8-2006

Photography in Architecture: The Transformation of Reality

Haley E. Chapman
University of Tennessee, Knoxville

To the Graduate Council:

I am submitting herewith a thesis written by Haley E. Chapman entitled "Photography in Architecture: The Transformation of Reality." I have examined the final electronic copy of this thesis for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Master of Architecture, with a major in Architecture.

Marleen K. Davis, Major Professor

We have read this thesis and recommend its acceptance:

Brian Ambroziak, Barbara Klinkhammer

Accepted for the Council:
Dixie L. Thompson

Vice Provost and Dean of the Graduate School

(Original signatures are on file with official student records.)

To the Graduate Council:

I am submitting herewith a thesis written by Haley E. Chapman entitled "Photography in Architecture: The Transformation of Reality." I have examined the final paper copy of this thesis for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Master of Architecture, with a major in Architecture.

Marleen K. Davis, Major Professor

We have read this thesis and recommend its acceptance:

Brian Ambroziak

Barbara Klinkhammer

Acceptance for the Council:

Vice Chancellor and Dean of Graduate Studies

PHOTOGRAPHY IN ARCHITECTURE: THE TRANSFORMATION OF REALITY

A Thesis
Presented for the
Master of Architecture
Degree
The University of Tennessee, Knoxville

Haley E. Chapman
August 2006

Dedication

I would like to dedicate this thesis to my family and friends who have supported and encouraged me throughout this entire process. They have gracefully endured incessant discussions about "Photography in Architecture", and were very understanding every time I declined yet another dinner or get-together in order to work a few more hours. Even though they didn't quite understand "the little architecture thesis world" that consumed my entire being, they knew how important that it was to me, and that they understood.

Acknowledgements

I would like to thank each of my committee members for their support and dedication to this thesis project. They have each, in their own unique way, contributed a great deal to the development and success of this project as well as to my education here at UT.

I would like to give special thanks to my primary advisor, Marleen Davis, for her unwavering support and encouragement throughout this project's entirety.

Abstract

"The object of art is not to reproduce reality, but to create a reality of the same intensity." - Alberto Giacometti

"...representation itself is not a reflection of some "reality" in the world about us, but is a means of casting onto that world a concept – or a subliminal sense – of what reality is." -Ackerman, 121

Photography informs our perceptions of reality. Through various themes or techniques of transformation, the photograph exposes reality as an abstraction of itself and alters the way that we see and understand our surroundings. This way of seeing, or "photographic vision", is especially important in the visual field of architecture. As architects, we aim to create "moments of experience" within a building. By utilizing the photographic themes of transformation in the creation of these "moments", we can capture the same sense of illusion that is exposed in photography. As representations of themselves, these "moments" will offer a glimpse of an alternate reality.

The small-scale urban setting can benefit from a public building that embodies these ideas. Many small downtown areas have suffered misuse and neglect over the past decades, and are now attempting to reverse these effects through major revitalization efforts. A work of architecture based on the transformation of reality will not only encourage revitalization, but also become a symbol of the city's aspirations.

Museums engage our sense of vision. Their primary function is to display works of art, each of which becomes its own "moment of experience". Therefore, ideas of photographic transformation, altered perceptions, and "moments of experience" will be fully explored in the design of a museum.

TABLE OF CONTENTS

List of Figures

I. Thesis Statement / Introduction

This thesis investigates four themes of transformation in photography and explores how they can provide the framework for an architecture that captures articulated "moments" of illusion. The themes are: 1) Decontextualizing Reality, 2) Flattening Space, 3) Directing Vision, and 4) Capturing Time.

Photography captures the fleeting moments of our existence. It freezes single instances of human experience in times and space and promotes them to profound moments of reflection, recollection, and observation. As a creative art, photography not only captures, but also transforms these fleeting moments. As Barbara Savedoff says in her book *Transforming Images:*

> Photographs acquaint us with things that would otherwise be inaccessible. But photographs do not simply record; their fascination is not simply that of preservation. Photographs transform their subjects. They have the power to make even the most familiar objects appear strange, the most chaotic events appear structured, or the most mundane items appear burdened with meaning (Savedoff, 2).

Once transformed, each photographic moment becomes an isolated illusion, an idealized version of truth.

Likewise, architecture aims to capture isolated "moments of experience" in built form. Whether through the occurrence of windows and frames within which to control a view, the measurement and exaggeration of light to define a moment, or the articulation of an intended angle of approach, architecture becomes a collection of "moments" that reveal the architect's intentions through experience.

I believe that photography offers an invaluable tool for exploring the potential of the transformation of reality in a two-dimensional image. Just as a "good" photograph of a work of architecture can enhance its meaning or significance by transforming it according to the four themes, I believe that the application of these themes in architecture can elevate the experiences within a building to profound moments of an alternate reality.

Photography is unique due to its connection to reality. Painting, drawing, sketching and graphic design have the potential to transform reality in much the

same way as photography. However, photography is inherently different in its technology. The magic of painting is created by what the artist chooses to include, whereas in photography, it is what the photographer chooses not to include that has a lasting impact on us. Furthermore, photography has a direct connection to reality. We know that what we see in a photograph is a depiction of what actually exists. Therefore, when we see reality transformed through a photographic image, it is particularly intriguing because the camera does not lie. The same transformation in a painting would not have quite the same effect because the source of the painting is the artists' imagination, whereas the source of a photograph is reality or the physical world. Ultimately, the painter constructs an image while the photographer exposes one.

This does not mean, however, that photography simply documents our surroundings. A photographer is an artist in the sense that he/she chooses what part of reality to convey, and under what circumstances. Several techniques may be used to portray an object or scene as a transformation of reality. I will discuss many of these techniques such as framing, point of view, planarity and depth, juxtapositions of subject and space and light and shadow. These techniques can be broken down into four categories or themes of transformation:
1) Decontextualizing Reality, 2) Flattening Space, 3) Directing Vision and 4) Capturing Time. These themes of transformation are specific to photography in that they expose reality as a representation of itself rather than constructing a new reality through the imagination.

II. Background: Perception

This thesis is grounded in the beliefs that 1) imaginative acts depend on perceptions of reality and 2) that photography has the ability to inform our perceptions of reality. Therefore, the following discussion concerning the architect's mental process of design will illustrate the underlying connection of photography and architecture and serve as the foundation for the application of the ideals presented in this paper.

The role of the photographic image in the production of architecture hinges on three important phenomena regarding the human psyche: experience, perception and imagination. When viewed as a sequence of events, these three phenomena illustrate a mental process that can determine one's capacity to create architectural form.

In today's society, where photographic images of architecture are endlessly reproduced in books and journals, and are available at the click of a mouse, these images often become our first encounters with most great works of architecture. Walter Benjamin illustrates this point in his essay "Little History of Photography" by saying: "Everyone will have noticed how much easier it is to get hold of a painting, more particularly a sculpture, and especially architecture, in a photograph than in reality (Benjamin, 523)." The ability of photography to introduce architecture, especially great works of architecture, to the masses forms the basis of its connection to architectural production. According to Julius Schulman in his book *Photographing Architecture and Interiors*:

> The task of conveying the facts of their (the buildings') existence, meaning, and importance is rapidly devolving on photography which performs this function in several ways. It enhances awareness of an already-familiar environment. It prepares for the actual experience of being at or in a building. It substitutes for that experience until it occurs, if it ever does. And it freezes the design, thus providing a quality of experience never to be found in being in the building itself (Shulman, 1-2).

By providing what is, in most cases, our primary exposure to architecture, the photographic image becomes our primary experience of it as well. It is through experience that one's perceptions are formulated. To perceive a thing is to become aware of it through the senses. By observing photographic images of architecture, we rely on our sense of vision to inform our awareness and understanding of the built environment. Walter Benjamin continues: "But one is brought up short by the way the understanding of great works was transformed at about the same time the techniques of reproduction were being developed (Benjamin, 523)." Thus, photography can create perceptions of architecture according to the visual experience that it promotes.

Finally, imaginative acts depend on perceptions of reality. Our ability to create architecture depends in part on our perceptions of what architecture is. Shulman comments on photography's ability to alter an architect's perceptions and in turn influence his/her imaginative processes:

> ...he will also learn, through the camera eye, many things about his own craft. For example, an element that may have seemed minor in the design concept can be thrown into startling prominence by the camera eye and this in turn may lead to a whole new train of ideas in the designer's mind. Again, photography is an excellent means of exploring and recording for future reference whatever aspects of a design are intriguing or puzzling or just worthwhile (Shulman, 5).

Due to the fact that the photograph plays such an important role in defining our experiences and perceptions, it can be seen to play a crucial part in the imaginative process of design as well. In many instances, this is an unconscious phenomenon, however, the goal of this thesis is to consciously incorporate photographic techniques of transformation into a work of architecture.

III. Perception and Representation

In order to clearly explicate how photographic transformations of reality may alter our perceptions and become the impetus for the creation of architecture, it is important to look to the emergence of previous methods of representation and their influence on past generations of architectural production. These include but are not limited to the development of the perspective drawing during the Renaissance period, the revival of the physical scale model in the 20th century Modern movement, and the current explosion of computer technology and CAD applications.

Prior to the 15th century, the representation of architecture was limited, and design was primarily a constructive practice, usually developed through geometric rules and direct, physical application. However, the period of the Renaissance (15th to 16th century), equipped with new methods of creating perspective drawings, marked a milestone in the representation of architecture. A distinct shift in the guild system, previously skilled in masonry, carpentry, and other technical fields, to that of architects trained in art and sculpture paralleled this development of artistic representation in architecture. It is no surprise, therefore, that much Renaissance architecture attempted to capture artistic ideals. It seems quite probable that the artistic goals of Renaissance architects was in no small part due to the expression of vanishing space, point of view and points of focus illustrated in the new perspective drawings of the period (Giddings, 2).

In the early 20th century, another form of visual representation, the physical model, re-emerged as a primary means of expressing and exploring architectural ideals. Participants in the Modern Movement utilized this method of representation to investigate ideas based upon the new industrial technologies of the period (Giddings, 3). The physical model provided an appropriate tool for expressing and exploring an architecture free from ornament and decoration. The expression that the physical model allowed the pure forms representative of this period was perhaps its appeal to Modern architects.

Perhaps the most obvious example of the way in which a specific method of representation can inform architecture is illustrated by the current role of the computer in the design profession. Computers have provided us with the ability to model and render objects in three-dimensional space, to animate these objects, and to actually interact with them through fly-throughs and virtual reality. This seemingly "real" involvement with a two-dimensional image alters our perceptions of architecture. These altered perceptions affect the way in which we design through their impact on our understanding of architectural space.

Photography, born in the mid-19th century, did not immediately offer a method of representation capable of informing the design process. When photography emerged as a new technology, it faced many obstacles in becoming a creative tool. Initially, the photograph was viewed as a means of documentation, as a tool for recording the environment, and was considered inferior to painting and other gestural arts. Early critiques of the new medium relied on the belief that there was no intellectual involvement with the subject, no imaginative process through which to express ideals beyond nature and ourselves.

The work of Eugene Atget and the Surrealist movement played a major role in pushing photography beyond the boundaries of documentation and into the realm of experimentation and creativity. Atget's photographs offered a particular presentation of reality. The evocative quality of his work "made magic appear from the apparent banality of everyday life and places (Agrest, 8)." The element of surprise and displacement of meaning in his work attracted the Surrealists who consciously used such techniques as a symbolic device. Together, Atget and the Surrealists emphasized presentation and perception rather than representation, proving that a photograph could express more than facts, that it could, in fact, attach meaning to an image of reality (Agrest, 8).

In his essay "Eye and Mind", Marleau-Ponty describes his interaction with a painting: "...I do not look at it as I do at a thing; I do not fix it in its place. My gaze wanders in it as in the halos of Being. It is more accurate to say that I see

according to it, or with it, than that I see it (Marleau-Ponty, 164)." He then quotes Giacometti who says: "What interests me in all paintings is resemblance – that is, what is resemblance for me: something which makes me discover more of the world (Marleau-Ponty, 165)." The same can be said of a photograph in its ability to "capture an aura of a thing without directly representing that thing (Benjamin, 518)." As a creative art, photography offers images of the world, not for the sake of creating images or directly representing reality, but to show us a way to look at reality; to provide a lens, so to speak, through which we may look to obtain a greater understanding of the physical world; and to provide a specific path that guides us through reality and teaches us new things along the way. As Daniel Naegele says in "Object, Image, Aura, "the photograph is didactic. It teaches the "reader" to see (Naegele, 3)." It is this notion of creativity in photography that frames the central proposition of this thesis.

It was not until photography achieved this status of a creative art that it became a means of expressing architectural ideals. It's full potential, however, has yet to be thoroughly explored regarding its ability to express ideals applicable to architectural production. Just as the perspective drawing, the physical model, and the computer have promoted enlightened perceptions and understanding of architectural form and space among generations of designers, I believe that the photograph, in its ability to transform reality, is fully capable of elevating architecture to "new expressions, new investigations, richer perceptions (Vignelli, 18)."

IV. Four Themes of Transformation

With this understanding of the way in which photography, as a creative art, transforms reality and alters our perceptions of form and space, I will now focus on the intent of this thesis. I will explore the four themes of photographic transformation and discuss how they can be translated into architectural form. These themes, as they are transformed through photography, will serve as the basis for a hypothetical design project encompassing the ideas presented in this paper.

I will explore a collection of works from several 20th century photographers who utilize the four themes in their representations of reality. Imogen Cunningham, Walker Evans, Lucien Herve, Henri Cartier Bresson, and others provide a broad range of material for illustrating the transformation of reality in photography.

In order to illustrate how the themes can be translated into architectural form, I will look at a collection of Le Corbusier's architectural achievements that are believed to have been consciously developed according to photographic principles. As case studies, Le Corbusier's works will provide the necessary connection between the ideas in this thesis and their application in architecture.

Each theme will be further explored in its connection to architecture through a precedent study relevant to both the proposed building type and the application of photographic transformations in architecture.

A. Decontextualizing Reality:

Issues of context are of primary importance in the transformation of reality through photography. As Walter Benjamin says in his "Little History of Photography", "when photography takes itself out of context, ...when it frees itself from physiognomic, political, and scientific interest, it becomes creative (Benjamin, 526)." By removing an object from its surroundings, the photographer frees it from the physical constraints of place, allowing greater expression of singular elements or ideals. These singular elements become isolated moments

rather than parts of a whole. Lucien Herve uses this technique of decontextualization extensively in his photographs. He portrays scenes or objects as abstract shapes and compositions. However, he generally includes one figure to provide a sense of scale and orientation for the viewer. For example, in his photograph *PSQF* (figures 1 and 2), he transforms the subject and snow-covered ground into bold geometric shapes. If it weren't for the figure of the man running in the upper left corner, this image would be unrecognizable. Intensity of light and shadow further illustrate the decontextualization of reality in photography. The practice of obscuring or amplifying certain elements within a photographic composition through varying levels of illumination is commonly utilized by photographers. Ambiguous representations of positive and negative space are often created through this photographic technique. In many cases the subject is distorted beyond recognition, and the quality of light presented, no longer representative of the subject, actually becomes the subject.

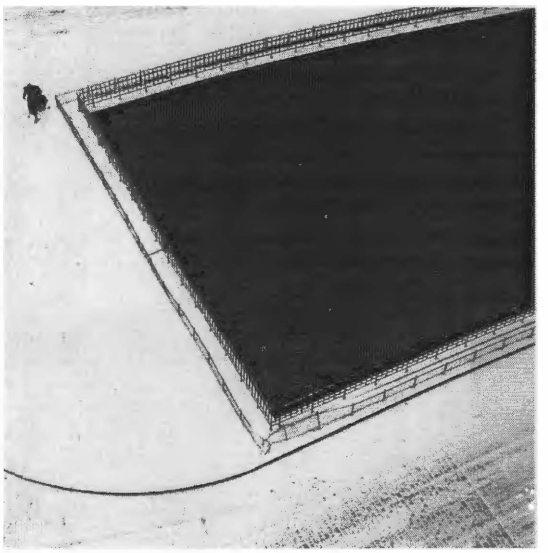


Figure 1
***PSQF*, 1947**
Lucien Herve

Figure 2
Diagram of Transformation 1
Author

This effect can be seen in Imogen Cunningham's *Leaf Pattern* (figure 3). Photography can also decontextualize the *meaning* of reality. Eugene Atget's photographs of Paris (figures 4 and 5) exemplify such decontextualization by bringing a Surrealist element of surprise and displacement of meaning to scenes of everyday life through "the particular way in which the city and its places and buildings is presented, in its nostalgic emptiness, in its uninhabited humanity, in its monumental stillness and suspension in time and space...(Agrest, 8)." This act of decontextualization strips reality of its original meaning and re-defines it according to isolated frames of reference.

In contrast to the technique of eliminating context, photography can also amplify the contextual aspect of a scene in an attempt to re-define meaning or significance. Through this act of attaching or enforcing specific viewpoints or sentiments to a subject, the photographer reveals additional insight into that subject's reality, beyond that of representation. Much architectural photography uses the contexts of surrounding buildings, landscapes or people to imbue images of architecture with societal and cultural overtones.

Figure 3
***Leaf Pattern*, 1929**
Imogen Cunningham

Figure 4
***Magasin, avenue des Gobelins*, 1925**
Eugene Atget

Figure 5
***Store, Avenue des Gobelins*, 1925**
Eugene Atget

Figure 6
Case Study House #22, Richard Neutra
From *A Constructed View*
Photograph by Julius Shulman

For example, Julius Shulman's photographs of the Case Study Houses for *Arts and Architecture* magazine, taken throughout the course of the program from 1945 to 1967, not only presented the houses to world, but also conveyed them as a major influence in the history of Southern California architecture. In particular, Shulman's view of Pierre Koenig's Case Study House #22 in Hollywood Hills "does not necessarily document the house but reflects an image of the postwar lifestyle that was to become representative of the modernity of California (Rosa, 54)" (Figure 6).

