

A conceptual study of 'The Spirit of Place' for a historic
building

by

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INTRODUCTION

My personal reason for studying design in the United States is to search for design methods which will enable me to analyze historic and contemporary design, to study the power of place-specific aesthetics and the relevance of a place's 'spirit', and to learn theoretical constructs which I may apply in my home country, Brazil. Brazil, although a developing country, possesses an extremely rich culture. My personal conviction is that Brazil needs to reinforce its roots of history in order to obtain cultural, economic, and political independence.

Statement of Intention

The intention of this thesis is to show that the character-defining aspects of a historical building are not based solely on stylistic and formal architectural elements as interpreted by The Secretary of Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings.¹ Instead, a building is composed of architectural elements, a visual vocabulary, that accounts for its

¹U.S Department of Interior, National Park Service, The Secretary of Interiors Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings, (Washington D.C.: Preservation Assistance Division, 1979/1983).

environmental character and creates its 'spirit of place'. This 'spirit', or the essence of places, is at stake in preserving buildings so that their evolution through time becomes apparent--and demonstrates its organic growth. To achieve these intentions, I have studied the philosophies of Christian Norberg-Schulz and the development of his thoughts by Thomas Thiis-Evensen; I have tested approaches to historic rehabilitation; I have reviewed the philosophies and works of designers who I think are sensitive about capturing the essence of places and making their character visible; and I have developed a contemporary conceptual framework for the rehabilitation design of a *19th*-century building in downtown Des Moines, Iowa.

CHAPTER I: LITERATURE REVIEW

Three basic categories of literature have been reviewed to accomplish the research:

1. Perceptual theories for interior design and architecture. Theoretical design frameworks concerned with the perception of form and meaning. The theoretical frameworks were explored both for the analysis of the original building and for the design of the new parts.
2. Design for historic preservation. Rehabilitation of historic buildings, including review of the National Park Service documents (N.P.S.) and interpretation of the Standards.
3. Philosophies of designers. Professional design work, particularly the work of designers who search for expressiveness and character of places.

Perceptual Theories for Interior Design and Architecture
Christian Norberg-Schulz

Christian Norberg-Schulz is a Norwegian architect, theorist, and philosopher who searches for a humanistic vision of building. Norberg-Schulz was the first theorist, outside the philosophical context, capable of reflecting and understanding the philosopher Heidegger's existential line of thought, and of introducing it, in the architectural debate

to develop a non-superficial architecture for contemporary people.²

Norberg-Schulz argues that "environmental problems cannot be reduced to their practical aspect, and that their 'solution' presupposes a true understanding of man's need for participation and meaning."³ He advocates an environmental awareness, a rediscovery of the world's concrete qualities, and proposes that architecture, as a work of art, can give visual expression to these qualities. For him, "life interprets itself as space, in taking possession of the environment."⁴

Norberg-Schulz created the philosophy of an existential expression of architectural space, because for him, architecture should create spaces with character, with a sense of place. Architecture can bring essential aspects of places into the physical presence. He states that our modern world has created passivity and discontent, and that to improve the world, we first need to improve people. In order to improve people, designers need to offer a sense of belonging through meaningful places that are able of

²Paolo Portoguesi, "Foreword", in Architecture: Meaning and Place, (New York: Electa/Rizzoli, 1986), 7.

³Christian Norberg-Schulz, Existence, Space and Architecture, (New York: Praeger Publishers Inc., 1971), 11.

⁴Norberg-Schulz, Existence..., 31.

expressing a 'life-world'.⁵

Architectural spatial boundaries relate earth and sky and represent aspects of the world affecting men and women. These boundaries are the first manifestation of life taking place and relate people to the world. The interior of these boundaries relate humans with architecture, and objects and artifacts inside them are still more specific and detailed manifestations of life taking place, often connected with intimate memories. For Norberg-Schulz, "architecture protects furniture, and furniture protects those things that are the core of the core". Men and women experience their environment as meaningful as things progressively interpret the character of bigger things until the condensation of the large world.⁶

Norberg-Schulz states the most important goal of a meaningful architecture is to rediscover the world as a totality of interacting, concrete qualities because

"the loss of things and places makes up a loss of 'world'. Modern man becomes 'worldless,' and thus loses his own identity, as well as the sense of community and participation.

Existence is experienced as 'meaningless,' and man

⁵Christian Norberg-Schulz, Genius Loci, Towards a Phenomenological Architecture, (London: Academy Editions, 1980), 5.

⁶Norberg-Schulz, Existence..., 212.

becomes 'homeless' because he does not
any longer belong to a meaningful totality."⁷

The 'spirit of a place' The 'spirit of a place' or a place's character, is an idea developed in Norberg-Schulz's concepts of existential and architectural space.⁸ The intention of these concepts is to establish a balance between man and environment by meaningfully developing the environment to give men/women a sense of belonging it. As all human actions have a 'spatial' aspect, "space is a dimension of human existence;"⁹ thus, if developed, it fosters human development.

Norberg-Schulz defines an existential space as the environmental image perceived by man and the architectural space as the concretion of this image.¹⁰

Existential Space - It "is a relatively stable system of perceptual schemata or image of the environment". This system of perceptual schemata is established by centers or places [proximity], directions or paths [continuity], areas or domains [enclosure]. The combination of these elements is what makes a space a "true dimension of human existence".

⁷Norberg-Schulz, Existence..., 12-16.

⁸Norberg-Schulz, Existence...

⁹Norberg-Schulz, Existence..., 14.

¹⁰Norberg-Schulz, Existence..., 13.

Centre and place - The centres are ideal goals, represent the protected 'known' against the frightening 'unknown' around it. Centers are 'places of actions' and actions have a meaning if they happen in a particular place and are reinforced by the character of this place. Centers can be defined by concentration and isolation. A place is an 'inside' defined by proximity and closure. "The places are goals or foci where we experience the meaningful events of our existence, but they are also points of departure from which we orient ourselves and take possession of the environment".

Direction and path - An existential space is composed of many places that are connected by a path with certain directions to be followed. In following the path, many events can happen, passing through places or in the path itself, which has its own 'spirit'. A path is defined by the continuity of its guiding elements and is interdependent with places.

Area and domain - It is a unifying general 'ground' "on which places and paths appear as more pronounced figures."¹¹

¹¹Norberg-Schulz, Existence..., 13-32.

The existential space defined by Norberg-Schulz has five levels and the schemata cited above is different on each of these levels, but the interaction of levels is what structures the existential space. These levels are:

Geography - It has a cognitive character; we think it instead of really living it.

Landscape - "A naturally protected space" which interacts with its surroundings. Its masses and spaces invite us to the "experience of taking possession of it by physical and psychic movements".

Urban Level - Man-made environment which "more than anything else gives him a sense of identity".

House - It is the inside; "the central place of human existence." "It is a system of meaningful activities concretized as space consisting of places with varying character."

Thing - Detailed articulation of the environmental character.¹²

These levels interact to create the structure of our existence; People live between 'things' and 'nature'. Humans 'receive' the environment and interpret it focusing it in things or buildings. Stated another way, people 'project' themselves into the environment by communicating their feelings to the environment, which in turn 'unifies' their

¹²Norberg-Schulz, Existence..., 28-31.

'things'--expression of their feelings--in a larger scale.¹³
An organic system of levels which compose the two complementary processes, inward and outward. These levels of existential space, from geography to 'things', permit people to orient themselves better in the world, physically and psychologically. The point here is the interaction of levels. People can execute 'things' making their image of the environment visible, such as focusing on furniture and objects that are the detailed essence of a house. One creates the house itself, but the house is already made in relation to the other houses and buildings, at the urban level, because its exterior belongs to the public. The urban level, as a public function, expresses many aspects of other individual 'houses' to make up the general character of a city. The city, in turn, is related to a larger context outside its boundaries, a landscape with farms and other settlements.

This outward process from 'things' to nature can also occur inwardly. The city can express certain aspects of the landscape on creating its own character. The house can articulate properties of the city to have its own identity. Things (at the detail level) can define the character of a house.

Therefore, this existential totality of contextual

¹³Norberg-Schulz, Existence..., 32.

relationships gives people a sense of belonging because they are at in the center of the process, and they feel connected with all the levels of scale. Although the levels have similar properties, they should possess different characters from one another in order for people to experience different modalities of existence.¹⁴ If the levels do not have their own specific character, they become blown-up or shrunken versions of each other,¹⁵ and create a monotony which does not stimulate people to act or to belong to their environment.

Architectural Space - It is the physical interpretation, the built reflection of the existential space, in its five levels from geography to 'things'. It is the concretion of the existential space's structure of centres or places, direction and path, area and domain. "Architectural space concretizes man being in the world."¹⁶

We cannot reduce architecture to just a scientific world, because it, being a rationalistic activity, would render people 'homeless'. On the other hand, to consider architecture as a private world would not be satisfactory, because individual needs should be part of a larger context. According to Norberg-Schulz, "architectural space concretizes

¹⁴Norberg-Schulz, Existence..., 103.

¹⁵Norberg-Schulz, Existence..., 103.

¹⁶Norberg-Schulz, Existence..., 69.

a public existential space which includes many private existential spaces."¹⁷

In conclusion, a designer should determine which are the essential aspects of a place; that is, what comprises a place's 'spirit' or its essential character. Architectural space should make the 'spirit of place' clear.

Resuming, the 'spirit of a place' is the product of place's interaction with its surroundings. It determines the "basic properties of the environmental images"¹⁸ which man experiences. The 'spirit', or the character of a place, is determined by concrete things with material, substance, shape, texture and color, this totality is what creates a 'place' - "a qualitative total phenomenon,"¹⁹ defined by its 'figural quality'.²⁰ Elements of the landscape, city or 'house' can compose a figure that is characterized "by being a form which gathers earth and sky."²¹ These elements, and the figures composed by them, are the vocabulary of the 'language of architecture'.²² The 'language of architecture'

¹⁷Norberg-Schulz, Existence..., 39.

¹⁸Norberg-Schulz, Existence..., 27.

¹⁹Norberg-Schulz, Genius Loci..., 8.

²⁰Christian Norberg-Schulz, The Concept of Dwelling, on The Way to Figurative Architecture, (New York: Electa/Rizzoli, 1985), 109.

²¹Norberg-Schulz, The Concept..., 117.

²²Norberg-Schulz, The Concept..., 111.

is what gives figural quality to the built form. This 'language', made of typical elements, like the spoken language, manifests basic ways of interaction between earth and sky. This typical figures composed of elements are spatial figures or volumes that possess defined boundaries. Therefore, depending on how this vocabulary of figures and elements is repeated, combined and varied to manifest basic ways of being between earth and sky the built form, that can be one or more typical figures, becomes a place with a defined character or 'spirit'.²³ This basic way of being between earth and sky is determined by the way the boundaries define the place, which materials are they made of, how is the ground on which we walk, how is a form articulated, how the built 'thing' rests in the ground and rises towards the sky.

Thomas Thiis-Evensen

Thomas Thiis-Evensen is a Norwegian architect who studied Norberg-Schulz's philosophies and applied them to develop his book, Archetypes in Architecture.²⁴ Thiis-Evensen further details the typical elements of Norberg-Schulz's 'language of architecture'.

²³Norberg-Schulz, The Concept..., 122-128.

²⁴Thomas Thiis-Evensen, Archetypes in Architecture, (Oslo: Norwegian University Press, 1987).

I use Thiiis-Evensen's Archetypes in Architecture as the theoretical basis for my adaptive-use design of the Lederer Strauss building. I use his theories first, for analysis, in order to understand the character of the historic architecture, and secondly, for application of my new design. Archetypes in Architecture is an appropriate choice for my study because Thiiis-Evensen explores the expressive characteristics of a building's form, and its existential effect upon people, giving me a theoretical basis for establishing my own personal design philosophy.

Thiiis-Evensen defines a "grammar of architecture," or a group of icons, which are the essential elements of architecture: the wall, the roof, and the floor. Within these architectural elements there are archetypes which can contribute to an understanding of architectural expression and that are independent of personal, social, or cultural circumstances. Thiiis-Evensen argues that people react to a space even without knowing its functional use because they perceive the expressiveness of the designed forms. For him, the inter-play of archetypes has specific meanings which influence both our spatial experience and our relationship with the world. In other words, the play of archetypes corresponds with Norberg-Schulz's 'spirit' of a building.

The wall, the roof, and the floor are the spatial boundaries which can strengthen or weaken the spatial form.

The planar elements are divided into smaller scaled categories, such as form, construction system, surface treatment, and openings, and each are capable of having a theme and a motif. For example, the floor as a planar element has a form, a system of construction, a surface treatment, and openings onto it. A theme of this floor would be the function of its form, construction system, finish and openings; and whether they were directing, delimiting or supporting. An example of the floor's motif would be how its elements function, by lowering, raising, framing, or remaining within pattern placement.

The delimiting elements of a volume (roof, wall, floor) embody the fundamental meaning of human shelter. Delimiting elements have an expressive potential which is visualized in the balance of forces of the inside and the outside. To describe how the delimiting elements close or open, between inside and outside, there are qualitative concepts that are the existential expression of architecture, and they create the communicative aspect of architecture that is independent of private and social experimental levels. These qualitative concepts are:

- Motion - The dynamic nature of the elements, expansion, contraction, or balance.
- Weight - The lightness or heaviness of the elements; stand, fall...

- Substance - The materiality of the elements; soft, hard...

The theory of archetypes develops on the basis of fundamental forms that exist within the elements of the wall, floor, and roof. The concepts seek to interpret the existential expression which these archetypes possess by describing how motion, weight, and substance manifest themselves in form and how they affect our architectural experiences and promote reactions that belong to our spontaneous and unconscious. These shared experiences, common to all human beings, refer to our bodily experiences (sit/stand, light/dark, soft/hard) and form the basis for our reactions when we move in relationship to objects in space.

Thiis-Evensen's theory is both design-oriented and analysis-oriented. It is not a closed theory, in that the theories are rules to be followed.

Design for Historic Preservation

A review of The Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings(Standards) defines rehabilitation as:

"The process of returning a property to a state of utility, through repair or alteration, which makes possible an efficient contemporary use while preserving those portions and features of

the property which are significant to its historic, architectural, and cultural values."²⁵

The Standards provide a theoretical framework and a design philosophy for the rehabilitation of buildings listed in the National Register of Historic Places. A summary of the Standards includes the following general guidelines:

1. Provide a compatible use which requires minimal alteration of the building in its environment.
2. Original qualities or character of the building and its environment shall not be destroyed. No removal or alteration of any historical material or distinctive architectural feature.
3. Buildings shall be recognized as products of their own time. Alterations that have no historical basis and try to create an earlier appearance are discouraged.
4. Changes in the course of time are evidence of history and development of a building and its environment. The changes should be recognized and respected.
5. Distinctive stylistic features or examples of skilled craftsmanship which characterize a building shall be treated with sensitivity.
6. Deteriorated architectural features shall be repaired rather than replaced. If replacement is necessary, the new material should match the material being

²⁵U.S. Department of Interior..., 5.

replaced in composition, design, color, texture, and other visual qualities. Repair or replacement of missing architectural features should be based on accurate duplications of features, substantiated by historic, physical, or pictorial evidence rather than on conjectural designs or the availability of different architectural elements from other buildings or structures.

7. The surface cleaning of structures shall be undertaken with the gentlest means possible.
8. Preserve archeological resources affected by, or adjacent by the building.
9. Contemporary design for alterations and additions shall not be discouraged when such additions do not destroy significant historical, architectural, or cultural material, and such design is compatible with the size, scale, color, material and character of the property, neighborhood or environment.
10. New additions and alterations shall be made with the possibility of removal to preserve the essential form and integrity of the structure.²⁶

The Standards also offer a philosophical approach to alterations and additions. Although alterations and additions to historic buildings are sometimes required to

²⁶U.S. Department of Interior, 5-6.

assure a building's continued use, character defining spaces, materials, features or finishes cannot be changed, obscured, or destroyed. Exterior additions should only be considered if programmatic needs cannot be met by altering the existing structure. If an alteration or addition is required, it should be designed to be clearly differentiated from the character-defining features of the original. The rehabilitated design should make clear what is historic and what is contemporary.²⁷ The Standards also has a section devoted to a building's interior that states: "the identification, retention, protection, and repair of the interior floor plan, the arrangement of spaces, and built-in features and applied finishes, structure and mechanical systems should be given consideration to not radically change character-defining spaces or obscure, damage or destroy interior features or finishes."²⁸

Other historic rehabilitation design literature was also reviewed, including sources on building addition design and the relationship between old and new architecture.²⁹ From the literature review, I observed that there were few

²⁷U.S. Department of the Interior..., 10.

²⁸U.S. Department of the Interior...,33.

²⁹ National Trust For Historic Preservation, Old and New Architecture, Design Relationship (Washington, D.C.:The Preservation Press, 1981) and David R. Dibner and Amy Dibner, Building Additions Design (New York: McGraw-Hill Books Company, 1985).

professionals who proposed a dialogue regarding rehabilitation design's consequences in terms of public perception.

Philosophies of Expressionist Designers

I have chosen to study a select group of contemporary architects whose international approach to design can be characterized as expressive. Consciously or intuitively, the designs of James Wines, Robert Venturi, Carlo Scarpa, Frank Gehry, and Coop Himmelblau affect people's senses and speak to the issues of place and culture. Each, in their own way, seems to have been searching for a stronger environmental character for places. A summary of their philosophical stances and an example of their work follows.

James Wines

James Wines, an American architect, founded his firm, Site, in 1970. Wines searches for a communicative architecture capable of commenting on contemporary issues. He is concerned that *20th*-century architecture has not made an effective environmental statement as an art media.³⁰

Wines has appealing ideas about design and architecture's role in contemporary society. I see him as a philosopher concerned with today's lack of environmental character, what he calls a lack of communication.

³⁰James Wines, De-Architecture (New York: Rizzoli International, 1987), 60.

According to Wines, architecture is a public art form, an appropriate vehicle which conveys messages about society's values and motivations. Following Wines' line of thought, design is not an exclusively formalist exercise in the manipulation of volumes, spaces, or structures. Instead, historical references in buildings have sociological and psychological content; they can communicate complex and varied narrative information. Architecture is art if we see it as a natural and organic aesthetic exploration, and it is public art because it includes environmental aspects and reflects ideas that stimulate reactions from the users.³¹

Wines' intention is to challenge architecture to step outside its usual formalist, functionalist, and historicist parameters and to incorporate pluralism and vitality as an environmental stimulus so that the public's perception of reality will be redefined. Only an architecture that becomes involved with the raw expression of our cities today can hope to engage the public's sense of reality.

