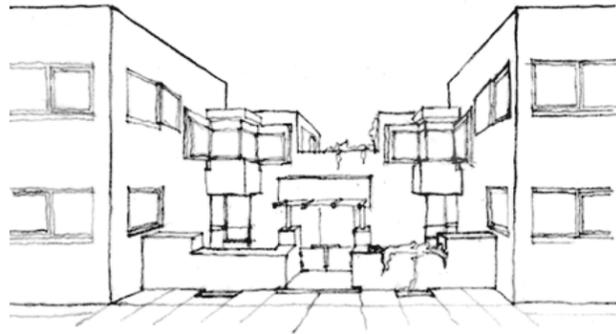


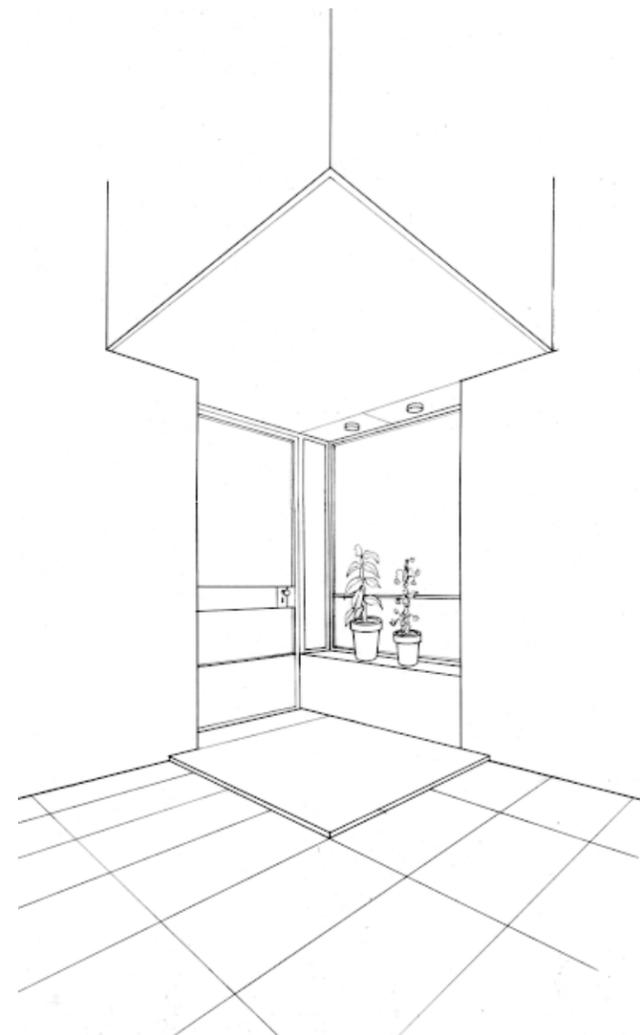
## CHAPTER THREE

### *The unit*

Chapter three focuses on the presentation and the analysis of a typical housing unit from the row of sixteen. The following material will give a description of the interior of the unit, and provide valuable insight on how it is put together as a coherent construct, that supports the purpose of being inhabited.



Entering the unit, from the courtyard to the front door



Perspective view of diagonal entrance to the unit. The diagonal entry offers privacy but also an opportunity to expand the visual field when one is aligned with the diagonal. For that reason the glass area is maximized, and the two rooms (courtyard and interior) are visually inter-related; at the same time, the design of the entry becomes a place where the individual can bring to it their personal touch.

Introduction to the unit

Housing for families stands out as a demand and a desire that remains architecturally unfulfilled in the town of Blacksburg. A great number of apartments are occupied by families in which a member or two are college students. Most apartment buildings in Blacksburg do not acknowledge how families live, and their special living needs. Being aware of the absence of adequate housing for families, the proposed row house project is intended for multiple use, that takes into consideration the family.

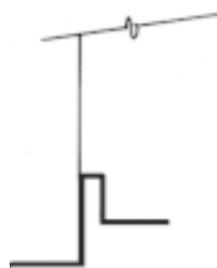
RELATIONSHIP OF ELEMENTS

Background

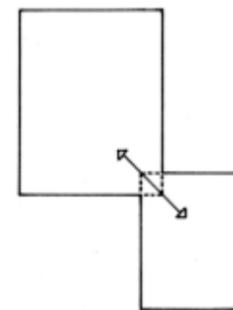
Among elements (in the particular case the term elements refers to what are known as rooms) two fundamental relationships can be found, those of contiguity and those of similarity. The two terms contiguity and similarity correspond to activities of conjunction and association. The relationships that are based on contiguity (adjacent condition or common boundary condition) are those that make up the *syntagmatic field* [syntax], and those relationships of similarity make up the *paradigmatic field* [paradigm] of the system. (note 3)