Case Study: Villa Schwob

To introduce Le Corbusier's photographic sensibility, and to illustrate the theme of Decontextualizing Reality in his work, I will discuss his Villa Schwob. After its construction in 1916, Le Corbusier published altered, airbrushed photographs of this house in *L 'Esprit nouveau* 6 (Colomina, 107). In order to

present a purist aesthetic in these photographs, Le Corbusier eliminated all organic growth and distracting objects (figures 7 and 8). He also removed any reference to the site in order to present the house as an object independent of place. Le Corbusier used similar techniques of alteration in the layout and production of his *Oeuvre Complet*. He ultimately viewed the space of the pages of this publication as a vehicle for enforcing his ideas regarding the architecture presented. For Le Corbusier, architecture lies within the "realm of ideas", and once built, loses its purity. He views photography and page layout as a means to return his work to this "realm of ideas." In Le Corbusier's work, as Beatriz Colomina eloquently states:

> The function of photography is not to reflect, in a mirror image, architecture as it happens to be built. Construction is a significant moment in the process, but by no means its end product. Photography and layout construct another architecture in the space of the page (Colomina, 114)

Precedent Study: Guggenheim Museum

To illustrate the translation of this theme of Decontextualizing Reality into architecture, I will introduce Frank Gehry's Guggenheim Museum in Bilbao, Spain (figure 9). This building replaced dock facilities on a site adjacent to the

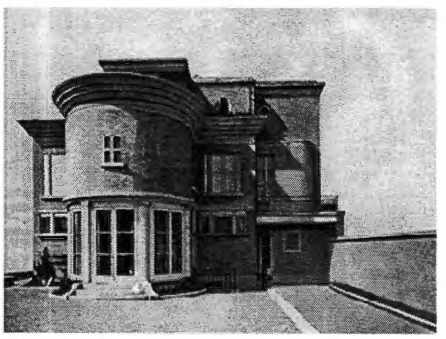


Figure 7
Villa Schwob altered
Le Corbusier
From *Privacy and Publicity*
As published in *Le 'Esprit Nouveau*

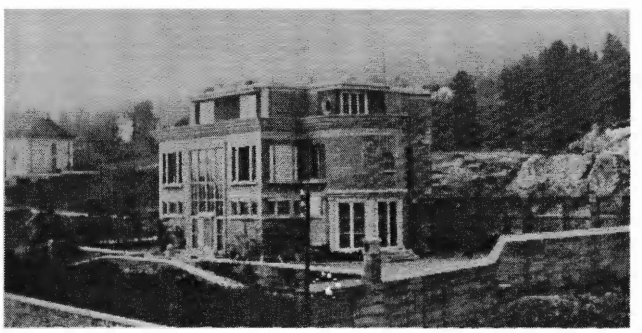


Figure 8
Villa Schwob unaltered
Le Corbusier
From *Privacy and Publicity*

Figure 9
Guggenheim Museum, Bilbao, Spain
Frank Gehry
From www.guggenheim-bilbao.com

Nervion River in Bilbao. This site in Basque Country was chosen to contribute to the revitalization of the area's recession-plagued economic structure. Within one year of operation, the museum received over 1,300,000 visitors, thus proving its success in decontextualizing the city of Bilbao from its former recession as a manufacturing city, and re-contextualizing it as a thriving metropolitan area and reference point for Europe's Atlantic seaboard (Moffett, 560-561). "The idea was to bring the city right to the doors of the building (Guggenheim-bilbao.com)," and that is just what happened. The city is now associated in most visitor's minds with the museum. They are virtually perceived as one and the same.

The interior of the building is also a departure from the traditional museum setting, with its irregularly shaped gallery spaces and enormous scale. However, an underlying order between the architectural shapes and the content of each gallery exists. This, coupled with appropriate volumes and perspective views from the atrium space, serves to orient the visitor and facilitates the location of galleries and services.

B. Flattening Space:

Any two-dimensional representation of reality ultimately flattens volumetric space. Photography accomplishes this illusion by exaggerating a sense of planarity and depth, juxtaposing subjects at various positions in space, and superimposing reflections onto the field of vision.

By reducing three-dimensional form to a two-dimensional image, photography creates illusions of planarity and depth. The flattening of volumes overlaps sequential spaces onto a singular plane of reference, thus distorting our understanding of spatial experience. For example, notice the way in which the objects in Walker Evans' photograph *Gas Station, Reedsville, West Virginia*, are drawn to the foreground as the space between them seemingly collapses (figures 10 and 11). The distinction between foreground, middle, and background are blurred, as all information demands attention at once.

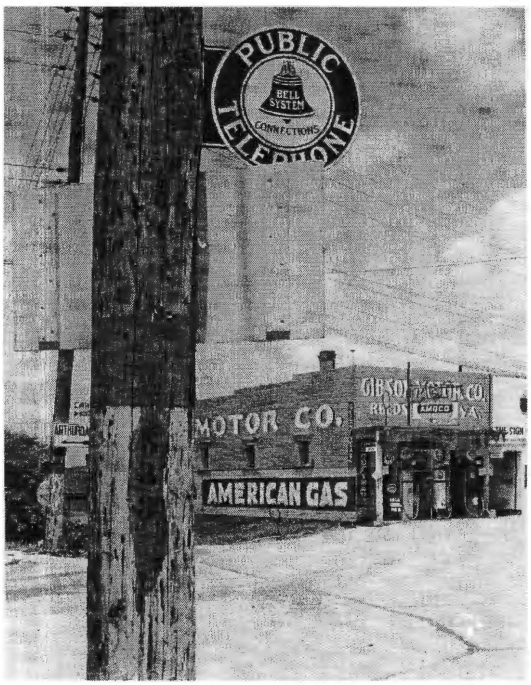


Figure 10
***Gas Station, Reedsville, West Virginia*, 1936**
Walker Evans

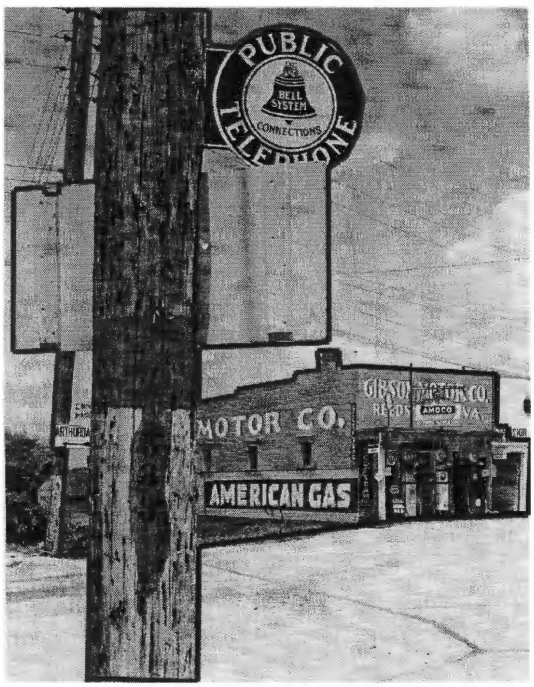


Figure 11
Diagram of Transformation 2
Author

By juxtaposing objects at different intervals in space, photography flattens the space between them. This transformation disrupts our sense of scale by presenting a smaller object in the background as though it were in the same plane as larger objects in the foreground or vice versa. Lucien Herve utilizes this technique in his photograph *Toledo* (figure 12). The magazine display in the bottom right corner is presented as though it were the same size as the balconies on the building in the background.

Reflections provide another technique for flattening space through photography. By capturing reflections of scenes or objects outside or behind the field of vision and superimposing them onto the subject, photography can condense multiple pieces of visual information into a single image. This basically flattens a 360-degree experience of reality into one comprehensive view. For example Walker Evans, in his photograph *New York,* captures a reflection of a construction site in New York City in the window of a building across the street (figure 13). The two scenes lose their connection to reality as they are combined into one image. This photograph is not about the scenes as they exist in reality, but about the illusion created by portraying them as one.

Figure 12
***Toledo*, 1954**
Lucien Herve

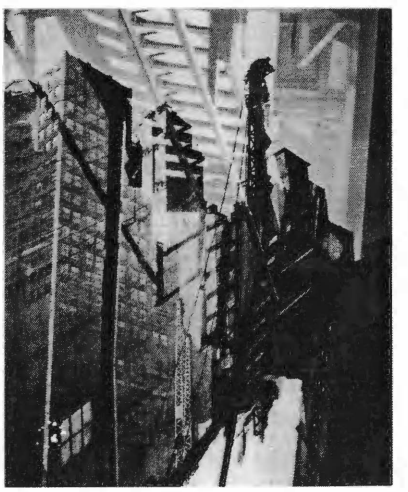


Figure 13
New York
Walker Evans

Case Study: Villa Stein at Garches and Pavilion de l'Esprit Nouveau

Colin Rowe and Robert Slutzky, in their essay, *Transparency: Literal and Phenomenal,* refer to the architectural manifestation of this theme as "phenomenal transparency". Much of Le Corbusier's work employs these same illusions of flattened, seemingly overlapping space. For example, his Villa Stein at Garches (figure 14) displays a horizontal plane of windows behind which multiple spatial stratifications are implied (Rowe, 35).

In Le Corbusier's exhibition pavilions, representation is enlarged to the scale of the architecture itself, and actually becomes the architecture. In his Pavilion de l'Esprit Nouveau (figure 15), Le Corbusier treats the architectural object as an image. This full-scale model was built to represent a living unit to be build as part of a much larger complex. On its side façade, the initials EN are painted. These letters, enlarged to the scale of primary architectural elements, create an illusion of depth, as they appear to recede into the building. The words L 'Esprit Nouveau are given less prominence within the same plane, and appear to overlap the E N. This provides another example of the way in which Le Corbusier translates this theme of flattening space into built form.

Figure 14
Villa Stein at Garches
Le Corbusier
From "Transparency"

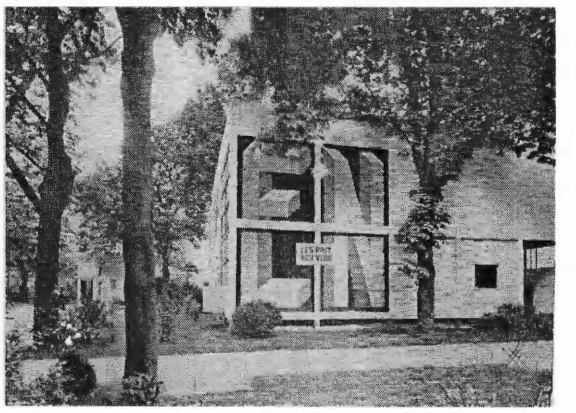


Figure 15
Pavilion de l'Esprit Nouveau
Le Corbusier
From *Oeuvre Complet* vol. 1.

Precedent Study: Barcelona Pavilion

The Barcelona Pavilion (figures 16 and 17) is relevant to this discussion of flattening space through photography not only because of the various spatial readings that can be perceived, but also because of the nature of our understanding of this temporary work of architecture. Before its reconstruction in 1986, this building was experienced solely through photographs. These images display a complex spatial transparency that seems to occupy both interior and exterior space at the same time. Was this Mies' intention, or is this an added bonus, apparent only in the photographs? In any case, the photographs portray this transformation, and they were the only evidence of the original building that Mies Van der Rohe allowed (Dodds).

C. Directing Vision:

The third theme that I will discuss deals with directing the viewer's vision within a photographic composition. Framing and cropping and point of view are techniques that photographers utilize in guiding our vision.

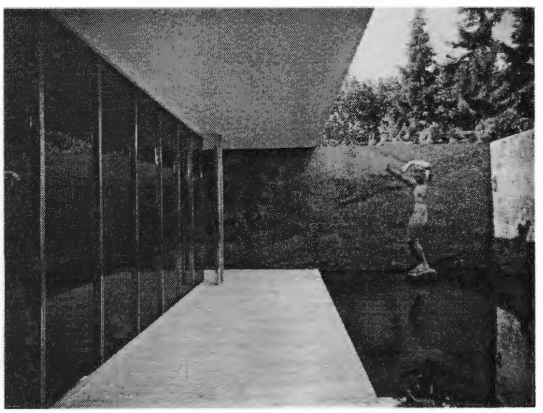


Figure 16
Barcelona Pavilion 1
Mies Van der Rohe
From *Building Desire*
Berliner Bild-Bericht
© Fundacio Mies van der Rohe-Barcelona

Figure 17
Barcelona Pavilion 2
Mies Van der Rohe
From *Building Desire*
Berliner Bild-Bericht
© The Museum of Modern Art

Through framing and cropping, the photographer chooses that slice of reality that he/she wishes to expose. What the photographer chooses to include ultimately becomes framed by incomplete pieces of adjacent objects, landscape, etc. More importantly, perhaps, is that which the photographer chooses to exclude. The nature of photography assures the viewer that there is more to a scene than what is actually represented, however, details of the unknown missing pieces are left to the imagination. Henri Cartier Bresson's photograph *Seilla, Spain* (figures 18 and 19) provides an example of this use of framing to focus the viewer's vision on the subject. Had he taken the photograph from a few steps closer to the boys playing in the street, the frame would have been eliminated and we wouldn't understand this photograph in quite the same way. For instance, without the frame, the viewer would understand the picture as an interaction with the subjects, but with the frame included, we understand it as a distant observation.

Another illustration of this technique of directing vision through framing can be seen in Lee Friedlander's photograph *Untitled* (figure 20). In this

Figure 18
***Sevilla, Spain*, 1933**
Henri Cartier Bresson

Figure 19
Diagram of Transformation 3
Author

Figure 20
***Untitled*, 1972**
Lee Friedlander

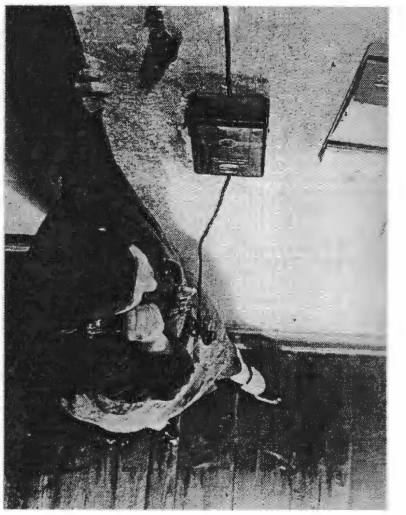


Figure 21
***At the Telephone*, 1928**
Alexander Rodchenko

photograph, Friedlander uses the transparent doorway to frame the two figures while the reflection on the outer glass wall frames the figure of the man in the background. He captures the three framed figures at the precise moment when it seems as though they will converge and disappear into the center of the image.

Point of view is also used in photography to direct the viewer's vision. Every photograph is taken from a particular vantage point, a point of view from which the photographer reveals his/her representation of reality. This angle of approach becomes creative when it reveals the object to us in ways that we would not normally observe in everyday situations. The birds and worm's eye views and extreme close-up views are examples of how the photographer can express reality as a transformation. For example, in his photograph *At the Telephone* (figure 21), Alexander Rodchenko presents a new interpretation of the subject and abstracts the space through his choice of viewpoint. In this manner, photography provides examples of interesting and effective points of view and presents reality as a transformation.

Perspective and frontality must also be included in any discussion of point of view in photography. Perspectival illusions and exaggerations contribute to the transformation of reality through point of view in photography. The various angles of approach, points of focus, and framing techniques taken by the photographer each lend to the photographic illusion of diminishing spatial sequence. For example, in Roberto Schezen's photograph of Villa Malaparte (figure 22), he presents a perspective view of the angled stair, which exaggerates the shape of the architecture and creates an illusion of an inverse perspective. In contrast to perspectival approaches, direct frontal views (seen as elevation) may also be presented through photography. This approach is illustrated in Schezen's photograph of Paestum (figure 23). While this approach does not transform reality in the sense of abstraction, it does present the subject to us in a way that we would not normally experience it. In reality, as we approach an object, our view of it changes with every step. Rarely do we experience an elevational view of an object for more than a passing moment.

Figure 22
Villa Malaparte, Capri, a. Libera
From *Places and Memories*
Photograph by Roberto Schezen

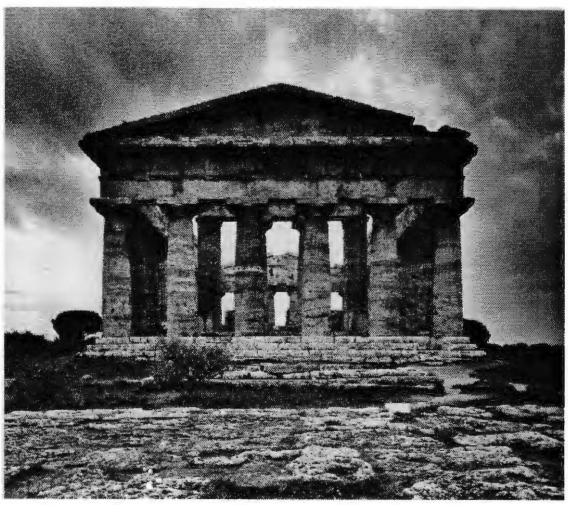


Figure 23
Paestum, 1978
From *Places and Memories*
Photograph by Roberto Schezen

Case Study: Villa Savoye

Le Corbusier incorporates this theme of directing vision in several instances in his Villa Savoye. He expertly captures a "photographic moment" on the rooftop pavilion (figure 24). Designed as the culmination of his *architectural promenade,* a framed opening in a freestanding wall provides the roof terrace with an intentional picture-like view of the natural landscape. In contrast to this moment of achieved destination, Le Corbusier's promenade, intended to promote sequential movement through the house, begins with the large opening of the south façade (figure 25). This elevation, animated by the ever-changing effects of forms in light, entices the approaching visitor to enter the building. In both instances at the Villa Savoye, "architecture corrals nature, reducing it to surface treatment (Naegele, 3)." Thus Le Corbusier presents architecture as a sign of itself, blurring the boundaries between reality and representation.

Precedent Study: Brion Sanctuary

Many of Carlo Scarpa's landscapes and gardens use framing techniques to direct the visitor's vision. George Dodds, in his essay, "Directing Vision in the Landscapes and Gardens of Carlo Scarpa" discusses this technique in his work.