An example of Wines' exploration of the character of a place issue is Site's 1983 competition entry for the Frankfurt Museum of Modern Art. The four-storied rectangular brick building has a conventional factory-like typology. In order to fit the building's volume on the triangular site, there is a cutaway corner in which parts of the interior are

³¹Wines, 113.

exposed. A transparent grid structure for the building is a reminder of the triangular site. The entire building is the result of the juxtaposition of a rectangular volume in the triangular structure. In the cutaway section, this intersection destroyed a corner of the rectangular volume. In the opposite corner, the glass structure passes through the building without any material consequences. The work evokes a memory of World War II American bombing raids over Frankfurt and gives a contemporary interpretation of the 'spirit' of the city during the war in making it visible through architecture. Wines plays with known figures such as the conventional factory-like typology and modern grid structure as a reminder of the character of destruction. Playing with the physical consequences of placing a vulnerable brick volume over a rigid metal/glass knife-like structure is a metaphor of the coldness of the war without regard for humans. This complex juxtaposition reminds the public that aspects of city life affect their personal lives. It does not permit the public to forget history, but, at the same time, the building shows them that the city, and they are evolving organically and they are surpassing historical wounds.

Wines illustrates the attempt to explore *20th*-century architecture's sociological and aesthetic responsibilities. For him, architecture today does not capture the public's

imagination. Wines questions how designers can "translate people's instinctive preferences, which generally have little to do with structural engineering or high art, into terms that satisfy the communal psyche as well as the architect's aesthetic sensibilities?", and states that "the responsibility of architecture--indeed of any public art is to communicate."³²

In my opinion, Wines' fight against the present poverty of environmental stimulation shows his concern for a better human existence and his belief that architecture, as an aspect of life, can improve our existence. Wines' philosophies recall the search for 'spirit of place' in the way he interprets social realities and makes visible their character through design.

Robert Venturi

Robert Venturi, an American architect who has been in practice since the 1950s, is one of the pioneers searching for meaning in architecture. In 1966 he wrote a seminal book, Complexity and Contradiction in Architecture, that was the inspiration for James Wines' book, De-Architecture.

According to Venturi, a complex and contradictory architecture is based on the richness and ambiguity of modern experience. Observing the everyday landscape, and including symbols to express richness of meaning, he concludes that

³²Wines, 32.

form and meaning cannot exist without each other.

Venturi argued that "architecture has to employ ambiguity to create paradoxal content as well as to exploit perceptual possibilities".³³ He believes that diversity, representation and pattern can create an architecture that is not only shelter, but that encodes messages within it. This architecture should be sensitive to place, time, and culture, and it should recognize the multiplicity and relativity of tastes.

Venturi's exploration of issues outside of functionalist parameters involves, in his terms, the issues of inclusion, inversion, and indeterminacy. The use of these issues creates an architecture that can absorb existing elements and situations, and that can invert and juxtapose these elements to make a visual statement.³⁴

Venturi's 1976 Franklin Court Museum is an example of his design expressiveness for a historic building in which he not only preserved but illuminated the 'spirit of place'. Instead of reconstructing Benjamin Franklin's original house, Venturi created an underground museum and a public park on

³³Robert Venturi, Complexity and Contradiction in Architecture (New York: The Museum of Modern Art, and Chicago: The Graham Foundation for Advanced Studies in the Fine Arts, 1966), 20.

³⁴Venturi, 16.

the site. Venturi captured the house's 'figural qualities',³⁵ by outlining only its structure. He did not revive a space that was dead, but simulated the house's character in order to remind the public about its historical importance. This work brings forth the essence of the original structure without falsification.

Carlo Scarpa

Italian architect, Carlo Scarpa, 1906-1978, conducted an international practice in Italy, Germany, Spain, Britain, and the United States. Scarpa's philosophical intention was to explore an architecture which was a perceptive commentary on the character and meaning of architecture itself. He used relationships among materials to promote an expression of their hidden qualities and evocative functions. Scarpa's articulation of form embraced the discontinuity of historic time, and he played symbolically with geometry. Scarpa's buildings gave presence to the architectural elements and suggested symbolic signs exploring the tension between the old and the new.

Scarpa's 1956 historic rehabilitation of the Castelvecchio Museum in Verona enables the ancient and the modern to coexist. Here, "Scarpa works to restore unity and life; he not only reveals the essential coordinates of the complex but also the materials that constitute its corporeal

³⁵Norberg-Schulz, The Concept..., 122.

essence."³⁶ The expressiveness of this work is in its organic juxtaposition of old and new fragments, and in its enlightenment of the old 'spirit', or essence, with the newly designed elements. Another expressive aspect of this space is in its sense of being in the town of Verona. Scarpa abstracted typical or commonplace elements of the city--its colors, walls, streets, pavements--and transplanted the elements within the castle walls.³⁷ He filled in the gaps of the old structure without hiding its process through time; instead, his revelation of time enhances both the Museum and the works inside it. Scarpa recalls Norberg-Schulz philosophies in the way he interprets the essence of old fragments into contemporary figures and also in his ability to bring the 'spirit' of place to a detailed level.

Frank Gehry

Frank Gehry, an American who has practiced architecture since 1952, works with a collaborative design process in which each viewer brings his or her own sensibilities and experiences to his work. Clients react to, and act upon, the created spaces. Gehry searches for an architecture which appears to be in process, unfinished. His architecture explores the expressive and compositional attitudes of

³⁶Liscisco Magagnato, "The Castevecchio Museum," in Carlo Scarpa-The Complete Works (Milano/New York: ed. Francesco Dal Co and Giuseppe Mazzariol, Electa/Rizzoli, 1984), 159.

³⁷Liscisco Magagnato, 159.

painting.

Gehry suggests an anatomical view of architecture in which the body element appears in all its crudity, raising questions about its concrete identity and physical form. With this fragmentation of substances, Gehry explores "a building that is a mobile energy that functions, involving all types of entities (beings, places, and concepts) in its movements."³⁸

Rejecting homogenization, exalting diversity, and calling for multiple readings, Gehry's architecture engages the urban environment by documenting its character of transformation and discontinuity. There is a search for a dialectical and contradictory architecture that is fragmented, decomposed, and that includes a plurality of processes and problems, therefore commenting on what is around it.

Gehry explores tensions between old and new architecture, interior and exterior spaces. An expressive use of his design exploration is seen in the 1978 transformation of Gehry's own house in California. Gehry added commonplace urban materials as fragmented volumes of raw material (corrugated metal plates, metal screens, wood and glass), to a typical two-story 1950s bungalow. While the

³⁸Mason Andrews, Germano Celant, "Reflections on Frank Gehry", in Frank Gehry Buildings and Projects (New York: Rizzoli, 1985), 10.

building addition appears to be under construction, it recalls the layering of fragments in our urban settings expressing both an outward process, in which the architect expressed, through his house's exterior, his view of environmental image, and an inward one, in which the architect brings his interpretation of the city to the inside of his house. Gehry added irregular geometric shapes to the older vernacular building to express a contemporary character. The outside is brought through to the inside by the use of irregular and transparent wooden structures. The crude elements of construction are left exposed, and express an urban essence.

Coop Himmelblau

Founded in 1968, Coop Himmelblau is a design group composed of the Viennese architects, Wolf D. Prix, Helmut Swiczinsky, and Rainer Michael Holzer. The group's working guidelines are based on a direct reaction to an inhumane environment. Their philosophy calls for a new architecture which "must be defined as a medium of expanding vitality".³⁹

Working upon the strength of the "surrounding desolation" of urban reality, their finished work creates an atmosphere of emotional impact. Rejecting conformity, their work is based upon active elements, movable forms,

³⁹Coop Himmelblau, Architecture is Now (New York: Rizzoli International, 1983), 106.

independence, experimentation and open systems. Using urban artifacts as elements which are "maybe aggressive, possibly unpleasant, but real",⁴⁰ the Coop Himmelblau group searches for an architecture which is an unadorned reflection of the image of urban reality. The group makes the urban character visible in their works.

The Red Angel bar, a 1980-81 historic rehabilitation project in Vienna, is a good example of the group's use of urban materials to produce an architecture that affects the occupants by bringing the urban environmental atmosphere to the inside of the place. The building has an "expressive individualistic language of form"⁴¹ engaged with the actuality. The Red Angel bar was installed in a 19th-century stucco building located in a Viennese street corner. The building is an abstract metaphor of the vulnerability of an angel body and the vulnerability of architecture.⁴² The building's original exterior had simple geometric lines defined by the openings and recessed friezes that ornamented the facade. The group interfered with the historic facade by introducing a distorted sheet metal rail that pushes out from the interior through the wall, and enters again pushing back

⁴⁰Coop Himmelblau, 26.

⁴¹Coop Himmelblau, "Foreword" by Frank Werner in Architecture is Now (New York: Rizzoli International, 1983), 6.

⁴² Coop Himmelblau, 73.

by deforming a facade door. The bar's interior has a vaulted stucco ceiling in which other distorted sheet metal lines are applied. Together, the interior and the exterior lines reinforce the analogy by implying the shape of an angel's wing. The floor is asphalt; the bar's counter is concrete; and fragments of corrugated metal simulate a dado. The space, with its dynamic use of urban material fragments, expresses the evolution of time and the character of vulnerability and instability of urban life, in other words, an urban 'spirit'.

This international group of designers shares a common desire to produce buildings which engage the public with time and place, buildings that try to promote a stronger environmental character, and that in one way or another, make visible their character as a place. What these buildings have in common is their figural quality. Wines, Venturi, Carlo Scarpa, Frank Gehry, and Coop Himmelblau search for an expression that comments upon, and interacts with, the contemporary world. They seek a typical vocabulary capable of questioning contemporary reality and of affecting the public's sensibilities by creating places with a true qualitative character that promote valuable life-experiences for them.

I will apply an expressionist philosophy to my adaptive-use design of the Lederer Strauss building.

CHAPTER II: DEFINITION OF THE PROBLEM

The Prototype

A prototype is an original type, or form, that serves as a model on which later stages are based or judged.⁴³ The Lederer Strauss building, constructed in 1889, is a four-story commercial building located in the Court Avenue Historic District in downtown Des Moines, Iowa. The building has been used for several kinds of businesses, and, therefore, has undergone several design transformations. Currently, two bars and a restaurant occupy the first floor, while the three floors above are unoccupied and not maintained. The building is in a fairly intact structural condition, which makes design intervention economically feasible.

Location

The Lederer Strauss building is located between 3rd and 4th street on Court Avenue. It occupies the even numbers, 300-310, on the northeast corner of the block, north of the railroad [Fig. 1].

Historically, Des Moines was a frontier outpost at the confluence of the Des Moines and the Raccoon rivers. Because of its location, the city became a commercial center between the expanding western territories and the manufacturing

⁴³James Marston Fitch, Historic Preservation (New York: McGraw-Hill Book Company, 1982), 1.

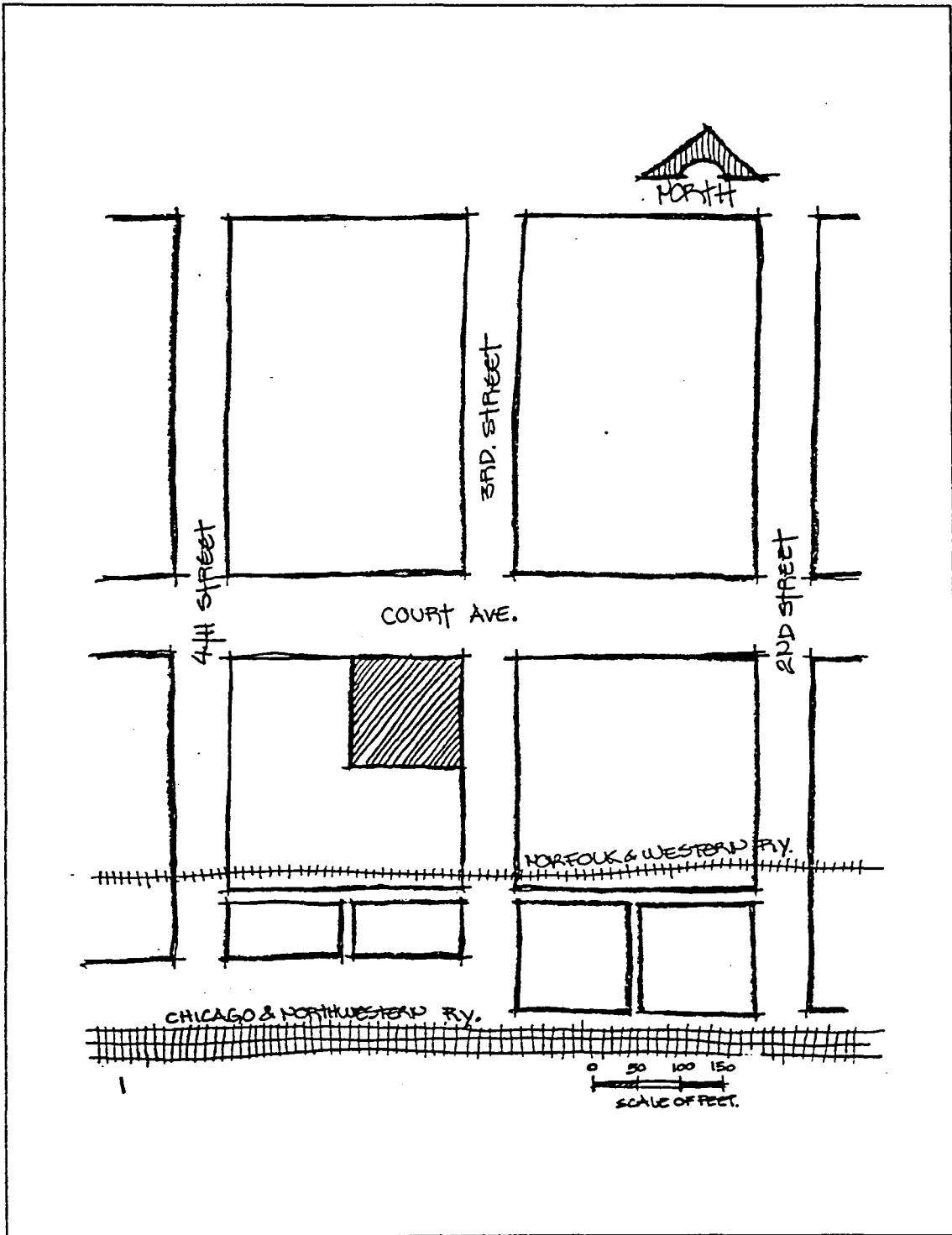


Figure 1. Lederer Strauss building location

eastern states. Des Moines' Court Avenue Historical District has been preserved because of its historic importance as an arrival point for merchandise coming by river, and by rail, and because proposed urban renewal efforts did not impact the area.

Building type

Using Richard Longstreth's typology, outlined in The Buildings of Mainstreet: A Guide to American commercial Architecture, the Lederer Strauss building can be classified as a "two-part commercial block"⁴⁴. It was the most common type of composition used for small and moderate-sized commercial buildings throughout the United States. The "two-part commercial block" emerged as a distinct type during the first half of the 19th-century. The two-part commercial block had a simple form which reflected its practical function. From 1850s-1870s, a Victorian version of the two-part block appeared with ornamental detail. Following the ornamented phase, between 1880-1890 (when the Lederer Strauss building was constructed), the commercial block assumed a sense of order and unity influenced by the Ecole des Beaux Arts in Paris and the newly created North-American design schools. Limited to structures of two to four stories, the "two-part

⁴⁴Richard Longstreth, The Buildings of Mainstreet: A Guide to American Commercial Architecture (Washington D.C.: National Trust for Historic Preservation, The Preservation Press, 1987), 24.

commercial block" was characterized by an external division of two distinct horizontal zones, reflecting internal differences in use. In Longstreth's typology, the single-story lower zone at the street level was used for public spaces such as retail stores, while the upper zone was used for more private spaces such as offices and residences. However, the Lederer Strauss building does not exactly conform to Longstreth's definition, because its second, third, and fourth floors were retail.⁴⁵

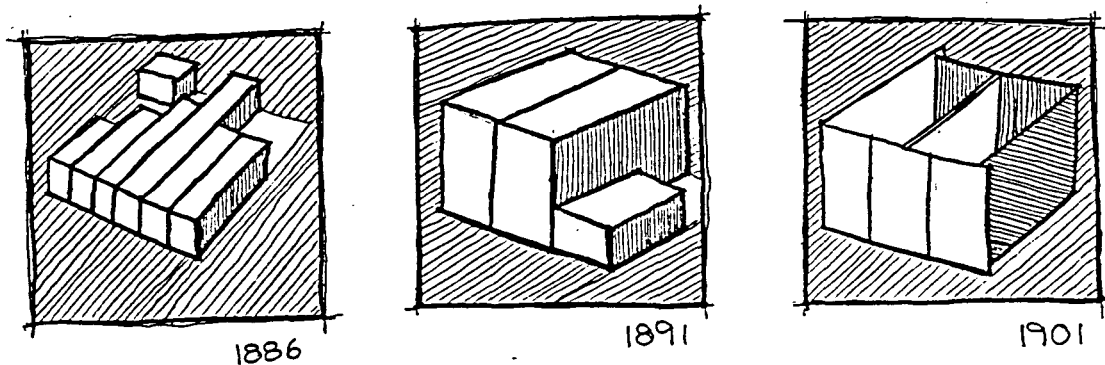
The Lederer Strauss building's design is transitional in nature. It possesses some of the dynamic qualities of the high Victorian era, such as an iron facade, patterned brick work, windows embellished with decorative caps, and an accentuated cornice. However, the ornamentation of the Lederer Strauss building was more restrained than the Victorian; its elements, such as moldings and applied ornaments, were closely related to one another, emphasizing unity, order and balance.

History of the building

As early as 1886, according to the Sanborn insurance company firemaps, the block in which the Lederer Strauss building was located, was for retail purposes. The block was divided into six units using a twenty-two foot module (the same module used to divide the entire state of Iowa) with one

⁴⁵Richard Longstreth, 24-53.

story business buildings, such as a liquor store, a millwork machinery shop, auction rooms, agricultural implements and wagons, and a hardware shop. By 1891, the block was occupied by three forty-four foot wide units, two of which were four stories high. In 1901, the Lederer Strauss building appeared on the Sanborn firemaps in its current configuration of three forty-four foot wide units of four stories each, with an eastern facade facing 3rd street, and a three bay northern facade fronting Court Avenue. Currently, however, the interior space is not reflected on the exterior; the interior is divided into two sixty-six feet areas divided by a fire wall.⁴⁶



Building's volume evolution through time

⁴⁶Sanborn Map Company, Insurance Maps, Des Moines, Iowa (New York: Sanborn Map Company, 1886, 1891, 1901).

In order to gain a better understanding of the building's design evolution through time, Associate Professor John Rice, of the Architecture Department at Iowa State University, accompanied me on a site visit to observe historical changes to the building. From our observation of the building's construction materials, it is clear that the building was formed by parts, and that its interior configuration was a later addition.

The building also showed clear evidence of its multiuses through time: in its variation of column shape and materials, and in the variation of finishes for floors, walls and ceilings.

