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abstract

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succinctly states the
basic premise of the full
thesis effort

abstract pg.4-5		
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An investigation of skin and a range of textural elements wishes to seek a parallel study of the body and its relationship to [applying] architectural clothing. The practice of reinterpreting textures, sounds, colors, smells, etc... invites the potential for an event of amplified stories and memories. Engaging the local contexts through the use of our senses establishes the core of a considered architecture. The experiences of passing through space, considering the whole engagement of the parallels of architecture and fashion is established through the interpretation of the specific methodological principles and strategies; which then begins to initiate an invigorating side effect to our senses. It is through the formation, deformation, and reformation of an articulate body that architecture can redefine beauty and utility through space.

Project Summary

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a meaningful statement
that translates the
thoughts that guided
the development of the
overall thesis.

abstract pg.4-5	project summary pg.6-7	
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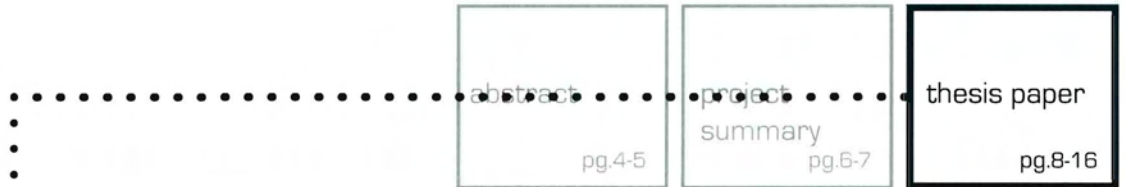
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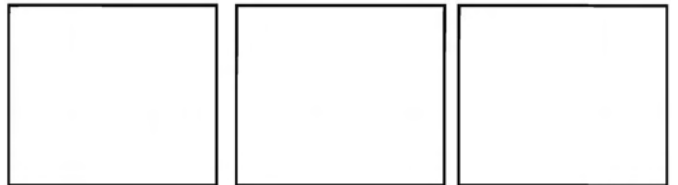
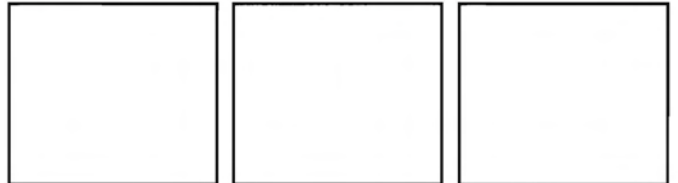
"fashion designers create garments for the human body, while architects create buildings large enough for many bodies to inhabit simultaneously" .skin+bones.

Regardless of scale, the body shape is a perfect exercise in spatial design, a testing ground for ideas and techniques to apply to buildings. The practice of origin for both architects and fashion designers is the body. In fact, there is a striking similarity in the 'making' process; it is the approach to construct a complex three-dimensional design from a two-dimensional medium. Openings, folds, panelizing, pattern-making - concepts and problems are much the same, whether it's a sleeve or a curtain wall. Technological innovations have influenced the design of buildings as well as garments. Therefore, garments and buildings share stylistic or structural qualities, or obtain common creative impulses. Designers in both fields have inspired each other with certain methodological strategies. Terminology of the 'making' has been exchanged and adapted to the strategies of both practices. Architects borrow and adapt vocabulary from the fashion world, draping, wrapping, weaving, folding, printing, and pleating surfaces and materials. Through the process of investigating the tectonic skins of a building or garment, this thesis expands on developing an experiential existence of the body within architectural clothing. Using the design of "An Educational Facility for the Visually Impaired," this thesis begins to engage and delight all of the senses in a considerable way at the multiple scales of the building and of the bodies within it.

thesis paper



is intended to be a thoughtful and critical text that carefully describes all the background information that is relevant to the thesis and builds up an argument for the thesis position.



Regardless of scale, the body shape is a perfect exercise in spatial design, a testing ground for ideas and techniques to apply to buildings. The practice of origin for both architects and fashion designers is the body. In fact, there is a striking similarity in the 'making' process; it is the approach to construct a complex three-dimensional design from a two-dimensional medium. Openings, folds, panelizing, pattern-making - concepts and problems are much the same, whether it's a sleeve or a curtain wall. This project explores the inherent connections that exist between the fashion of architecture and the architecture of fashion. Technological innovations have influenced the design of buildings as well as garments. Therefore, the garments and the buildings share stylistic or structural qualities, or obtain common creative impulses. Designers in both fields have inspired each other with certain methodological strategies. Terminology of the 'making' has been exchanged and adapted to the strategies of both practices. Architects borrow and adapt vocabulary from the fashion world, draping, wrapping, weaving, folding, printing, and pleating surfaces and materials. Investigating the contemporary results of technology and manufacturing offers a new vision of 'making' in architectural design. However, it is important to acknowledge and identify that the 'body' is the origin connection of the two practices. Buildings have often been described as bodies, and, still anatomically speaking, the interior of a building can be defined as its inner skin- a membrane of changing thickness that may be marked, pierced or wrapped. [Through the process of investigating the tectonic skins of a building or garment, this thesis expands on developing an experiential existence of the body within architectural clothing. Using the design of "An Educational Facility for the Visually Impaired," this thesis begins to engage and delight all of the senses in a considerable way at the multiple scales of the building and of the bodies within it.]