Regarding the unit

In the design of the individual housing unit, two basic syntagmatic relationships can be observed. Both involve relationships between rooms; one can simply be described as a relationship that results from a shift in section; the other, from a shift in plan. The relationship in section offers an opportunity to differentiate the two rooms by changing their floor height, and at the same time to maintain visual continuity between the two rooms that make up the conjunction. In plan, certain rooms relate diagonally. Rooms with a diagonal relationship are independent entities that simply can be accessed through the diagonal. (note 4)



Relationship in section

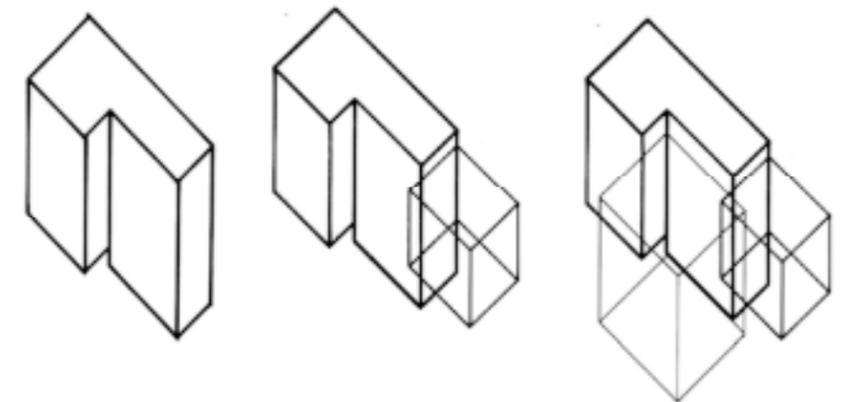


Relationship in plan

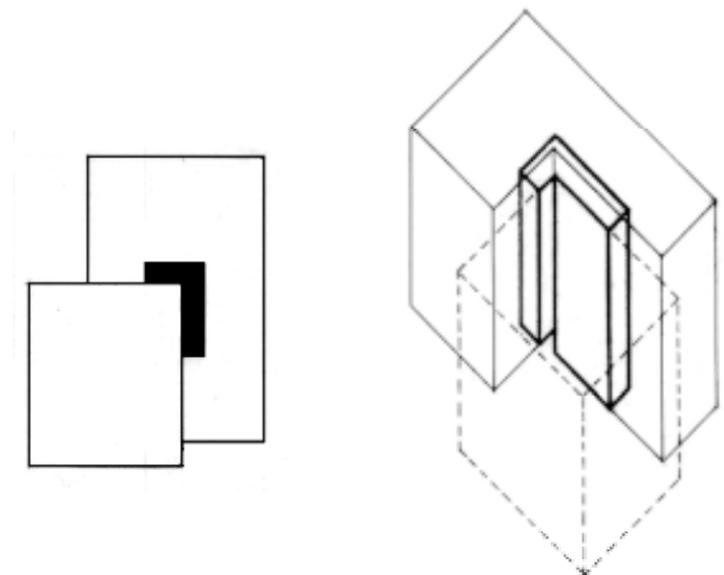
The above relationships can be found not only in the interior of the unit, but also between the unit and elements such as the street the court yard etc. It is intended to construct a set of relationships that can obtain meaning that will result in a habitable environment with the participation of the individual.

Relationship of volumes

In three dimensions the volumes reflect the relationships that have been established in the interior. All volumes are visible on the exterior of the building, and therefore give the building a sculptural quality in which each room participates within the composition of the whole. As a consequence, each room, by having a part of the exterior surface, receives natural light and ventilation.



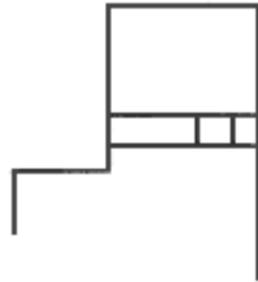
Volume diagrams



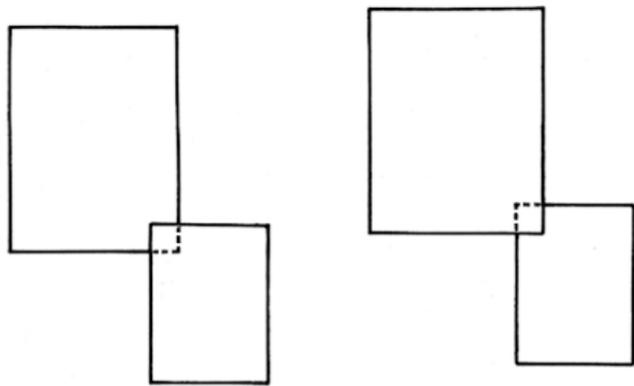
The above diagrams show the location of the volume that is occupied by the stair relative to the essential volumes of the unit.