System

The Lederer Strauss building is a prototype of manufactured vernacular architecture. Manufactured vernacular architecture is the middle ground between high-style architecture and folk architecture. High-style buildings are most often client-specific, site-specific, and one-of-a-kind buildings designed by architects with formal education. Folk vernacular architecture is often peculiar to a culture and a region and depends on hand-crafted elements for its composition. However, manufactured vernacular architecture is a product of industrialization, built by many kinds of people, including architects, builders, and manufacturers, and diffused all over the United States

through pattern and plan books, trade catalogs, and periodicals.⁴⁷

"The sharing of values that characterizes folk vernacular architecture in other cultures was subsumed by the industrial development in America. Whereas architectural values were once transmitted by word of mouth or by demonstration, in industrialized America they were transmitted through manufacturing--the changing of raw material or finished materials into architectural products".⁴⁸

The system that produced manufactured vernacular buildings was nationally based and reflected the democratization of the United States. Manufactured vernacular architecture represents the majority of structures in North America. The design values of the growing economy in North America were invested in the manufactured elements which could reach almost every corner of the country due to abundant raw materials, the ability to locate manufacturing processes in almost any region, and widespread accessibility of regional and national transportation.

⁴⁷Jan Jennings and Herbert Gottfried, American Vernacular Interior Architecture, 1870-1940 (New York: Van Nostrand Reinhold Company, 1988), ix.

⁴⁸Herbert Gottfried and Jan Jennings, American Vernacular Design-1870-1940, 2nd edition (Ames: Iowa State University Press, 1988), VII.

Interchangeable machine-made elements could be composed and redefined in any sequence by many kinds of people who built structures in the manufactured vernacular mode. It was a flexible system which encouraged experimentation and engaged individuals in the process of creation of products.⁴⁹

While manufactured vernacular is the primary system for commonplace North American buildings, Fitch and others have decried standardization of these buildings, arguing that mass-produced artifacts with "endless repetition of forms empties itself of emotional force: over-familiarity reduces cultural potency and ends by destroying the capacity to move us".⁵⁰ However, since the industrial revolution, the United States' building stock has been created primarily out of mass-produced elements. Buildings produced by manufactured elements expressed two North American values: democracy and technology. The Lederer Strauss's form is familiar, and it serves as a good example of the use of mass produced elements without aesthetic impoverishment.

The 'spirit' of the prototype

The 'spirit of place', or character, of the Lederer Strauss building depends on its relationship with its surroundings, through its structural boundaries: floor, wall and roof. It also depends on how we perceive its exterior

⁴⁹Gottfried and Jennings, American Vernacular Design..., X.

⁵⁰Fitch, 4.

and interior elements, how we feel inside of the building, and how the building's elements express the building's figure, its way of being between earth and sky.

In order to define the building's character, I analyzed the building's elements and figures, using Thiis-Evensen's Archetypes in Architecture.⁵¹ I first made an on-site survey and documented the building conditions and elements in a scale model [Fig. 2] and drawings. When building the model I recorded original elements and discounted recent changes that tried to disguise the building's changes through time. In taking this approach, the building appeared with missing parts, visible in my model. To me, the missing elements are the essence of how the Lederer Strauss building evolved through time and how it currently relates to the contemporary world. The building's missing features become possibilities for capturing its 'spirit' of place (concretize its essence in a new historical context) and opportunities for making visible the building's 'being in the world'⁵²(how it relates, as a place, with earth and sky). In the following summary, I have documented the Lederer Strauss building's elements and figures using Thiis-Evensen theories:

⁵¹Thomas Thiis-Evensen, Archetypes in Architecture (Oslo: Norwegian University Press, 1987).

⁵²Norberg-Schulz.

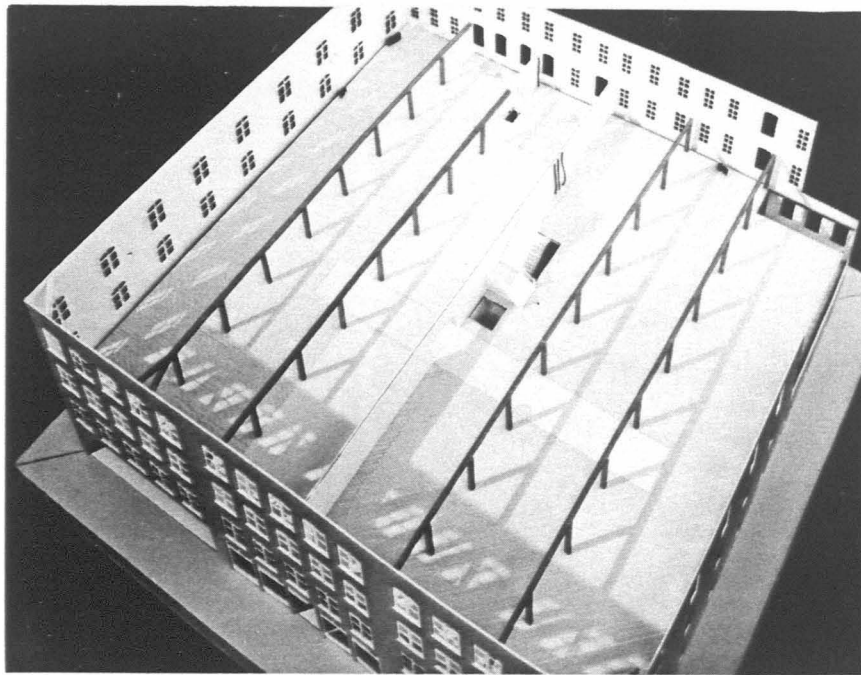
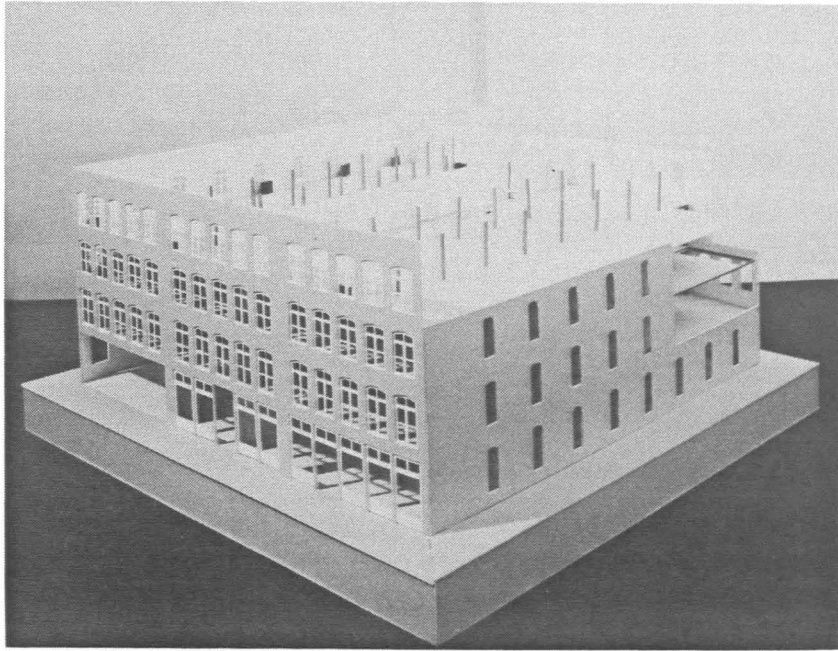
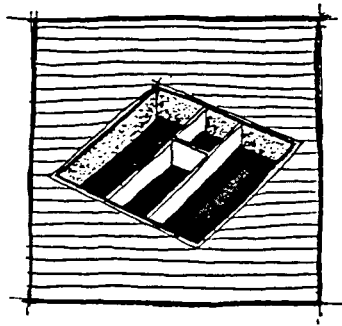


Figure 2. Scale Model -- record of original elements

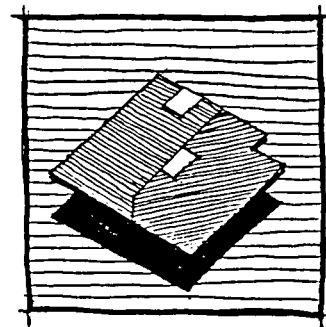
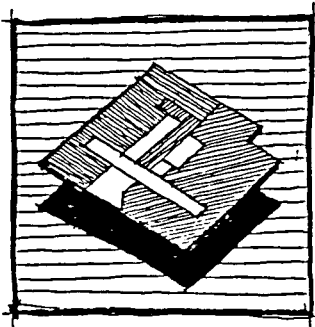
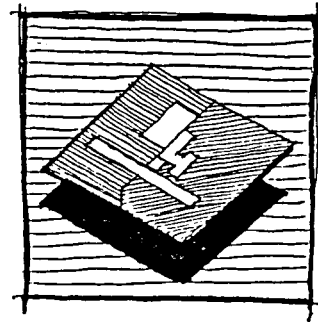
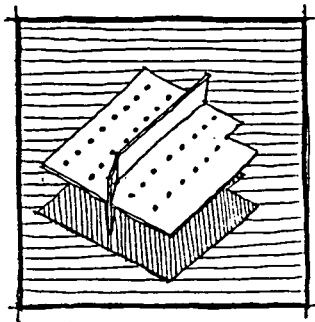
The floors - In the basement, concrete footings indicate an attached floor, part of the ground; it is perceived as the building's roots. The basement is a sunken, confined region, disconnected from its surroundings. It is the unknown place.



Basement

The other four stories of the building support our bodies with wooden detached floors. We are divorced from the ground and elevated in space in a dynamic motion. The wood is live substance; when we walk on it, it moves and makes noises. In all four stories, wooden floors appear in directional strips inviting us to experience movement. Because the building is divided in half by an interior fire-wall, the direction of the strips vary. In the eastern half of the building, on all four stories, the wooden strips run parallel to the space's boundaries, reinforcing the form of the space. However, in the western half, the wooden strips

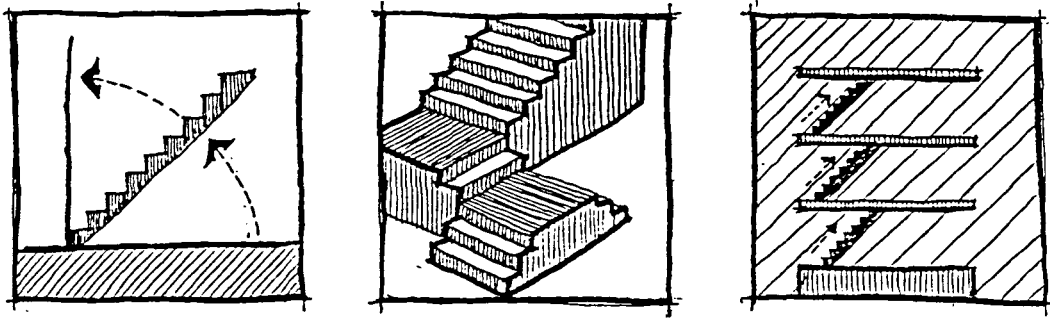
are placed diagonally, contrasting the space's form and expressing an expansion out of the building. Connecting the eastern and the western areas on 2nd and 3rd floors there is a layer upon the background defining a path, an independent pattern, a bridge going through the wall.



The detached floors - 2nd, 3rd, and 4th floors

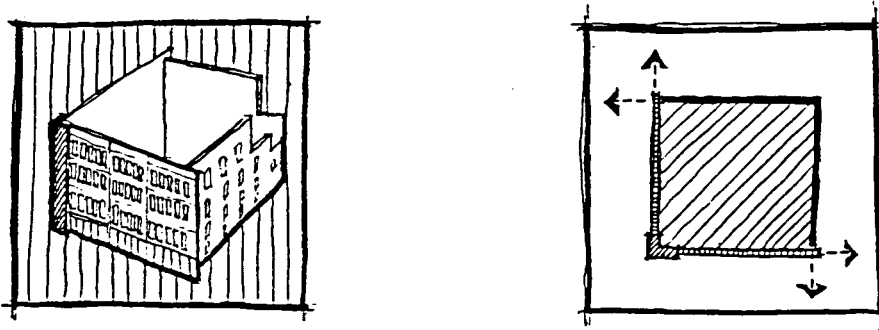
The building's stair is a freestanding wooden structure, an additive form that is perceived as another detached wood floor. As a detached and alive form, it expresses activity

and speed. The stair leads from the inside(up) to the outside(down), provoking a spontaneous urge to run across it to safety. As a narrow stair, wide enough for only one or two people at a time, the stair is perceived as a personal private space. It does nothing to open up the relationship between floors. By being steep, the stair isolates, but also emphasizes what is up, the places we are striving to reach. It is a vertical connection which leads the climber in a movement that is interrupted in each floor.



The building's stair

The walls - "The wall is a function of the corners."⁵³
 It is the corners that make the space a figure; corners tell us where we are. Developed through time, the Lederer Strauss building became a volume of two articulated 'L' shaped elements. The articulated edges⁵⁴ are the building's strength that holds its space together.



The two articulated "L" shaped elements

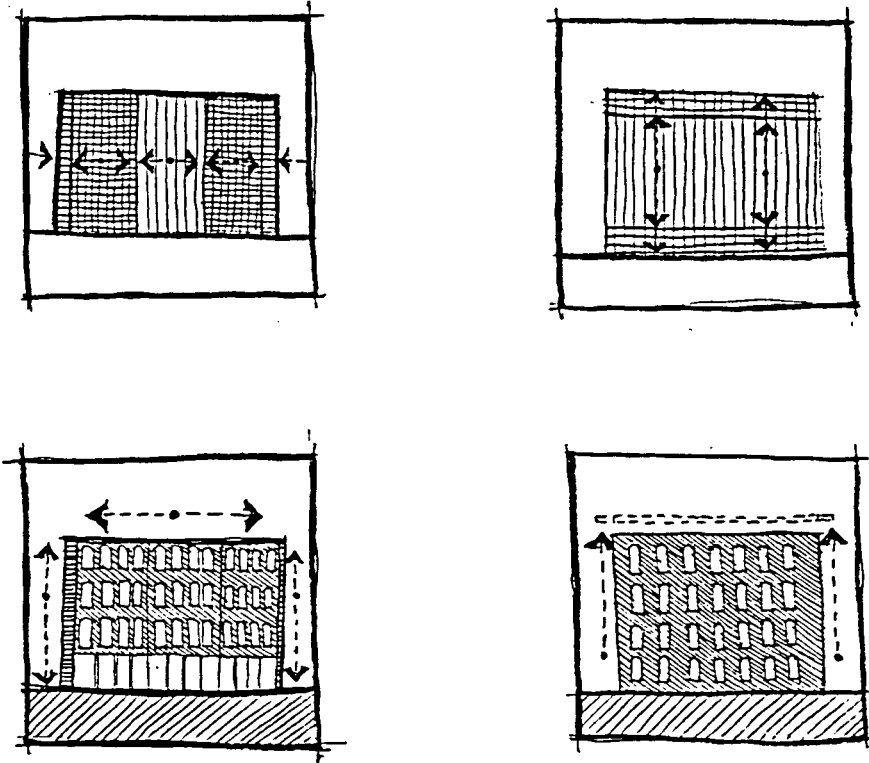
Its walls have a vertical tripartition in their breath theme. The central section accentuates the space's centrum where the space communicates with its surroundings, while the corners on either side delimit the space. Even with the northeastern and southwestern building's corners being articulated, its walls are dominated with an open middle section. This open middle section increases the communication between the building and its surroundings, thus increasing its public character.

⁵³Thomas Thiis-Evensen, 121.

⁵⁴Francis Ching, Form, Space and Architecture (New York: Van Nostrand Reinhold Co. Inc., 1979), 97.

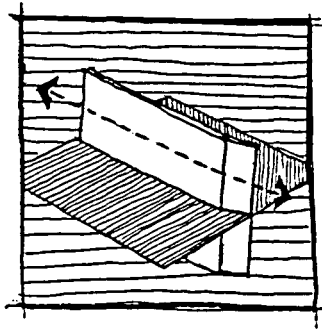
The building's walls also have a horizontal tripartition, in their height theme, in their relationship to earth and sky. In the expression of height, the wall lifts both itself and the roof and holds itself up by rising from the ground to carry the roof. The wall's upper section approaches the sky, the open infinite. Gravity tends to put the wall down, but it stands up against this force, synonymous with survival.⁵⁵ On the front (north) and side (east) facades of the Lederer Strauss building, the middle field of windows dominates and pushes downwards with its weight, expressing a sinking motif. As the windows dominate the narrow wall fields above and below them, there is also an expression of rising, although the ascent is barred by an upper frieze. The south and west facades also have a conflict of ascent and descent in the wall's middle fields. The upper frieze is non-bearing and open, giving more of a rising character, and appearing as if the roof is about to be lifted off the wall.

⁵⁵Thiis-Evensen, 132.



Vertical and horizontal tripartitions and their expression

Examining the expressiveness of the relationships between spaces in front of, and behind the walls (the depth theme), we observe the flat horizontal wall that divides the building in half. This wall creates a directional space that invites us to enter through its ends. Its flatness works as a background where activities take place both in front and behind it. Its expression depends on surface treatment and openings.



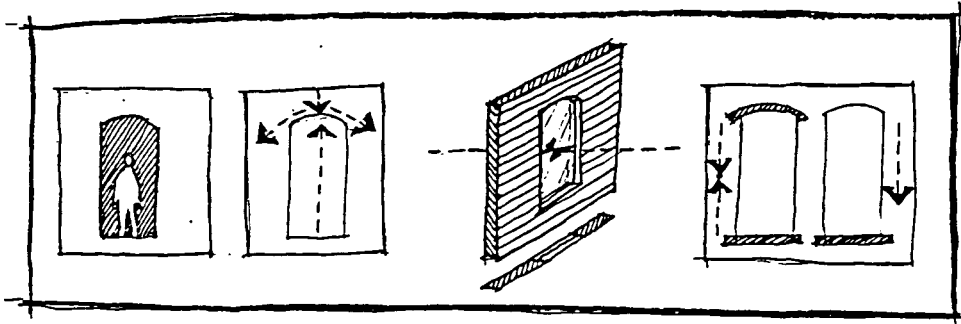
The flat wall dividing the building

Openings - Because the four walls have a flat horizontal, delimiting character, most of the walls' expression depends on the openings.

The form of the windows' hole is vertical and upright with the largest opening possible. The form accentuates the motion coming from the inside, and thus strengthens contact with the exterior space. A round flat arch supports weight from above, and lessens the penetrative effect while also gives more importance to the windows than to the wall. The windows' profile, is straight-cut, emphasizing the motion from the outside. The walls offer no resistance, so that the motion balances the one coming from the inside expressed by the window size.

The relationship between inside and outside is also balanced by the windows' faces (all that is covering the opening), because they are placed in the middle of the openings and seem to be pushed out from the interior but are halted half-way by a counter movement from the exterior.

The frame increases the importance of the windows. The windows with heads and sills create a motionless wall. The windows with sills create a sinking wall, but the ones without frames are neutral. Within the walls' planes the windows have a unified grouped composition.



