

SPACE: INVESTIGATION AND ORIENTATION

by

Diana Carr Nelson

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APPROVED:

Olivio C. Ferrari, Chairman

Ronald W. Daniel

Dayton E. Egger

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INTRODUCTION

The most important thing to be gained from an architectural education is the development of an attitude which is applicable over the range of scales at which an architect works. An integral part of this development is an awareness and understanding of what has been designed before, be it a chair, a poster or a building. Without such knowledge, one runs a great risk of designing something which is only equal to or, more likely, less than what has been done before. In the pursuit of excellent design, the architect combines an understanding of the past with a personal statement of beliefs and desires for the built environment.

Two projects are presented here. One is an investigation into the relationship between an architect's work at two different scales and the other is a building design incorporating some of the findings of the investigation.

AN INVESTIGATION

An architect can apply discoveries made at one scale of activity to work at another scale. The range of activities available to test ideas is unlimited. What is significant about this way of working is that at a small scale, such as painting, the architect is in complete control. Experience at this scale can then be applied to work at a larger scale, such as a building, which involves greater time, expense and the involvement of others.

Le Corbusier used painting as a test for ideas he then used in his architecture. The significant connections between the two activities were in terms of order and the structuring of space.

A method of ordering prevents decisions which are arbitrary and uneconomical. The particular method used is not so important as the adherence to it once it is chosen. Le Corbusier used several methods over the course of his career whether ordering the surface of a painting or the facade of a building. They were the use of regulating lines, growth patterns found in nature and the Modulor system of proportions which he developed from a combination of the two.

Space, whether it is the two-dimensional surface of a painting or the three-dimensional space of a building, is perceived according to the structure assigned to it by the architect. Le Corbusier placed elements in his paintings and his buildings according to certain methods. For example, space was ambiguously defined by spatial trans-

parency, highly structured by the juxtaposition of massive elements and defined and activated by the control of light.

CITY LIMITS

The design of a house in a city block was used as a vehicle to test ideas about the ordering of architectural elements and the structuring of space. Limitations of the site forced the consideration of three areas: the Street, the Garden, the Sky.

The Street

Inserting a building into the highly structured context of a city block forces consideration of the existing order. The existing rhythm and scale are respected without duplication of form.

The facade creates spaces and orients views toward the street. Openings in the facade frame views of the street while controlling the view from the outside in. There are outside spaces oriented toward the street which form a connection between the private world of the interior and the public realm of the street.

The Garden

To provide a private outdoor space, the house is divided in half with a garden in the center. The garden consists of a series of terraces and planters with steps and paths connecting them. The module of the brick is used to order the composition which is coded in terms of movement and rest by the pattern in which the bricks are laid.

Spaces for cooking, eating, sitting and sleeping on the first and second floors of each half of the house are oriented toward the garden. On the third floor, an outside space or roof garden is provided as the garden below is too remote from this floor.

The Sky

Sharing walls with adjacent buildings allows light to enter only through the end walls and the roof. The roof is, therefore, an important element for admitting light and orientation to the sky. The top floors take advantage of the special condition this creates. Using the repetition of basic elements, the roof is oriented to create a range of spatial heights and conditions which are reinforced by the controlled admission of light.