Threshold condition

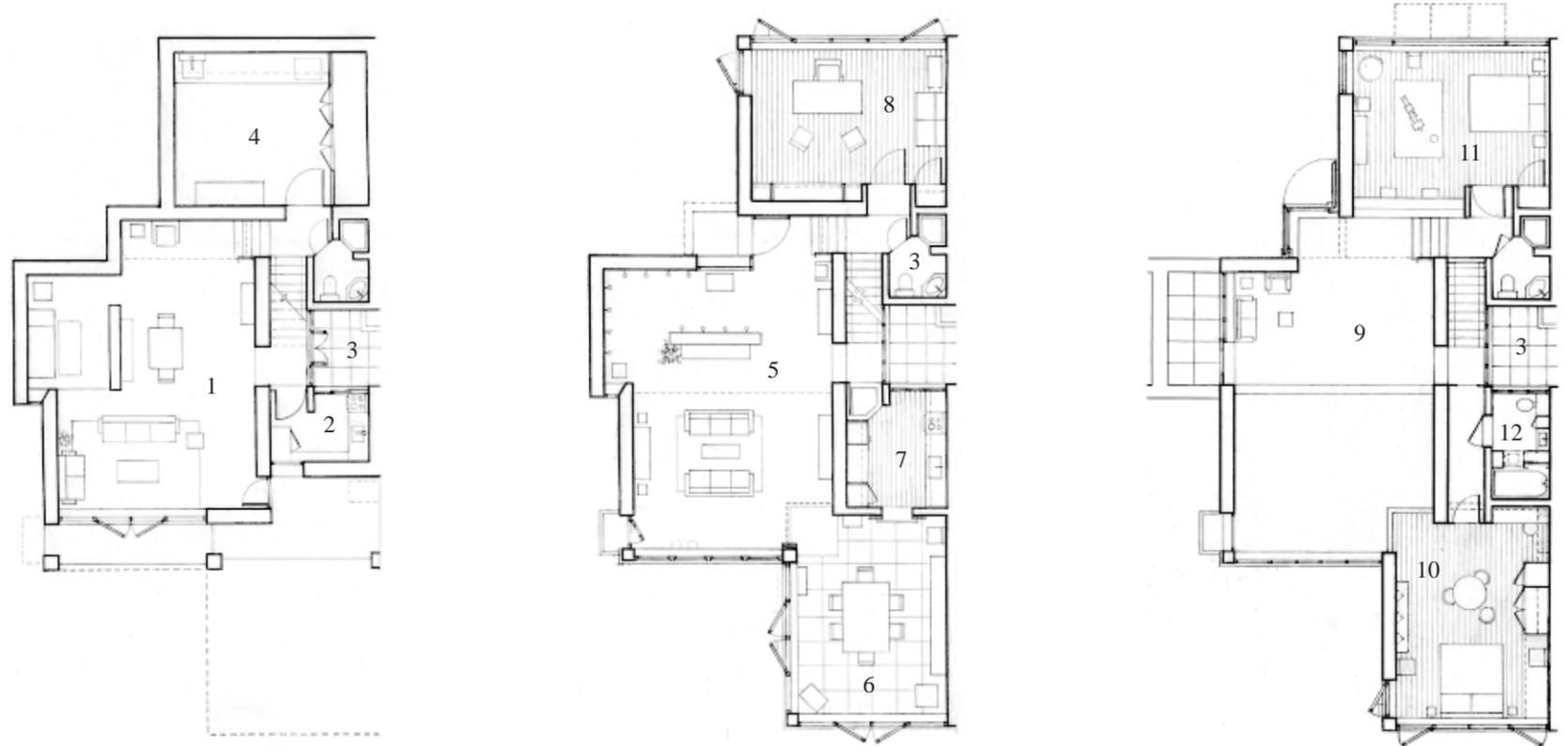
Relationships of contiguity introduce threshold conditions between elements. In the proposed unit attention has been given to the threshold conditions that exist between certain rooms. By examining the floor plans at level A and B, one can see that the threshold conditions are small entities that exist as small rooms between the two that they mediate. There are two ways that this happens: one, by increasing the thickness of the wall; and two, by overlapping two rooms.



