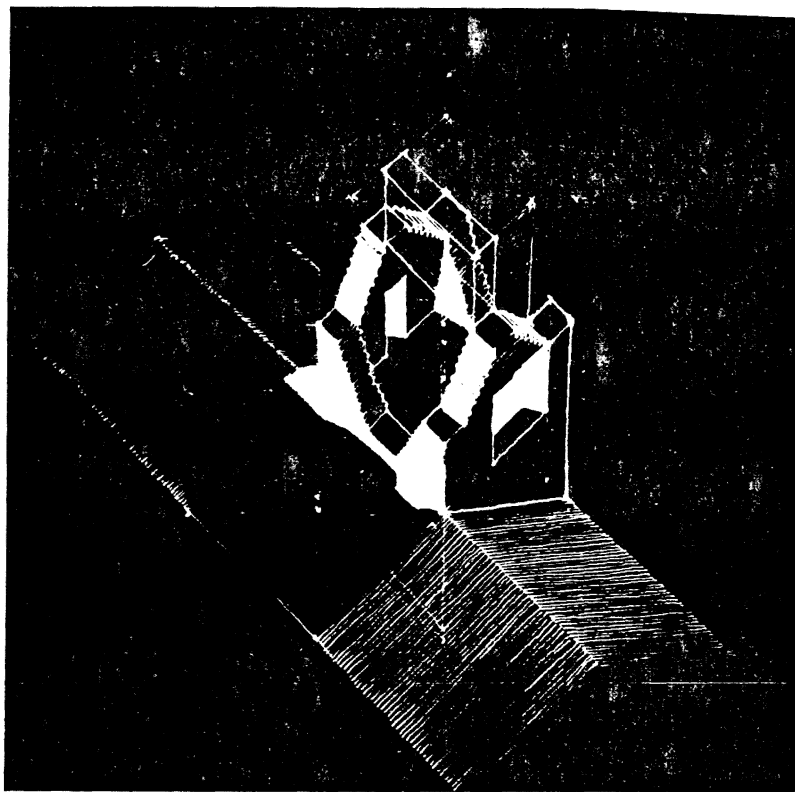
The primary openings in the exterior wall reinforce the geometric order of the plan while the secondary openings respond to circumstances within the wall.

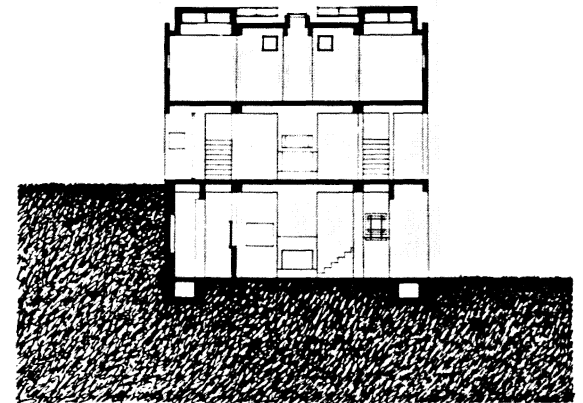
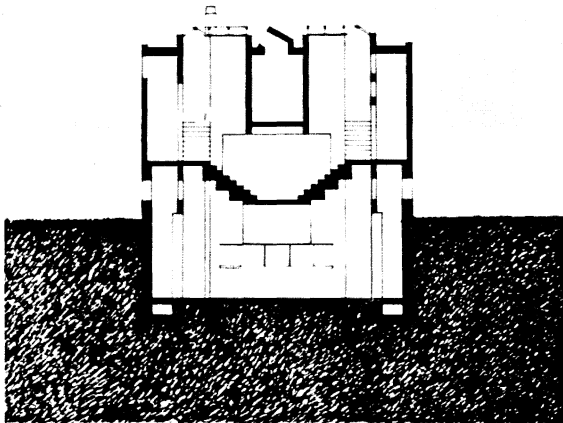
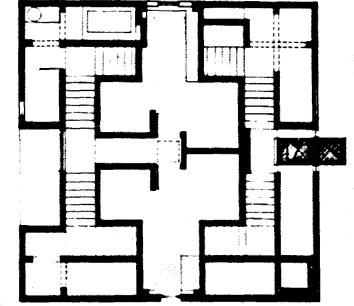
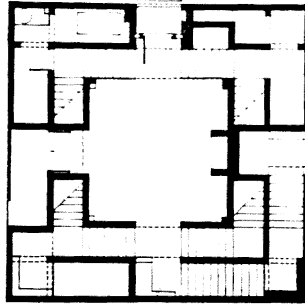
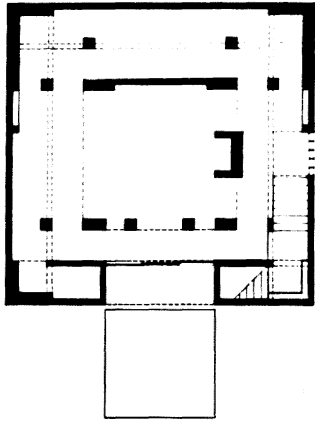
The first floor of the house contains the kitchen and dining rooms and is directly connected to the exterior and the ground. It is partially subterranean and as such is a part of the earth.