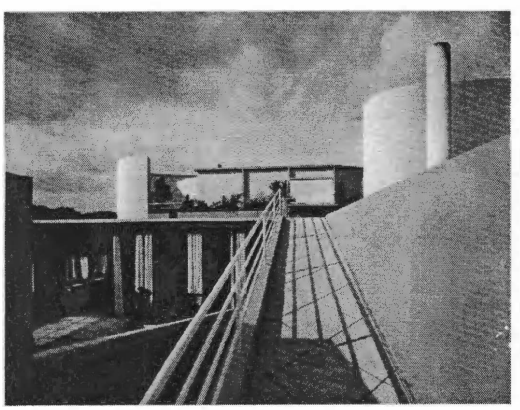


Figure 24
Villa Savoye rooftop
Le Corbusier
From *Oeuvre Complet* vol. 2

Figure 25
Villa Savoye exterior
Le Corbusier
Photograph by Liao Yusheng

> Through his designs of exhibitions, landscape gardens, and museological reorganizations, Scarpa conceived of the relation of landscape and architecture as "communicating vessels," through the theme of "directing vision" (Dodds, 32).

He constructs his works around borrowed views of landscapes and distant points of interest in a Picturesque manner. He assembles values of light and dark, varied tones of color, and deep and shallow spaces much as a painter would build up a landscape on a canvas (Dodds, 33). Scarpa's Brion Sanctuary (figures 26 and 27) is replete with intentionally framed views. In one instance a "viewfinder" is carved into the wall of the meditation pavilion and frames the distant view of rocca of Asolo (Dodds, 34). Additional references to the surrounding site and landscape are made through various cutouts and openings in the walls as Scarpa merges architecture and nature creating a simultaneous experience of the two.

D. Capturing Time:

The final theme of transformation in photography is Capturing Time. Photography has the unique ability to show the passage of time in a two-

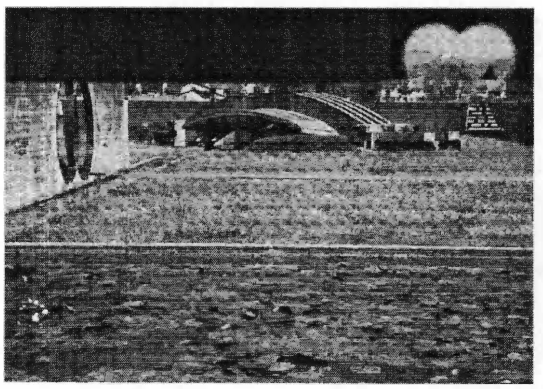


Figure 26
Brion Sanctuary 1
Carlo Scarpa
Photograph by George Dodds

Figure 27
Brion Sanctary 2
Carlo Scarpa
Photograph by Liao Yusheng

dimensional image. This can be achieved by representing time lapse or an object in motion. Another way of representing the passage of time in photography is to capture the varying effects of light and shadow at different times of the day.

Time lapse can be captured by taking very long exposures. The static images appear clear and sharp, while the moving objects create streaks and blurs. Each position of the moving object during the time of exposure is recorded, creating a continuous trail of movement. Two examples of capturing time through time lapse are Grunewald Bremen's *Night Shot* (figure 28) and Anton Giulio Bragaglia's *The Cellist* (figure 29).

Photography can also represent time by freezing an object in motion. This is done by using a very fast shutter speed to capture an object in mid-movement. This photographic technique transforms reality in that it exposes a moment in time that we normally would not have access to. Such fleeting moments are incomprehensible to us without the aid of the camera.

Figure 28
Night Shot
Grunewald Bremen

Figure 29
The Cellist
Anton Giulio Bragaglia

Imogen Cunningham captures such a moment in her photograph *Three Dancers, Mills College* (figure 30).

The third way that photography can encapsulate time is by capturing the effects of light and shadow throughout the day. Roberto Schezen effectively captures the dramatic effects of light and shadow on the columns and exterior corridor at Rossi's Gallaratese Housing in Milan (figure 31). He captured one specific moment of this corridor. If he had taken this exact photograph at a different time of day, the result would have been completely different.
By capturing the effects of light and shadow on and within a subject, the photographer reveals the power of a quality of light to transform the subject throughout the day. By making these dramatic effects readily apparent, the photograph forces us to acknowledge this phenomenon. Photography allows us to understand our surroundings in terms of light and shadow alone, thus promoting our understanding of their significance in a work of architecture.

Figure 30
Three Dancers, Mills College
Imogen Cunningham

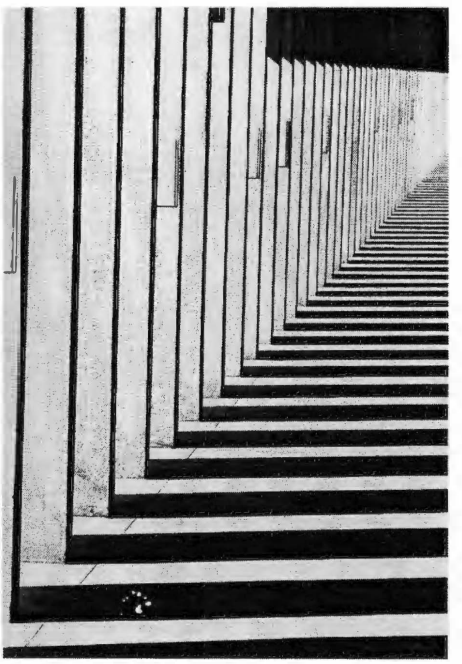


Figure 31
Gallaratese housing, Milan
Aldo Rossi
From *Places and Memories*
Photograph by Roberto Schezen

Case Study: Notre Dame du Haut

Le Corbusier's Notre Dame du Haut (figure 32) most thoroughly embodies the theme of capturing time in photography in his work, especially through his manipulation of natural light. At Ronchamp, Le Corbusier creates a "glowing light sculpture" through a series of small apertures in the south wall (figure 33). Furthermore, a thin strip of glass separates the sweeping roof from the walls, which allows a glimpse of daylight and makes the roof appear to float. And in the meditation chapels, "the light from an unseen source spilling softly over the rough-textured red stucco powerfully conveys a sense of humanity's essential loneliness (Moffett, 530)." In Daniel Naegele's discussion of this poetic chapel design in "Object, Image, Aura", he says:

> And again, Le Corbusier turned to photography – to ambiguous images that reveal the chapel's east façade as a curious visage, as an apparition that miraculously appears in the light of a bonfire or in the fog of a misty morning – to re-present the aura of his object, to mythicize Modern architecture and imbue the temporal with a transcendent sense of the eternal (Naegele, 4,5).

Figure 32
Notre Dame du Haut exterior
Le Corbusier
Photograph by Liao Yusheng

Figure 33
Notre Dame du Haut interior
Le Corbusier
Photograph by Lucien Herve

Precedent Study: Kimbell Art Museum

Louis Kahn is one of many architects who were acutely aware of the effects of light and shadow on and within a work of architecture. While no direct connection to photography has been established, Kahn did devote much attention to studying light through his paintings and sketches. In essence, this approach is the same as the approach of this thesis, which seeks to illustrate a connection between ideas presented in the two-dimensional image and those realized in built form. To illustrate his use of natural light, I will introduce Kahn's Kimbell Art Museum (figures 34 and 35). In this design, Kahn eloquently integrates structure and service, creating a uniform whole that promotes and enhances the viewer's experience. The construction also reveals a splendid display of natural light, which illuminates the interior spaces and casts a "comfortable" light onto the works on display. This light animates the surfaces of the building, transforming it throughout the day. His use of natural light creates a constant connection to nature, allowing the visitor to be aware of the time of day and exterior conditions at every moment.

Figure 34
Kimbell Art Museum 1
Louis Kahn
Photograph by Liao Yusheng

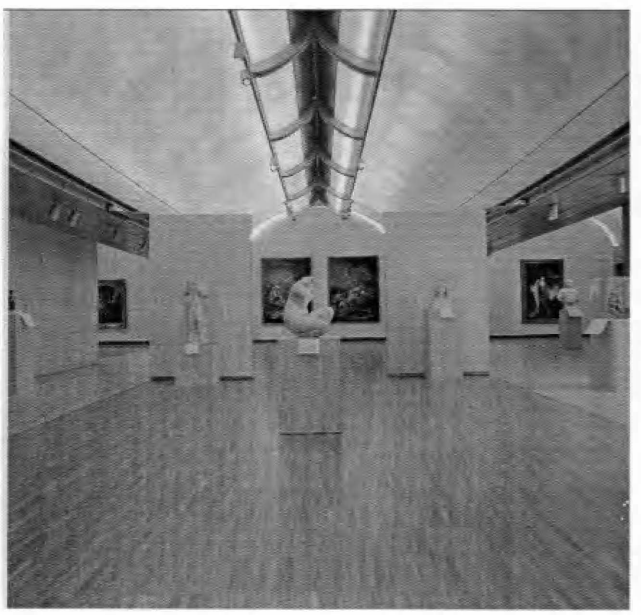


Figure 35
Kimbell Art Museum 2
Louis Kahn
Photograph by Liao Yusheng

V. Application

Le Corbusier is one architect who was consciously aware of the potential of photographic techniques in architecture and took full advantage of them in his work. I would argue, however, that most architects have been influenced to some extent (whether consciously or unconsciously) by photography and the sense of transformed reality that it promotes. This thesis is consciously aware of photography's influence on perception and its potential to inform architecture. Therefore, I will embrace a sense of "photographic vision" as a way of seeing and as a means of gathering visual data relating to the four themes of transformation. The transformations of reality that I discover will be translated into architectural form as a collection of "moments of experience", just as a collection of photographs represents a series of single instances in time and space. Each "moment" in my project will be not only a small part of the larger whole, but also an isolated instance in itself. The goal will be to present each "moment" as a representation of itself through the application of the four themes of transformation.

The small-scale urban setting will provide an appropriate context for my project. Many small downtown areas have suffered misuse and neglect over the past decades, and are now attempting to reverse the negative effects through major revitalization efforts. A work of architecture based on the transformation of reality will not only encourage revitalization, but also become a symbol of the city's aspirations.

A museum provides a suitable building type for the application of the transformation of reality as well as for the context of a small-scale urban environment. Museums engage our sense of vision. Their primary function is to display works of art for viewing. Each work can be seen as a "moment of experience" which offers the viewer a chance to escape momentarily into an alternate reality. The goal of this thesis is to create experiences in architecture similar to those offered by a photographic work of art.

VI. Proposed Building Type

As seen in Le Corbusier's work, the application of moments of photographic transformation in architecture can be relevant to virtually any building type. However, in keeping with the theme of the photographic image, I have chosen to design a Museum of Photography as the vehicle for my ideas. The philosophy of this museum will be to promote understanding of photography through collection, research, exhibition and instruction. The project will be small in scale, and the program minimal, to allow full expression of the architectural manifestation of instances of photographic transformations of reality. Inside the museum, the photographic image will be displayed, exposed, brought to life. As the viewer wanders from photograph to photograph, he/she will experience each moment of transformed reality in turn. Each experience will be magnified by the effects of all others and compounded by the various experiences of the building itself. The act of entering the building should mirror the act of "entering" the images on display, as each offers an alternate reality, transformed through the composition of space and form. The building itself will be a sequence of "moments of experience" serving to orient the visitor and to guide them through the galleries and other spaces. Various points of view will be utilized to guide the visitor's vision and a sense of depth will be established through deep and shallow spaces. Specific moments of destination and observation will be framed by the structural elements, while other spaces will remain partially obscured to promote a sense of exploration and discovery. Exterior views will be frequent to contrast the complex interior spatiality and to orient the visitor within the larger context of the city. Various levels of illumination will be achieved through a combination of natural and artificial lighting appropriate to each space. In areas where damage to prints is not an issue, natural light may be fully exploited to animate and transform the space throughout the day. Overall, the building will become a testimony to the photographic image. It will be based on lessons learned from suppressing the third dimension, even while it occupies space as a physical object.

VII. Proposed Program

A. Qualitative Description of Program:

1. Primary Spaces:

a. Entry area: The entry is the first opportunity to introduce the transformation of reality in the interior of the building. Therefore, it should embody elements of each of the four themes and serve as a precursor to the spaces that follow. It will most likely be occupied for only a short time. It is a "fleeting moment" in itself. Therefore, it must make a bold statement as the first impression of the museum's interior. It should also offer a strong sense of organization as the core of the building and aid in orienting the visitor upon arrival. It should utilize various points of view in order to create a visual connection to the gallery spaces. The scale is large, as this area is a transition zone from the exterior open space to the inner world of the image. The visitor should utilize the experience of this space to become accustomed to the museum atmosphere.

b. Gallery Spaces: Each gallery space should be thought of as a "machine for viewing". The museum's collection of photographs will be displayed here, so movement through the space should be an utmost concern. The four themes of transformation will be fully exploited in these spaces. Perhaps each gallery will focus on one specific theme. In the "decontextualizing reality" room, the space could be presented as a contrast to the traditional museum setting. Elements such as scale, hierarchy, rhythm, procession, etc. could be addressed in unexpected ways in order to present the visitor with an experience of transformed reality. The "flattening space" room could be composed of a sequence of deep and shallow spaces, which would present the visitor with a variety of spatial readings. Transparent walls, interior and exterior, would add to the illusion of space and depth. Reflective surfaces could also be utilized. In the "directing vision" room, framed views of the exterior landscape could provide areas for moments of observation, while framed interior destinations could place importance on featured displays. Various points of view could be utilized in this

space to guide the visitor through a sequence of visual experiences. Finally, in the potential "capturing time" room, movement and natural light will be the primary concerns. This space will house a part of the exhibition that will not be easily damaged by exposure to natural daylight.

c. Auditorium: This space will be for lectures, presentations, films, and any other function that may be relevant. It will be small in scale, the least prominent of the primary spaces, to keep the focus on the photographic image rather than film or the projected image.

2. Secondary Spaces:

The secondary spaces will occupy the "spaces in between" and serve as a transition zone between each gallery space. While they are not the most important spaces, they will be thought out and provided for with equal care and attention.

a. Café: The café will be a place for relaxing after touring the museum, or for waiting on a group to gather before a tour. Coffee, soft drinks, pastries and other snacks will be served, however, I do not see this as a full-service restaurant.

b. Museum Shop: This space will be located near the entry and will offer visitors a chance to purchase momentos from the various exhibits or the museum in general.

c. Reception Area: This area will be a space for small receptions following exhibit openings. It may also be used by the community for special functions and could serve as a classroom for weekend or evening classes sponsored by the museum.

d. Staff Offices: These offices will be discreet spaces in the building. They should be located away from the public spaces to create privacy for the staff.

B. Quantative Description of Program: see Table 1

Table 1: Quantitative Description of Program	
Program Part	**Size**
Primary Spaces	
Gallery Spaces	
Permanent Exhibitions	2500 sf
Temporary Exhibitions	5000 sf
Large Scale Exhibitions	2500 sf
Auditorium	5000 sf
Circulation including entry area (40 % of net)	8240 sf
Secondary Spaces	
Café	600 sf
Museum Shop/Retail	600 sf
Reception area with kitchenette	1000 sf
Staff Offices (10 @ 100 sf)	1000 sf
Ancillary Spaces	
Loading Dock	600 sf
Mechanical Rooms	800 sf
Restrooms	400 sf
Storage	600 sf
Total Interior Spaces	**28,840 sf**
Outdoor Spaces	
Parking (72 spaces)	20,000 sf
Gardens	1000 sf
Grand Total	**49,840 sf**

VIII. Proposed Site as Context for Four Themes

The site that I have chosen is located in the heart of Downtown Johnson City, Tennessee. This relatively small urban area is rich with cultural and historical identity. The town was established in 1869, and was re-designed in 1928 by John Nolen who also developed a plan for Kingsport, Tennessee around this time. These two cities and Bristol (on the border of Tennessee and Virginia) make up the tri-cities area of East Tennessee. This region is particularly relevant to this study of photography due to the local Eastman / Kodak plant which has significantly contributed to the region's economy for decades.

The town of Johnson City originated at the intersection of three major railroads in the late 1800's, and it is on the edge of this intersection that my site is located. The city of Johnson City has recently implemented major revitalization efforts around this specific area. Their goal is to create a distinct public square that will become the city center both physically and symbolically. The site that I have chosen is surrounded by this proposed city square to the north, railroad tracks and Buffalo Street to the east, and existing block structures to the south and west (figure A1).

Aside from the previous details, I essentially chose this site for its potential regarding the ideas of this thesis. This site is ideal because of its ability to facilitate each of the four themes of photographic transformation.

A. Decontextualization / Re-contextualization:

The placement of a museum of this sort on this specific site will substantially add value and interest to the proposed city square, and thus supplement and accelerate the city's revitalization efforts. In doing so, the area will be removed from the context of the existing lull in vitality, and re-contextualized as a central hub of activity and public interaction (figures A2 and A3).

B. Flattening Space:

With the possibility of building frontage on Main Street (facing the Public Square), direct frontality may be observed by the visitor as they approach the site

from the square (figure A4). Perspective views are equally accessible from the other possible angles of approach. This makes the variable effects of transparency possible within the site. Also, the site is visible for quite some distance along the axes of Buffalo and Main Streets, allowing for even greater opportunities to expose the effects of planarity and depth (figure A5).

C. Directing Vision:

Framed in plan by a grid of streets and block structures, the railroad and the public square, the site has ample opportunities to interact with and compliment the existing infrastructure, built structures and landscapes of the city. Additionally, with all streets pointing to the site, it becomes a framed destination from all directions, framed by the existing pieces of the city (figure A6).

Due to the placement of the site within the downtown cityscape, and the angle of approach of Market, Main and Buffalo Streets (the three major downtown corridors), direct views of the site are accessible as are half and three quarter views. This variety of angles of approach, coupled with the corner condition of the site, creates the possibility of multiple points of view.

D. Capturing Time:

With minimal adjacent structures to obstruct light or cast distracting shadows, the site is virtually a blank canvas, awaiting an ideal structure that will capture and reflect light and animate the surrounding areas.