Example where the thickness of the wall increases. In the above example the threshold, by increasing the thickness of the wall separates the two rooms and therefore increases the degree of privacy between the two rooms.



Example where the threshold is between two overlapping rooms. The threshold is where two rooms overlap.



Level A

Level A (ground level) has the capacity to be used either as independent entity within the unit or as an extension of the upper levels.

Level B

Main level. Used primarily for day time activities.

Level C

Used primarily for night time activities.

- 1. Living area
- 2. Small kitchen
- 3. Bathroom
- 4. Utility room

- 5. Living room
- 6. Dining room
- 7. Kitchen
- 8. Home office

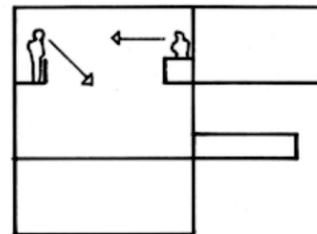
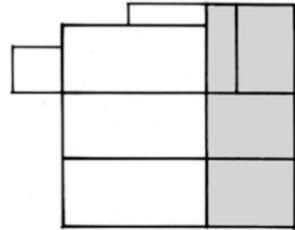
- 9. Multipurpose room
- 10. Master bedroom
- 11. Bedroom
- 12. Master bathroom

ABOUT THE INTERIOR

The theme and the unit

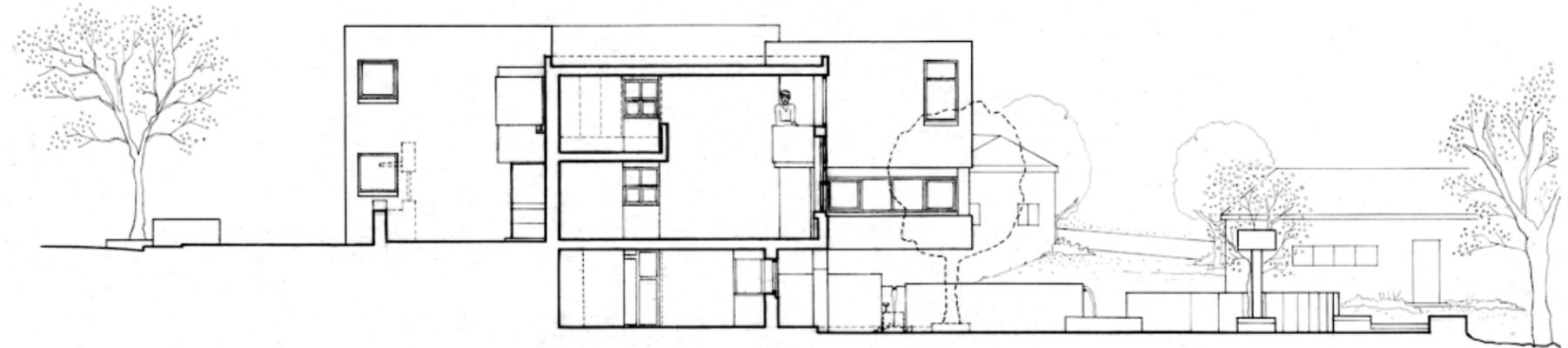
Schematically the unit can be described as a collection of rooms that partially enclose the areas of common access. When it comes to the issue of privacy, areas such as the living-room for example, is to the bedrooms analogous to what in a

town or the city a public plaza would be to a houses. (note 5) Therefore, each private room can be seen as an individual house within a city. Associations such as *the livingroom as a public plaza* are reinforced, in the following ways: by orienting internal views towards the living room; by making it the largest and more luminous room in the house; and by using the shared outdoor rooms to encourage activities to take place among adjacent units.