APPENDIX

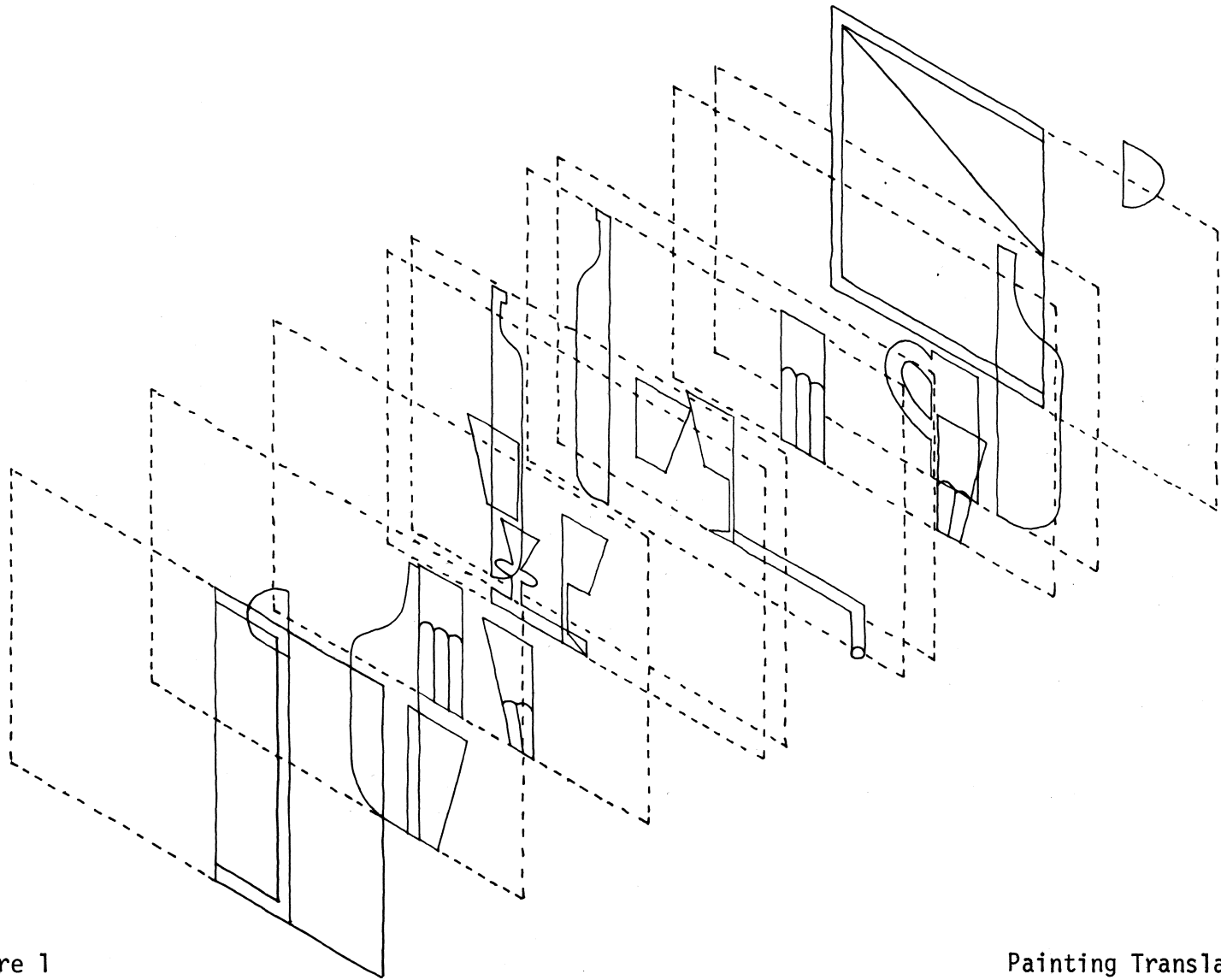


Figure 1

Painting Translation

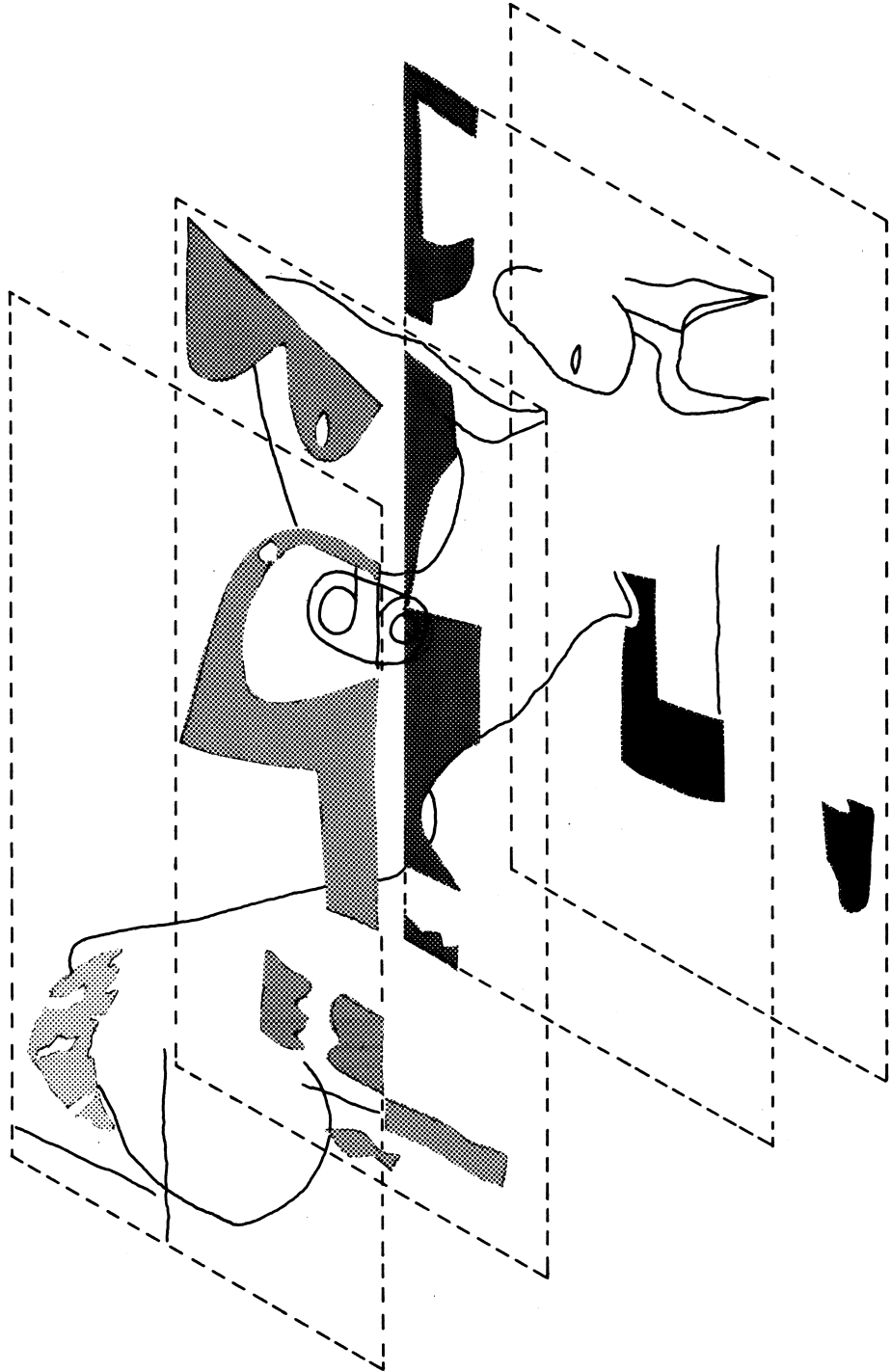


Figure 2

Painting Translation



Figure 3

The Street