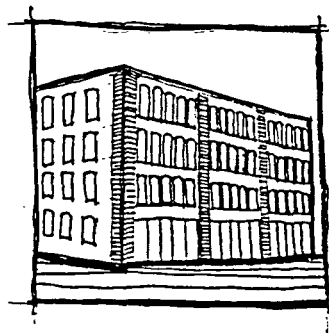
The windows' form, profile, face, and frame

Building Systems - "The expression of motion, weight and substance in these systems can transform the impact of the main form."⁵⁶ A massive wall system gives weight to the spatial boundary and closes the space. A thick wall, such as the one in the middle of the building, is inert and compact and expresses an inner resistance. Thickness and weight are also expressed because the building's walls are masonry. The molded, stucco interior walls on all four floors have a fine texture that seems neutral but works as a protective layer that gives strength and meaning to the inner part of the

⁵⁶Thiis-Evensen, 153.

walls. The coarse texture of concrete and stone found in the basement draws the inner walls' substance to the surface in an aggressive manner. The fine texture of the applied brick on the north and east facades is associated with porousness expressing a warm and protected space, while the south and west facades of raw brick are coarse, and thus have more weight, making the walls' inner substance more aggressive.

The vertical wall pattern composed by the pilasters which divide the north facade on three bays expresses a freer character, but the patterns made up by the windows' rows create horizontal compositions that have an inert and heavy character. The reference is the ground, not only because the weight seems to lie heavily on it but because motion parallels it.⁵⁷ The interaction of horizontal and vertical motions makes stable compositions.

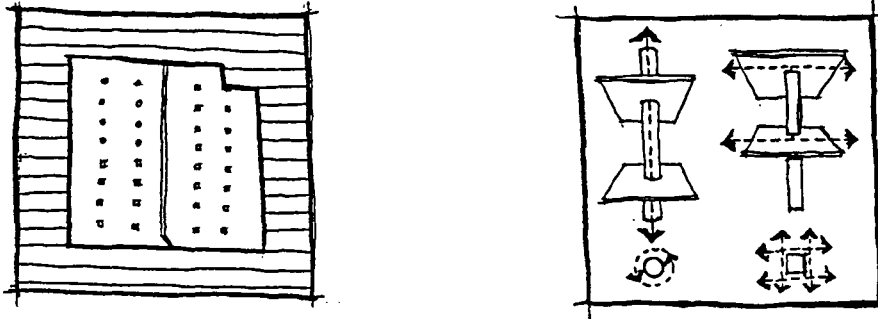


Facade's patterns

⁵⁷Thiis-Evensen, 175.

The convex relief on the windows' heads free themselves from the walls, expressing the walls' substance coming out, a wall about to disintegrate. The small smooth textured blocks on the north and east facades make the walls seem lighter than the raw brick walls on the south and west facades, and their geometric joining also makes them seem thinner than the ones on the south and west.

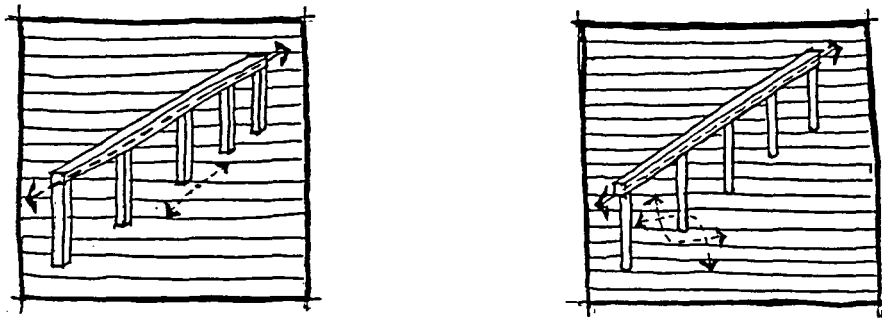
Skeleton System - The light interior skeleton of the Lederer Strauss building invites us to go through it. The building has an orderly grid of square and round columns. Comparing the expression of support in columns with the same height and volume but with different cross sections, the circular shafts seem slimmer and stronger because of their inward closed form, while the square ones look as if their surfaces and corners could come apart. The square columns have a sinking expression, and the round columns, a rising one. As the square columns direct the surroundings and the round ones lend freedom to it, the building, having both types, has some open and some defined areas. However, both types of columns have a straight beam above them that makes the directional space dominate. The round columns are freer because nothing can be joined to them, and they can also grow, while the square ones are perceived as part of the wall and appear as additive, isolated units. The smooth finishes of the columns' surfaces strengthen their forms.



The orderly grid and the expression of round and square columns

Each of the building's floors are taller than 13' which makes the skeleton tall enough to open up the space. However, as the building's columns create colonnades with straight beams, the expression is that of a barrier between both sides of the structure. The colonnades have a lateral motion that "despite the apertures between columns, the straight beam gives less direct communication between inside and outside".⁵⁶ In the areas that have colonnades composed of round columns, the transverse direction is increased. In the areas where there are square columns, the accent is in the lateral motion, the barrier effect increases, and the row of columns can even be perceived as a wall with holes.

⁵⁶This-Evensen, 237.



The expression of the colonnades

The Colors - The pale and unsaturated colors of all four interior floors express lightness and openness, but the dark basement seems dense and heavy with its gray hues of stone intensifying the coldness of the underground. The dark, reddish brick colors of the exterior express substance, density, weight, and resistance. The warm red of the outside brick has a contained potential and attracts by its strength.

The Entrance - Currently, the Lederer Strauss building's entrance has a directional wall motif that "leads us forward with a feeling of security but also of dependence..."; this motif is "based on asymmetry and contrast between the vertical and the horizontal, making one 'keep close to' the vertical."⁵⁹

The roof - The flat roof of the building is a raised floor on which you can walk, one which should be "'inhabited'

⁵⁹This-Evensen, 297.

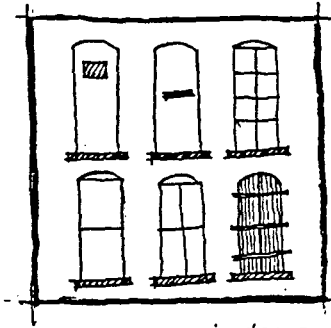
in order to assert itself at all."⁶⁰ A flat roof is without expression.

The detailed elements that visually composed these figures and archetypes (described above) are a visual vocabulary of the building. Some of these elements can be classified as a 'quasi-figure' "because its characteristic form, makes us remember the totality to which it belongs".⁶¹ An example of an element is the parallel strips of the directional wood floors. The directional floor is a figure, or a form, which promotes a directional movement. The pattern is the element that composes the figure, and elements just "gain their full meaning when they are composed"⁶² as a figure. Documenting the elements of the Lederer Strauss building is important in order to understand its figures or its 'spirit'. The following drawings document the elementary visual vocabulary of the Lederer Strauss building. Some of these images are also figures and quasi-figures.

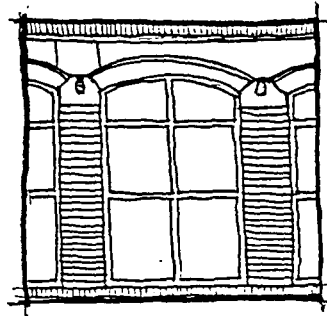
⁶⁰Thiis-Evensen, 371.

⁶¹Norberg-Schulz, The Concept..., 120.

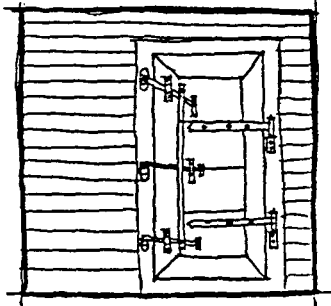
⁶²Norberg-Schulz, The Concept..., 118.



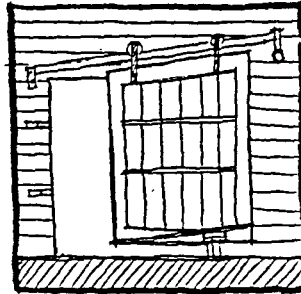
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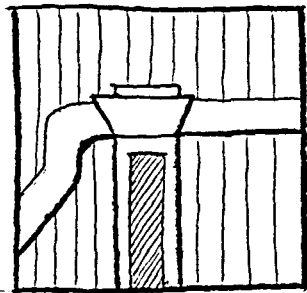
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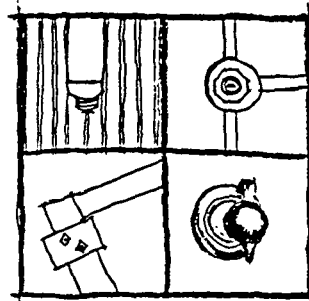
fire-door



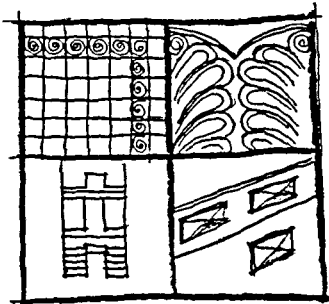
fire-doors



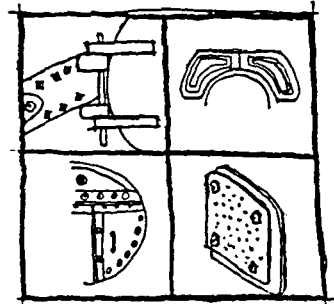
landing newel post



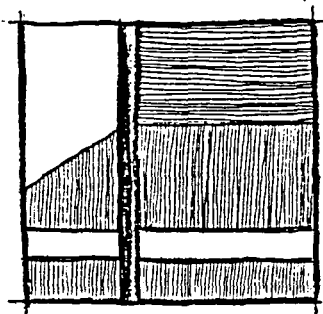
details



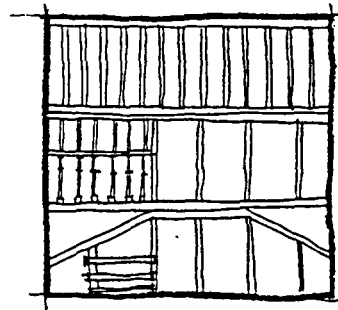
facade details



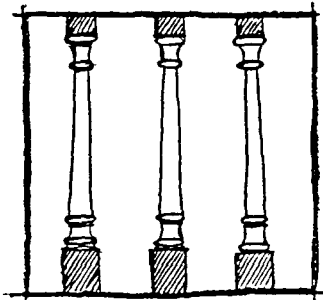
boilers



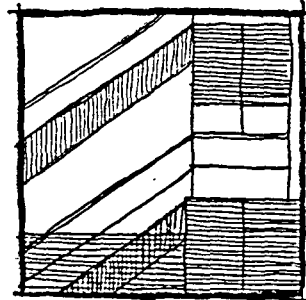
stair patterns



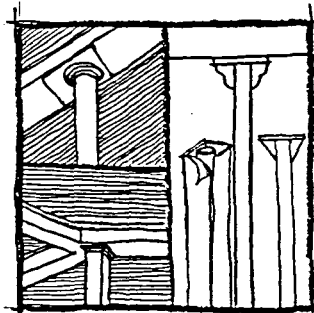
stair patterns



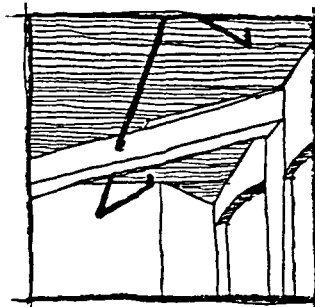
balusters



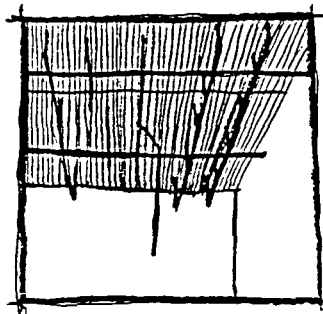
fire-stairs patterns



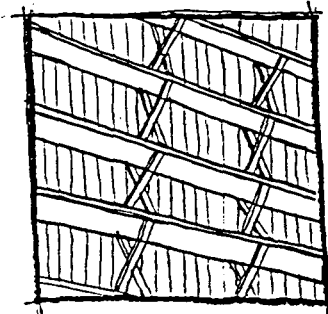
types of columns



ceiling



ceiling



ceiling

Preserving the Prototype

In my opinion, the reason for preservation is human development. Space is an essential part of human existence.⁶³ Since childhood we structure our world based on permanent things that we connect with particular places and situate ourselves in a more comprehensive totality.⁶⁴ In this totality we feel that we belong to the world, we feel security and an identity. To preserve the environmental image is to preserve human identity. However, it does not imply that places are eternal and should not change, but that the 'spirit of place', its *genius loci*, should have some stability through time to conserve human identity.⁶⁵ As Norberg-Schulz states, "to protect and conserve the *genius loci* means to concretize a place's essence in an ever new historical context. Stated in another way, the history of a place ought to be its 'self-realization'. What was there as possibilities at the outset, is uncovered through human action, illuminated, and 'kept' in works of architecture which are simultaneously old and new."⁶⁶

⁶³Norberg-Schulz, Existence...

⁶⁴J. Piaget, The Child's Construction of Reality (New York: Basic Books, 1954), 90.

⁶⁵Norberg-Schulz, Genius Loci, 18.

⁶⁶Norberg-Schulz, Genius Loci..., 18.

A case can also be made for preservation as an organic system. Fitch argued in his book that any living system must repair itself constantly in order to maintain its balance and coordination and its quality as a whole. Buildings adapt to changing users and changing needs, and instead of being torn down, buildings should be embellished, modified, reduced, enlarged and improved.⁶⁷ To Fitch, "all good environments are whole and alive because they have grown slowly over long periods of time, piece by piece."⁶⁸ This organic approach to rehabilitation is a contemporary attitude which permits the building to be a critical memory while engaged with present time. The organic approach takes a holistic view toward architecture that promotes a more human environment.

Preserving such building prototypes for successive generations should also demonstrate that manufactured systems have not historically generated cultural homogeneity. Industrialized elements are an aspect of the character of our contemporary reality.

Another reason to preserve the prototype is an economic one that involves both retrieval and recycling. When any building is demolished, energy is wasted, especially that of time, natural and human resources, as well as fuel supplies.

⁶⁷Fitch, 35.

⁶⁸Fitch, 35.

Rehabilitation as a historic preservation strategy

Rehabilitation is defined as "the process of returning a property to a state of utility, through repair or alteration, which makes possible an efficient contemporary use while preserving those portions and features of the property which are significant to its historic, architectural, and cultural values"⁶⁹. In rehabilitation, an historical building is updated by conforming with current building codes. Additionally, a rehabilitative strategy calls for proper maintenance and repair, and the replacement of missing parts.

Adaptive use is a category of rehabilitation strategy in which a building's original use is changed in order to accommodate contemporary needs. The adaptive use of the Lederer Strauss building, from a warehouse and retail building, to retail and residential functions is an example.

Rehabilitation is a strategy which permits the preservation of the 'spirit of place'. It allows the new design to uncover the character of the old place, to comment on it, and to keep it alive in all its phases through time. It allows a relationship among existential expression, architectural space, and organic growth.

A strategy of adaptive use makes possible a dialogue between old and new architecture, permitting expression of

⁶⁹ U.S. Department of The Interior, 5.

inherent tensions: old systems versus new systems, the building's original purpose versus its new purpose, the building's original public meaning versus the building's meaning through time and into the current period. An adaptive use strategy makes possible a design that not only comments on the building's memory itself, but also comments on its surroundings - its neighborhood, city, state, country, and world, another reference to existential/architectural space.

In practical terms, adaptive use is the most appropriate rehabilitation strategy for the Lederer Strauss building because the building is not architecturally significant on a national scale, that is, it is not a building that might deserve restoration. Instead, the Lederer Strauss building is locally significant to Des Moines' architectural heritage and it is a good prototype of a two-part commercial block which was composed of manufactured elements.

Personal Philosophy of Design

Design is a personal issue because professional designers respond differently to a project situation depending on their individual background and cultural and personal values. In fact, it is the variety of design responses that fosters a richness of images for our cities.

It is through design that I respond to life and culture. I believe that design is the tool that I have to comment on

my environment. When I design, I seek to be conscious of the natural, social, cultural, and political realities of place. My design goal is to interpret environment and to generate ideas about it. Like Norberg-Schulz and others, I want my design to respond to a sense of 'place'.⁷⁰ I believe that each locale has a unique character, and that a place's character should be enhanced in order for people to feel that they belong to it. I believe in the existential/architectural space philosophy developed by Norberg-Schulz and my goal, as a designer, is to perceive and interpret the character of places into objects and buildings and help our human development. Kenneth Frampton, in his book Modern Architecture,⁷¹ reinforces Norberg-Schulz's concept of place, and my own convictions by defining the concept of "critical regionalism." "Critical regionalism" emphasizes the sensual qualities of the environment which cause involuntary body experiences and sensations. Instead of simulating the local vernacular, "critical regionalism" will reinterpret it and cultivate a contemporary place-oriented culture that is not hermetic to the world culture. "Critical regionalism" suggests the end of a dominant culture that dictates social and aesthetic rules and states that in

⁷⁰ Christian Norberg-Schulz, Architecture: Meaning and Place (New York: Electa/Rizzoli, 1986), 27.

⁷¹ Kenneth Frampton, Modern Architecture: A Critical History (London: Thames and Hudson Ltd., 1980/85), 313-327.

the modern architecture every small culture should reinforce itself while also being part of the general world culture.⁷²

I hope that the public's sense of belonging to place will increase its desire for participation in its society. In my view, a designer's role is to help people develop as complete human beings, while providing shelter or service, efficiency and safety. Design should be psychologically stimulating to people so that they become critics of their environment. To design spaces is our best means to touch peoples' senses because they live in and work in buildings. The built environment is undeniable to them. Like Fitch's organic system, I believe that each place in the world should be a continuum of reinforcement of its own roots, while at the same time, it is connected to the realities of current life.

The current commercial aesthetic of well-ordered, functional spaces that are clad in expensive finishes or that are attired with the latest stylistic trend may satisfy some people's needs for status. However, to me, environmental statements should be relevant to place and to reality in order to be good design.

Spaces are the connection between humans and reality, and, therefore, spaces have to be in harmony with humans and

⁷²Frampton, 327.

their place to work well. I believe that these disharmonic spaces alienate people because they form a protective bubble which allows users to forget the world that is around them. This conformity grows in such a way that it affects the users' relationships both with others and with themselves. I believe that spaces should have more than an ordered, functional, and "beautiful" make-up.

I also believe that buildings should be more than shelter. Building design is an art, in that it enhances the moments of our lives.⁷³ In order for a building to be an art work, it has to be the concretization of the life-moment of the artist/designer when experiencing the complex reality of the building's place and needs.⁷⁴ Being an interpretation of life, a building has an expression that, to me, is synonymous with energy and meaning. The building should connect us with the place we are in, so that we feel alive and perceive that we belong to a totality. An interior space that embodies expressiveness has sensual qualities such as form, color, texture, light, odor, and temperature that affects our experience in it. The vast majority of interior spaces in our city's buildings are unexpressive and unanimated because in their conception there was no concern that a place is an

⁷³Stanley Abercrombie, Architecture as Art: An Aesthetic Analysis (New York: Van Nostrand Reinhold Company, 1984), 9.