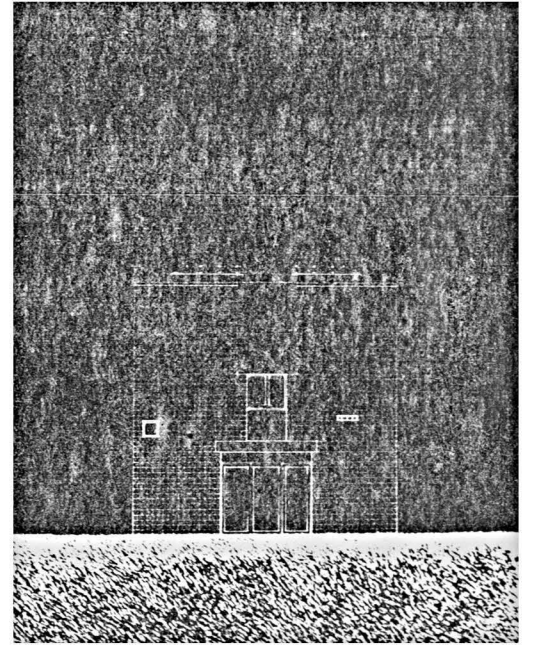
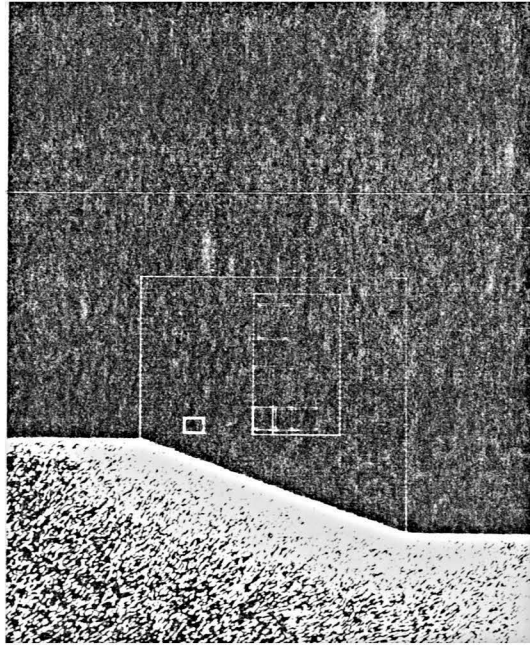
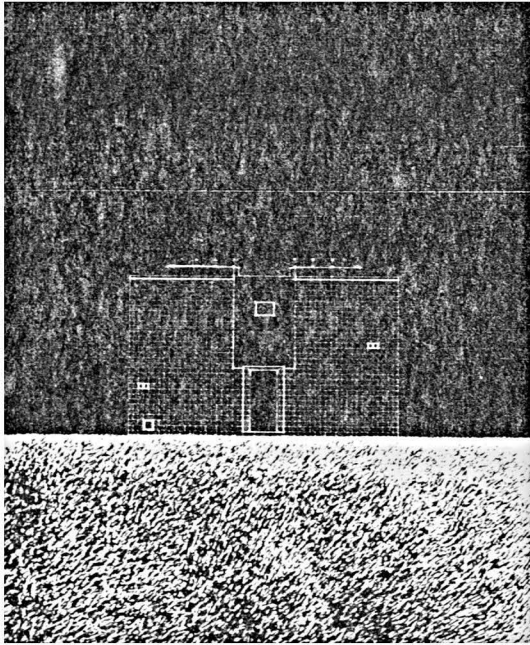
The second floor of the house is internally oriented and receives light indirectly from the stair which encircles it.

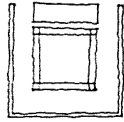
The third floor of the house contains two small cells with connected study areas. Light enters these rooms through the roof connecting the rooms with the sky. The wall which surrounds the stair contains many small spaces some of which are functionally specific and some which are left unspecified.











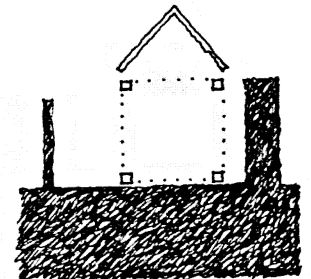
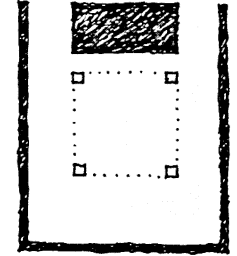
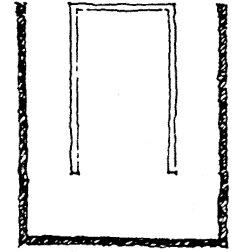
The third house is formed by two interlocking "U" shaped walls. The outside wall serves to create an internal site for the house while the interior wall makes a roofed space.

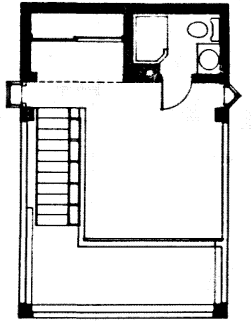
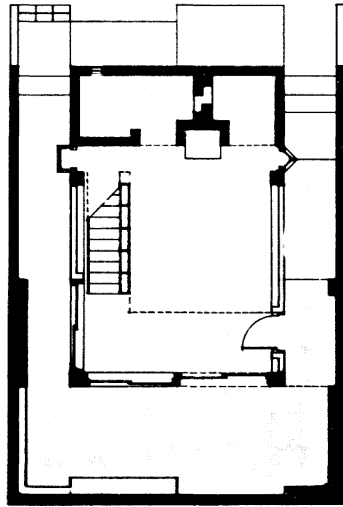
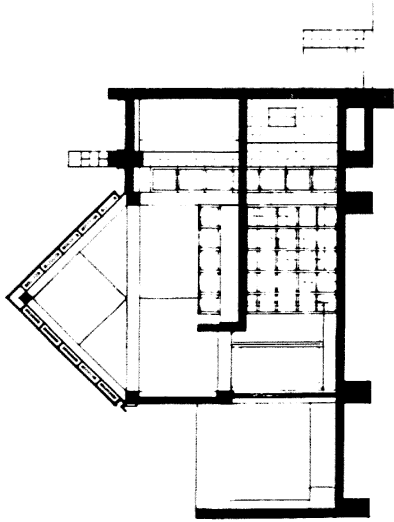
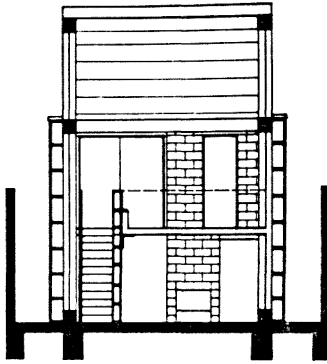
Within the area of the house there is at once interior and exterior worlds which are shaped by the configurations of the walls.