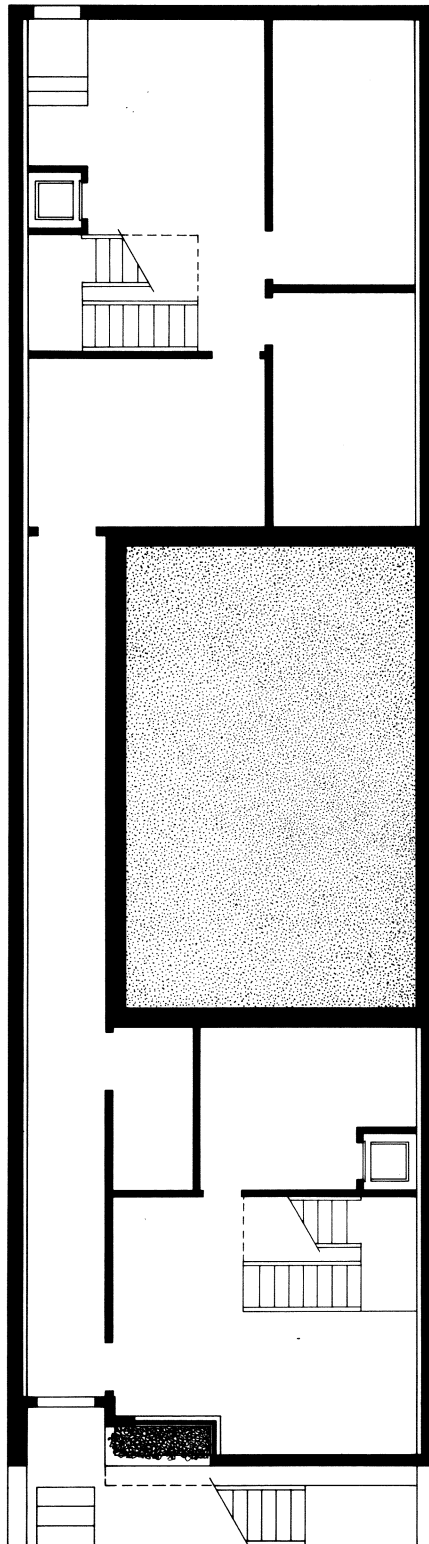


Figure 4

Ground Floor Plan

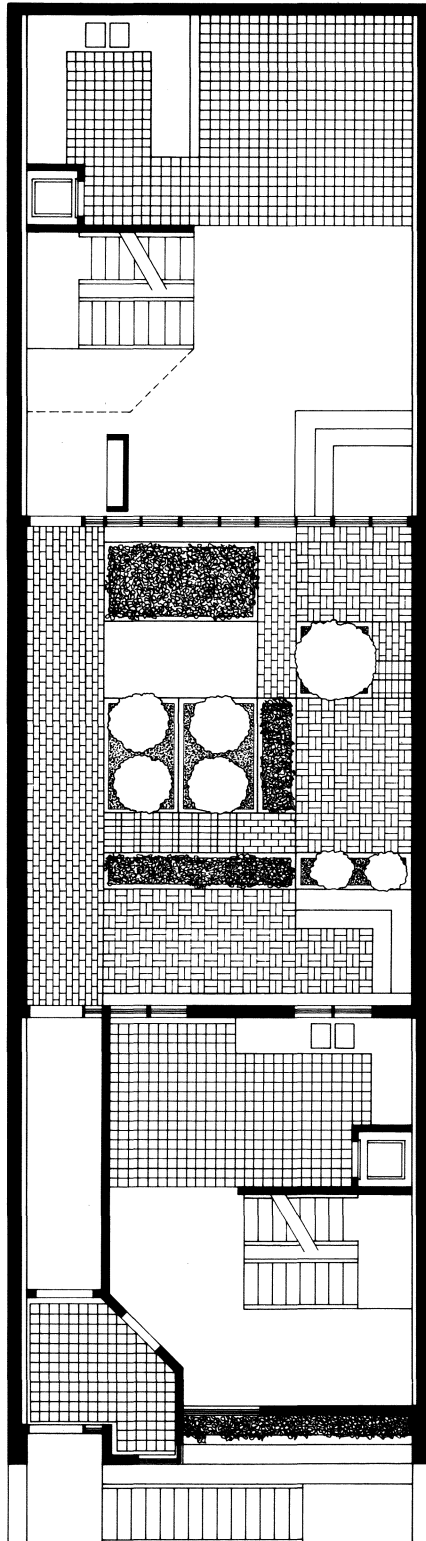


Figure 5

First Floor Plan

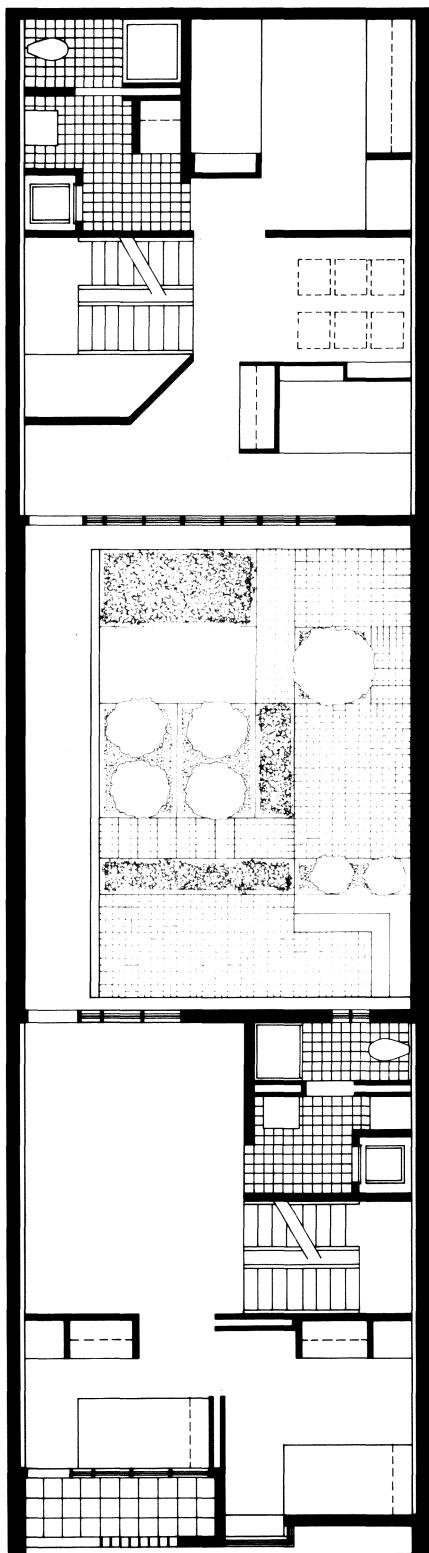


Figure 6

Second Floor Plan