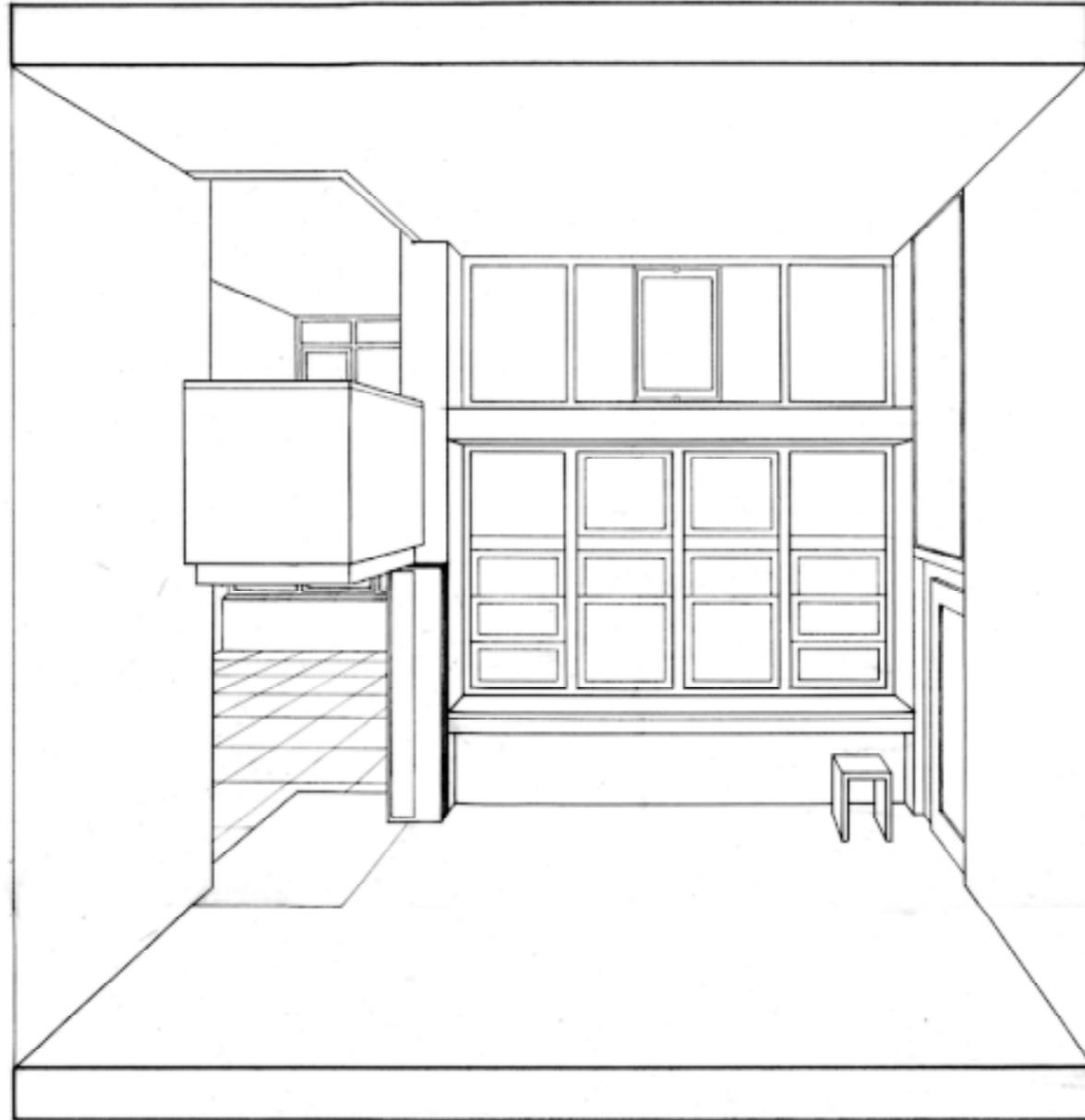
The three conditions that satisfy the theme

Of fundamental importance to the theme is the principle of reciprocity. (Note 6) It involves the two realms: public, and private, and how one can be seen as the other. The theme does not aim towards constructing the image of a city inside the unit; that is neither desirable or appropriate. The theme allows for associations to be made that support design decisions that contribute to the habitability of the unit.



Section through living-room. In the section through the unit shown above the relationship of the unit to the earth resembles the relationship that exists among rooms in the interior.