IX. Zoning Regulations

The site is located in the B-2 Central Business District. Applicable zoning codes are as follows in Table 2:

Table 2: Zoning Codes and Regulations	
Article / Requirement	**Code**
Article VI, 6.15.2.16	Permitted Uses: Libraries, museums, and performing arts centers
Article VI, 6.15.5.1	Area Regulations: Building Placement: All buildings, excluding civic and institutional uses, shall be set back no further than five feet from the front lot line for at least ninety percent of the front façade, unless an outdoor eating area is provided which extends from the front building line to within five feet of the front lot line. Corner lots shall be considered to have front lot lines for all sides of the lot adjoining a public right-of-way, excluding alleys.
Article VI, 6.15.5.2.B	Exterior Building Treatment: A minimum of sixty-five percent of the street level façade of all buildings shall be windows, doors, display areas, or similar architectural features.
Article VI, 6.15.6	Sidewalk Requirement: Sidewalks shall be required for all multi-family residential, office, and commercial developments along their public street frontages in accordance with the Article IX, Sidewalk Regulations.
Article XI, 11.3.25	Parking Regulations: Libraries, Museums, and Art Galleries: One space per four hundred square feet gross floor area.
Minimum Lot Size	None
Minimum Lot Width	50 ft
Maximum Density	None
Arterial Setback	None
Collector Setback	None

Table 2 continued	
Article / Requirement	**Code**
Other Setbacks	None
Principal Side yard Setback	None
Accessory Side yard Setback	None
Principal Rear yard Setback	None
Accessory Rear yard Setback	None
Maximum lot coverage	None
Principal height regulations	None
Accessory height regulations	None
Fire Protection Code 7-201	Adopted. There are hereby adopted and incorporated by reference and made a part of this chapter, as fully and completely as though copied herein, all volumes of the 1998 edition of the National Fire Prevention Fire Codes, as well as the standard fire prevention code, 1997 edition, as published by the Southern Building Codes Congress International, and all supplements to either of said codes as are now or may hereafter be published; and which codes collectively, as supplemented, shall constitute the Fire Protection Code of this city. In the event of a conflict between the provisions of the aforementioned codes, the stricter provision shall apply.

X. Verification of Fit Regarding Site and Program

The site is approximately 35,150 square feet (figure A7). This would allow the entire footprint of the building (28,840 sf) to fit within the site boundaries (figure A8). However, taking sidewalks, setbacks, parking and outdoor spaces into consideration, this would not suffice.

With the public square to the north of the site, this will most likely be the "front" of public entrance to the museum. By pushing the building to the north edge of the site, adequate space is allowed for parking and any landscaped outdoor areas to the south (figure A9). This will require three levels within the museum, which could provide a good opportunity to delineate between public, administrative and service areas.

XI. Preliminary Parti Studies

Placing the building on the north edge of the site maximizes the possibilities of responding to the public square and creates ample room to the south for exterior landscaped areas and parking (figure A10).

The building could potentially be a series of rooms or gallery spaces with the connecting spaces housing secondary and ancillary program parts (figure A11).

An angle could be incorporated on the northeast corner as a response to the intersection of Buffalo and Main Streets on the site.

The entrance area could be a further response to the public square, perhaps in the center of the building (figure A12).

References

References

1. Ackerman, James. *Origins, Imitation, Conventions: Representation in the Visual Arts.* MIT Press, Cambridge: 2002.

2. Agrest, Diana. "Framework for a Discourse on Representation" from *Places and Memories: Photographs by Roberto Schezen.* Rizzoli, New York: 1987.

3. Benedikt, Michael. *For an Architecture of Reality.* Lumen Books, New York: 1987.

4. Benjamin, Walter. "Little History of Photography" from *Walter Benjamin: Selected Works Volume 2.* The Belknap Press of Harvard University Press, Cambridge: 1999.

5. Colomina, Beatriz. *Privacy and Publicity: Architecture as Mass Media.* MIT Press, Cambridge, 1994.

6. Dewey, John. *Art as Experience.* Minton Balch, New York: 1934.

7. Dodds, George. *Building Desire: On the Barcelona Pavilion.* Routledge, London: 2005.

8. Dodds, George. "Directing Vision in the Landscapes and Gardens of Carlo Scarpa". *Journal of Architectural Education*, pp. 30-38, 2004.

9. *Electronic Culture: Technology and Visual Representation.* Ed. Timothy Druckery. Aperture, 1996.

10. Giddings, Bob and Margaret Horne. *Artist's Impressions in Architectural Design.* Spon Press, London: 2002.

11. Gregotti, Vittorio. "On Image" from *Inside Architecture.* Trans. Peter Wong and Francesca Zaccheo. MIT Press, Cambridge: 1996.

12. Le Marche, Jean. *The Familiar and the Unfamiliar in Twentieth Century Architecture.* University of Illinois Press, Urbana, 2003.

13. Le Corbusier. *Creation is a Patient Search.* Frederick Praeger, New York, 1960.

14. *Le Corbusier Before Le Corbusier: Applied Arts, Architecture, Painting, Photography, 1907-1922.* Ed. Stanislaus von Moos and Arthur Ruegg. Yale University Press, New Haven: 2002.

15. Leach, Neil. *The Anaesthetics of Architecture.* MIT Press, Cambridge: 1999.

16. Malik, Ali. "The Use and Abuse of Photography in Architecture" Precis: the GSAP Student Publication. www.arch.columbia.edu

17. Marleau-Ponty, Maurice. "Eye and Mind" from *Primacy of Perception.* Ed. James M. Edie. Northwestern University Press, 1964.

18. Moffett, Marian, Michael Fazio, et. al. *Buildings Across Time: An Introduction to World Architecture.* McGraw Hill, Boston, 2004.

19. Naegele, Daniel. "Object, Image, Aura: Le Corbusier and the Architecture of Photography" *Harvard Design Magazine,* issue 6: 1998.

20. *Oeuvre Complet.* The Complete Works of Le Corbusier. Pubilee par W. Boesiger. Les Editions d'Architecture Zurich, vol. 7,1965. vol. 2, 1964.

21. Rosa, Joseph. *A Constructed View: The Architectural Photography of Julius Shulman.* Rizzoli, New York: 1994.

22. Rowe, Colin, and Robert Slutzky. *Transparency.* Birkhauser Verlag, Basel: 1997.

23. Savedoff, Barbara E. *Transforming Images.* Cornell University Press, Ithaca: 2000.

24. Serraino, Pierluigi. "Fables of Visibility: Architect and Photographer a Critical Bond" *Architectural Design* vol. 71, issue 6, 2001: p 85-89.

25. Shulman, Julius. *Photographing Architecture and Interiors.* Balcony Press, Los Angeles: 2000.

26. Snyder, Joel and Neil Walsh Allen. "Photography, Vision and Representation"

27. Sontag, Susan. *On Photography.* Anchor Books Doubleday, New York: 1977.

28. Vignelli, Massimo. "Architecture and Photography: A Life's Collaboration" from *Armando Salas Portugal Photographs of the Architecture of Luis Barragan.* Rizzoli, New York: 1992.

Appendix

Appendix

Figure A1
Proposed plan for Downtown Johnson City, Tennessee

Figure A2
Historic photograph of Public Square

Figure A3
Current view from Public Square
Author

Figure A4
Frontal view of site from Public Square
Author

Figure A5
Perspective view of site from Main St.
Author

Figure A6
Views approaching site from Buffalo St.
Author

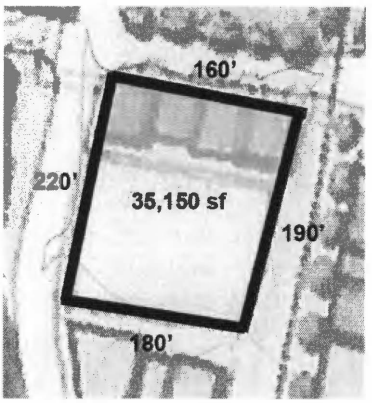


Figure A7
Site Dimensions
Author

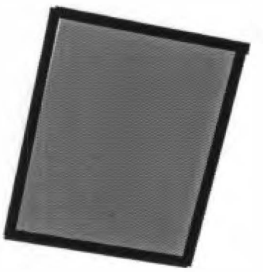


Figure A8
Building Footprint Diagram 1
Author

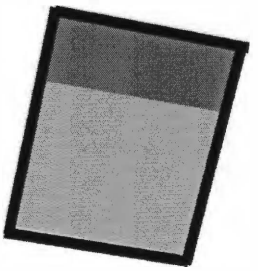


Figure A9
Building Footprint Diagram 2
Author

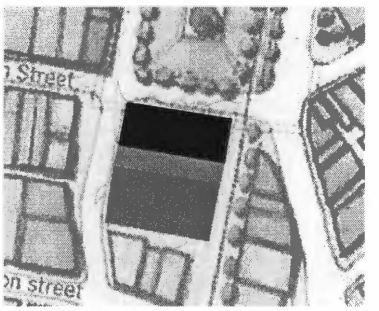


Figure A10
Parti Study 1
Author

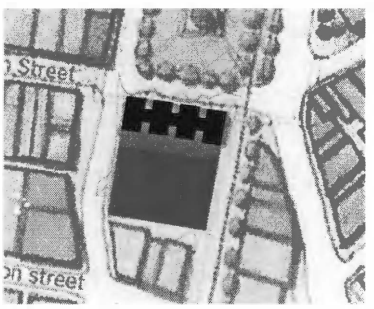


Figure A11
Parti Study 2
Author

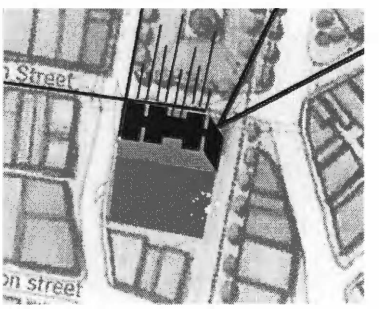
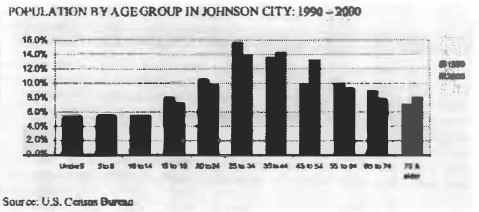


Figure A12
Parti Study 3
Author

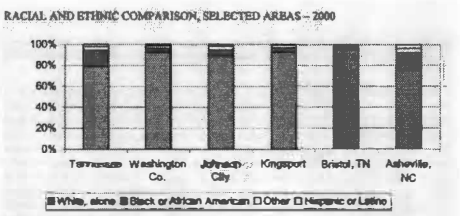
- Johnson City is home to approximately 59,807 residents.

- The median age in Johnson City is 36.9 years
- The age groups that increased from 1990 were 35-44, 46-54, and 75+. The 25-34 age group experienced the greatest decrease.



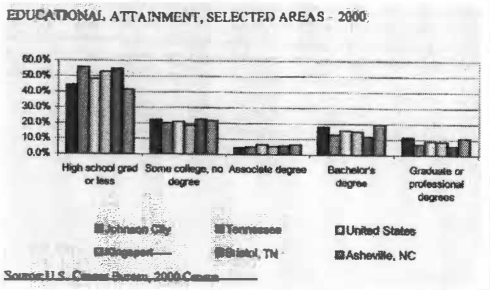
Source: U.S. Census Bureau

- The racial composition of Johnson City's population is 90.1% white, 6.4% black or African-American, and 2.2% other.



Source U.S. Census Bureau, 2000 Census

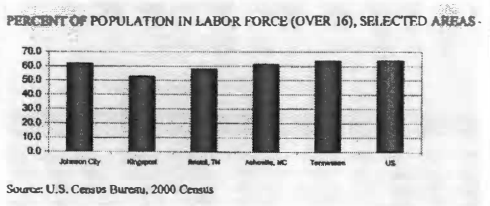
- 30 % of Johnson City's population over 25 years of age obtained a college degree as of 2000.



Source: U.S. Census Bureau, 2000 Census

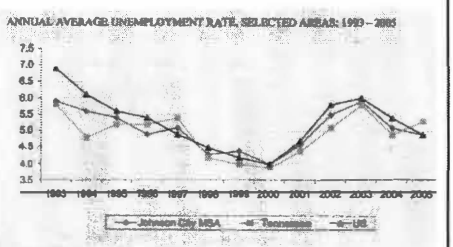
Figure A13
Johnson City Demographics (Population), Author

Approximately 26,500 residents of Johnson City were employed in 2000, which represents 62% of the population over 16 years of age.



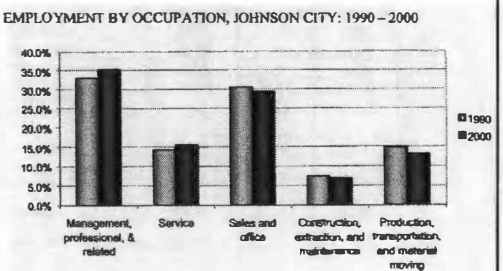
Source: U.S. Census Bureau, 2000 Census

The Johnson City MSA's unemployment rate in August 2004 was 5.1%, compared to 4.9% for Tennessee and 5.4% for the U.S.



Source: Tennessee Department of Labor & Workforce Development

- In 2003, the Johnson City MSA's per capita personal income (PCPI) totaled $23,260.



Source: U.S. Census Bureau

- In Johnson City, the largest employers include health care providers, educational institutions, and public agencies.

TOP TEN EMPLOYERS, JOHNSON CITY –2005

Employer	Number of Jobs
Mountain States Health Alliance	3,541
East Tennessee State University	1,990
CITI Commerce Solutions	1,700
James H. Quillen VA Medical Center	1,259
American Water Heater Company	1,194
Cingular Wireless	895
Johnson City School System	851
City of Johnson City	843
Superior Industries International	540
Frontier Health	500

Source: Johnson City Economic Development Board,
Note: As reported by individual company during 2005

Figure A14
Johnson City Demographics (Employment) Author

- A majority of the city's housing stock is owner-occupied; representing 57.9% of all occupied units in 2000.
- The overall vacancy rate for renter-occupied units is 7.8%.

DWELLING UNITS IN JOHNSON CITY

Units	1960	1970	1980	1990	2000	% Change from 1990 to 2000
Owner-Occupied	4,935	6,250	8,171	11,184	13,556	21.2%
Renter-Occupied	3,140	3,851	5,860	8,491	10,164	19.7%
Total Units	8,579	10,877	15,020	21,241	25,730	21.1%
Total Occupied Units	8,075	10,101	14,031	19,675	23,720	20.6%
Percent Owner- Occupied	61.1%	61.9%	58.2%	56.8%	57.9%	
Vacant	504	776	989	1,566	2,010	28.4%
Percent Vacant	5.9%	7.1%	6.6%	7.3%	7.8%	

Source: U.S. Bureau of the Census

- The average number of persons per household is 2.2 persons as of 2000.

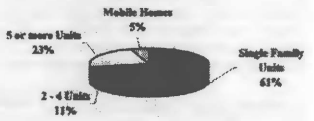
PERSONS PER HOUSEHOLD

Area	1960	1970	1980	1990	2000
United States	3.66	3.14	2.73	2.63	2.59
Tennessee	3.49	3.15	2.76	2.56	2.48
Johnson City	3.29	3.01	2.55	2.3	2.2

Source: U.S. Bureau of the Census

- The majority of housing type is the single-family dwelling in Johnson City comprising 61% of the housing inventory.

HOUSING BY TYPE, 2000



Source: U.S. Bureau of the Census

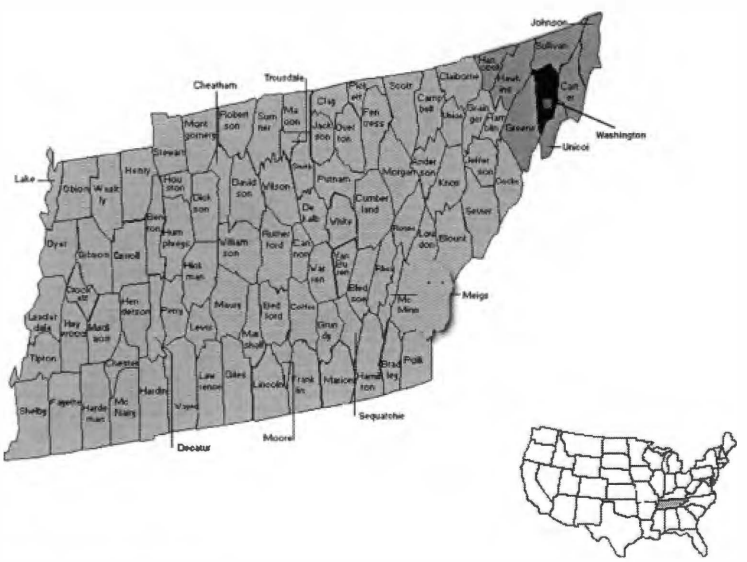
- In 2000, the median home value in Johnson City was $99,600, and the median rent payment was $438.

HOUSING COST

	Johnson City	Tennessee	United States
Median Home Value	$99,600	$93,000	$119,600
Median Mortgage Payment	$871	$882	$1,088
Median Rent Payment	$438	$505	$602

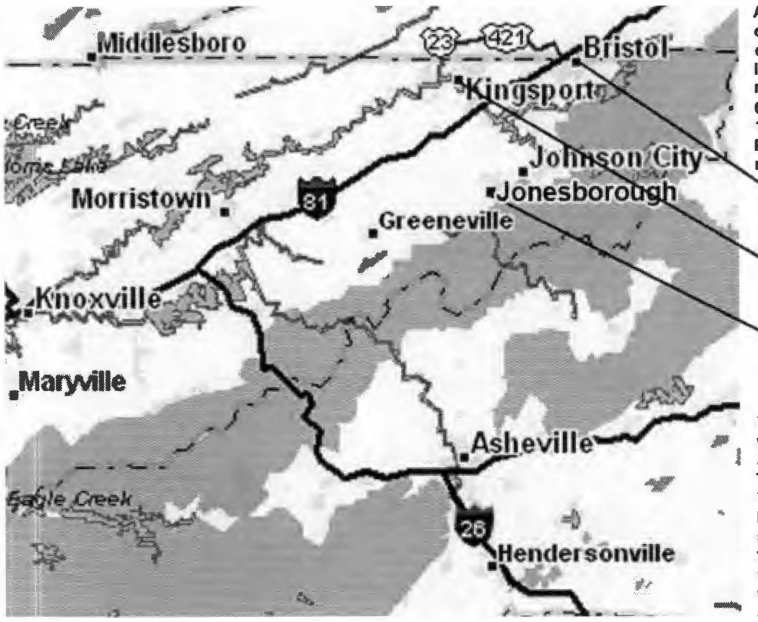
Source: U.S. Bureau of the Census (2000)

Figure A15
Johnson City Demographics (Housing)
Author



Region Locator

Figure A16
Region Locator



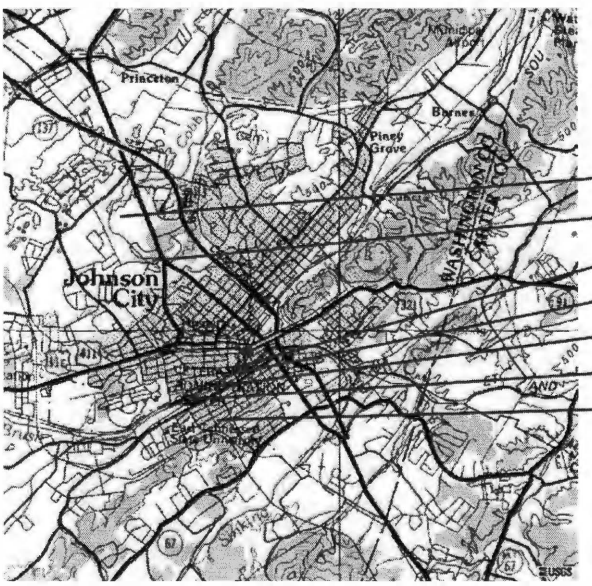
At the junction of two interstate corridors, I-81 and the recently designated I-26, Johnson City is close to several major markets including Asheville, NC 65 miles to the south; Knoxvile 100 miles to the west; and Roanoke, VA 150 miles to the north.