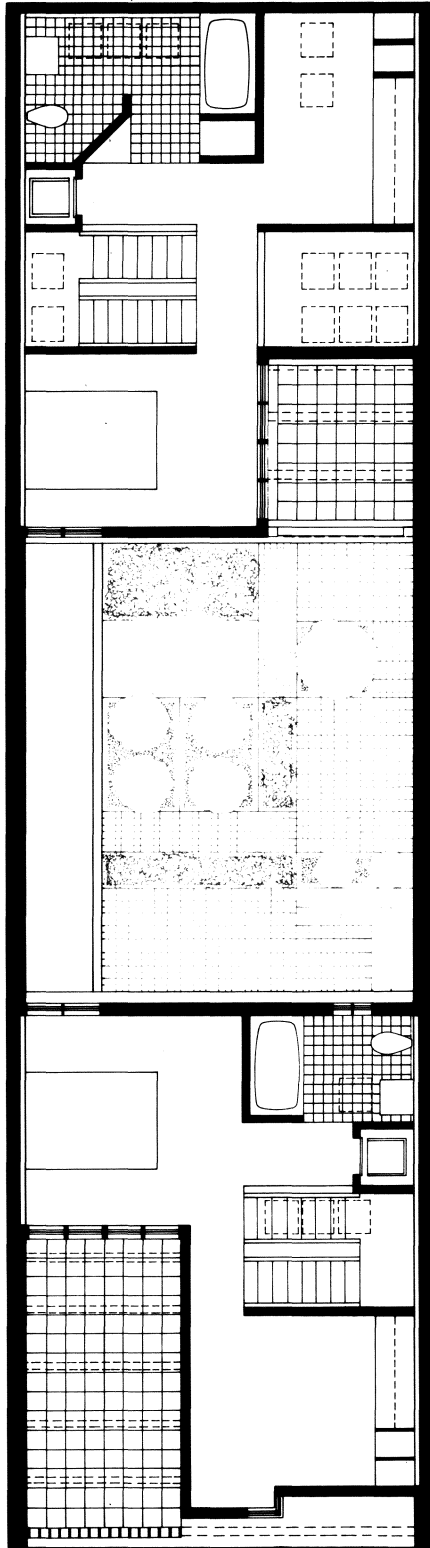


Figure 7

Third Floor Plan

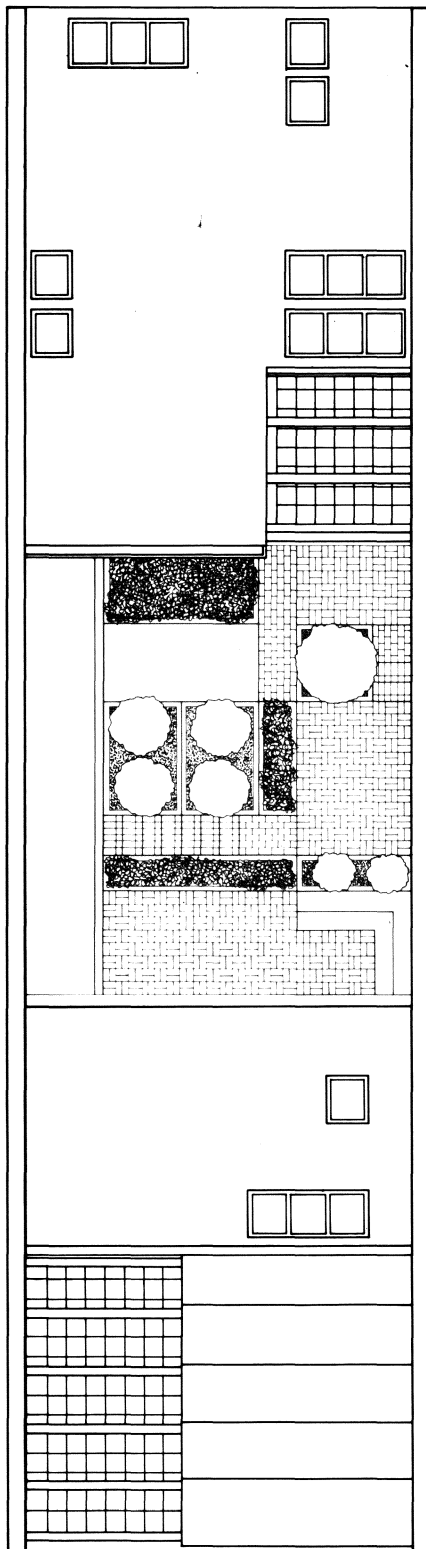


Figure 8

Roof Plan

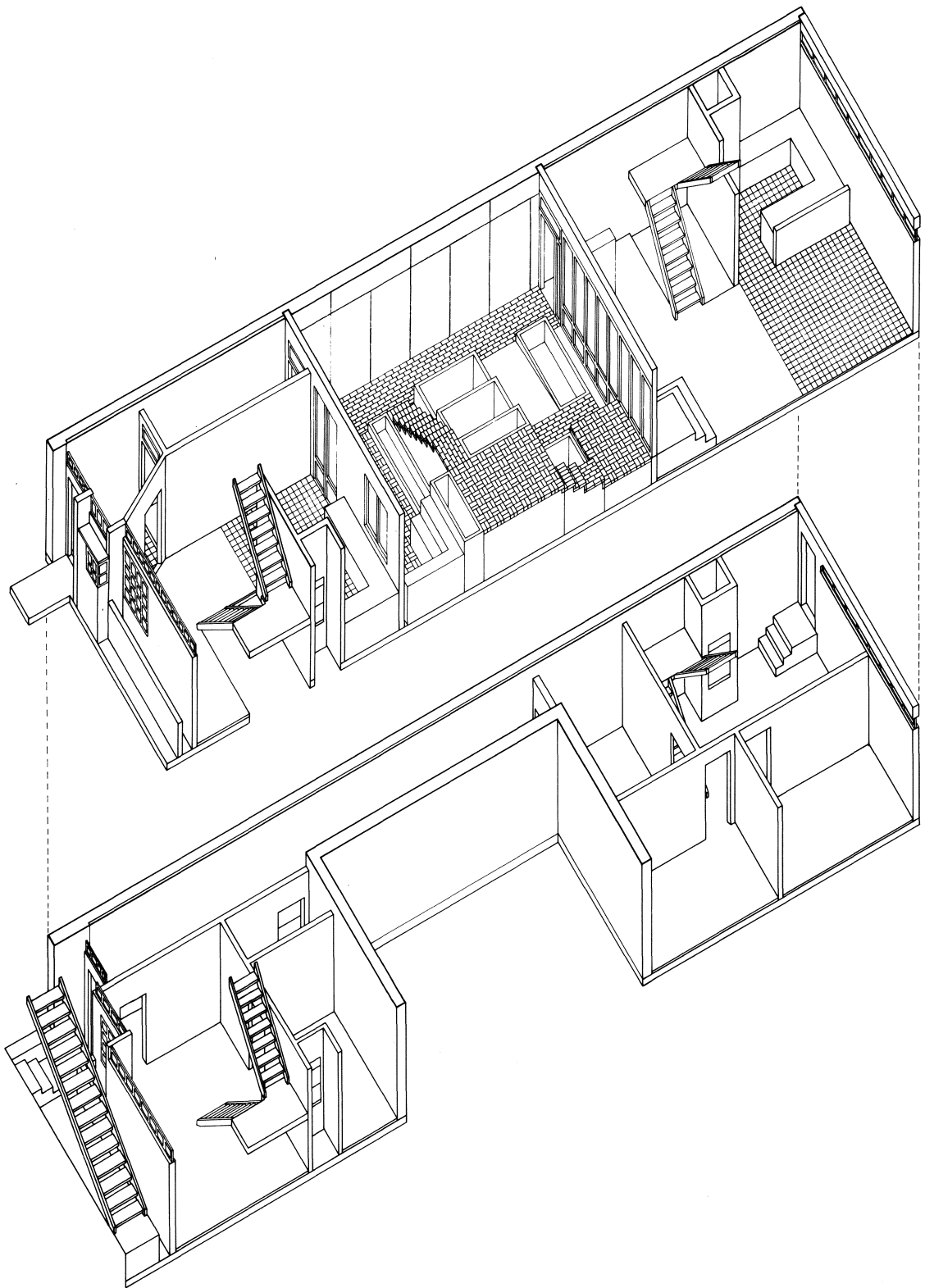


Figure 9

Axonometric Ground and First Floors