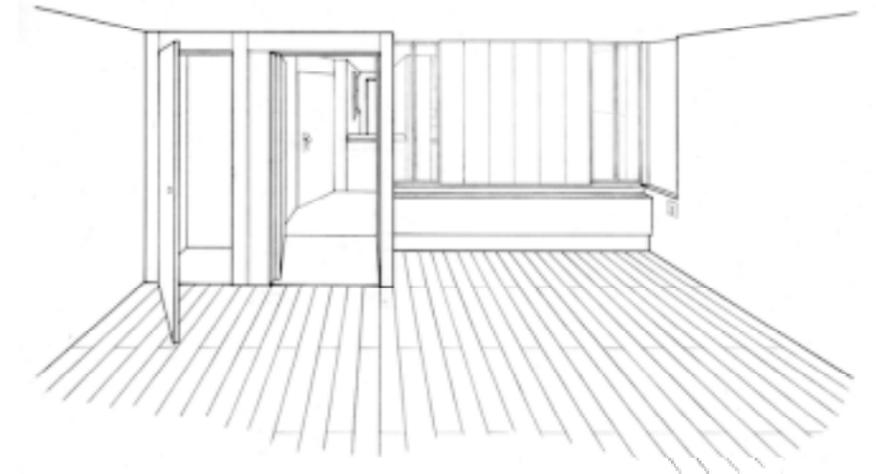




Living room interior

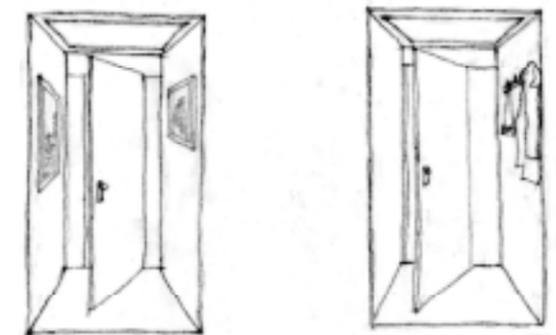
Further consequences of the theme

At the third level, the bedroom by being elevated relative to the multipurpose room is in an ideal situation in which one room can have a view into the other. The condition is reminiscent of house-street conditions in which the floor of the house gains privacy by being elevated relative to the commonly used area. This certainly can be further developed into a situation in which the commonly used area such as the multipurpose room, can be claimed as an extension of the private realm of the bedroom. If the unit is occupied by a family, and the bedroom is occupied by young children for example, the area in front of the bedroom can be used as an indoor playground that is contained within the unit.

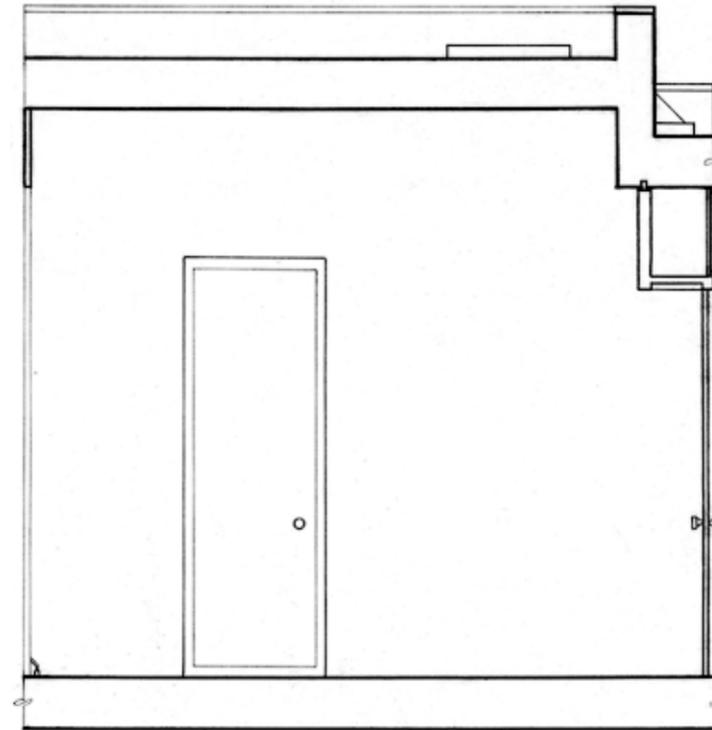
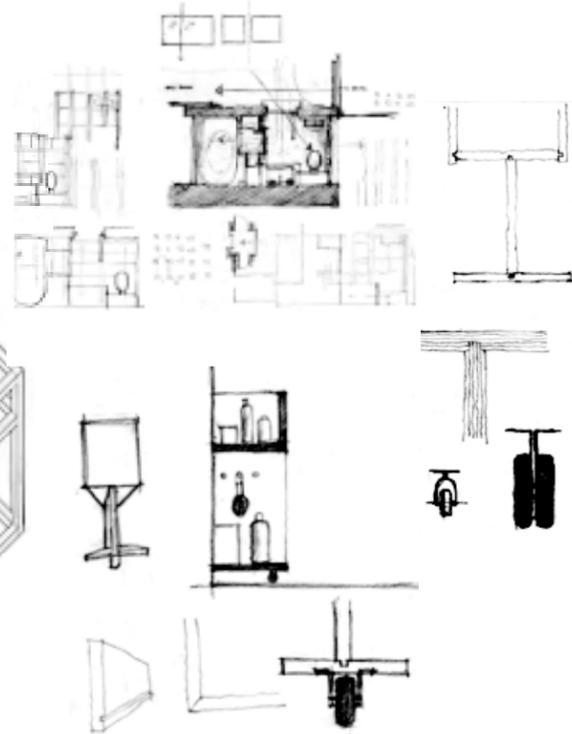
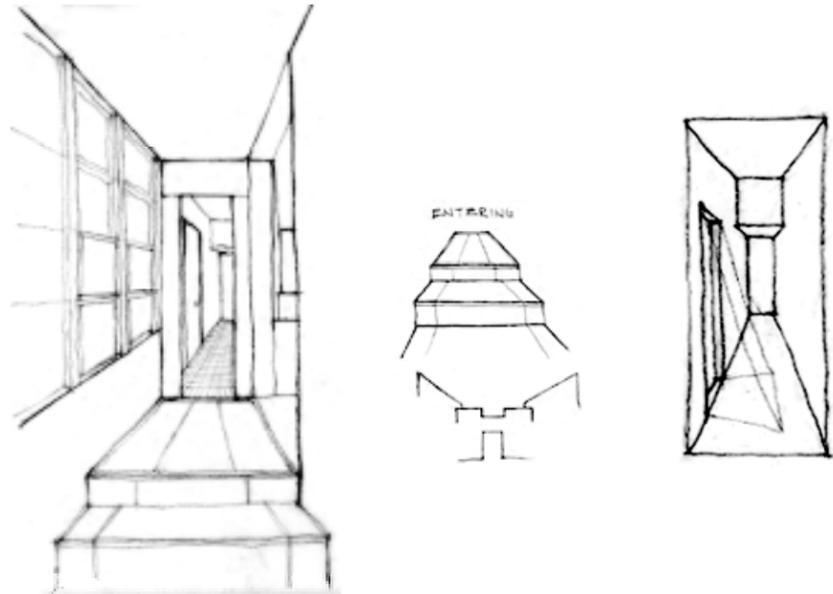