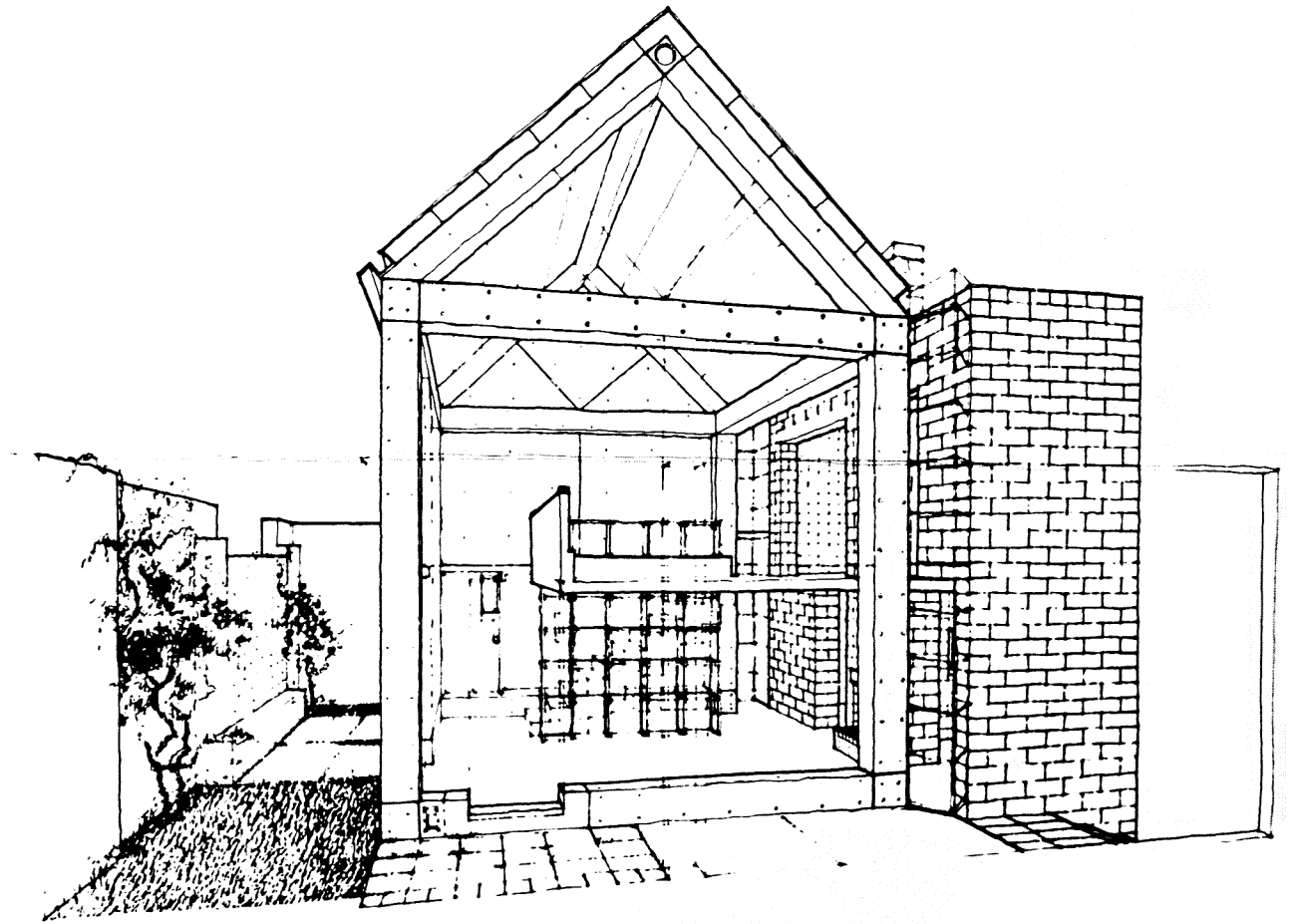
The exterior wall is masonry and serves to connect to other houses of that type. The wall encloses a small outdoor area so that even though the house is very small it has a site which is specific to the house. Nature is brought directly into contact with the inhabitants of the house.

The interior wall is of two parts: One part is masonry and thickened to make space for the circumstantial elements of the house. The second part is a concrete frame forming a cube with a half/cube as a top. This concrete cube forms a pure geometric interior space separated from the circumstantial parts of the house. The cube is enclosed with concrete panels, doors, sliding walls and a concrete roof, thus the main element of the house is a pure technological element in a relationship to circumstantial events, elements, and nature.

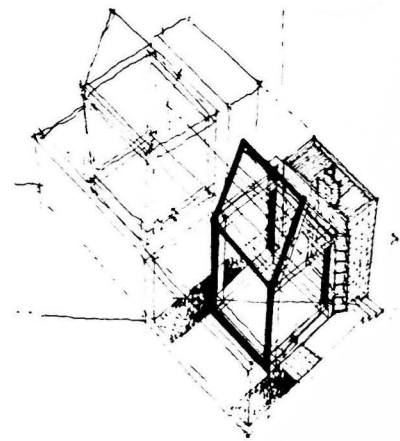
The house is intended as a small temporary living place for one or two people, because of its small size it is made to include, at a micro scale, all of the fundamental relationships which naturally occur at the macro scale. The wall encloses a small exterior space which is isolated from the larger world but is still subject to its rules. The interior of the cube is a pure geometric space, complete within itself.

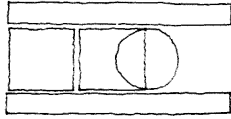












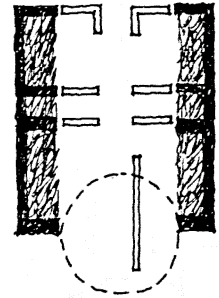
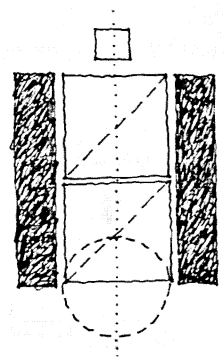
The fourth house is formed within the space made by two parallel walls. Within the walls, depending on the length, a number of geometric figures are outlined. These geometric spaces make the basis for rooms which are constructed between the walls.

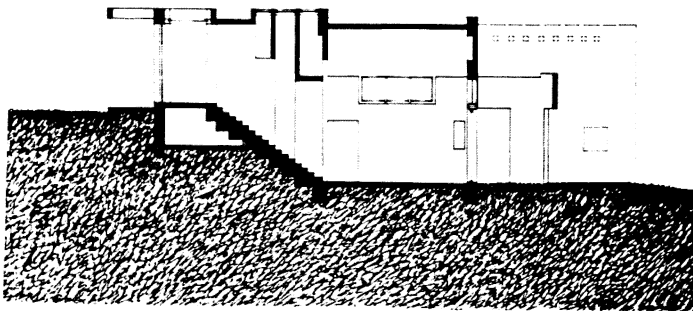
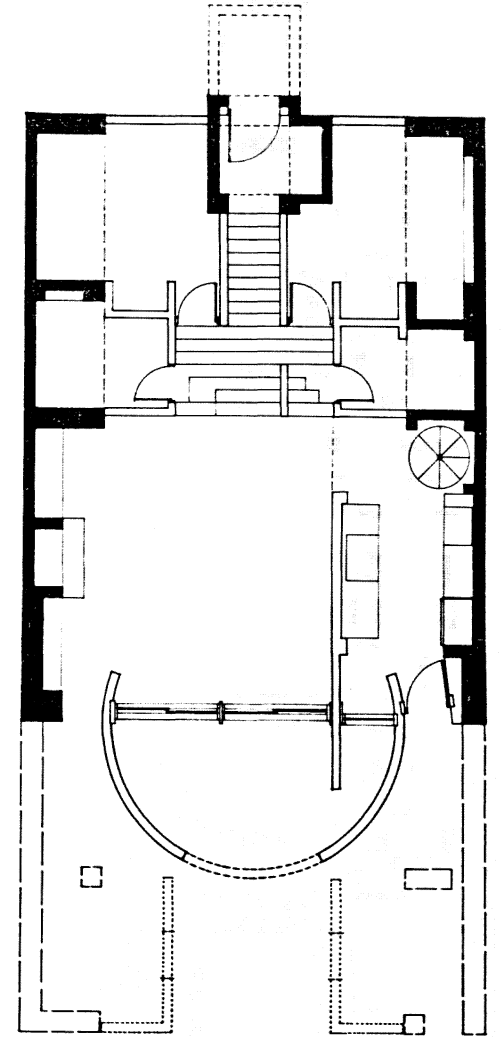
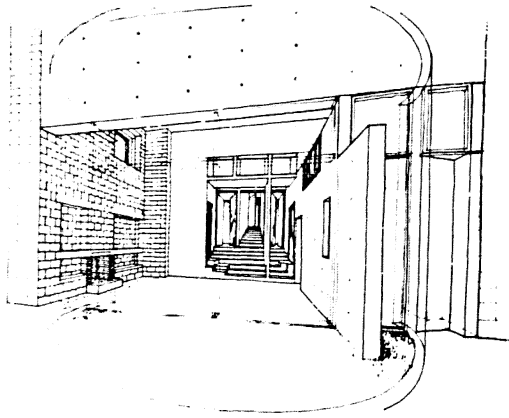
The walls are masonry and are hollowed out to provide space for circumstantial events along the wall. The rooms between the walls are made of concrete. The walls, therefore are made of a historic material and the rooms within are made of a modern technological material.