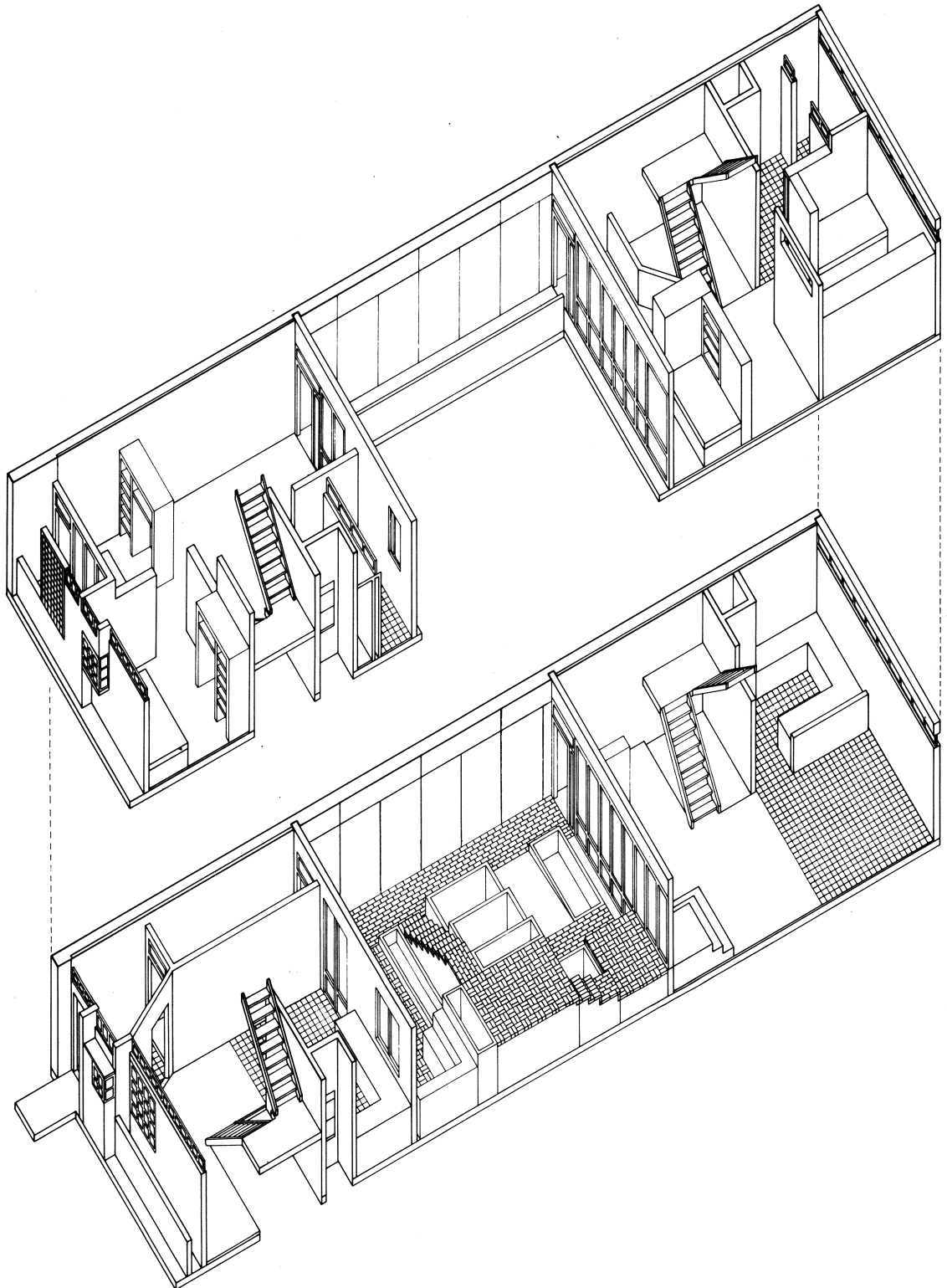


Figure 10

Axonometric First and Second Floors

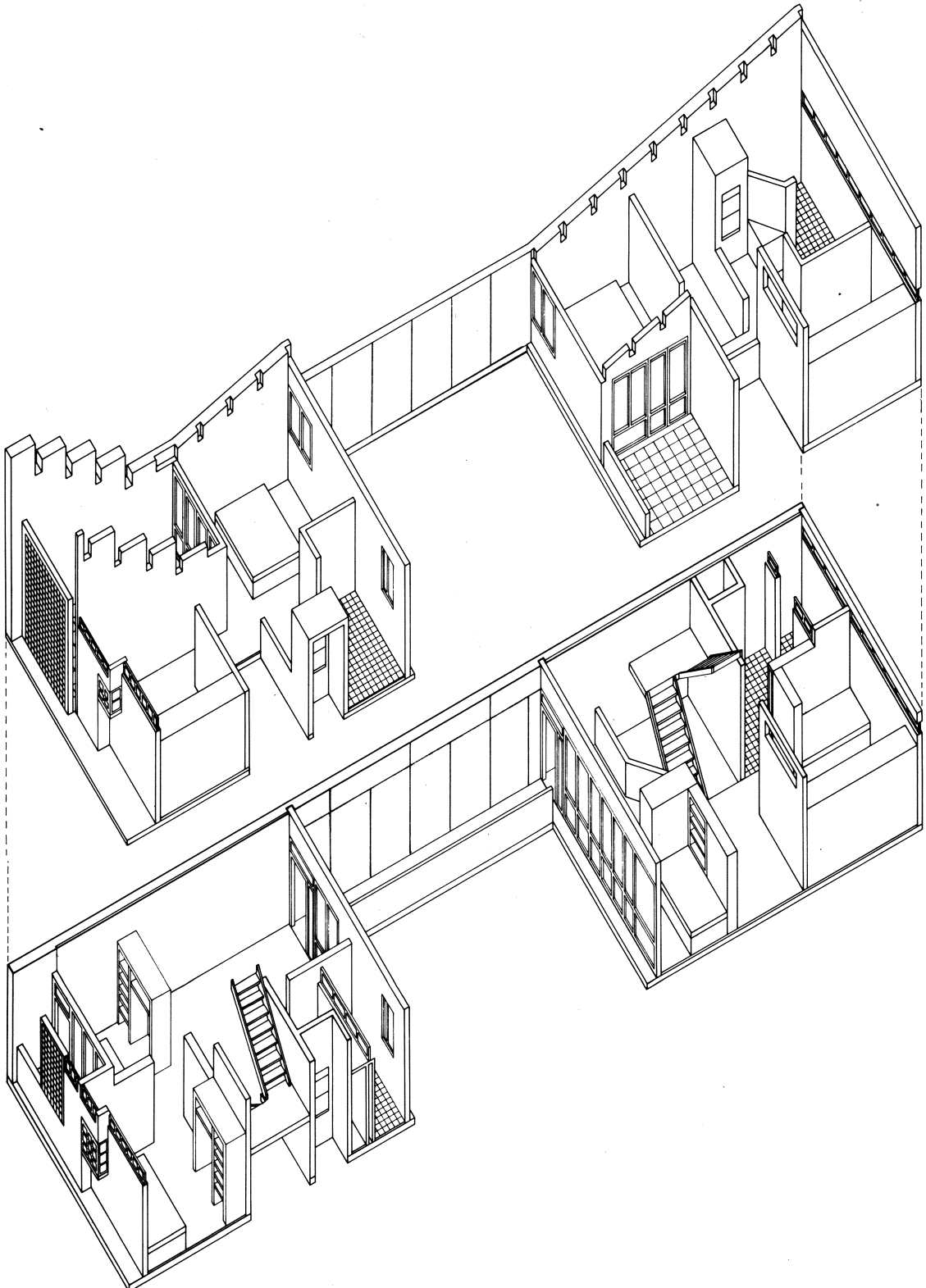


Figure 11

Axonometric Second and Third Floors