Interior view from third floor bedroom

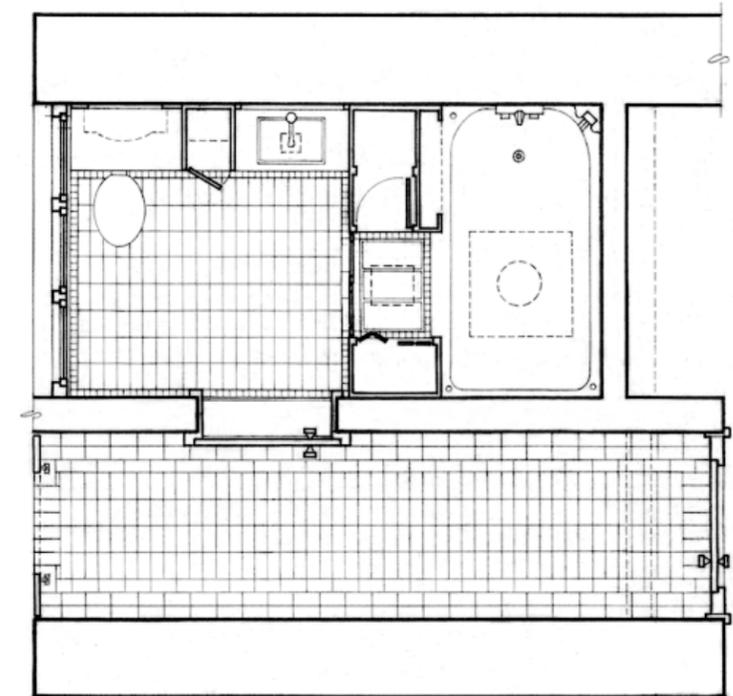
As seen in the above example the room took on characteristics of a house. What makes the theme very effective is the fact that when it is established at the macro scale of the house, a series of consequential associations can follow at smaller scales. For example, the doorstep of a room is the doorstep to a house; the stair can be seen as a public stair etc.



Entry as a small room. If the house is a city and the rooms are houses then the entry is an entry to a house. To the left the symmetrical entry is the formal one (appropriate if the room is used as an office), in contrast to the asymmetrical and less formal one on the right (appropriate if the room becomes a bedroom).