- Bristol Motor Speedway
- Tri-Cities Regional Airport
- Eastman / Kodak plant
- National Historic district
- Annual National Storytelling Festival

The city of Johnson City, along with the cities of Kingsport and Bristol, are located in the Tri-cities region in northeast Tennessee. Johnson City is located in a semi-rural setting along the foothills of the Appalachian Mountains where rolling farmland blends with regional employment and retail centers.

Regional Attractions

Figure A17
Regional Attractions



Johnson City (55,469) is the largest city in the Tri-Cities region (480,091) and is the 8th largest city in Tennessee.

- Johnson City Mall
- Freedom Hall
- Carnegie Hotel
- Millenium Park / Convention Center
- James H. Quillen College of Medicine
- Veteran's Hospital
- East Tennessee State University

Johnson City was rated 73rd out of 354 Metropolitan areas, and #1 place in North America to retire, according to Places Rated Almanac Millennium Edition 2000.

Local Attractions

Figure A18
Local Attractions

- Annual Blue Plum Festival
- Fountain Square
- Restaurants
- Shopping
- Night life
- Various holiday festivals
- Proposed city square park

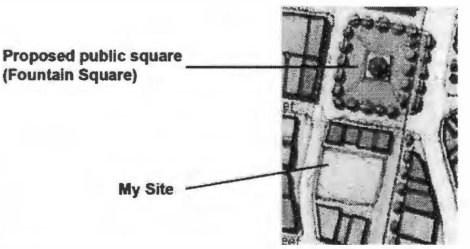
- Revitalization efforts for Downtown Johnson City began in the mid-1980's and are currently led by the Johnson City Development Authority.
- The JCDA follows Main Street's 4 Point Approach to Downtown Revitalization: 1. Design; 2. Promotion/Marketing; 3. Organization; 4. Business Improvement/ Economic Restructuring.

Downtown Vision Statement:

"Downtown Johnson City, Tennessee is a place with a uniqueness shaped by a sense of history, but not bound by the past. It is an active mixed use community where people work, live and play; an attractive, clean and safe environment. It offers a mixture of arts, cultures and faiths; education, entertainment and tastes; business, government and emerging technologies; and opportunities for innovation and entrepreneurship. Downtown is the heart of the City with arteries flowing throughout the Tri-Cities Tennessee/Virginia region, embraced by nature and surrounding mountains (www.jcdevelopment.org)."

Downtown Attractions / Proposed Plan

Figure A19
Downtown Attractions / Proposed Plan



-Re-developing the public square is a priority of the JCDA to improve the community spirit, design and feel of this great City. Located at Buffalo Street and West Main and Market Streets, this square has historically served as the public gathering space for the city.

- LaQuatra Bonci Associates is currently developing a plan for the new public square.

- My site is adjacent to this proposed city square across Main Street.
- I feel that a work of architecture based on the transformation of reality will not only encourage revitalization, but also become a symbol of the city's aspirations.

Downtown Fountain Square History

Figure A20
Downtown Fountain Square History

Figure A21
Panoramic View of Site 1
Author

Figure A22
Panoramic View of Site 2
Author

Figure A23
Panoramic View of Site 3
Author

Figure A24
Panoramic View of Site 4
Author

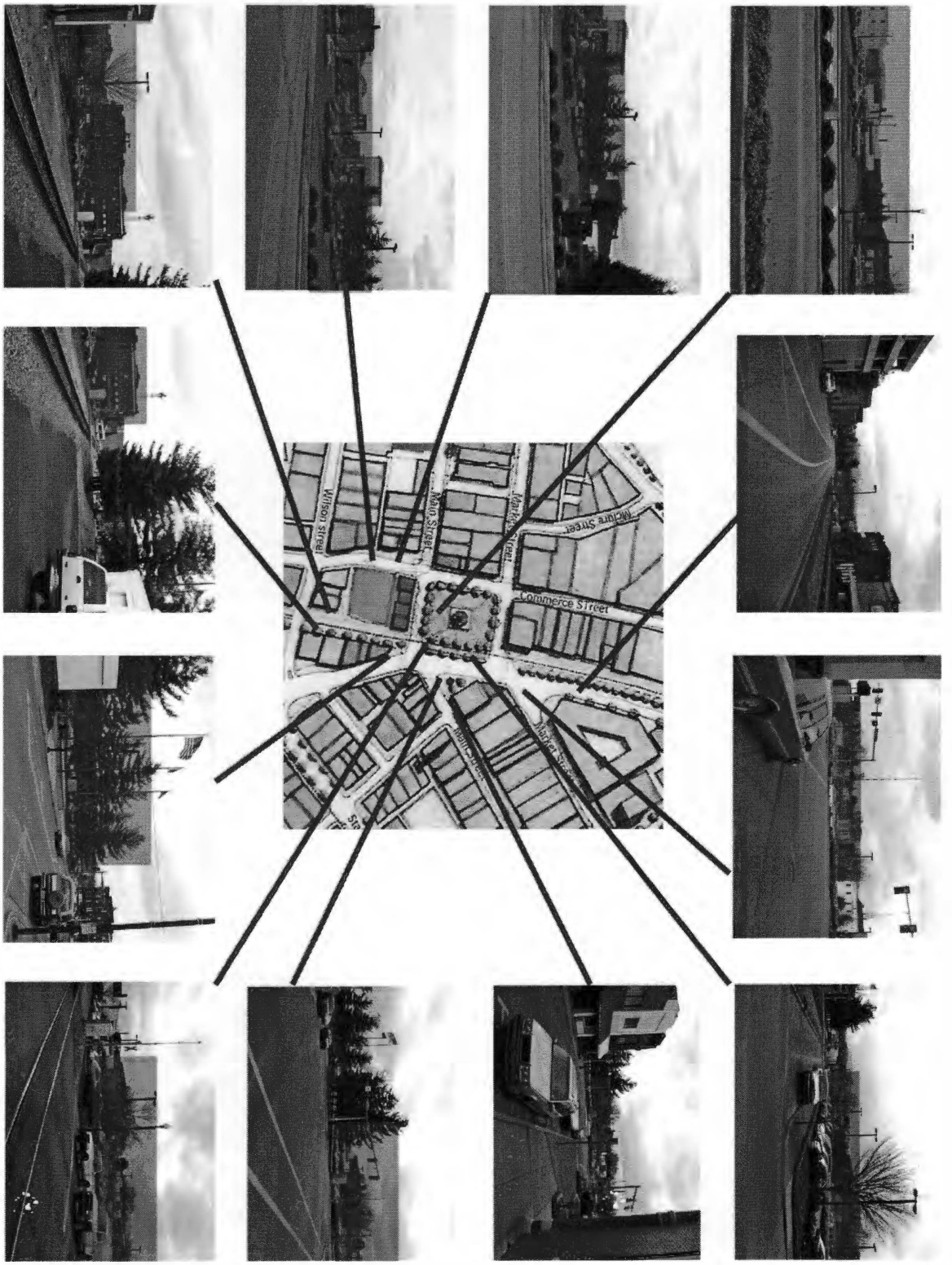


Figure A25
Views of Site
Author

Figure A26
Figure / Ground Diagram
Author

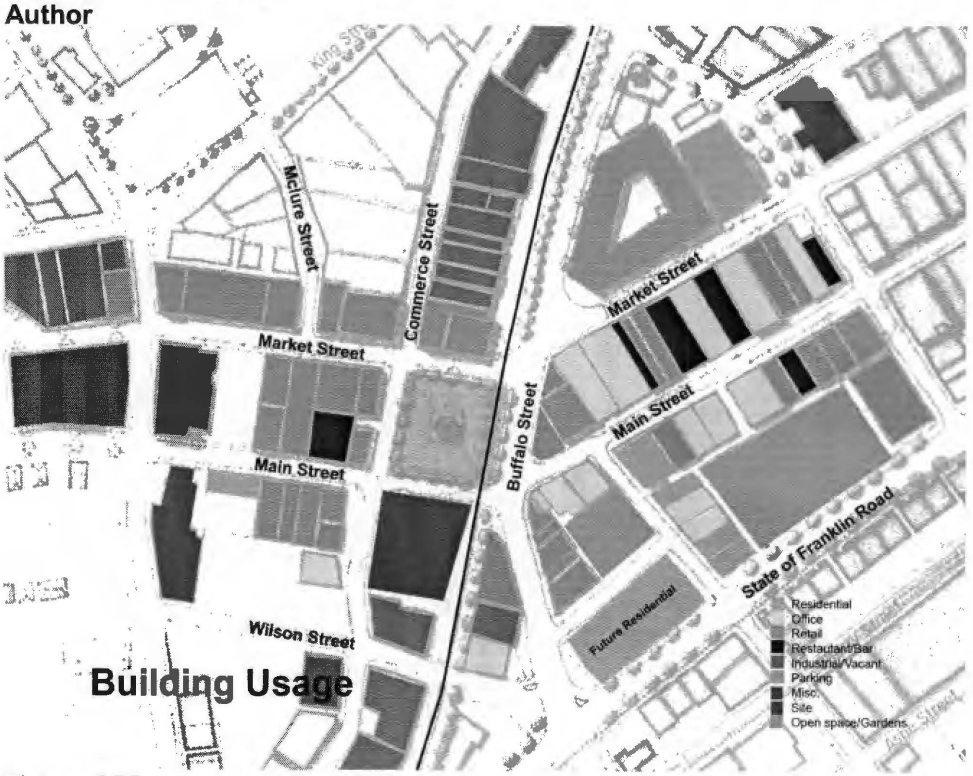


Figure A27
Building Usage Diagram
Author

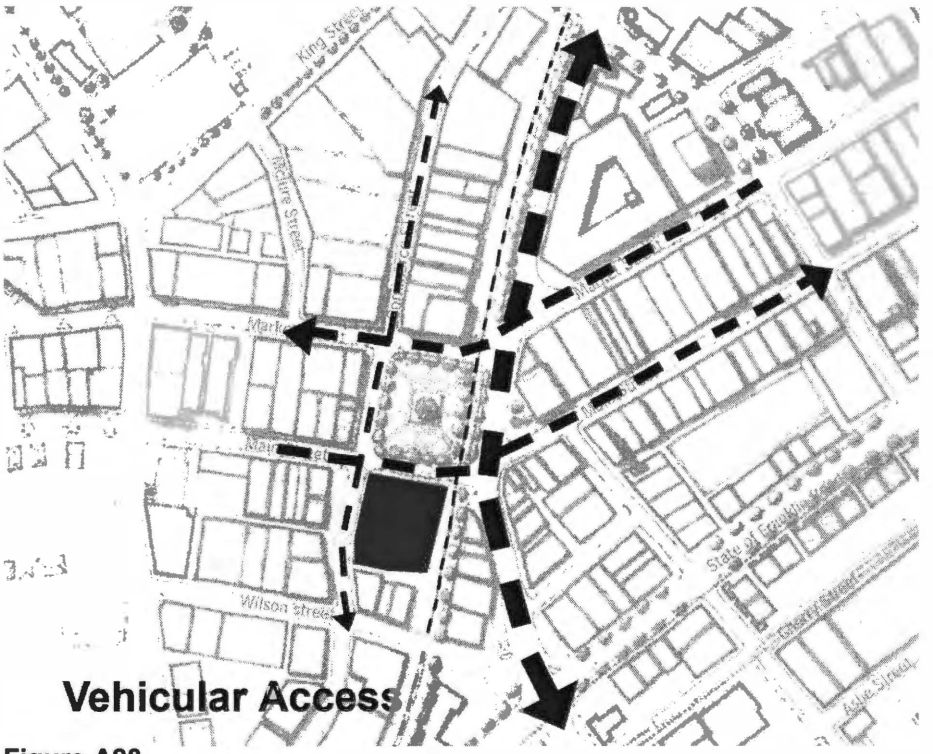


Figure A28
Vehicular Access Diagram
Author

Figure A29
Pedestrian Access Diagram
Author

Figure A30
Point of View Diagram
Author

Figure A31
Light Study Diagram
Author

Figure A32
Site Diagram- Decontextualizing Reality
Author

Figure A33
Site Diagram – Flattening Space
Author

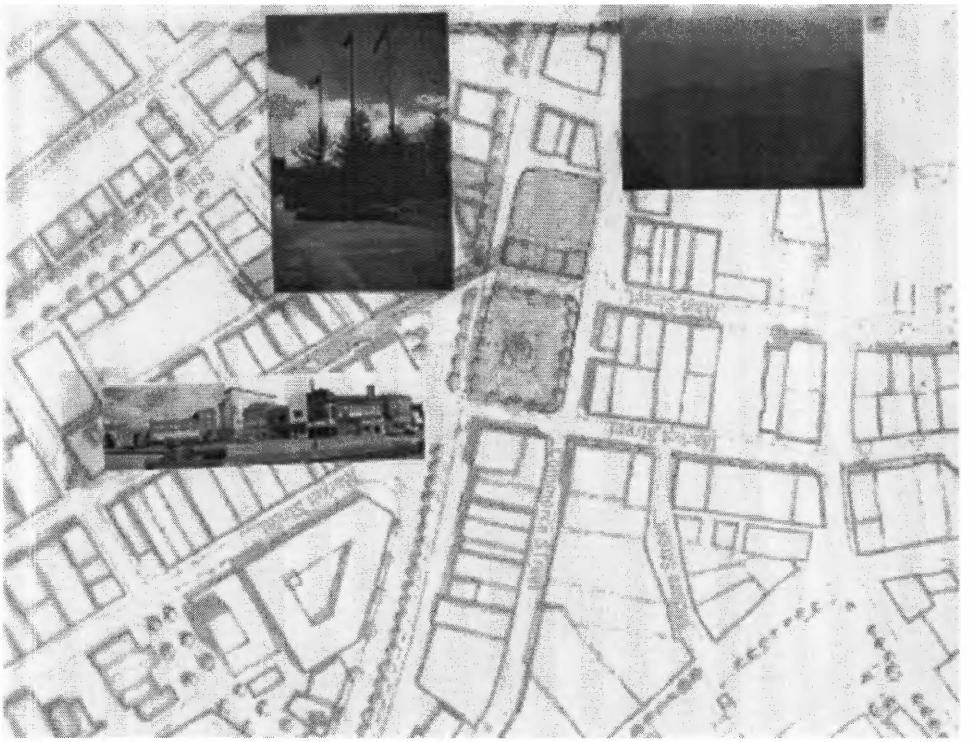
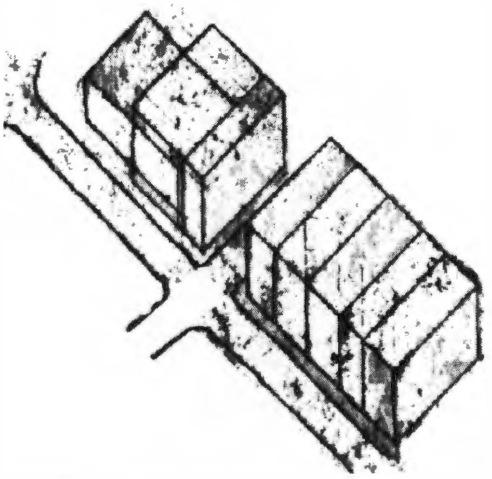
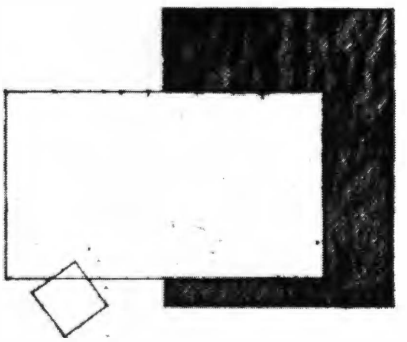


Figure A34
Site Diagram – Directing Vision
Author

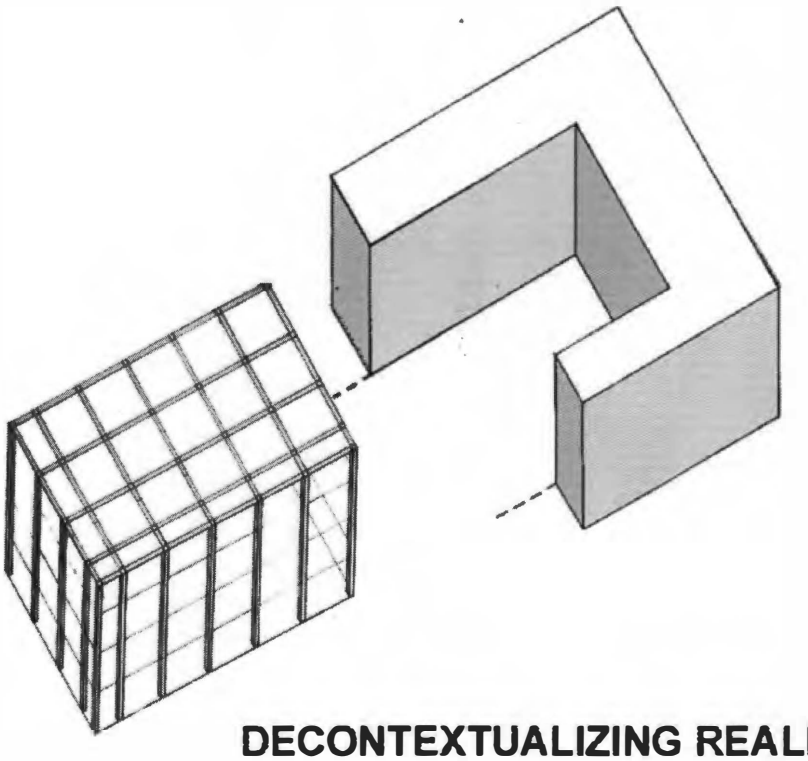
Figure A35
Site Diagram – Capturing Time
Author