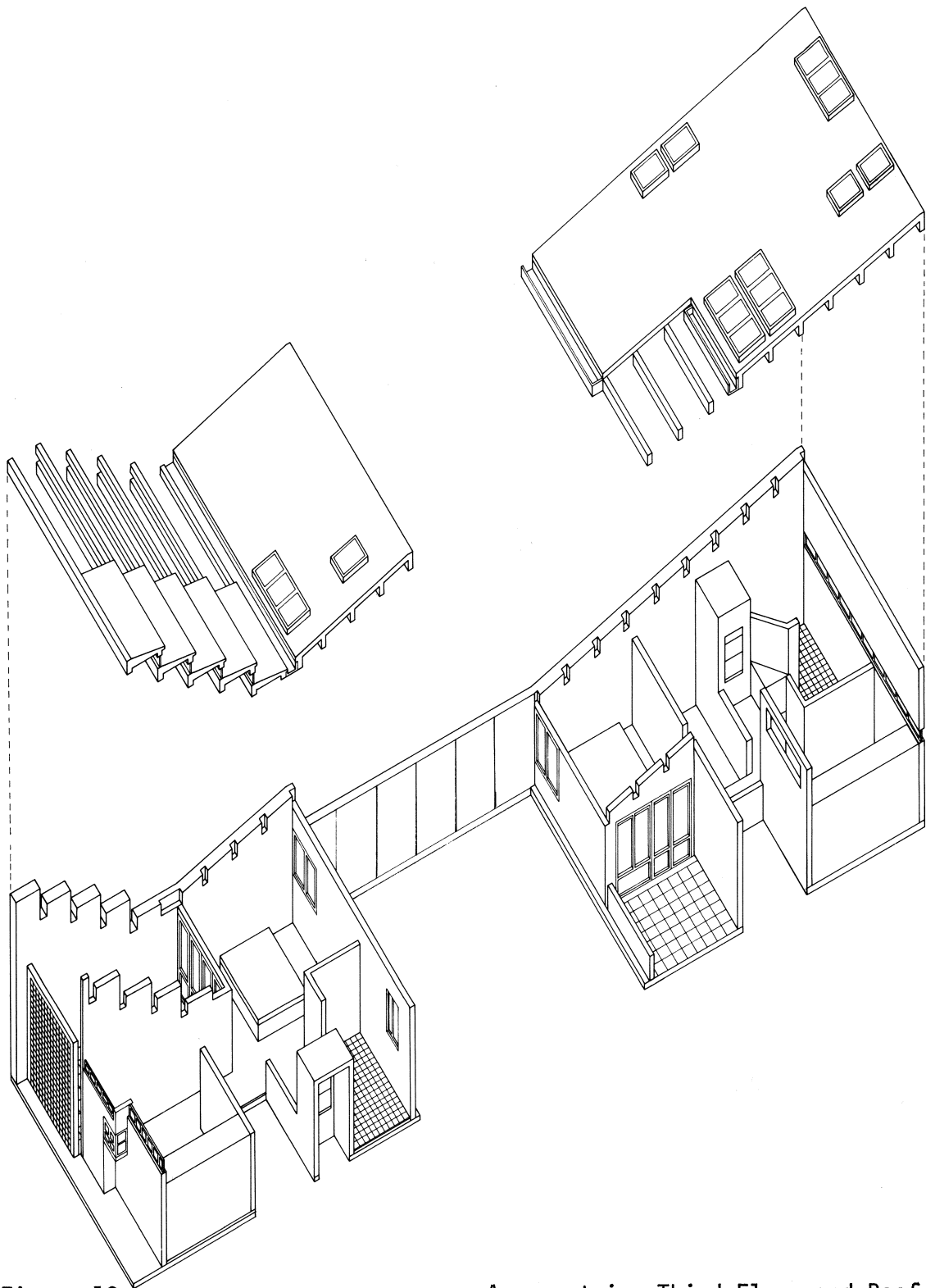


Figure 12

Axonometric Third Floor and Roof

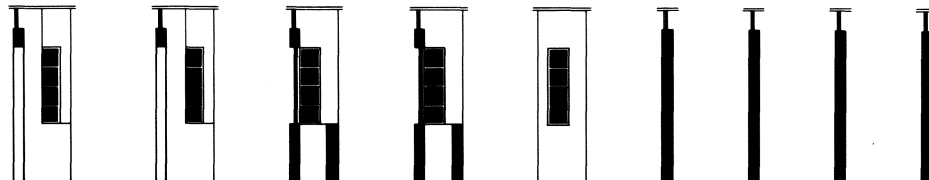
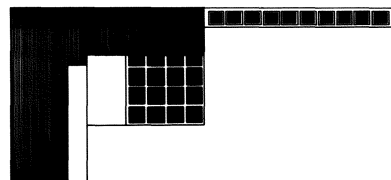
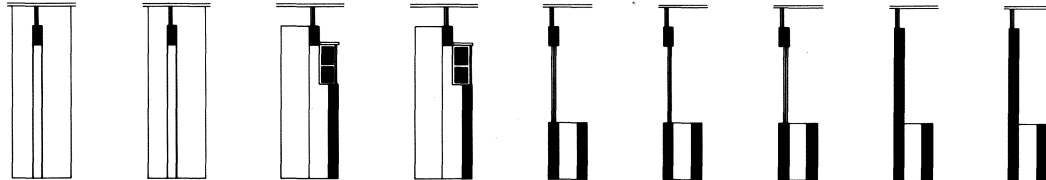