The rooms in the house occur sequentially along the axis of the walls. As the walls are extended over time, the rooms could be added according to the order of the extended walls.

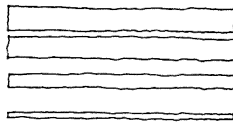
The rooms in the house are internally oriented and except for openings in the roof to let light in from above. The house has an internal open space which allows direct access to natural cycles.

The house can also be opened to an external view depending on the nature of the site.





5



The fifth house is formed in the space made by a field of parallel walls. The spaces of the house are formed by an interaction of three orders; the primary order is an alternation of object and space formed by seven parallel walls. The secondary order is a change from mass to line in a progression from north to south. The tertiary order is a growth from one to many symbolized by a triangle in plan.

The basis of the house, then, is a field deformed by interacting orders. The circumstances of use in the house serve to further decompose the field.

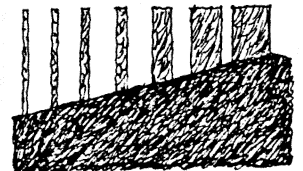
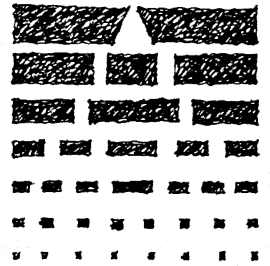
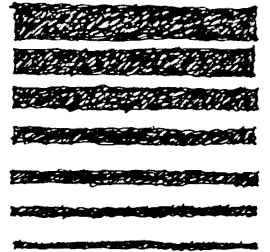
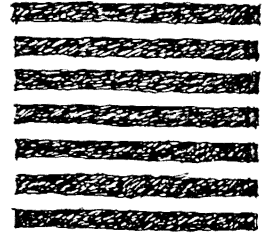
Place making in an infinite, non-hierarchical field poses a problem of choice; therefore the field of the house is made finite by geometry, location and orientation on the site.

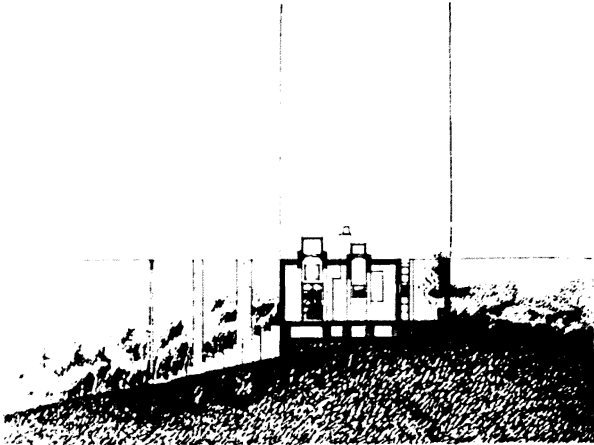
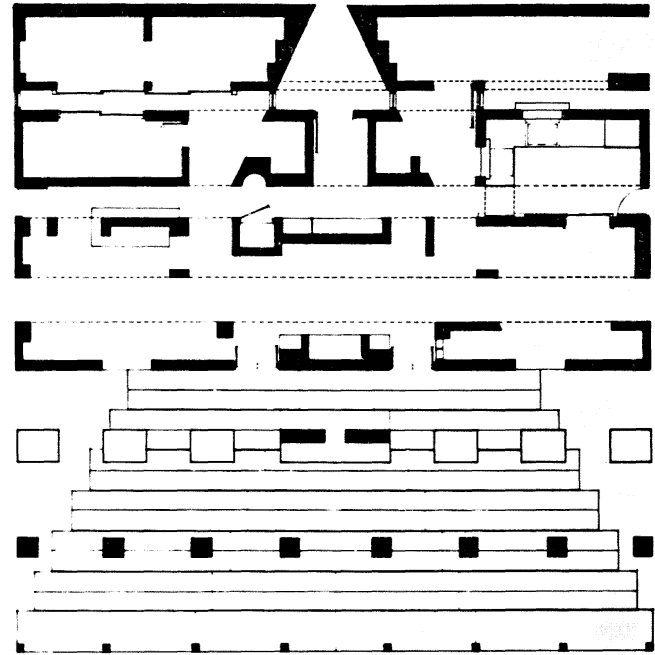
The interaction of orders creates a bias in the field making choice at once necessary and possible. The bias or "grain" in the field makes a structure for choice and value to occur.

The house sits on a gentle slope and the level, rational line of the tops of the walls and the natural slope of the ground stand in contrast to each other.

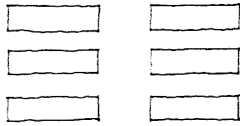
The enclosed space of the house occupies half of the field while the other half of the field is left unfinished as an exterior space "kept" by the house. Within the house the demarcation between site and house are equally ambiguous. Thus, the house is tending towards a unity of event within a field.

As this house is interactive with the site, siting of the house is specific to a certain kind of place. The house is generated by the transformation of one order into another. This condition is characteristic of what happens between edges of things; thus sites at the edges between two natural conditions would be sympathetic with this house.





# GA



The sixth house type is part of a group of five small houses located on a ridge in the Virginia foothills. The houses are formed by a field of parallel walls the size and spacing of which are controlled by the logic of the site.

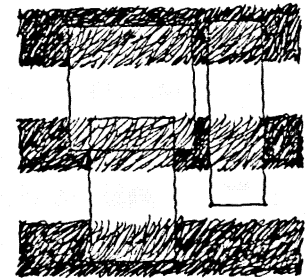
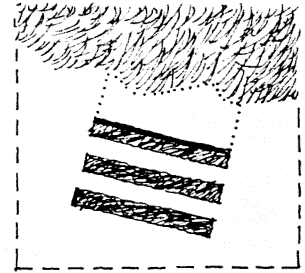
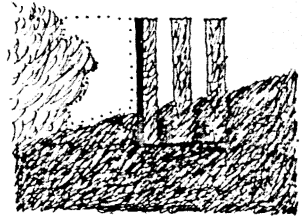
The site is a place between a town and the mountains. The site is a grassy ridge which points towards the mountains with thick bands of trees on each side of the ridge.