DECONTEXTUALIZING REALITY AXON

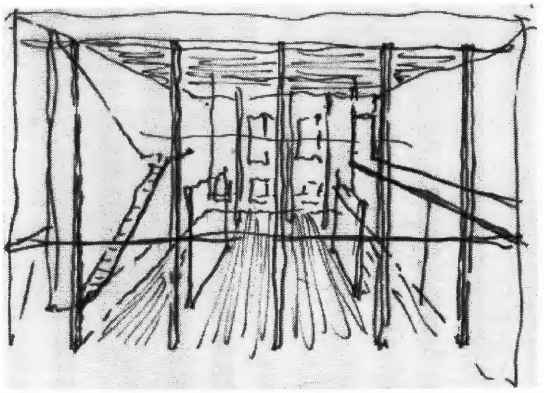


PARTI: DECONTEXTUALIZING REALITY

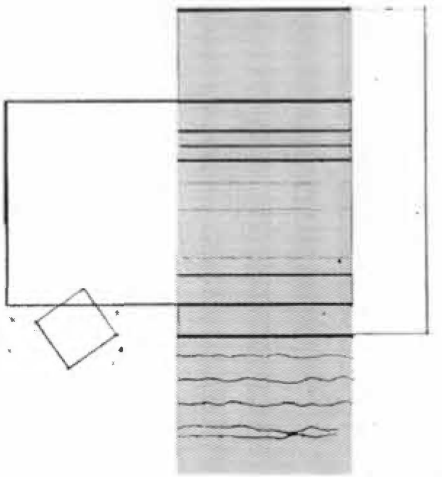


DECONTEXTUALIZING REALITY

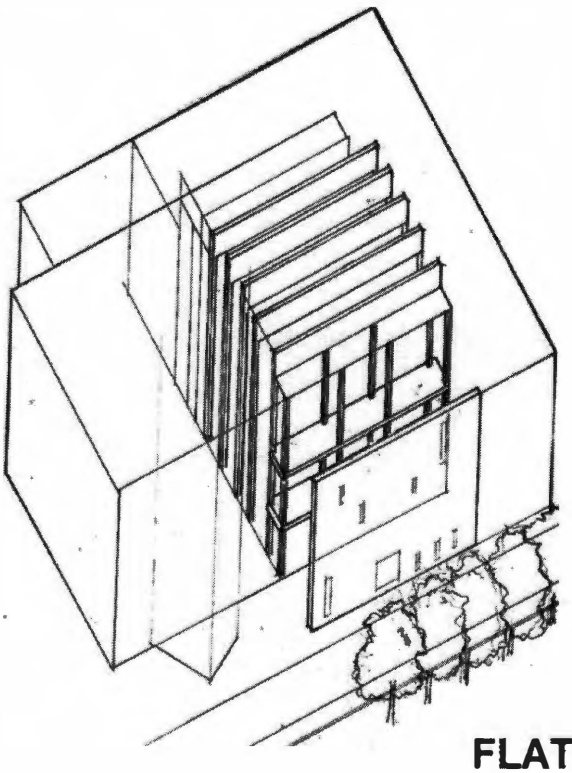
Figure A36
Decontextualizing Reality Diagrams
Author



FLATTENING SPACE PERSPECTIVE

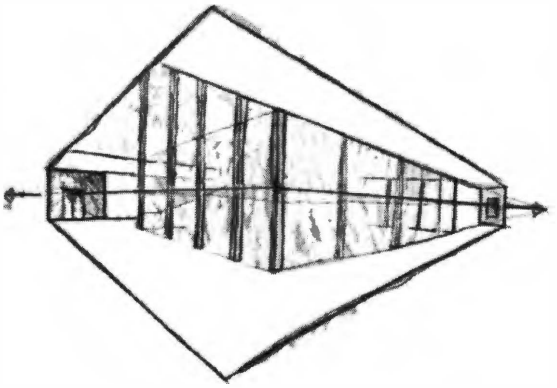


PARTI: FLATTENING SPACE

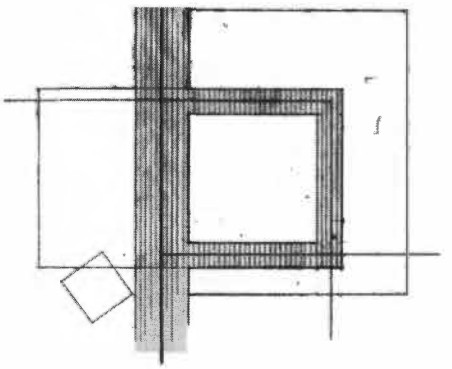


FLATTENING SPACE

Figure A37
Flattening Space Diagrams
Author



DIRECTING VISION DIAGRAM



PARTI: DIRECTING VISION

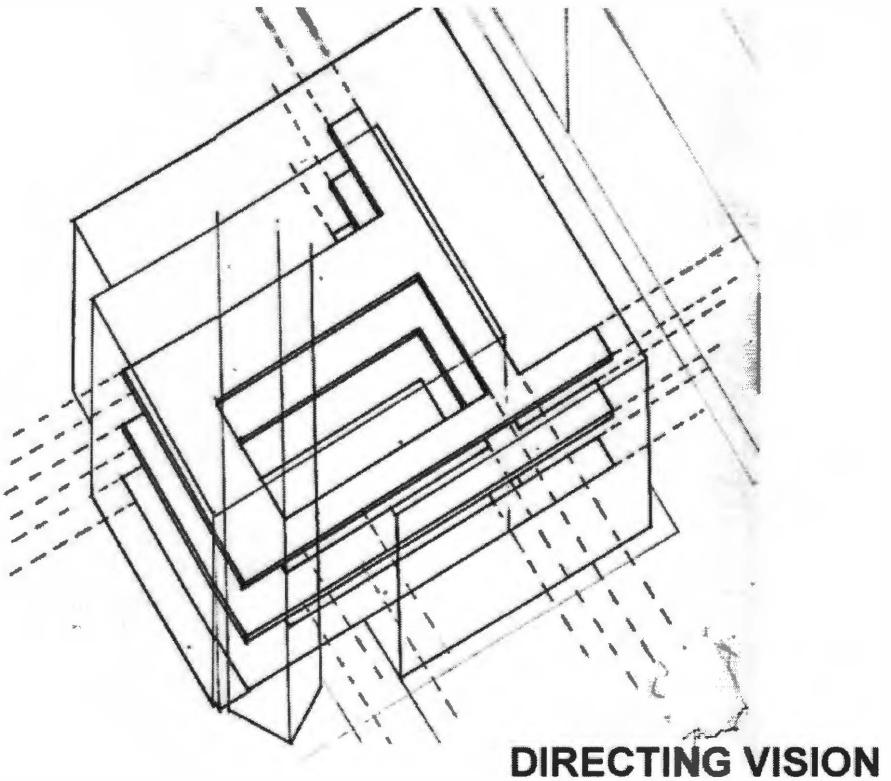
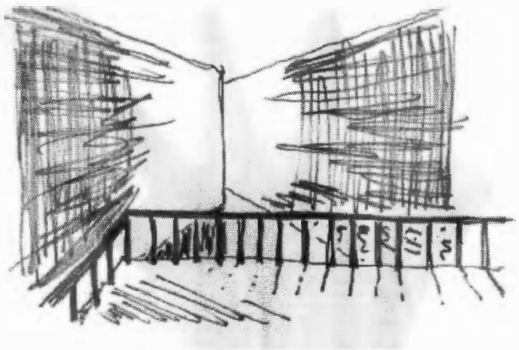
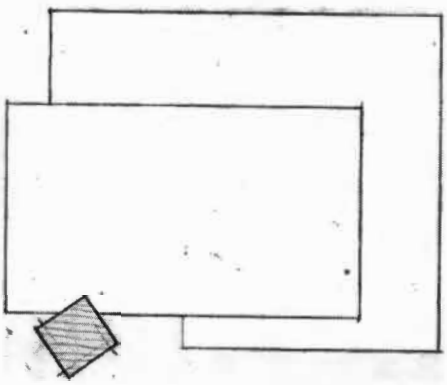