⁷⁴Norberg-Schulz, Existence..., 34.

aspect of human existence. These buildings do nothing to stimulate human senses; they do not encourage people to use them or to participate in them. In my view, these spaces encourage passive users because they encourage people to lose their identities through the lack of character extant in their surroundings.

The world needs people who feel that they belong to it and thus have the desire of preserving it through critical and active attitudes. I think that the physical elements of design affect people's senses and that a design's character should be used to link people with their world, updating people's thoughts and feelings regarding the reality that is around them. Design should call attention to any important societal issue such as emotional instability, urban chaos, poverty, or even a local reality. Design should be communicated to the users through the application of the design elements to compound a space that connotatively or denotatively affects human experience on it.

Rehabilitation as a preservation design strategy makes a valuable architectural statement because preserving old structures calls people's attention to their place's heritage, thus to their own heritage. Preservation design should be sensitive not only to the physical design of the building, but also to the environmental atmosphere created by it. Old buildings that have been present for decades in the

public realm have served a role; interference with their role may potentially affect people's critical perception of their environment. The public may perceive that their own roots are being modified when changes occur to old buildings. It is in this way that rehabilitation is an expressive form of design. Rehabilitation design reinforces organic growth of the city, demonstrating not only an evolutionary change to place and locale, but also demonstrating change in people's lives.

CHAPTER III: DESIGN DEVELOPMENT

General Design

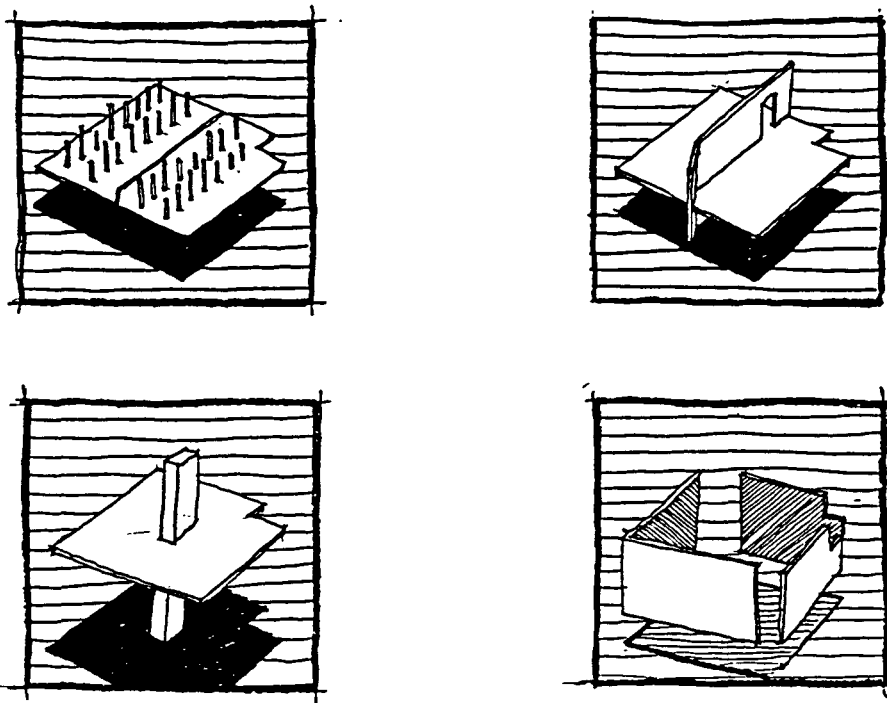
In order to reinforce my conviction that what has to be preserved in an historic building is the 'spirit of place' and that this attitude recalls an organic growth which has a humanistic concern, I developed a conceptual framework for the Lederer Strauss building's missing architectural elements. These parts which shall be contemporary in their design are: an upper addition, a corner, a building entrance, and the entrance's stair volume.

I propose that the building should be adapted to the following new uses: 1st floor and basement as retail space; 2nd, 3rd and 4th floors as apartments; and the addition of a 5th floor as a penthouse. I propose an adaptive use strategy because the Lederer Strauss building location is on an important area of Des Moines urban environment. The Court Avenue district is one of the few places in Des Moines that still maintains aspects of the intense public life of the city in the past. The Lederer Strauss building is part of the district's 'spirit'. The adaptative use of the building can encourage the preservation of the area and intensify the life in it.

I consider the Lederer Strauss building as a structure that belongs to its users and to the city of Des Moines. The building has a vocabulary of figures and elements that defines it as a 'place', defines its 'spirit'. In my design I bring

the place's vocabulary 'out' to the city through the penthouse addition design and reconnect the building with its environment, both illuminating and adapting the place to a contemporary reality. I also capture the 'spirit' of the building in the development of some of its interior spaces, bringing the building's essence closer to people (users), integrating people with the city.

Analyzing the Lederer Strauss building's 'spirit' and vocabulary, I observed a basic general vocabulary that defined my design concept for my design intervention on the building.



The 'forest' of columns, the dividing wall, the vertical central circulation, the two articulated corners.

My contemporary design for the building's missing features seeks to uncover and interpret the extant potentialities of the Lederer Strauss building. I try to bring out its 'spirit', its essence that makes it a 'place' in the qualitative character, a space that affects the life-moments of the building's users.

The upper addition - penthouse

Following Norberg-Schulz, I consider the penthouse as a house whose interior is private. It is "the place where daily life takes place," and the familiar ground that visualizes "the atmospheric qualities of the environment, and also expresses the mood of the actions which take place inside."⁷⁵ In the house the outside world cannot be forgotten. The house has to reveal a presence to its surrounding world at the same time that it offers a retreat from the same world.⁷⁶ Norberg-Schulz states that "by means of the house we become friends with a world, and gain the foothold we need to act in it. As an architectural figure standing in the environment, the house confirms our identification and offers security. When we enter inside, we are finally 'at home'. In the house we find the things we know and cherish. We have brought them with us from the outside, and live with them because they represent

⁷⁵Christian Norberg-Schulz, The Concept of Dwelling (New York: Electa/Rizzoli, 1985), 89.

⁷⁶Norberg-Schulz, The Concept..., 89.

'our world'.... The interior therefore possesses the quality of interiority, and acts as a complement to our own inner self."⁷⁷

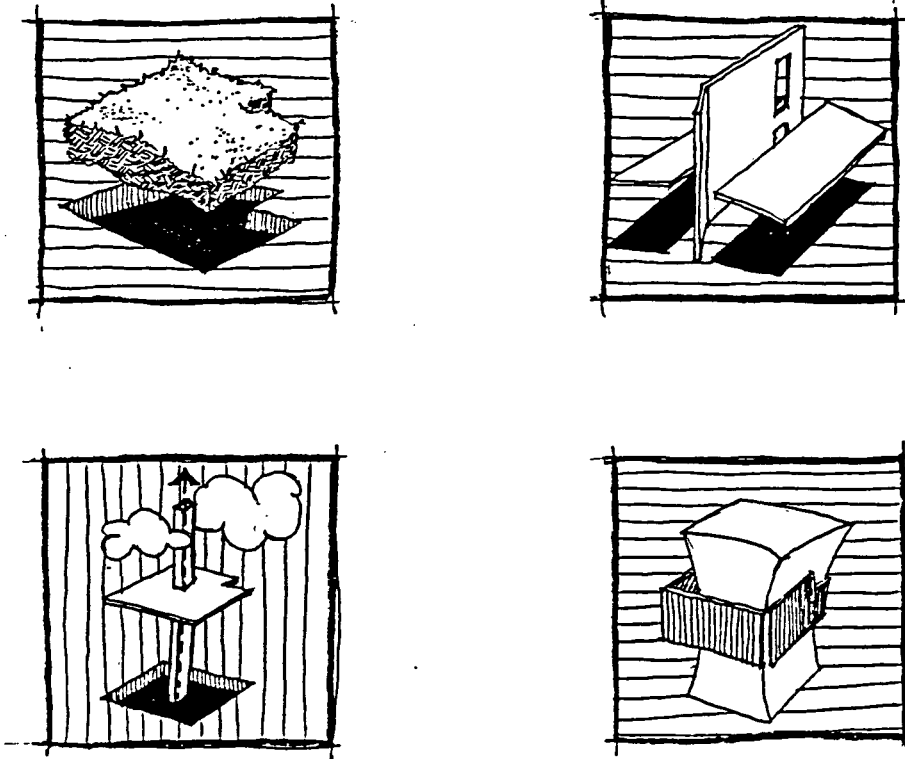
The penthouse also provides a new roof for the old building. The upper addition adds meaning to the extant flat roof that as Thiis-Evensen states "must be 'inhabited' to assert itself at all."⁷⁸

To develop the flat roof area, I bring the building's general vocabulary up organically and use the roof as a private site. At one scale, the Lederer Strauss building inhabits a site in the city, and on a smaller scale, its roof works as a site for the penthouse. The building's qualities of organic growth, and its site within another site condition, made me think of a landscape analogy in order to develop the design. The roof is a raised piece of the earth. The penthouse relates the building to the sky, or tries to open itself to it, by the upward (growth) motion of the trees (columns). The central wall, the central vertical axis, and the two articulated corners express the important character of the center of this landscape. The center becomes a space of tension where there is an action of cutting (the wall), a rising movement (stairs), and a compression made by the corners' expression of holding the building's volume.

⁷⁷Norberg-Schulz, The Concept..., 91.

⁷⁸Thiis-Evensen, 371.

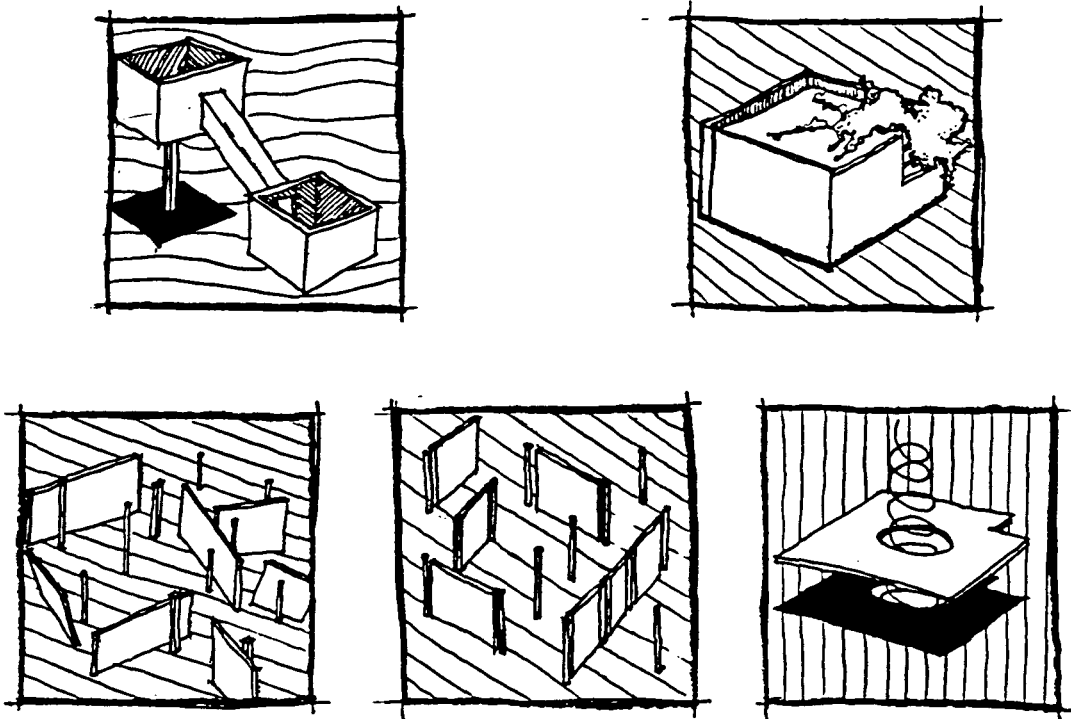
Meaningful events should occur in and around the center because it is the generator of life or the heart of the building.



The roof as elevated piece of the earth, the cutting action of the wall, the rising expression of the circulation, the compression of the corners

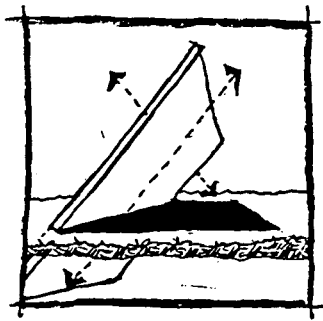
I consider that the cutting wall defines the forest of trees into two domains, east and west. There is a 'place' in the western domain and a 'place' in the eastern one; both are connected by a path. The path gathers the places around the center and links the two corners of the landscape. The corner

on the western portion is broken where the growth towards the sky begins, spreads towards the western domain going in between trees, and passing through the wall to rise to the sky. The place in the western domain grows through the adaptation of planes to the growing trees (columns). Planes are rotated, juxtaposed, and pulled apart. In the eastern 'place' the planes adapted themselves to the trees (columns) and are suspended by them. All this movement of organic growth happens around the center. The center is the essence which supports movement and brings life from the roots of the earth.



Two 'places' connected by a path, broken corner as beginning of growth, the western 'place', the eastern 'place', the center

This process of growth is visually experienced by the outside public with the visual connection of the two corners made by the penthouse's roof line, a 'shed' roof line which both rises and opens towards the sky and sinks towards the ground. The diagonal of the shed roof forces the volume to be perceived as a transitional form, as a fragment of something capable of change, that is still growing.⁷⁹



The expression of the shed roof

The dividing wall springs from the building's interior to express it, and the dividing wall serves as a directional guide to reach the center. The center of the building is protected and is only available to the ones to whom it belongs, those who penetrate it.

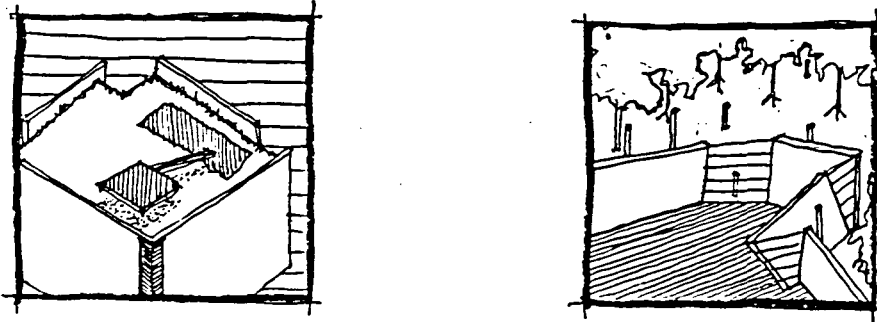
The historic building is earthy, attached to the ground; its reddish color expresses supremacy, but its roof is organic. Expressed as a dynamic growth, the two articulations of the corners explode in an outward motion trying to surpass

⁷⁹Thiis-Evensen, 363.

the historic building's boundaries to reach the city. The bright yellow dividing wall presses out toward the sky. The orange volume of the penthouse also pushes the corners outward, but the explosive expression is balanced by the volume's proximity to red that holds its growing form in a more stable manner. The corrugated metal roof is an unexpressive gray tone, but it is meaningful because its shiny surface reflects the sky. As the roof surface reflects the sun, it makes the sky itself a part of the roof. Weather changes become more perceptible in order to reinforce the organic qualities of growth. The center's wall and the interior are white which express an immaculate and innocent feeling of the inner life.

The interior of the penthouse interprets the vocabulary and 'spirit' that I observed in the historic building and defines it in more detail. The interior articulations are a detailed expression of the building; they attempt to explain the building through smaller figures and elements. In the western 'place' where the planes adapt themselves to the growing forest, there is an inward motion of open space in between rounded columns of various thicknesses. A directional floor is used for the pathway and emphasizes the connection between the two articulated corners that shape the building's volume. Linear patterns of windows' faces emphasize the planes' adaptive motion and become the openings between planes

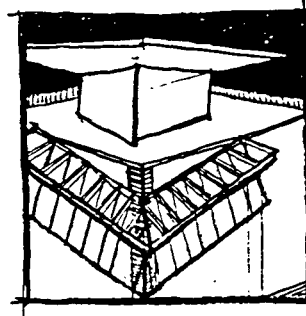
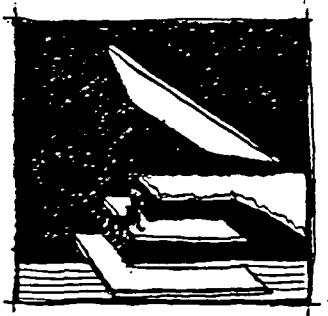
that promote the relationship of the interior space with the outside forested landscape.



Directional floor pattern connecting the corners, planes adaptive motion

In the interior of the eastern 'place', the planes have already adapted to growth; therefore, the motion is stable, and the openings, walls, and floors are formal and more restful. The building's interior vocabulary in the east 'place' is interpreted in a more placid way, the trees (columns) have grown, suspended the volume planes, and live maturely. In the eastern 'place', the path terminates in two different spatial experiences. One termination is the northeast corner of the outside stepped terrace which holds the volumetric movement towards the sky. The roof keeps raising and opening the volume to the sky, but the terrace floor steps down and only permits us to sit and to contemplate it. This corner 'place' makes us sit and receive the sky; we do not feel the need to fly because it comes to us through light. This volume grows out from the corner in the form of a

metal shading structure that reinforces the shed roof's opening expression and the articulation of the building's form with its play of light and shadow. The second terminating 'place' of the path is centered in the forest. In the center you belong to the landscape totally, to both of the domains; you are in the place that is surrounded by all other places. Here, the action of the cutting wall and the upward pressure of the stair's vertical axis created a glade where there is sunlight and water, two essential elements to the making of life.



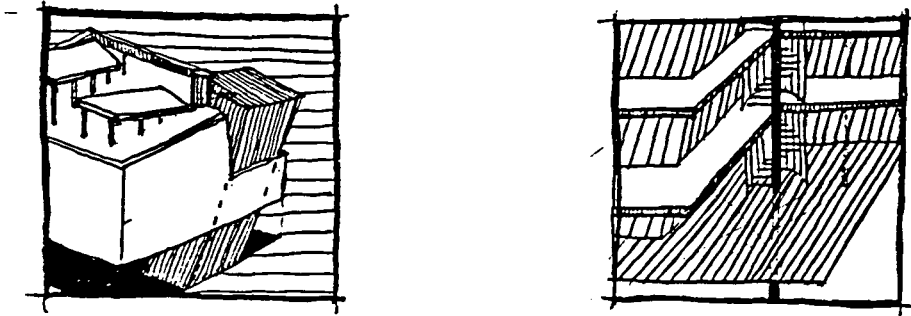
The contemplation 'place', the articulation of the corner

The corner

I consider that the missing southwestern corner of the building is the beginning of the penthouse growth. It is one of the articulated corners that holds the building's volume at the same time that it expresses the outward movement tried by it. I use the corner as a three-story public greenhouse that has access by the first floor and basement through a vertical

circulation of stairs around the column's line that is on the edge of the hole. The greenhouse's exterior boundaries are experienced by the building's interior, all the way up to the penthouse. The greenhouse's volume penetrates the corner's hole diagonally trying to reach the building's roots and to explode out to the city and sky. This vertical volume forces the essence of the roots upwards to promote the roof's landscape as an organic growth. In the vertical greenhouse one experiences moving down through to the confining places of the building's roots, or moving up to reach the sky. The downward penetration is "interpreted as an encounter with earth's primeval forces, with the rough and natural, with death, water and fire."⁸⁰ Arriving downstairs, the transparent glass floor 'sucks' us downwards to its depth, conveying the insecurity of falling. The greenhouse's glass floor works as a transparent skylight for the first floor and basement, completing the light/life motion from the sky to the underground to bring life. The upward exploration of the greenhouse is the struggle against gravity; it is the escape from the confining underground to go up and meet light. As a glass volumed greenhouse, our experience in it is of being in a transparent capsule that explodes to the outside. It is the essence of the building's roots coming out to the public.