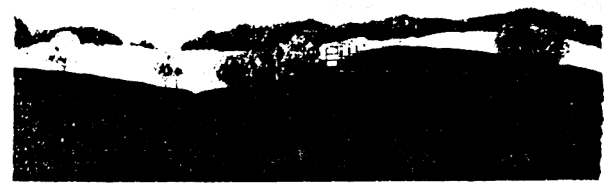
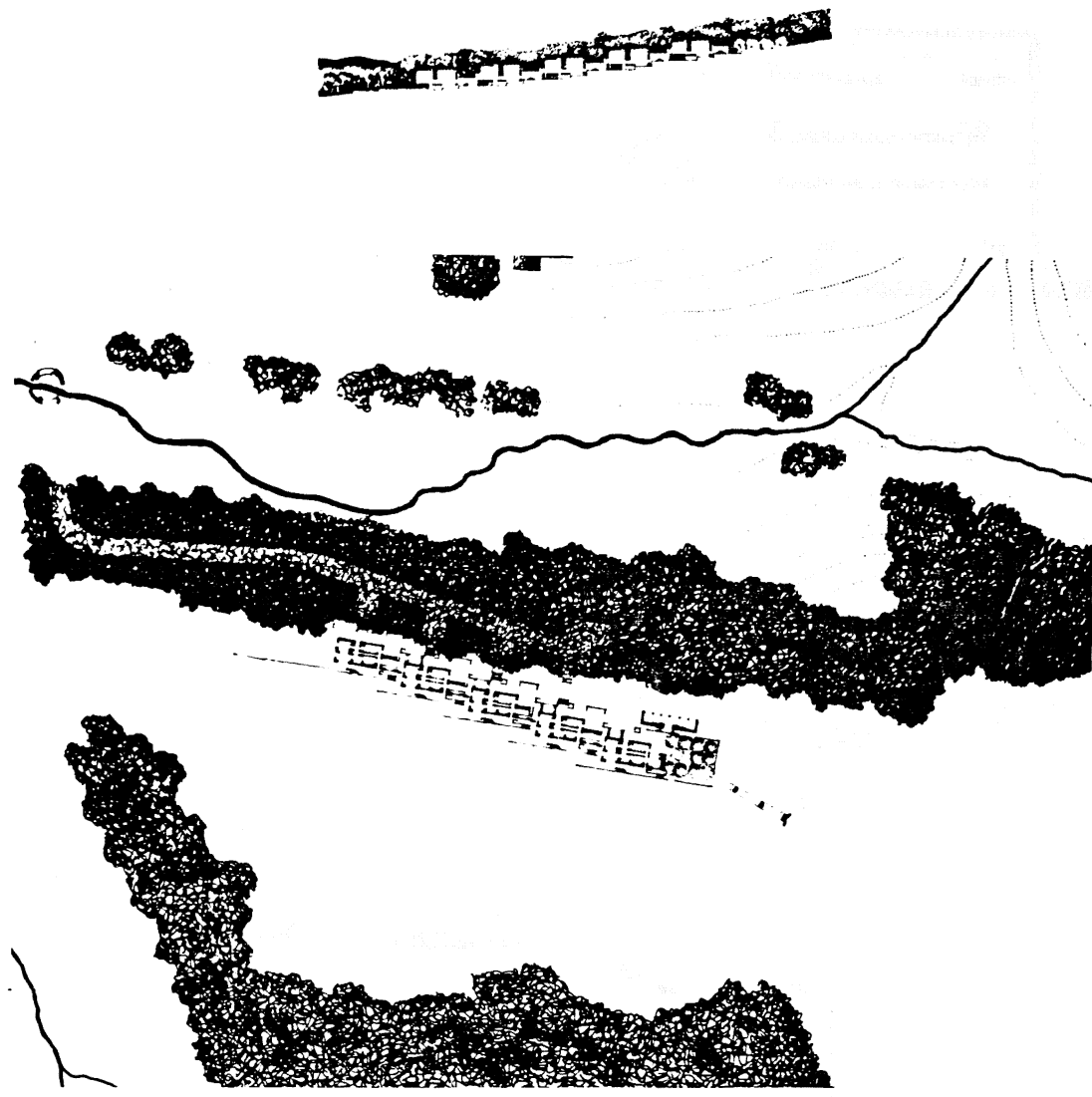
The houses are placed on the north side of the ridge so as to leave the ridge top untouched. The houses are placed close to the line of trees to make a room between the houses and the trees.

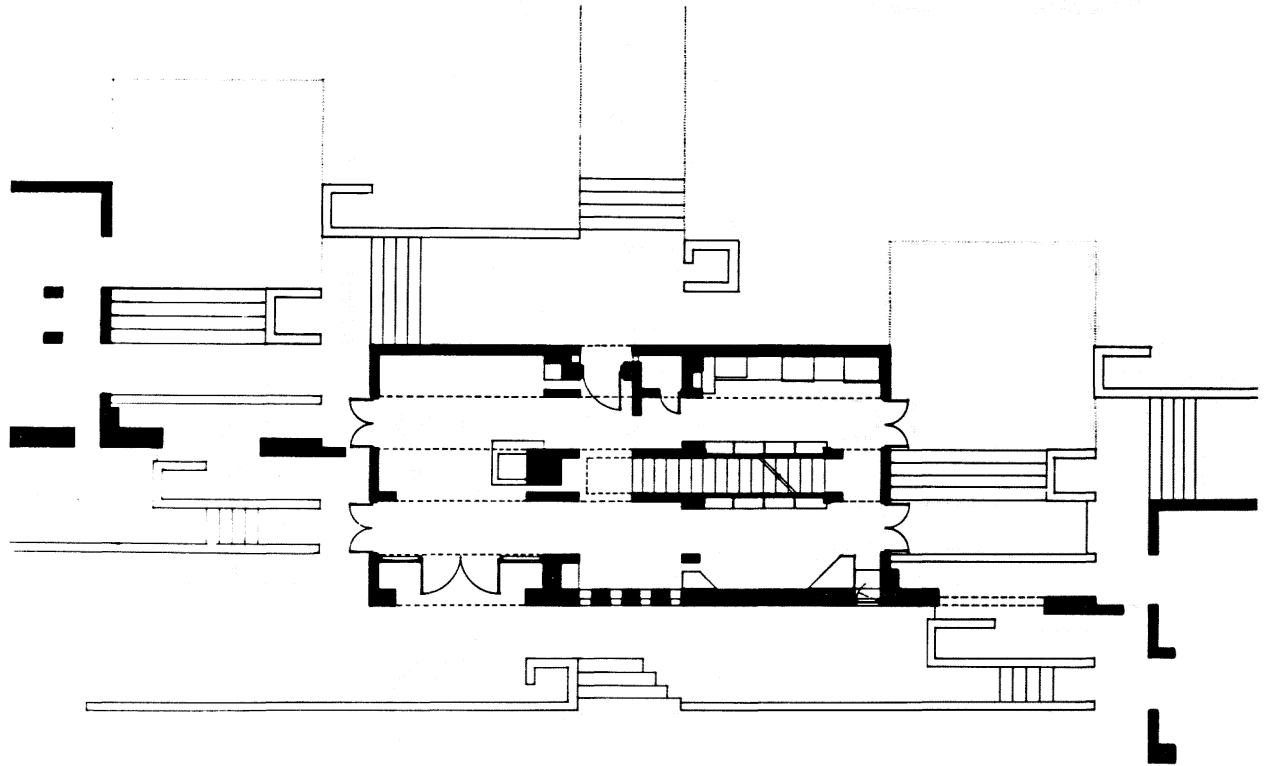
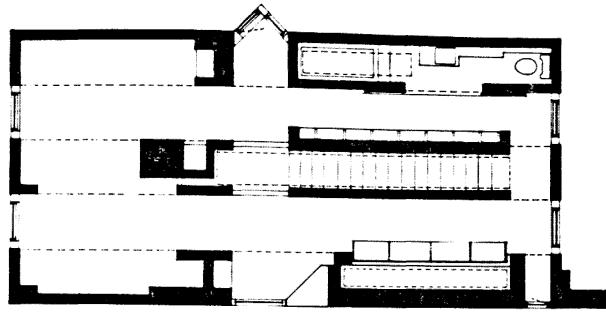
The order of the site which generates the walls is determined by the linear nature of the ridge which runs east to west. The houses are placed on the north face of the ridge, running east to west so that the south faces of the houses open to a sunny field. The north faces of the houses are then protected by the trees.