Figure A38
Directing Vision Diagrams
Author



CAPTURING TIME PERSPECTIVE



PARTI: CAPTURING TIME

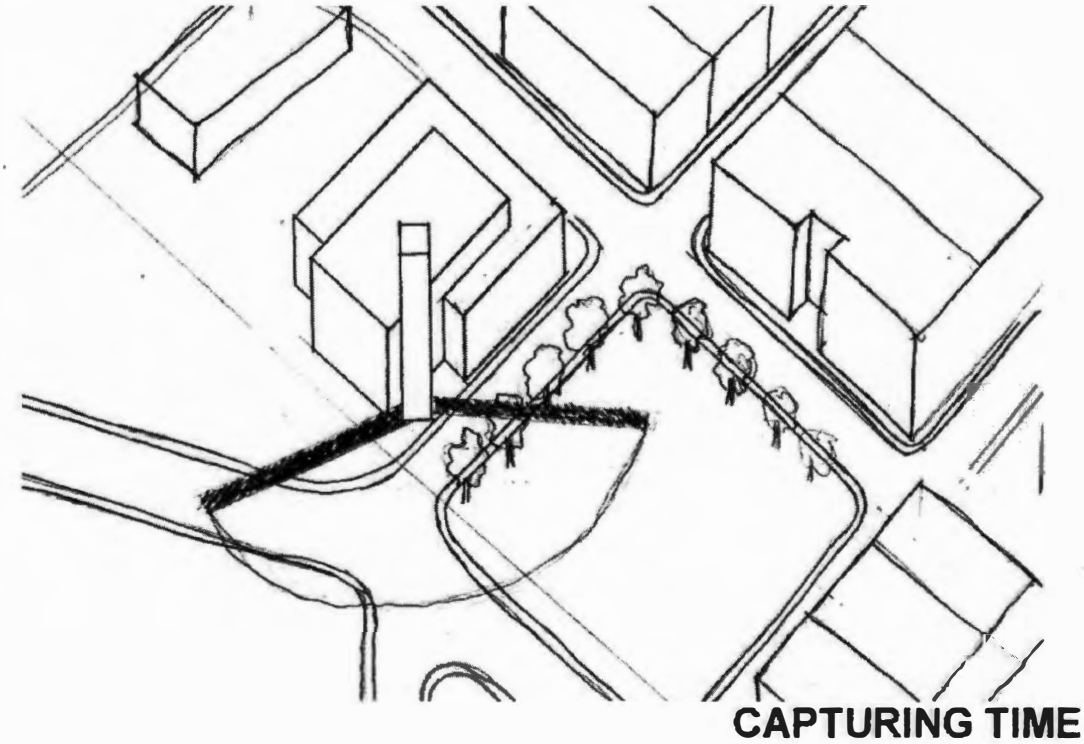


Figure A39
Capturing Time Diagrams
Author

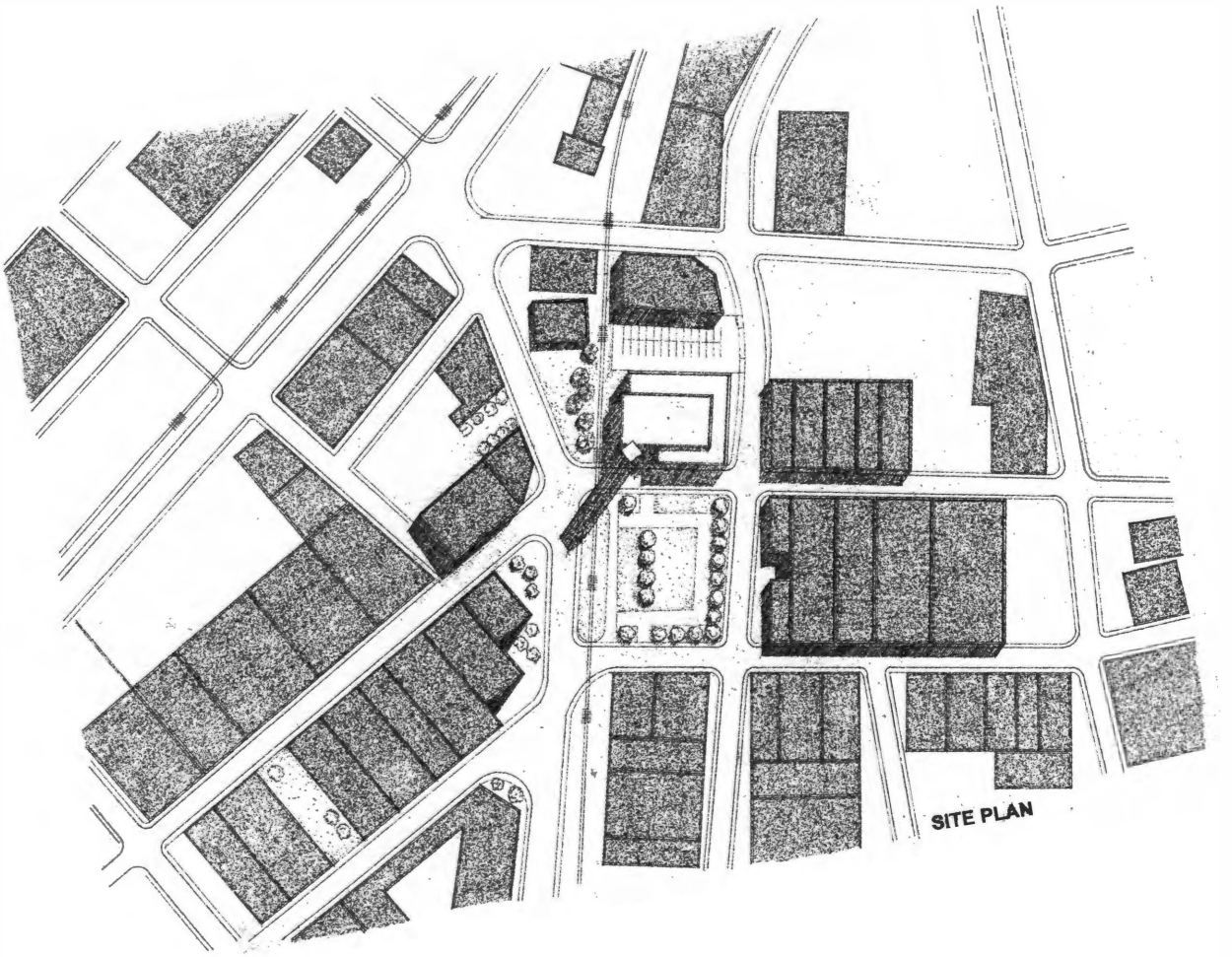


Figure A40
Site Plan
Author

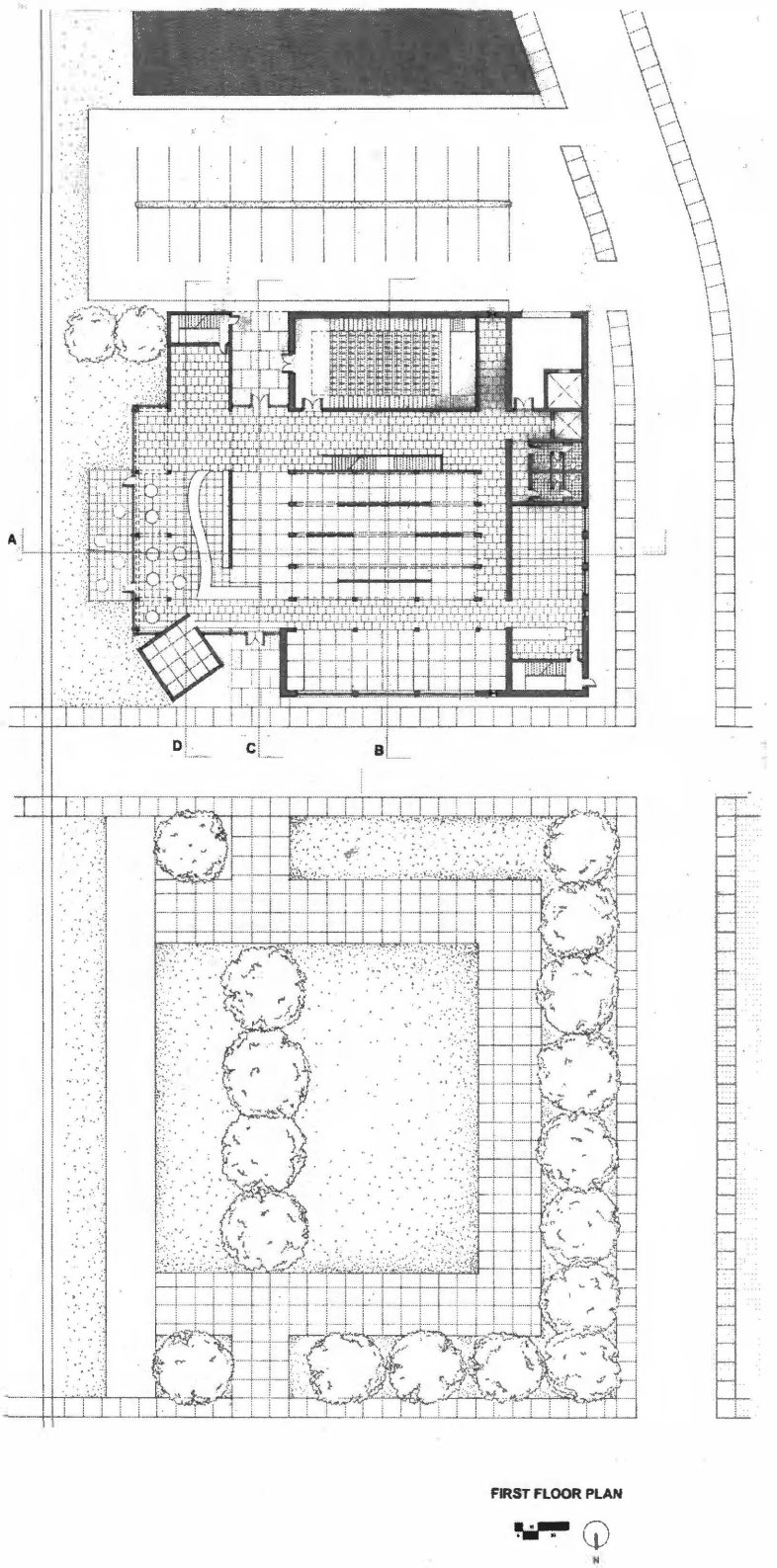
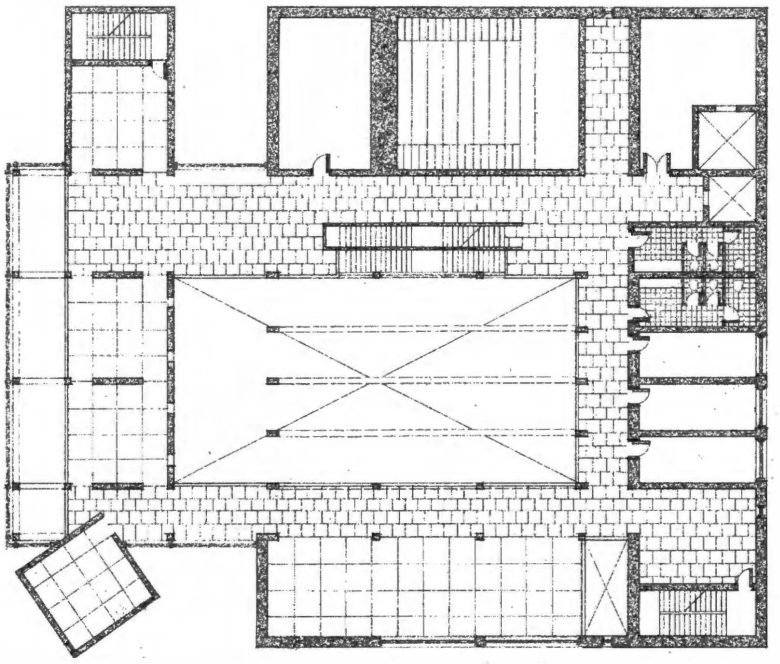
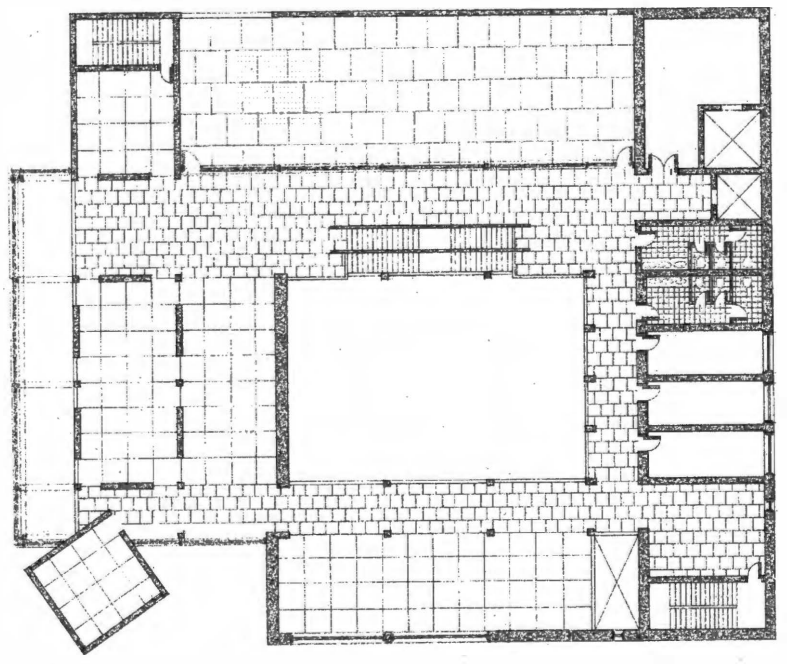