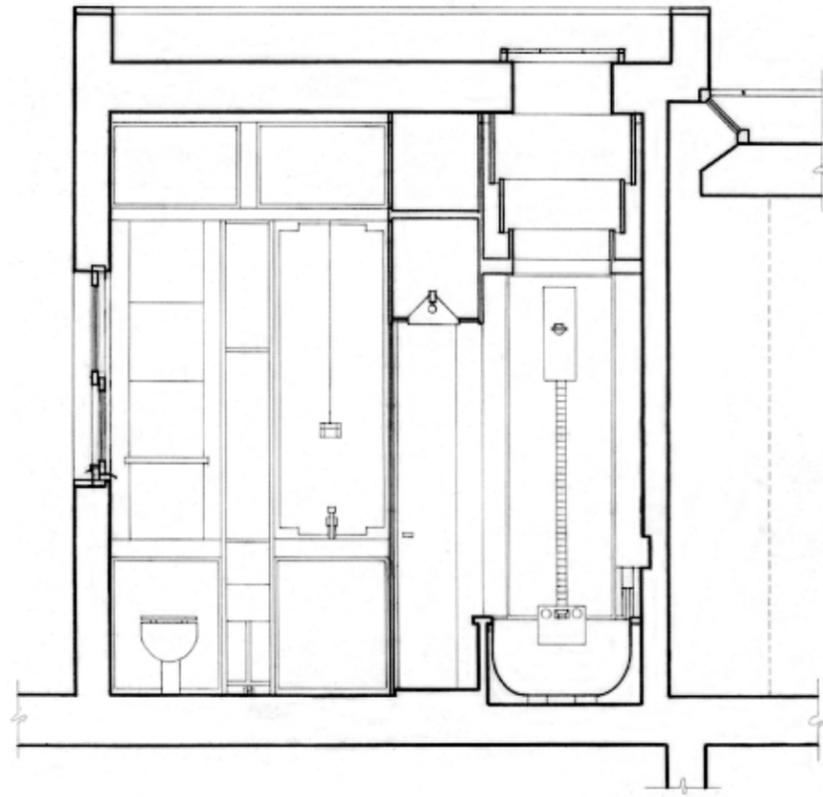
Exterior elevation



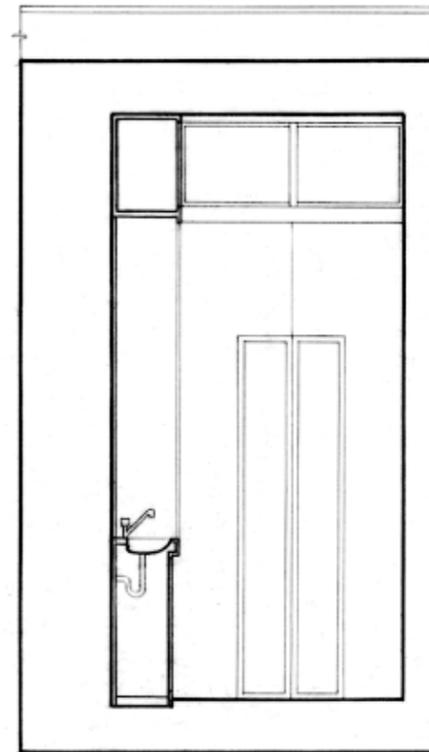
Plan

The master bathroom

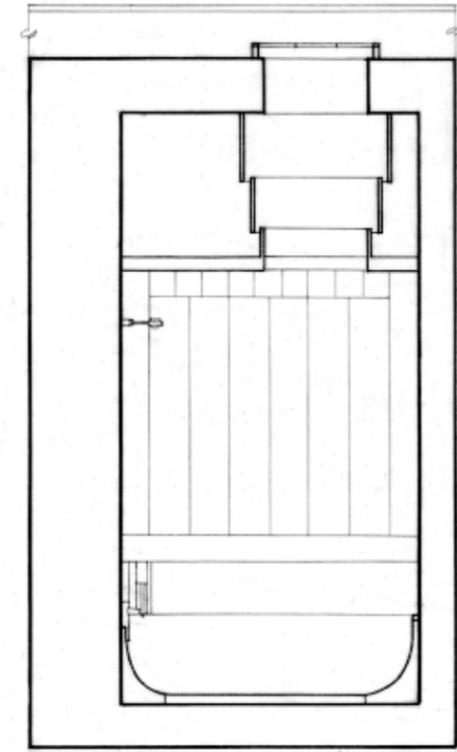
In the design of the bathroom, effort has been directed towards developing all surfaces of the interior to seek for architectural qualities in the smaller details of the room, such as: tiles, cabinets, and fixtures. The initial idea that governed the design the bathroom was to make the bathing area a room that is relatively independent within the overall area. In the proposed design the bathing area receives natural light, ventilation, and aims towards elevating the act of bathing beyond just an ordinary daily activity.



Section



Interior elevation (entry to bathing room)



Bathing room, section