The walls of the houses are four feet thick and are spaced four feet apart thus rooms formed within the house encompass both wall and space; what is wall and what is room is left ambiguous. The boundaries between the interior and the exterior of the houses are left equally ambiguous as are the edges between houses. This makes a range of levels of privacy and ownership between houses.

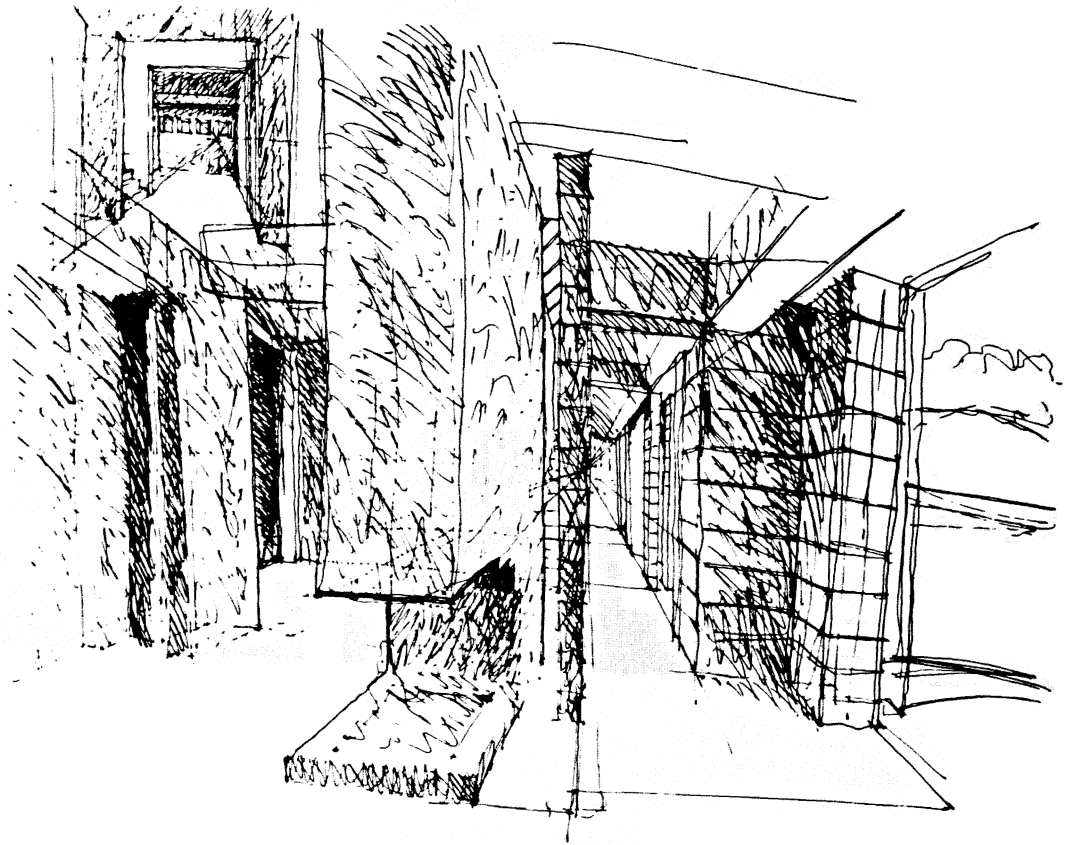
Within the field of walls the houses are staggered down the side of the ridge to allow each house a connection with the distant mountains. The connection to the mountains is emphasized to give a ground on which large scale change can be sensed in relation to the day to day changes in the immediate surrounding of the house.