⁸⁰This-Evensen, 77.



Corner's articulation in diagonal penetration, greenhouse's interior

Building entrance

According to Thies-Evensen, people should mentally perceive the experience of entering before the act of physical entry.⁸¹ I treat the expanded flat yellow wall as a directional wall motif that both divides the building into two domains and directs us to experience the building's center, its heart. A directional wall motif, based on asymmetry and contrast between vertical and horizontal, depends on the vertical for orientation, and entering is almost a forced action.⁸² The entrance can also be perceived as a side tower motif because of the verticality of the wall's edge and

⁸¹Thies-Evensen, 289.

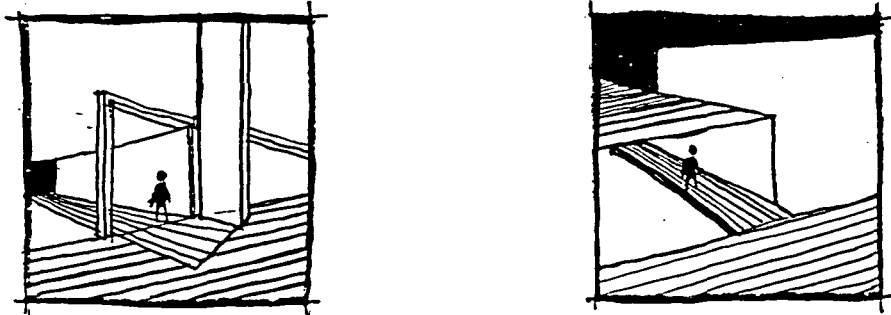
⁸²Thies-Evensen, 297.

because of a steel column that comes down from the roof marking the entrance. A detached directional wood floor in the entrance reinforces the experience of forward movement through the door. The entry floor is expanded to the outside in order for the entering moment to begin before the actual front wall opening. This directional path towards the center is treated as a bridge connecting the outside to the center. In the bridge, there is no side tower and the vertical directional wall motif is fragmented, establishing a state of tension and dependance on the bridge. An effort has to be made to conquer our goal, the center.⁸³ On both sides of the bridge, there is a metal screen suspended over an open floor. The screened floor opens downwards revealing the building's underground area, its roots. The open floor conveys a feeling of insecurity and danger that keeps us walking on the bridge.⁸⁴ The depth of the open floor elicits a fear of falling down into the enclosed world of the underground. Near the end of the bridge, one passes through a round arched brick structure (extant in the building) that marks the arrival at the center. The center contains the volume of the stair, the central circulation axis that is the goal of our conquest. Having the open floor downwards, and the center opening upwards, gives us a perception of the building's center totality just as we have

⁸³Thiis-Evensen, 87

⁸⁴Thiis-Evensen, 63.

the entering experience.



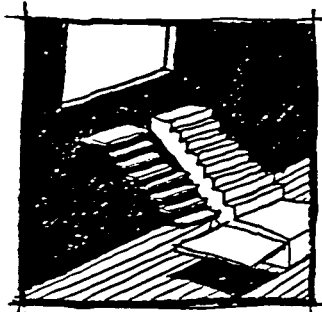
Directional wall and side tower motif, the bridge

Stair's volume

I duplicated the private narrow volume of the original stairs to create a more public one by mirroring it in a new design that reinforces the meaning of the old volume. The new volume, like the old, works as a detached, live, steep wooden hill that creates a struggle to move against gravity. However, the new stair volume has an open effect because its underneath section is a metal screen that increases the visual depth and makes the vertical experience stronger. Walking up is more detached and open; thus we are conscious of the possibility of falling. Both old and new stair volumes rise side by side; their in-between space is open and clearly visible. The intention here is to create one volume with two

parts, one old, one new, one in the western domain of the building, the other in the eastern domain. Together their volume illuminates the essence of the center that vertically connects the ground with the sky. In both parts we struggle vertically and the only difference between them is their existence in time; the new volume is the 'self-realization' of the old one because it uncovers its possibilities.⁸⁵

After struggling to reach the sky (the fourth floor), we cannot fully experience it. The sky is framed in a window and we just have a pictorial experience of it, but the sunlight, that brings the sky to the earth, penetrates through this window and gives meaning and life to the moment of arrival at the end of the stairs.



Stair

⁸⁵Norberg-Schulz, Genius Loci..., 18.

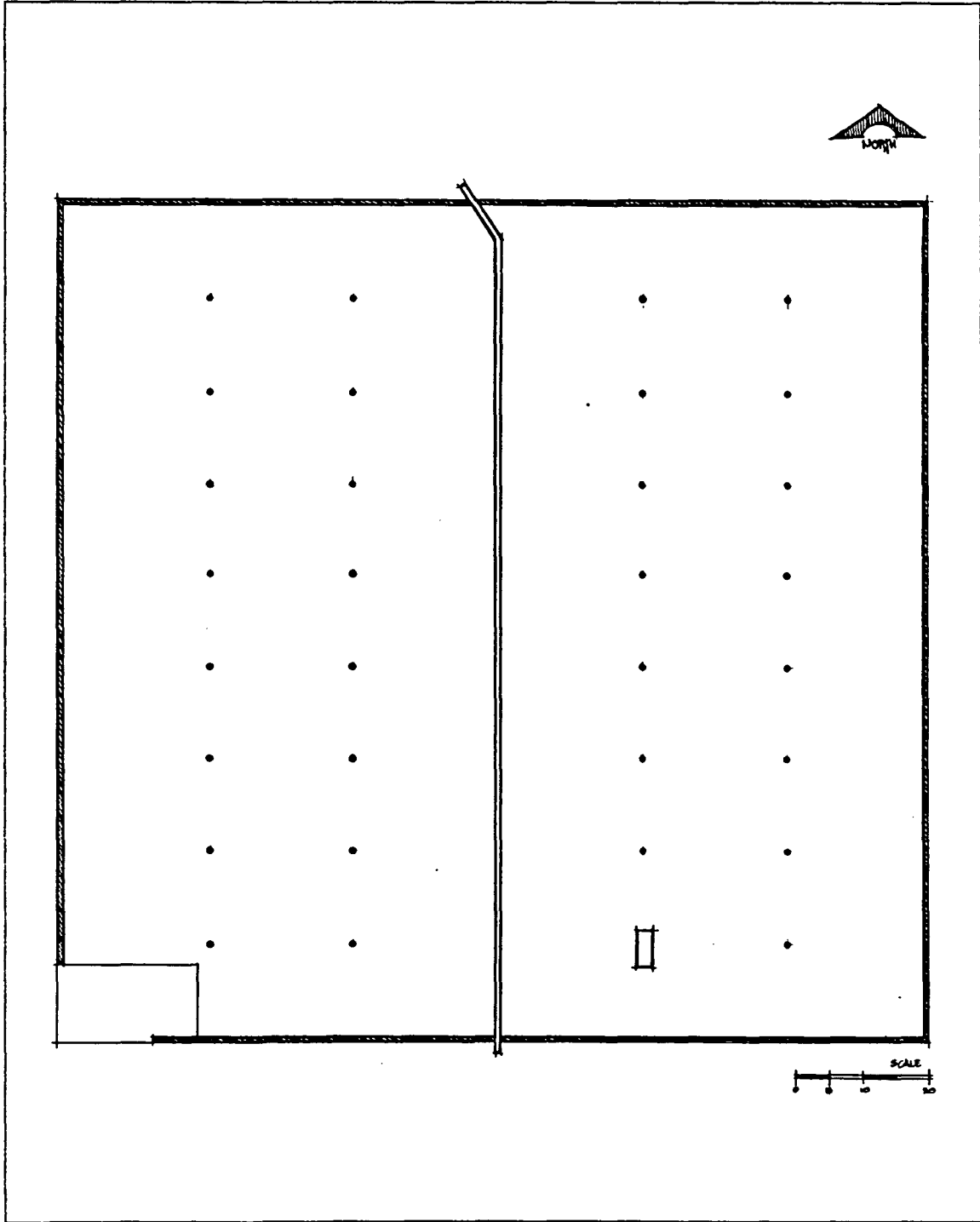


Figure 3. The roof as site

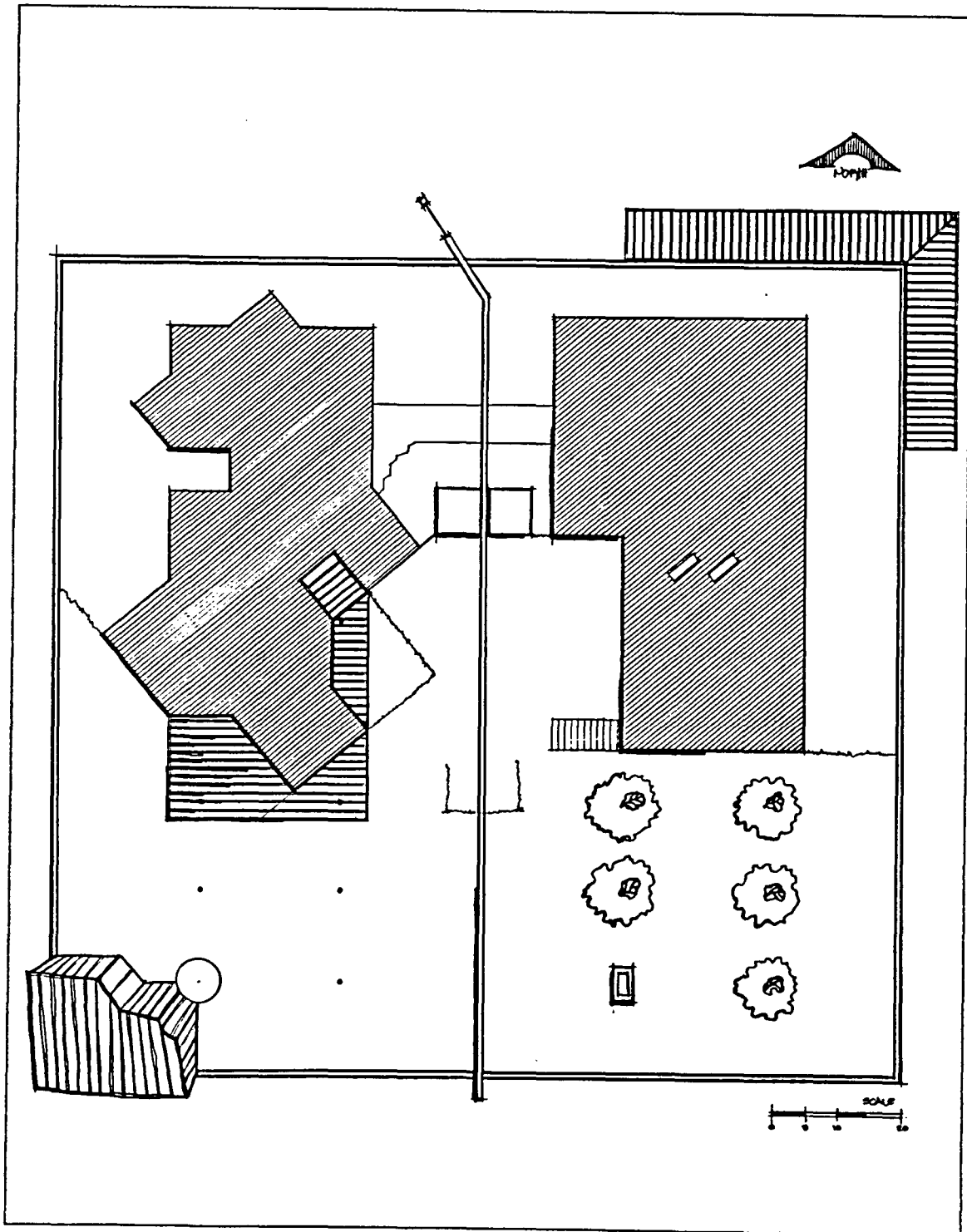


Figure 4. The penthouse in the site

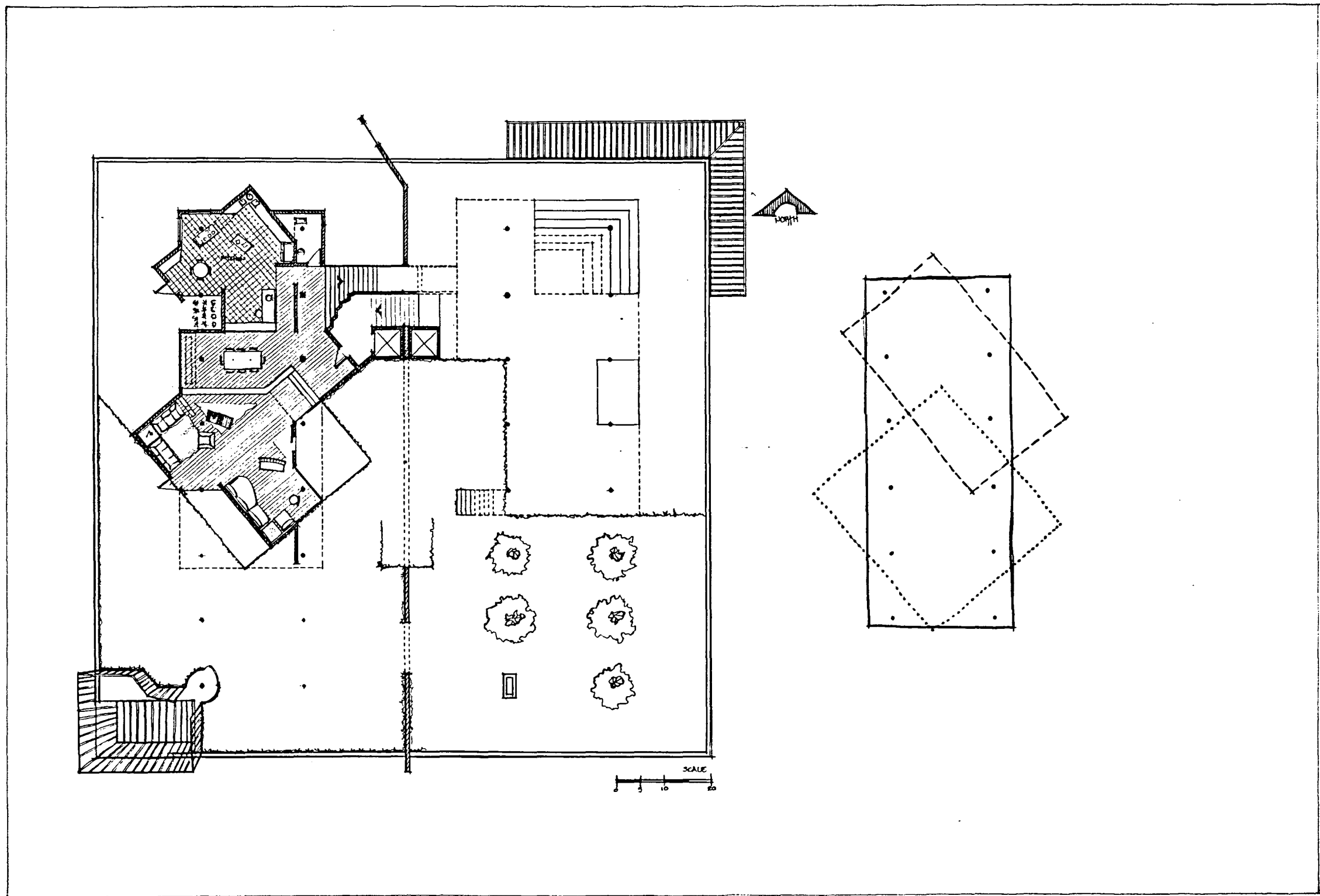


Figure 5. Penthouse's first floor, the western 'place'

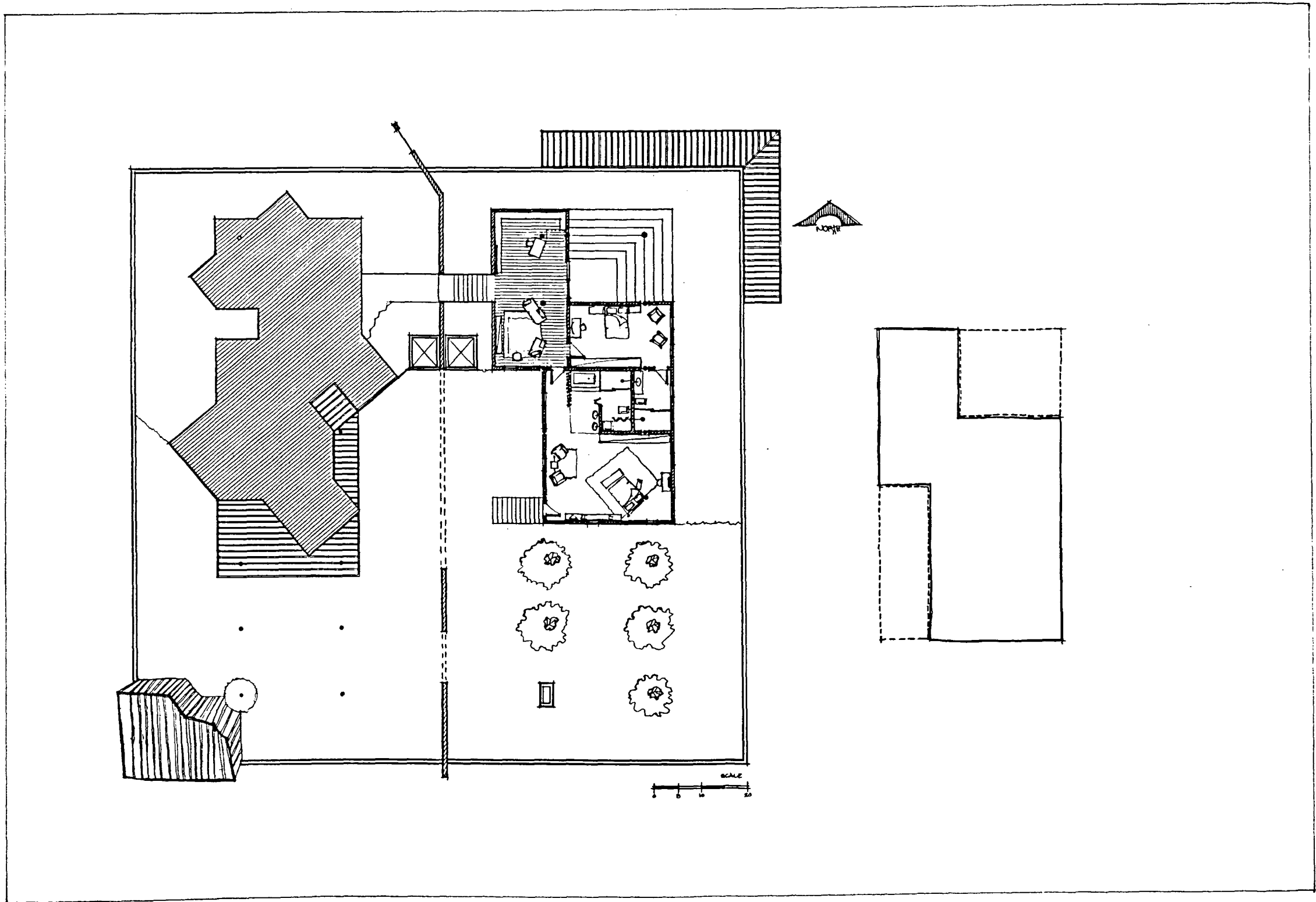


Figure 6. Penthouse's second floor. the eastern 'place'