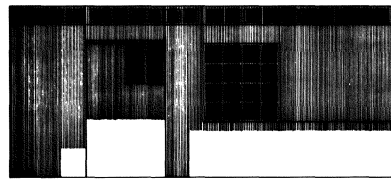
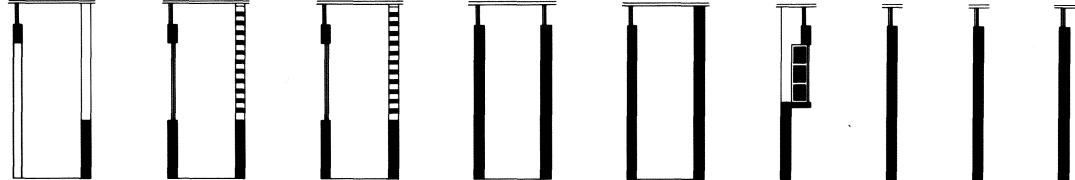
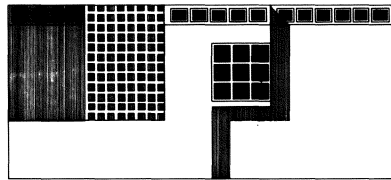
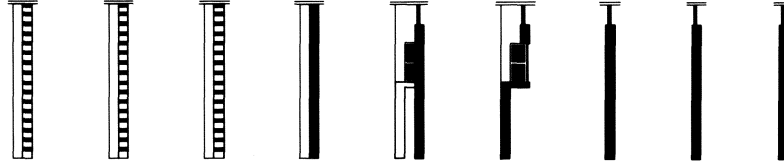
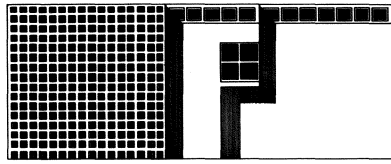