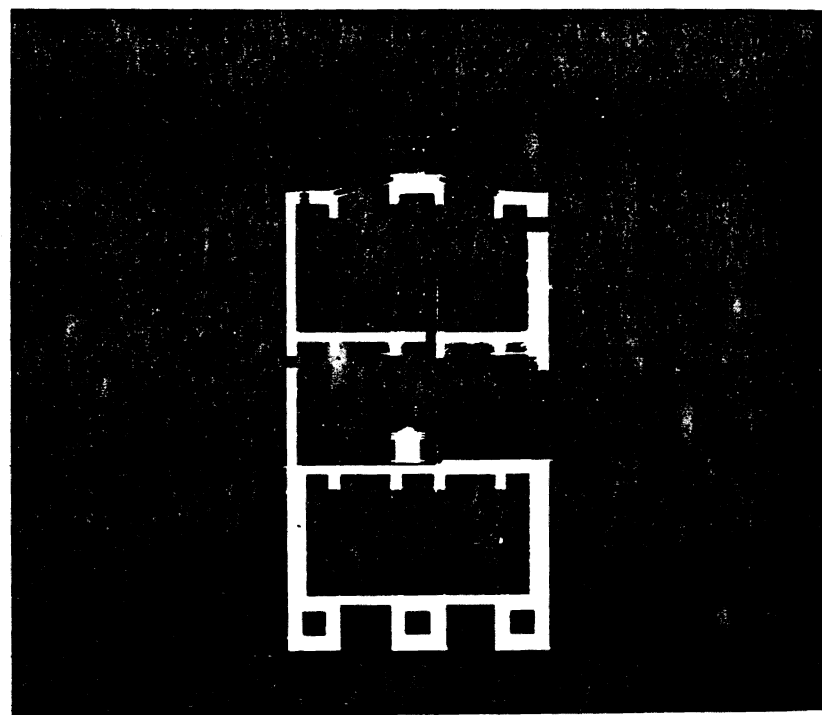
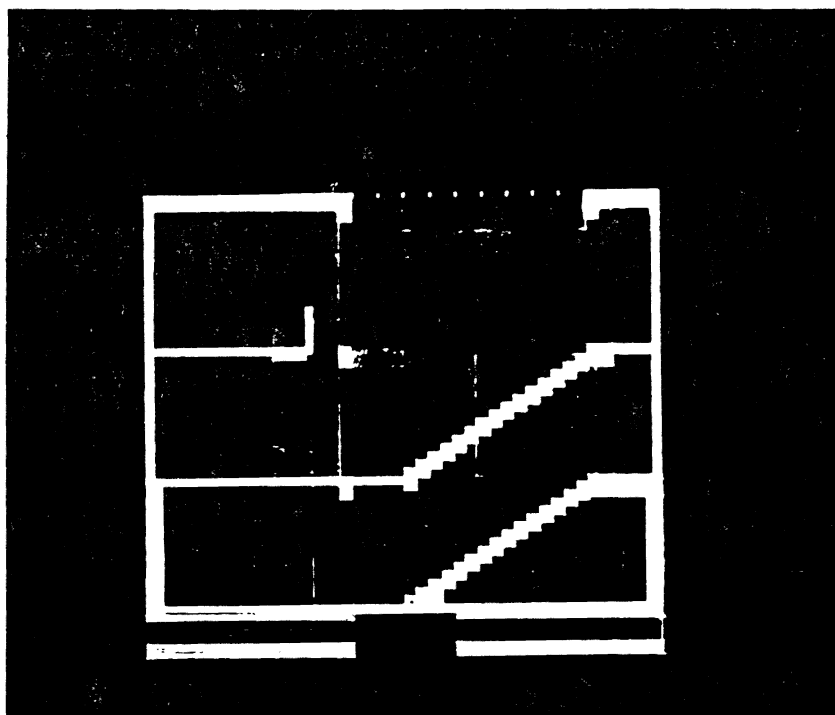




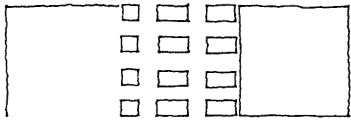








# GB



This is a single house designed for the same site as six A. In this house the relationship of the site to the town and the distant mountain is physically expressed in the order of the plan.

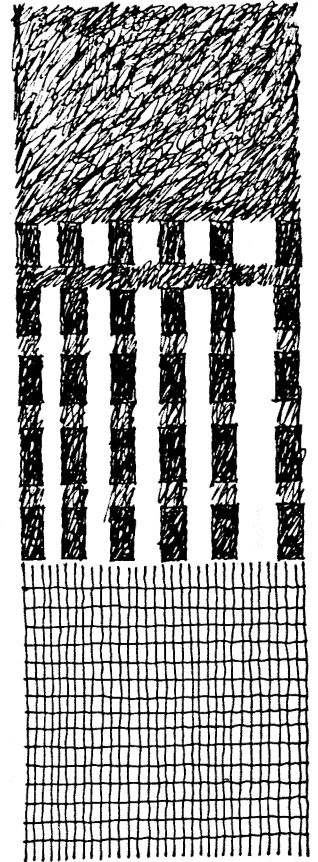
The plan has three parts configured in three 48' squares. The eastern most square nearest the town side of the site is a concrete masonry field 48' square where cars arrive from the town. Thus, the first experiences of the house is a technological/material field.

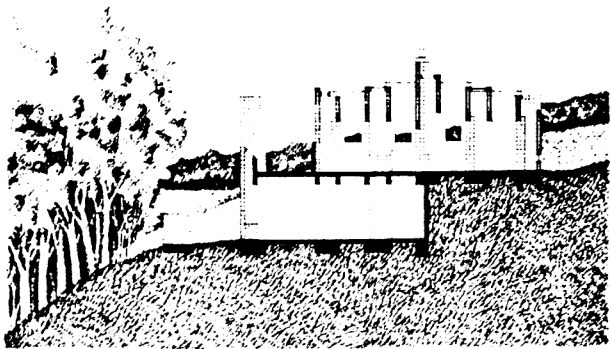
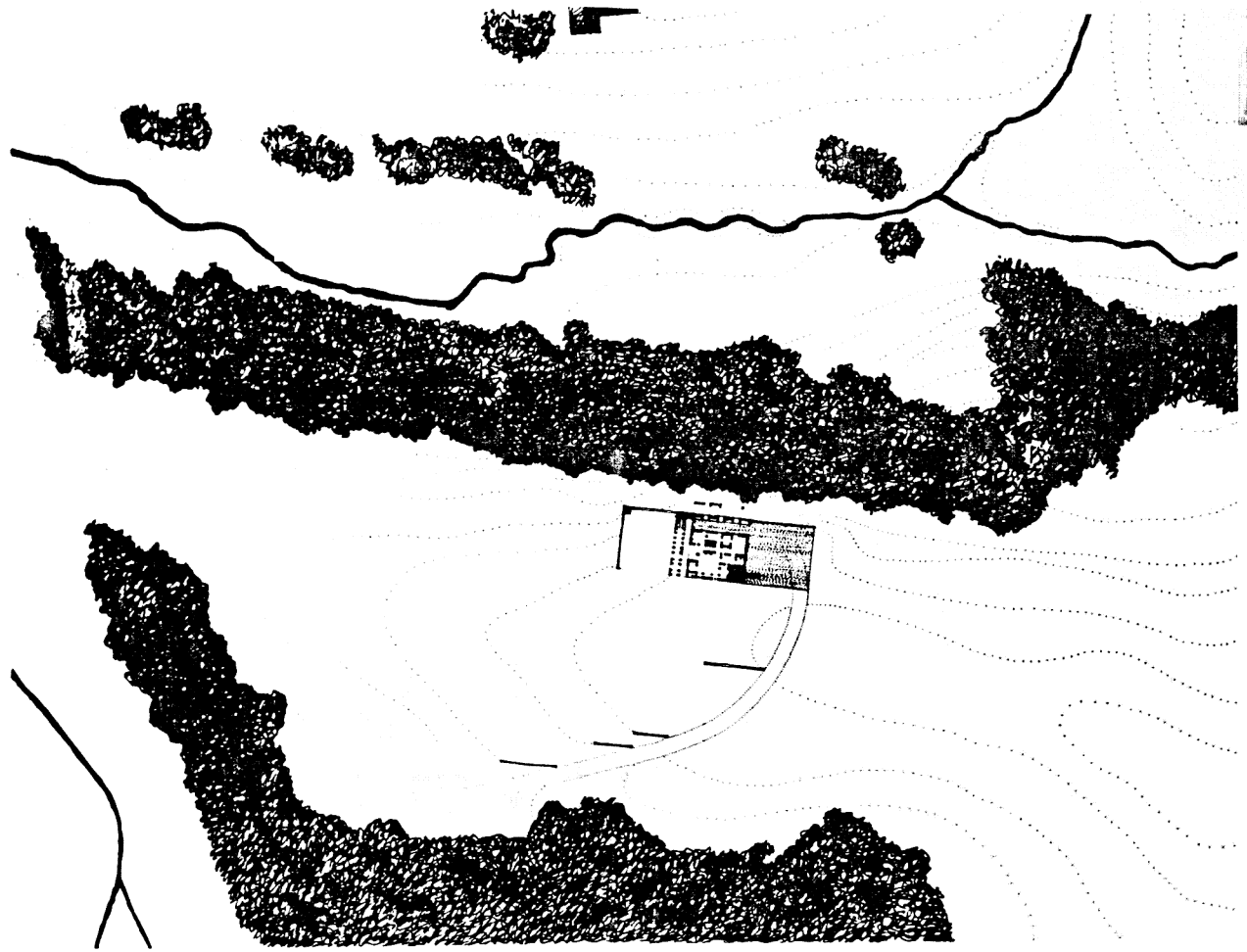
The second part of the house, which constitutes the main enclosed space of the house is a 48' square field of parallel walls. Thus the second experience of the house is of an object/material field.