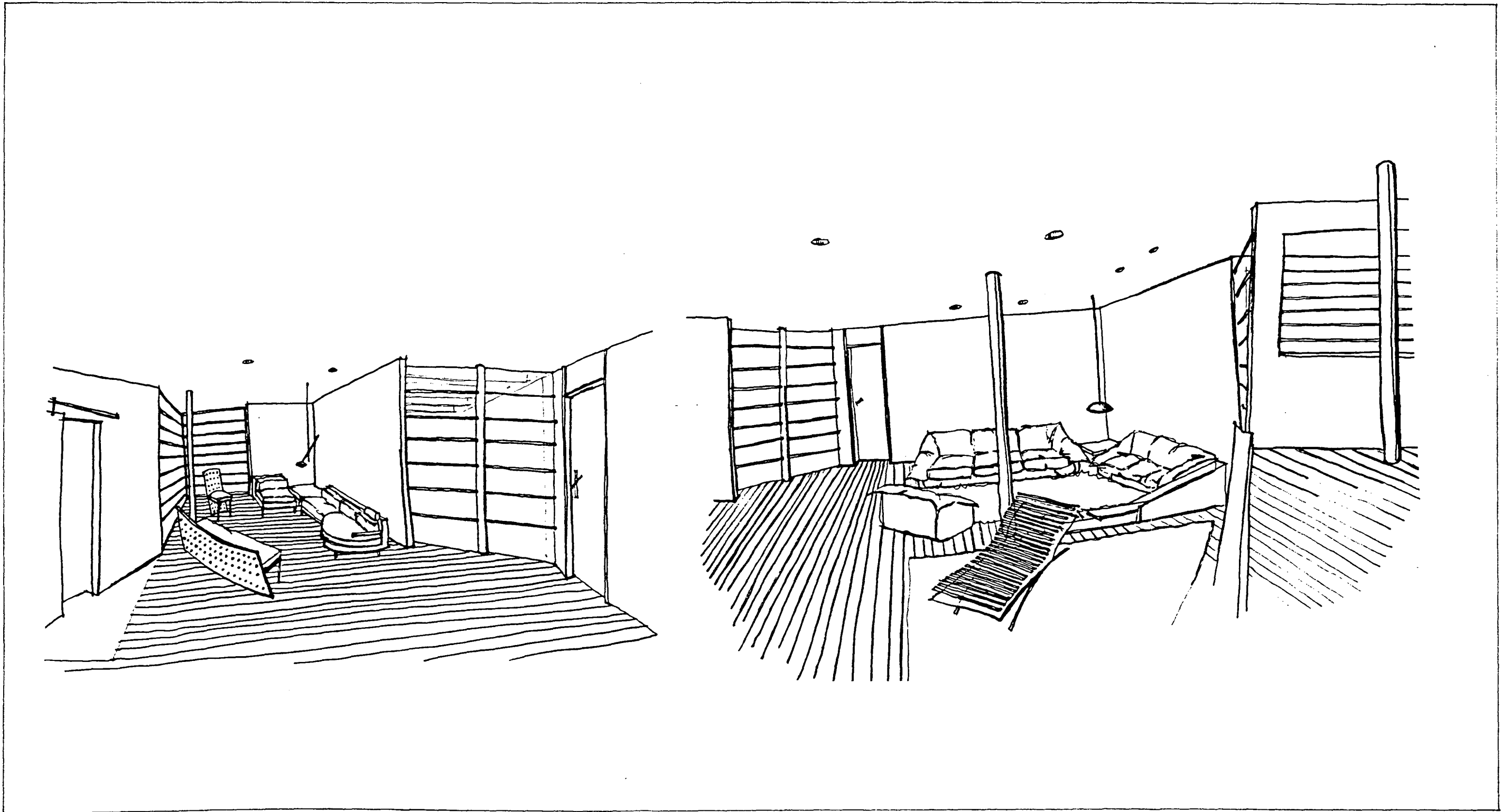


Figure 7. Penthouse's interior

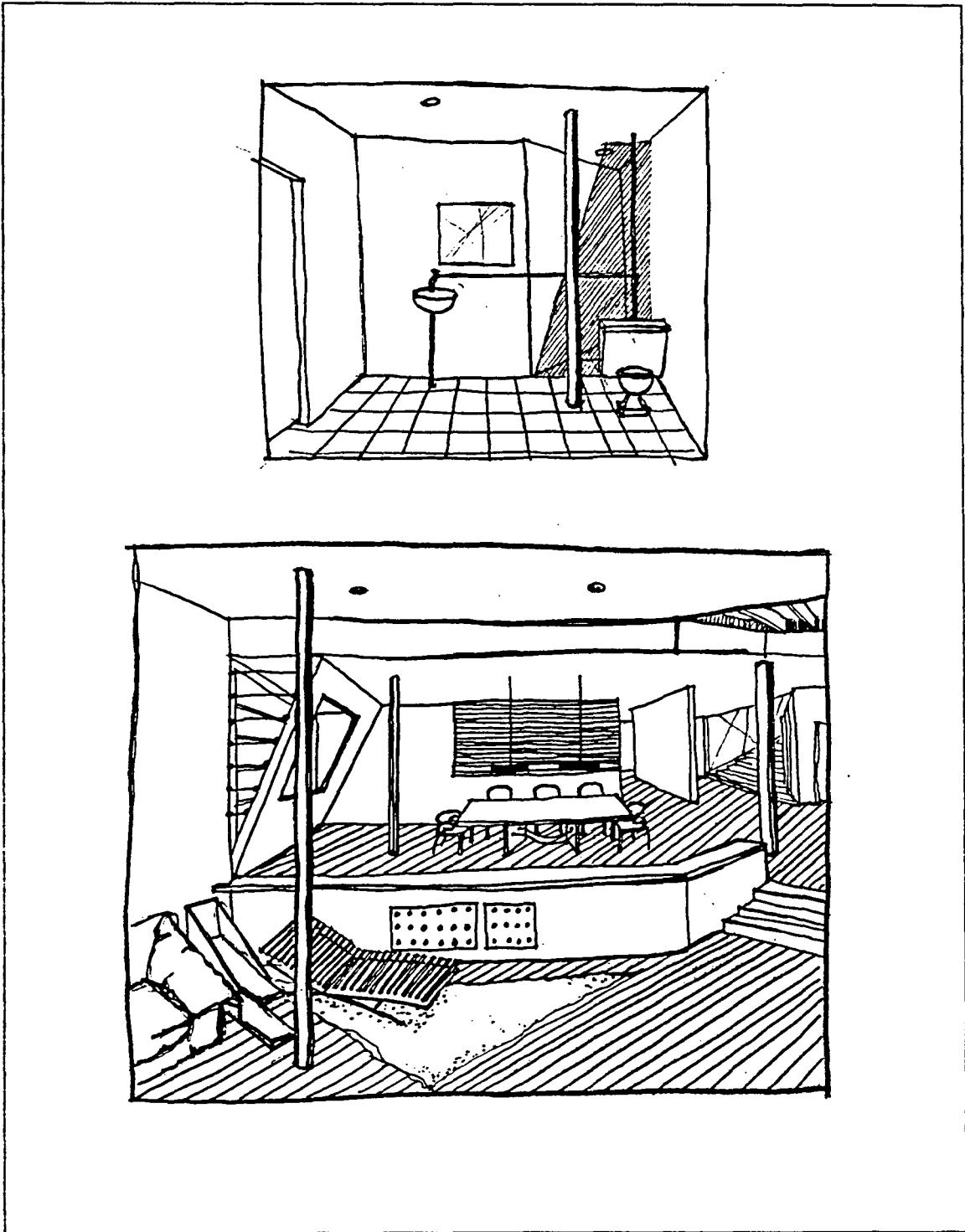


Figure 8. Penthouse's interior

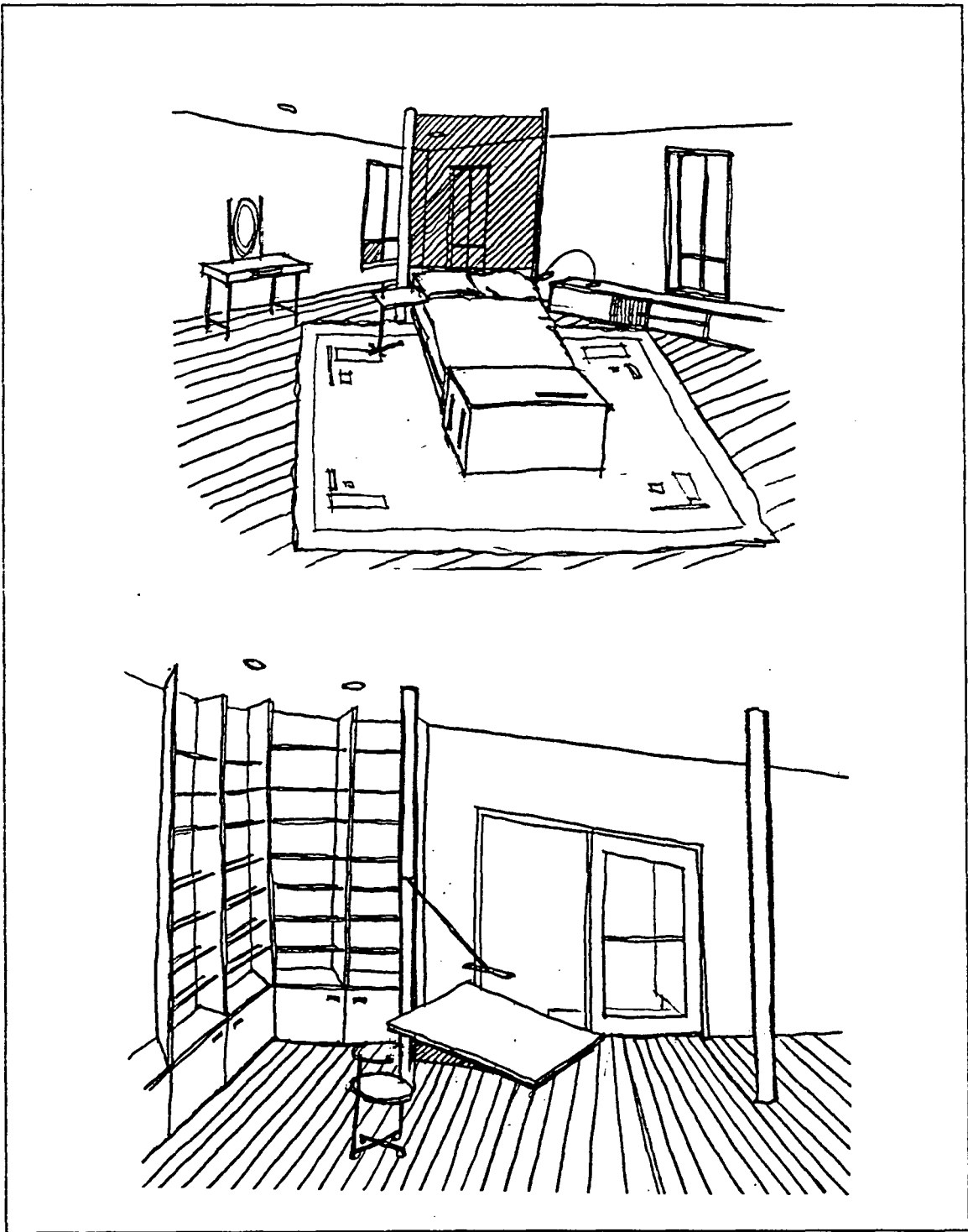


Figure 9. Penthouse's interior

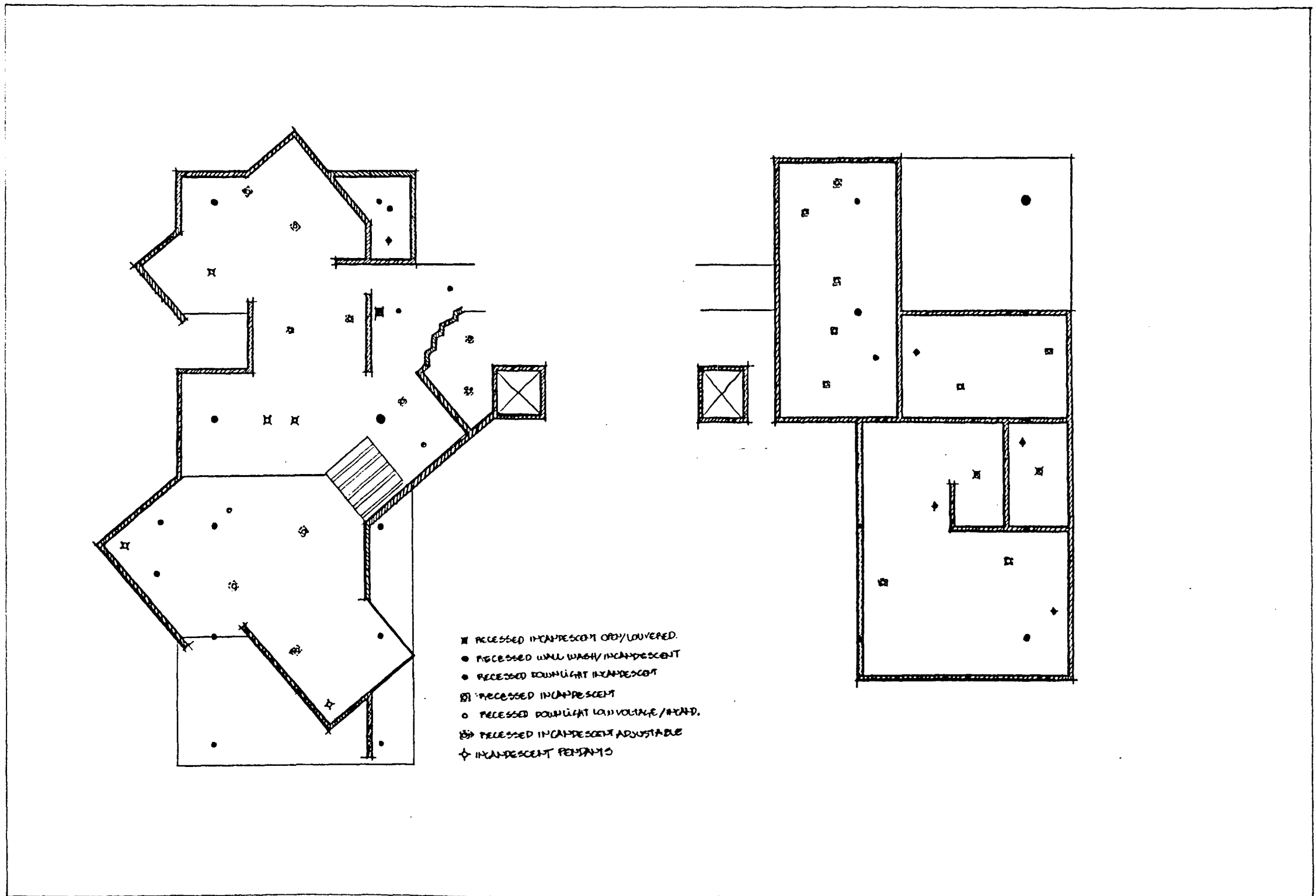


Figure 10. Reflected ceiling, western and eastern places

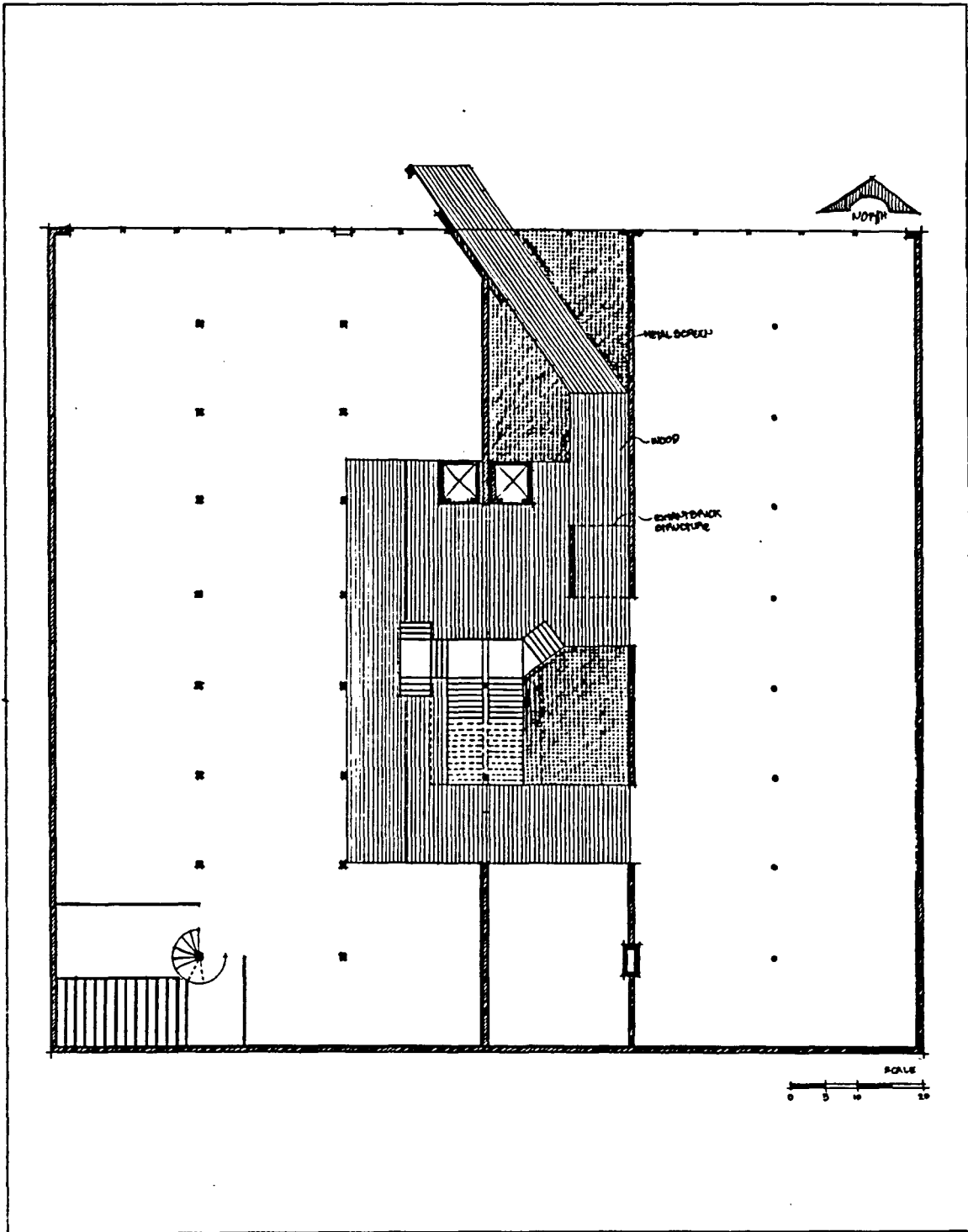


Figure 11. Building entrance

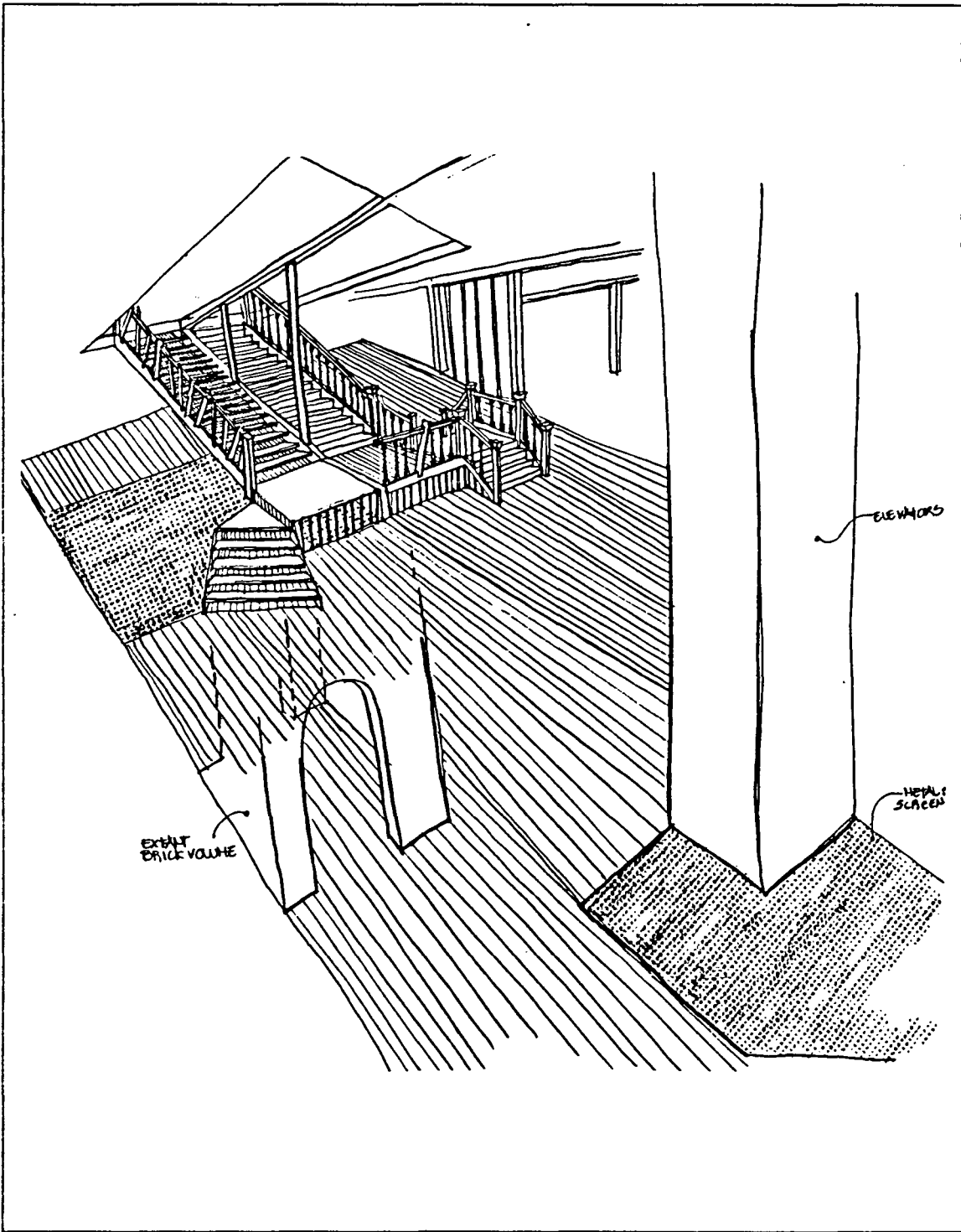


Figure 12. Building entrance/stair Volume

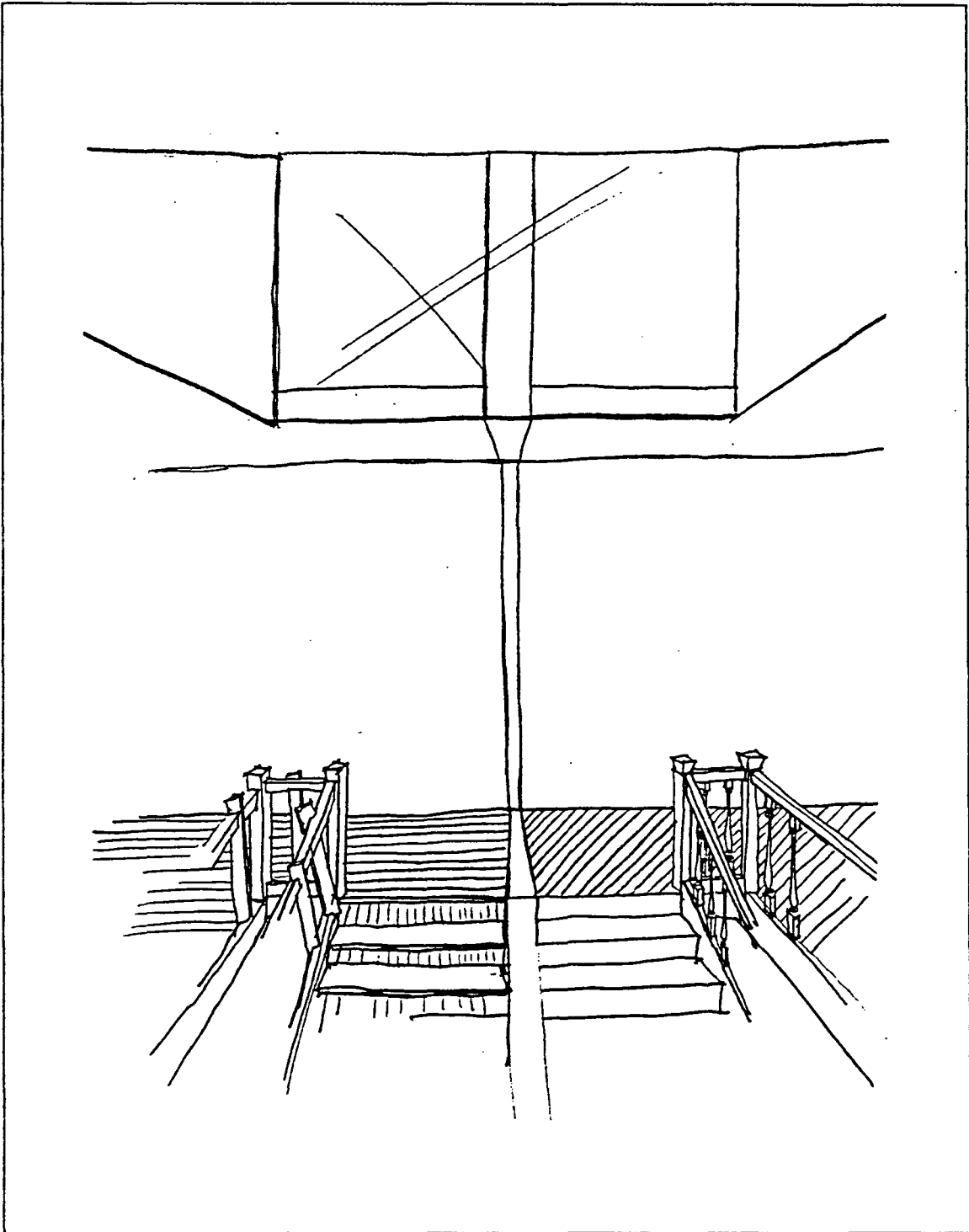


Figure 13. Stair volume (upper part)



Figure 14. The model, front facade (north)

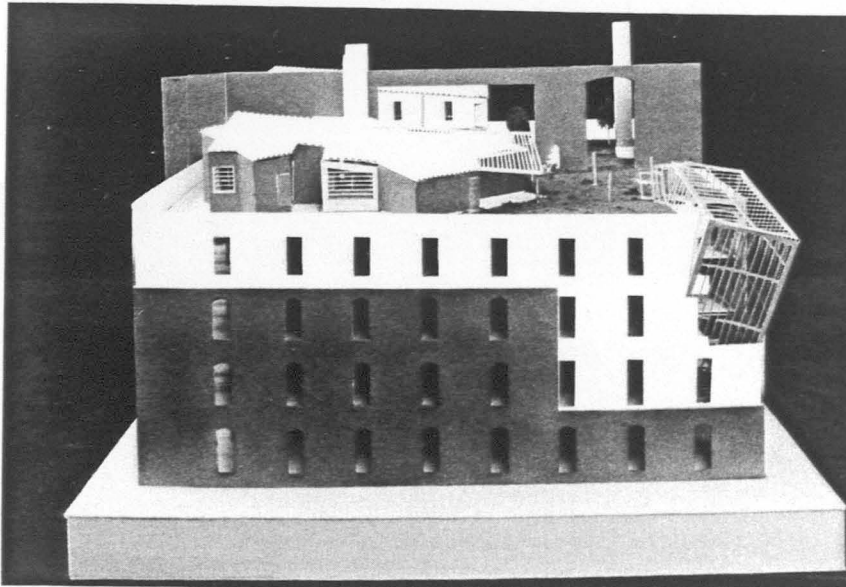
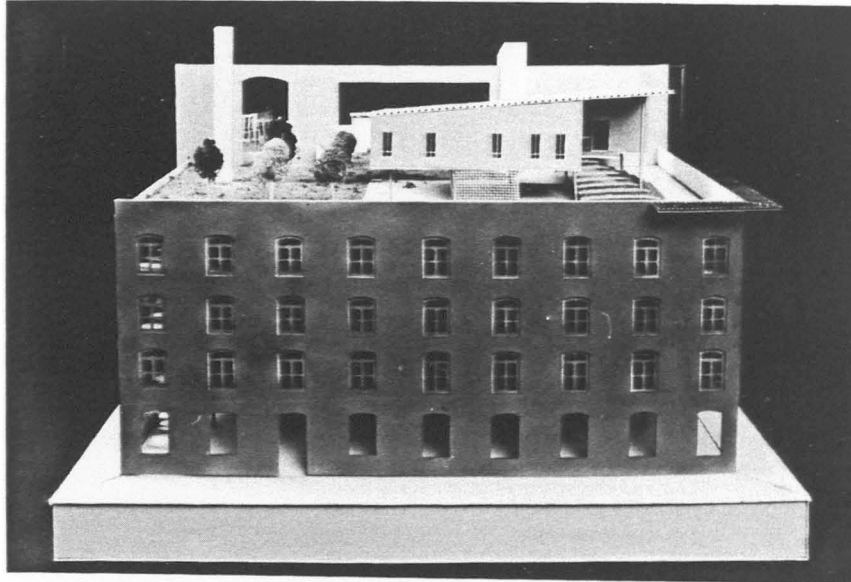


Figure 15. The model, the corners

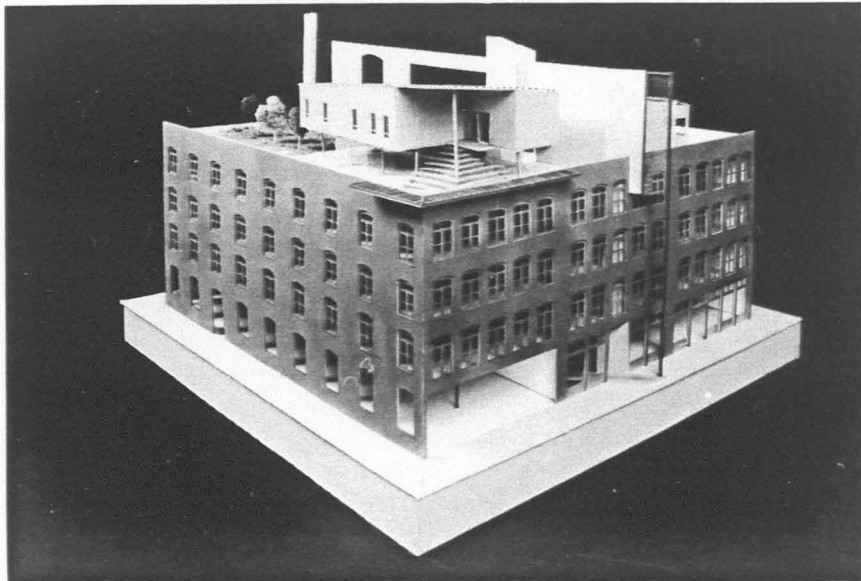


Figure 16. The model, the entrance and northeast corner

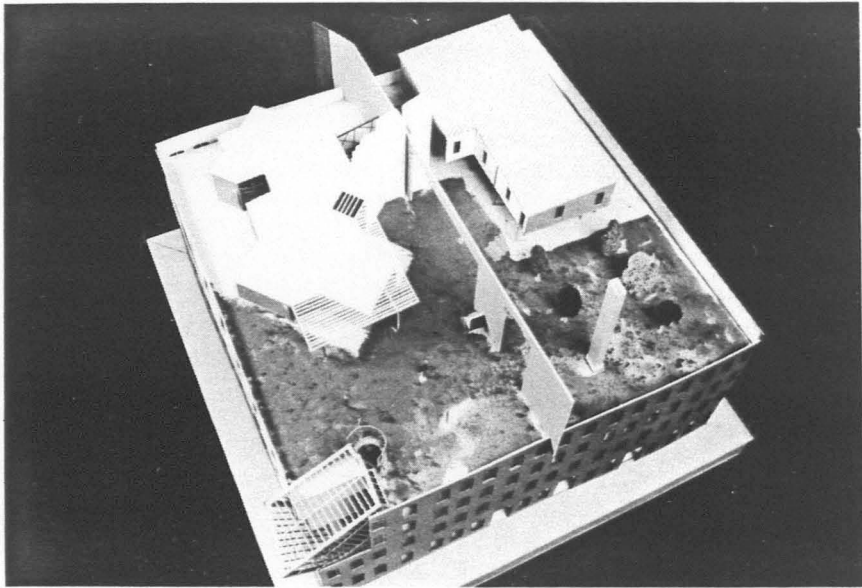


Figure 17. The model, the roof as penthouse



Figure 18. The model, penthouse's interior

Conclusions

Searching for the essence of the Lederer Strauss building, using the existential theories of Norberg-Schulz, kept my awareness of the building as a figure in its district and city, and of the building's interior as the articulation of this figure in a smaller scale. This understanding of levels or scales that interact to make up an entirety is a valuable concept for designers who seek a philosophical stance for the improvement of an environmental image with a more humanistic view. I found Norberg-Schulz's philosophies to be applicable for any level of the built form, as he himself states, from geography to things. Because Norberg-Schulz's theories are philosophical, one might think that they are not practical, but that is wrong. His theories promote a background of knowledge that encourages designers to objectively perceive environmental images and to intervene in them. His theories erase the possibility of arbitrary design gestures because as soon as we accept their value, our concern is with the existential qualities of a place.

In this case study, I applied Norberg-Schulz's theories to the rehabilitation of an historic building. I dealt with the levels of 'things' and of 'house'. Although it seems to be implied in Norberg-Schulz's work, the sublevels of district/neighborhood and of public buildings/private uses that I also explored in this study, are not stated in

Existence, Space and Architecture. However, I found that the concepts implied in his levels were useful to me in exploring scales which he did not elaborate.

In my search for the 'spirit' of the historic building the study of archetypes created by Thiis-Evensen was very important. Thiis-Evensen's study offered me the possibility of finding the elements and figures that compose the existential quality of the building. His theories are a more detailed study of the different existential levels stated by Norberg-Schulz.