Figure 13

Study for a Wall

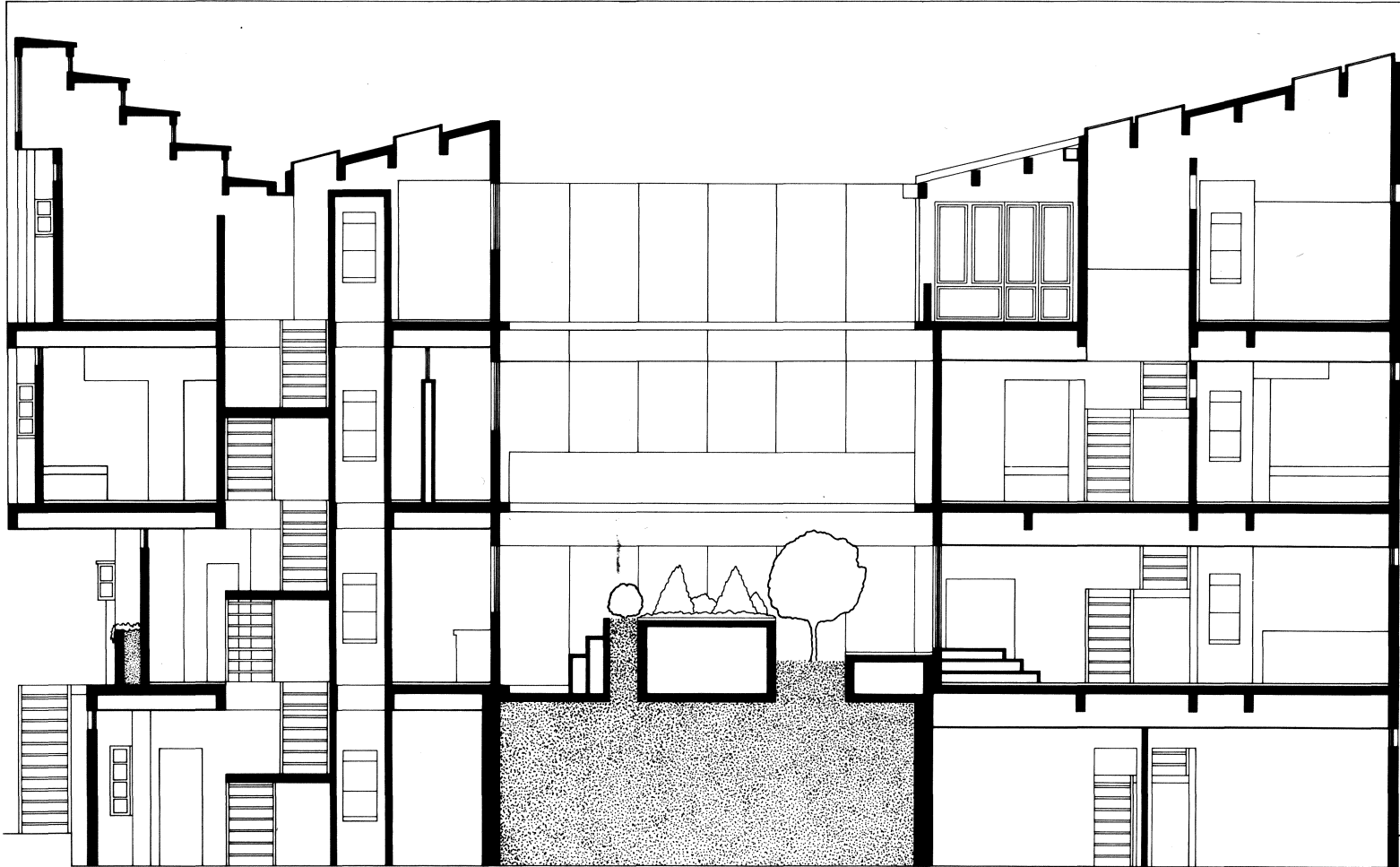


Figure 14

Section

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(ABSTRACT)

Two projects, one an historical study, the other an architectural design, are presented. Together they illustrate the nature of an architect's work at more than one scale, the importance of a knowledge of historical precedent in the making of architecture and the ability to use this knowledge in an architectural design project.