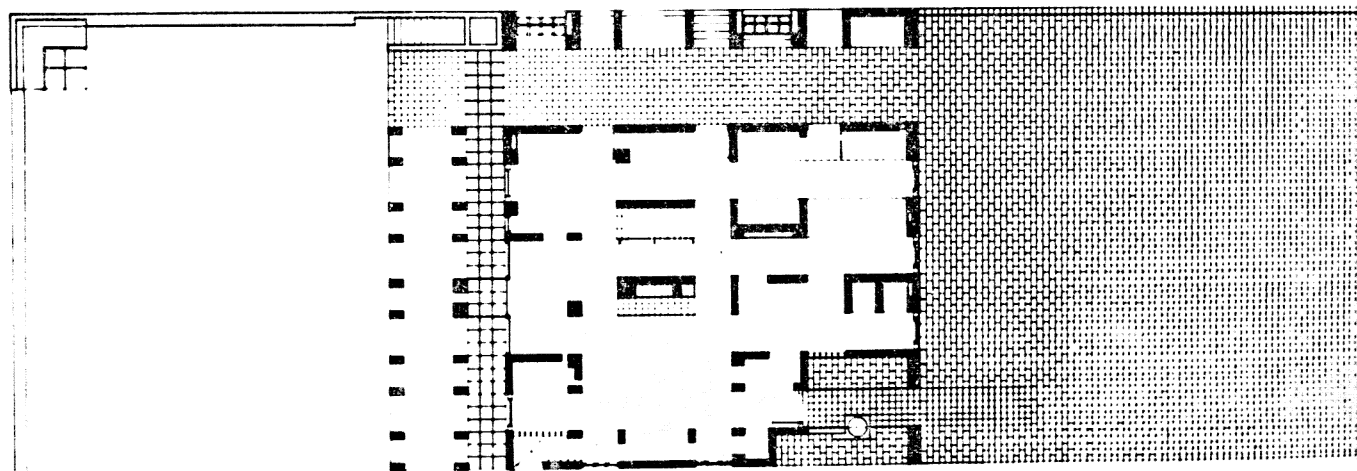
The third part of the house is 48' partially walls section of a grassy field; this square is taken from the rest of the site as a part of nature given to the house.

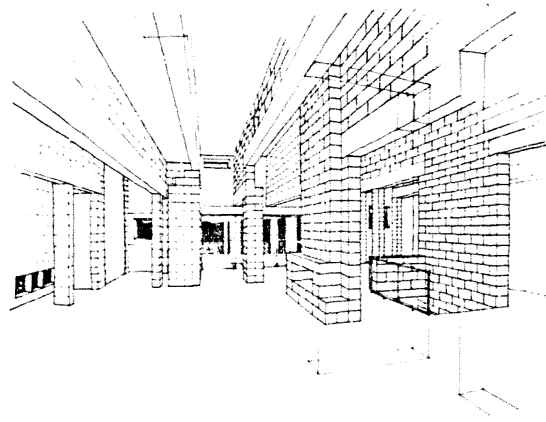
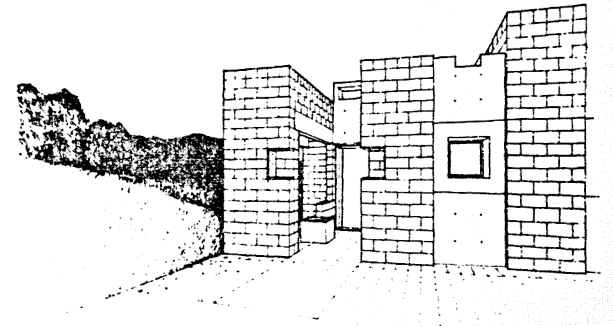
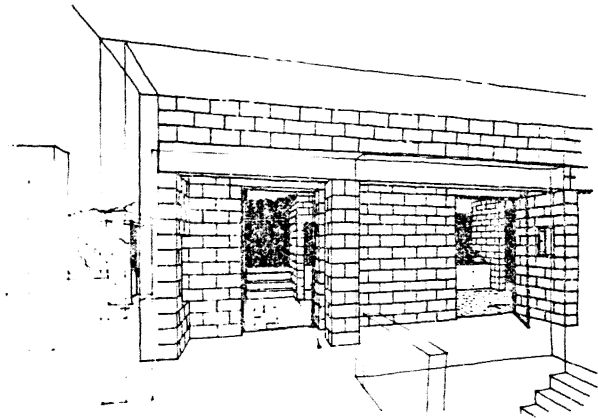
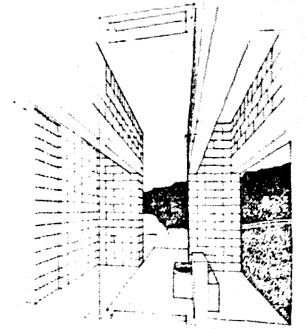
The house then is the juncture between the technological world of the town and the natural world of the mountains.

The spaces in the house are freely formed within the walls and create the circumstances in which the walls are deformed and carved away.









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