A disadvantage of the study was only working with the existential qualities of the building, rather than working with a specific client at the same time. The isolated study, removed from the normal reality of practice in which a client's participation would be essential, limited the level of detail that I could develop in the design interpretation of the 'spirit' of place. Therefore, I could bring the building's interior out and could reinterpret it to a certain detail but the absence of a real user kept me from a deeper interpretation of the interiority.

I felt that the archetypes gave the possibility of more control over the human experience desired in a place. To use the 'theory of archetypes' in a historic building gave me a strong understanding of the qualities of the place and promoted, after using it for analysis, a great deal of

manipulation on interpreting the building's character to a contemporary time.

All these philosophical and theoretical concepts are, in essence, a humanistic methodology that promotes a good background for design intervention at any scale. Upon completion of the design, as I reflect back upon the designers' work that I reviewed, I see in some of their work an unawareness of these existential concepts. However, all the designers I reviewed were concerned with a stronger environmental image, and they all tried to improve it based on their perception of what was valuable as a design statement.

If I had the time, I would have applied the Norberg-Schulz and Thiis-Evensen's theories to analyze the designers' work. This attitude would better define their design intentions and it would test their conscious or unconscious application of the existential theories and whether they would benefit from these theories.

I recommend that the design philosophies and theories of Norberg-Schulz and Thiis-Evensen should be incorporated in the education of designers because it is a humanistic approach. It should be as inherent to the design professionals' thinking as structural, economic and technical concerns.

I think this study is compatible with the Standards general guidelines and can be considered as another way of reading it. This study questions the guidelines about the

true meaning of the 'character of a place' and adds to the guidelines' interpretation a humanistic approach that has been missing in some of the preservation work that has been done. It is not a matter of adding or subtracting paragraphs to the guidelines but it is a matter of how you approach them and which intention you have, economic, politic, humanistic, or all of them.

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