Figure A41
First Floor Plan
Author



SECOND FLOOR PLAN

Figure A42
Second Floor Plan
Author



THIRD FLOOR PLAN

Figure A43
Third Floor Plan
Author

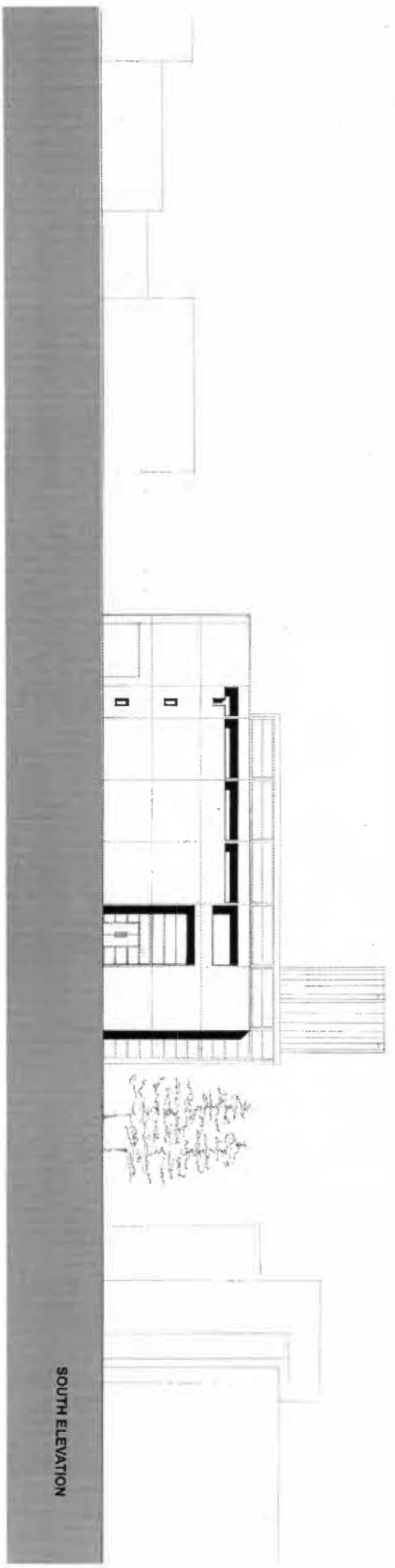


Figure A44
South Elevation
Author

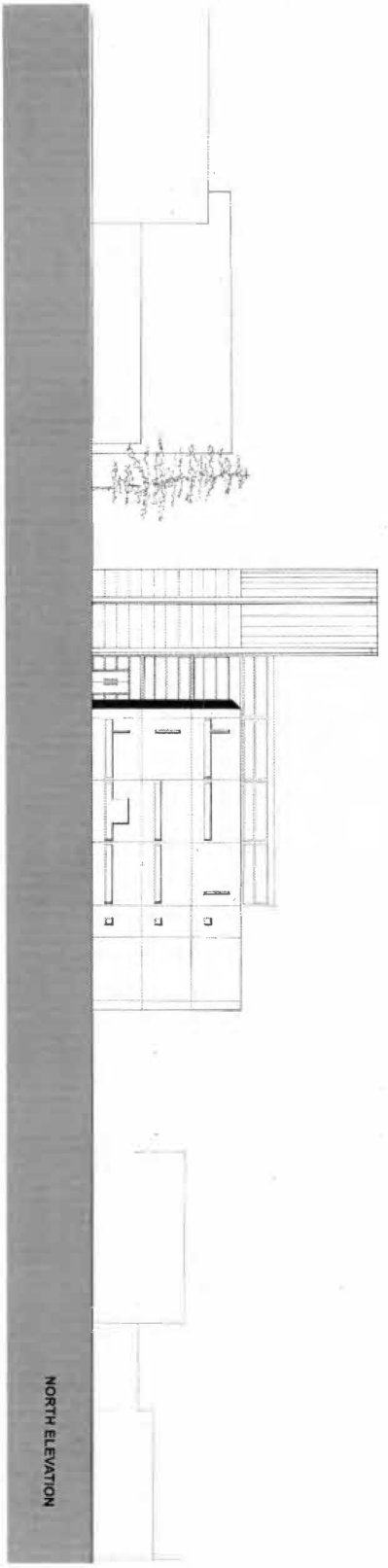


Figure A45
North Elevation
Author

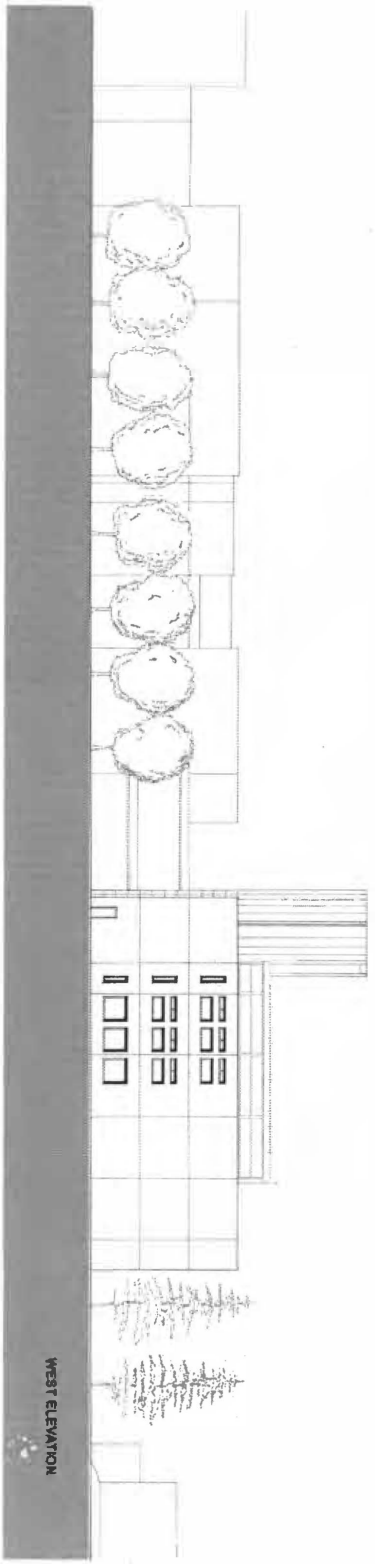


Figure A46
West Elevation
Author

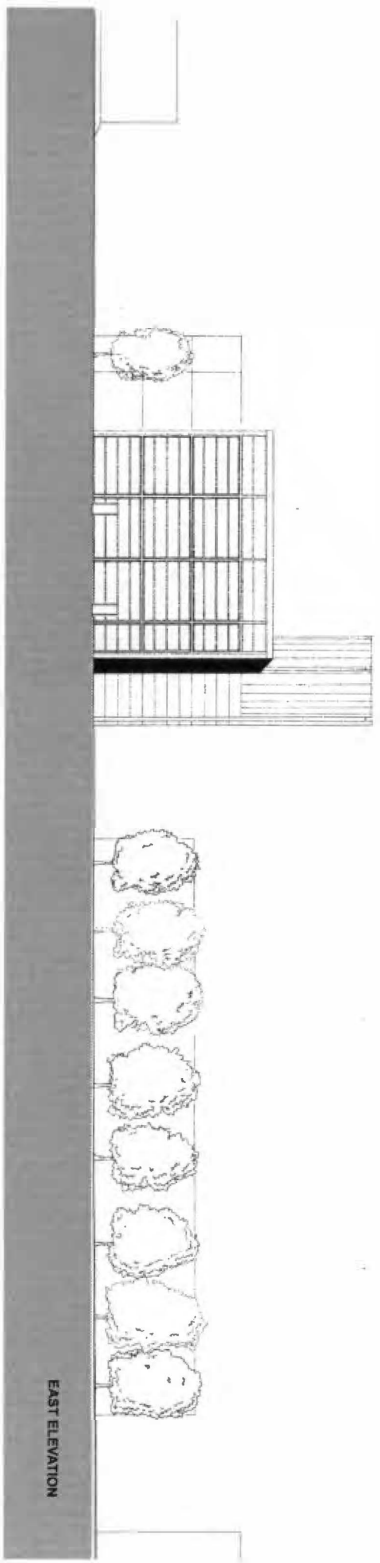


Figure A47
East Elevation
Author

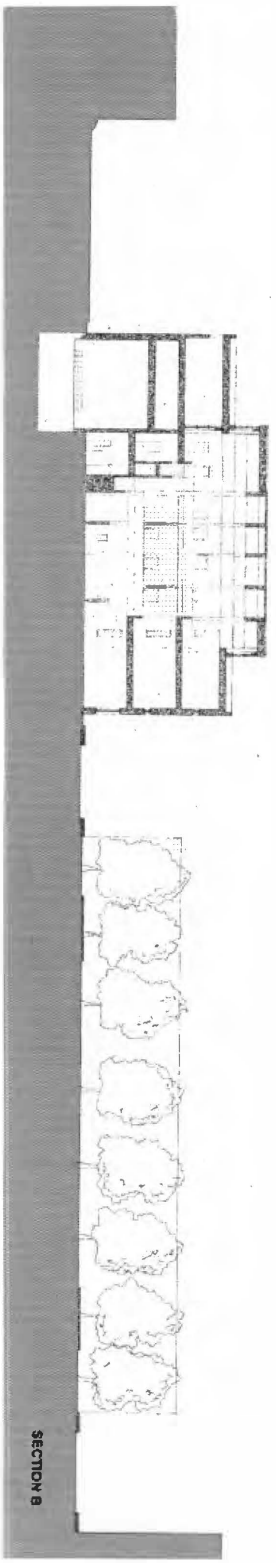


Figure A48
Section B
Author

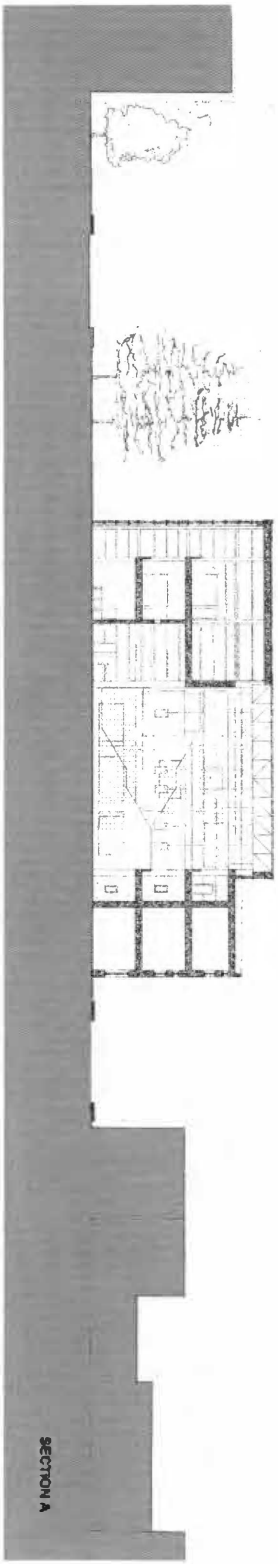


Figure A49
Section A
Author

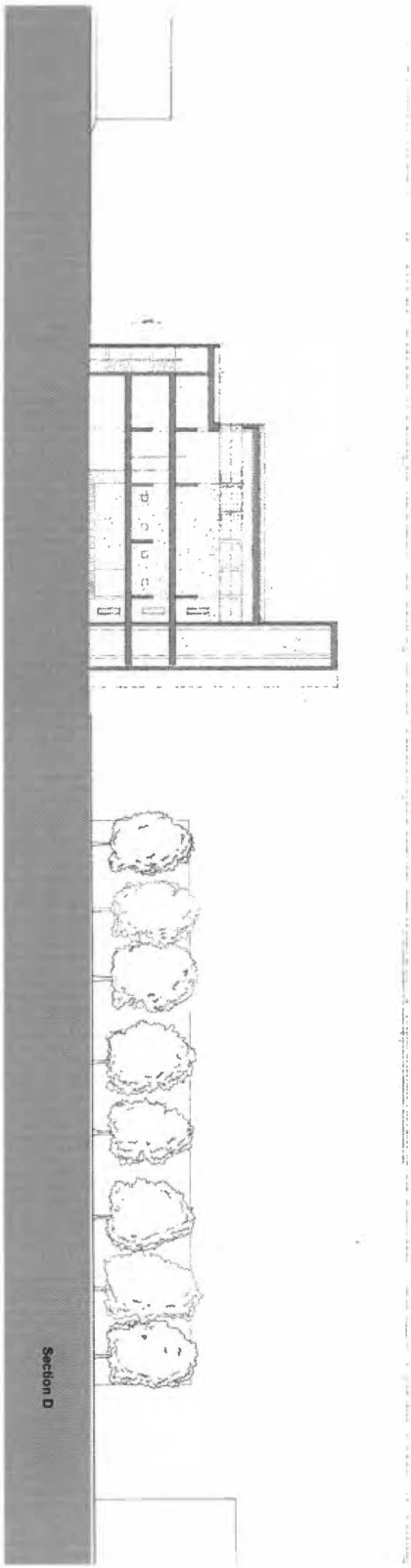


Figure A50
Section D
Author

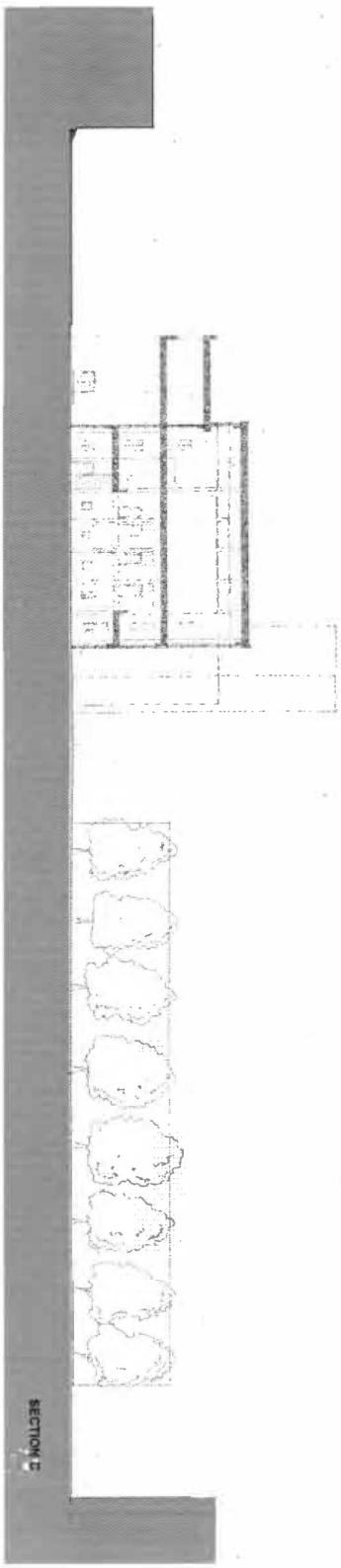


Figure A51
Section C
Author

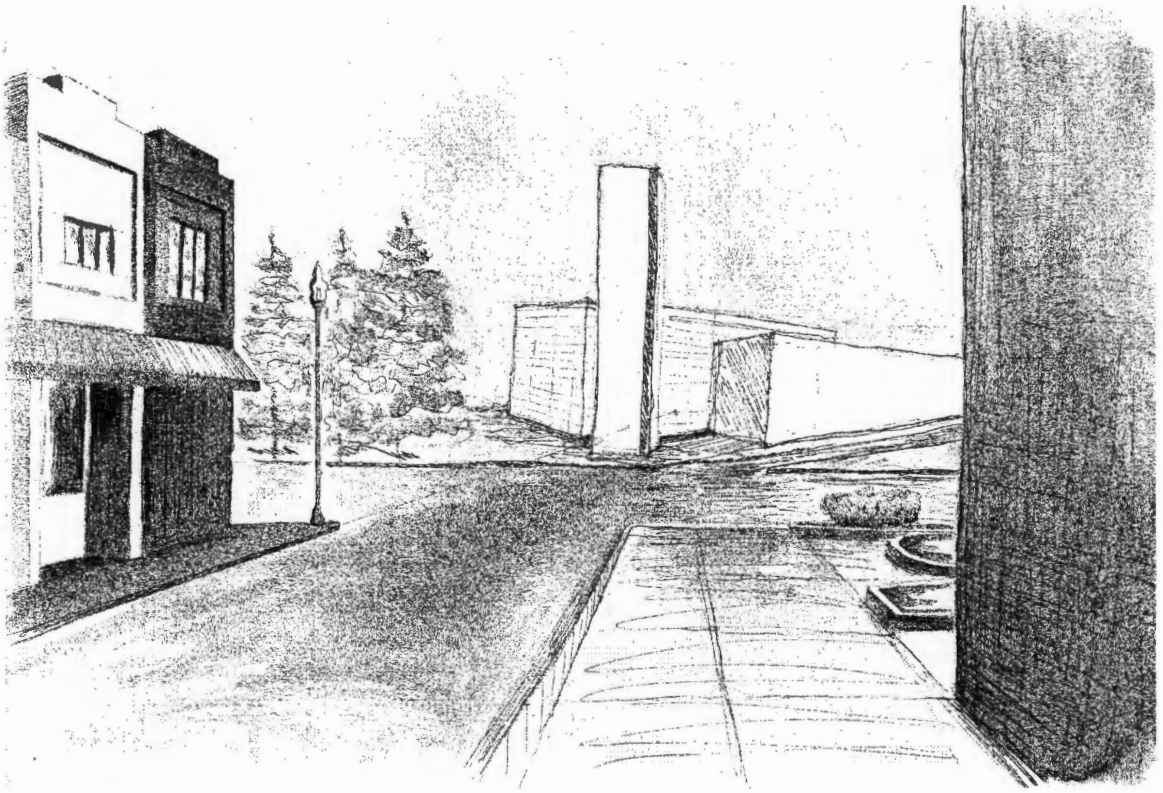


Figure A52
Perspective of Light Box From Main Street
Author

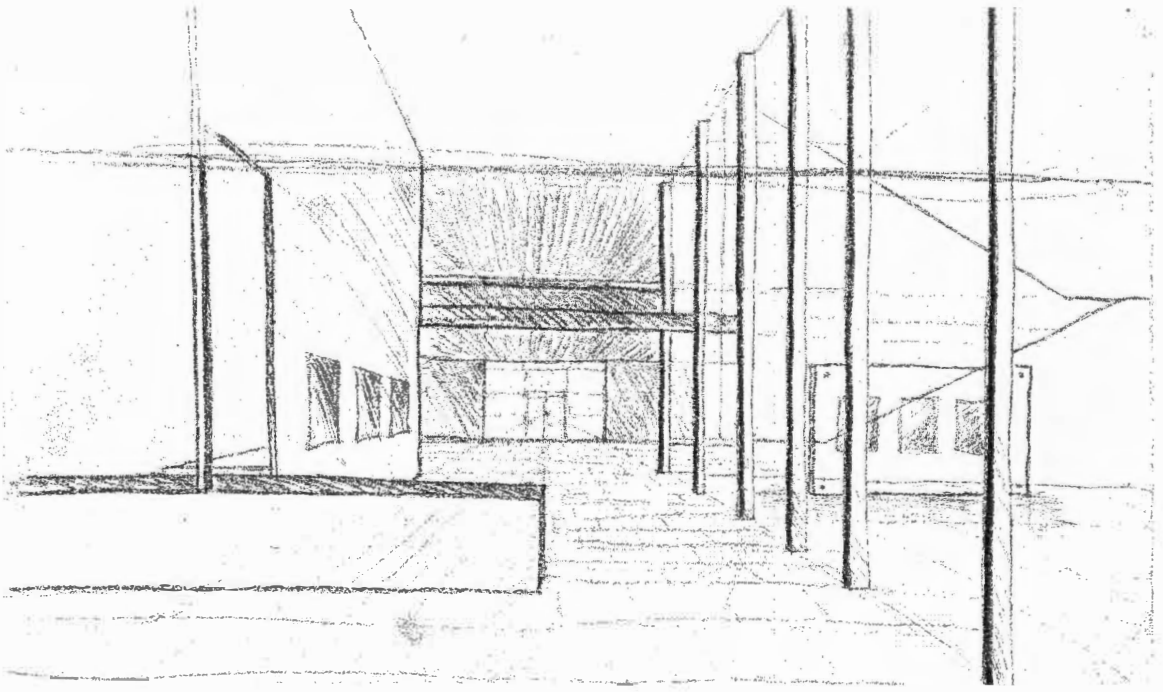


Figure A53
Perspective of Entry
Author

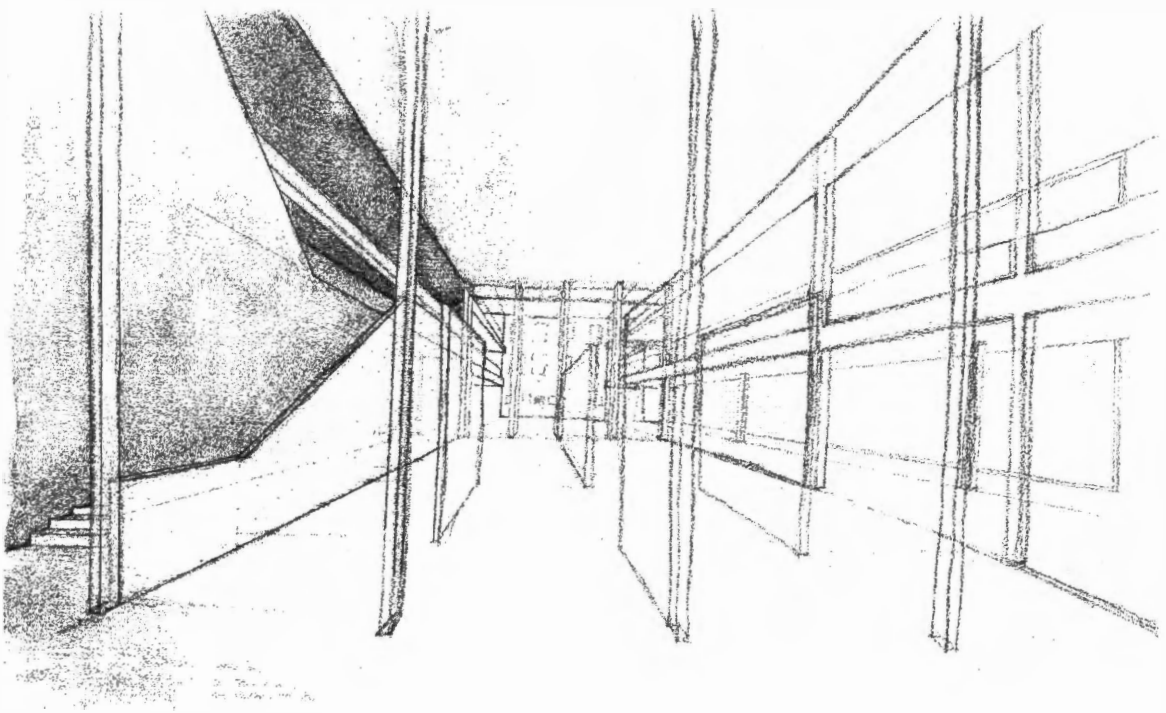


Figure A54
Perspective of Flattening Space Gallery 1
Author

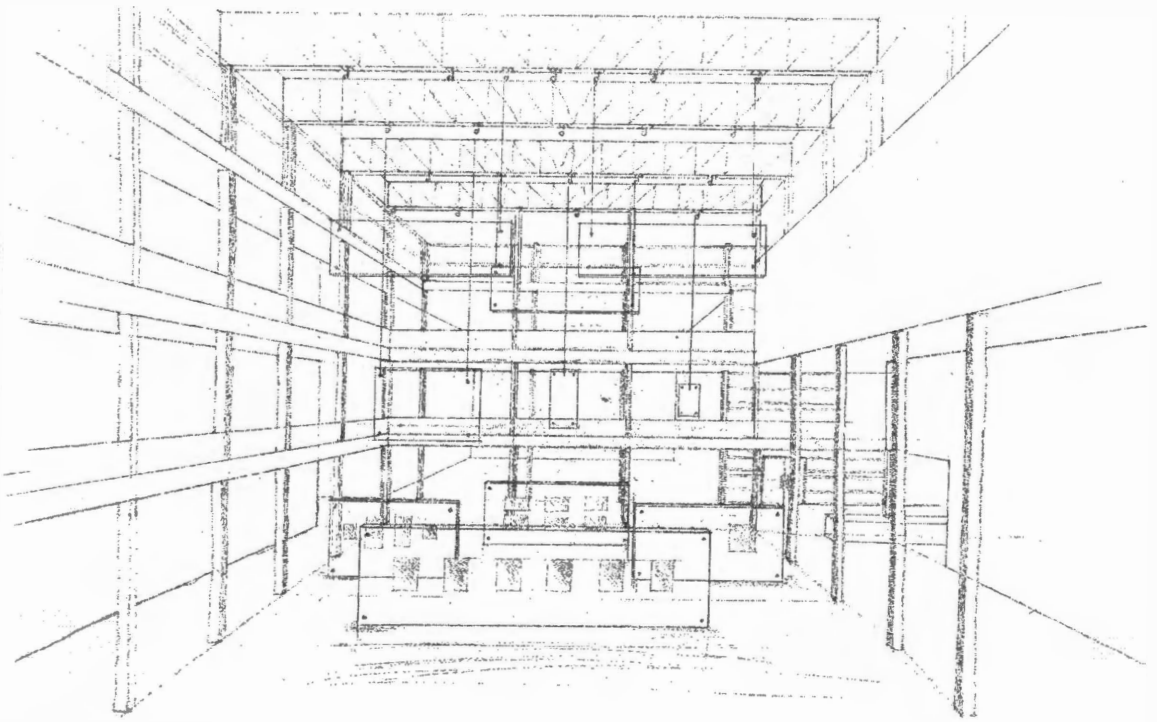


Figure A55
Perspective of Flattening Space Gallery 2
Author

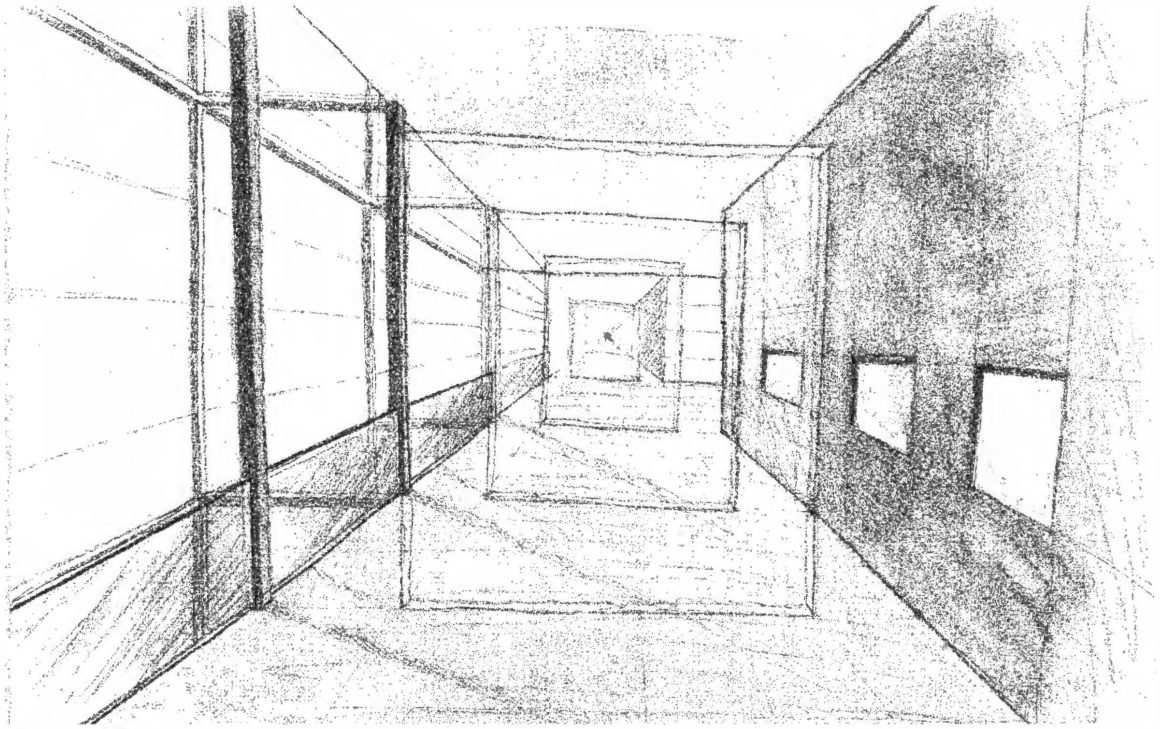


Figure A56
Perspective of Second Floor Gallery
Author

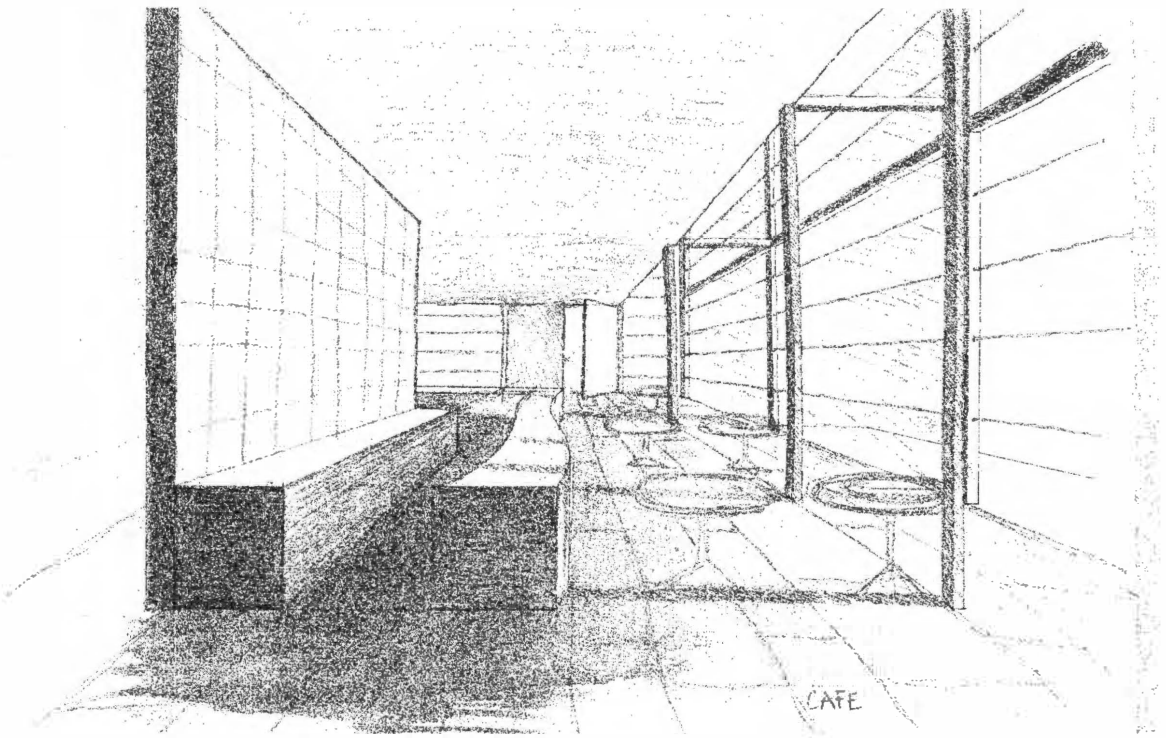


Figure A57
Perspective of Café
Author

Vita

Haley Chapman was born in LaFollette, Tennessee in 1980. She attended Campbell County High School where she graduated as valedictorian of her class. She then earned a Bachelor of Science in Engineering Design Graphics Technology in December, 2002 from East Tennessee State University in Johnson City, Tennessee. After one semester of rest and relaxation, she began the Master of Architecture program at the University of Tennessee, Knoxville, for which she will receive her degree in August, 2006.