the parallels

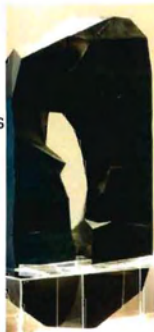
The parallel link between fashion and architecture can be viewed as part of a historical continuum. Both garments and buildings are invaluable anthropological artifacts that indicate important conditions, stylistic preferences and new developments in technology and materials. In addition, the designers and architects of today continue to be influenced by such artifacts,

reinterpreting them for a contemporary context. "The connection between clothing and shelter dates as far back as the Ice Age, when people used animal skins to cover themselves and to fashion exterior walls for simple structures." ¹ Today a number of contemporary architects are looking to create facades with more visual interest and have begun to explore folding and draping, including other techniques. "The Medieval propensity for extreme verticality can be seen in both Gothic dress and architecture. Sharply pointed shoes, sleeves and *hennins* relate directly to the ogival arches and soaring spaces of Gothic structures such as the thirteenth-century cathedrals at Amiens, France, and Salisbury, England." ² Recently, the Gothic arch was the inspiration for a dress designed by Yeohlee Teng, in which pattern pieces in shape of ogival arches were sewn together to form its skirt. Architecture is a significant source of inspiration; her study of building methods, tectonic properties, and various architectural concepts are evident in her garment designs.

Between the two disciplines, deeper and more complex parallels have developed- the result of new industrial technologies and manufacturing processes. In the past twenty-five years, fashion and architecture have followed ever more similar aesthetic directions, as mentioned, due in part to an increasing cross-disciplinary dialogue between the two fields. A more complex subject that addresses the two parallel texts is the adoption of deconstructive strategies. Fashion's obsession with deconstruction is not as theoretically influenced as that of architecture, deconstructed garments with grayed edges exposed seams, and deliberate holes and cuts began to appear in high fashion in the influential early collections of some fashion designers.

It is evident to capture the method of deconstruction in Frank Gehry's Santa Monica, California residence. He started with a conventional structure and, using readily available materials, ended with something innovative and unexpected. Gehry dismantled parts of the exterior envelope of the existing house and integrated off-the-shelf industrial materials like plywood and chain link to transform the house into a complex new spatial volume. Essentially, deconstruction is the act that breaks down the pieces to reveal and undermine the established hierarchy that exists between them. "The rhetoric of deconstruction- 'dismantling, disjunctive, rupture, layers'- was picked up by a number of

introducing the parallels of fashion and architecture: Peter Eisenman's model for the [Max Reinhardt Haus], and Yeohlee Teng's [infanta skirt/ bodysuit] the parallel of geometry and color



disciplines, which include- art, film, fashion, literature, and architecture.”³ This vocabulary is taken in by many practices and it employs a variety of creative outcomes. Deconstruction itself is often misunderstood as the ‘taking apart’ of constructions. Consequently, any provocative architectural design which appears to take structure apart- whether it be the simple breaking of an object or the complex dissimulation of an object into a collage of traces- has been perceived as deconstructive. On the contrary, deconstruction gains all its sensibility by challenging the very values of harmony, unity, and stability, and proposing instead a different view of structure. The view that flaws is natural to the structure. A deconstructive architect is therefore not one who dismantles buildings, but one who locates the inherent dilemmas within the building and creates a form of experience, awareness to its existence.

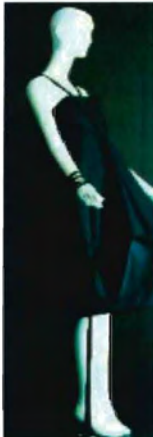
integrating the strategies

The strategies of design that are being developed by fashion designers and architects shape the envelope, spatial volume, and surface of individual garments, and buildings. Geometry has long been employed to generate form in architecture. However, in fashion design it is not often that you will find geometrical forms, since conventional garments are made of multiple pieces of fabric that are cut and assembled to complement and conform to the shape of the body. Although, you will find that an exploration of geometry has appeared in the practices of both Yeohlee Teng and Isable Toledo. Teng usually works economically with a limited or shortened length of fabric to construct her garments. Some of her garments are precise geometrical forms that can be reassembled into puzzle like pieces and then back to its original piece of cloth, but once shaped on a body, the geometrical shape of the garment disappears. It takes on a completely different shape due to gravity, which causes it to hang or drape, and the body, which fills out its form. One other architectural inspiration is suspension or more specifically, the study of suspension bridges, resulting in several suspension dresses where skirts are hoisted with cables or straps to provide volume and surface articulation. As for Isable Toledo, her approach is also inspired by geometry, but in an organic, less logical variety. She takes a reductive approach to pattern-making –what she calls “romantic mathematics”- by paring each garment down to its simplest geometric form.⁴ On

isabel toledo
[packing dress]
from collection
spring/summer
1998. where
a flat piece of
fabric forms a
three-dimen-
sional shape to
enclose the body.
made from two
circles of fabric
sewn together
with holes cut for
head, arms and
legs



yeohlee teng,
[catenary har-
ness] dress
from collection,
autum/winter
2006. the
importance of
geometry as
a generative
source for her
work.



teng draws inspiration from an infatuation with the work of Robert Mallet-Stevens and the awe-inspiring engineering of suspension bridges, particularly the flawless rope bridges that have three support cables held up by the stays. The collection is comprised of a wide range of fabrics in contrasting weights, from white gossamer cotton to black double face wool.



office dA, the [zahedi house]. the corrugation is conceived as a taut skin, holding a very constrained program within. the distortions of the skin reflect the shifts in wrapping that occur within the misalignment of the programmatic elements and the need for openings



the body, her clothes undergo a transformation as well, as pieces cut from squares, circles, and triangles lose their flatness and become delicate, flowing organic shapes. Toledo has studied fabrics to a great extent, and understands the detail that fabric performs on the body, calling the results "liquid architecture."⁵ Her Pedestal Dress and Suspension Dresses are current examples of the way she has adapted architectonic principles to explore and manipulate the structure and volume of her garments. Therefore, her focus to design follows function rather than a concept or theme design. Just as an architect might design based on the program of activities that it will house, Toledo looks at what a particular garment needs to do, how it will be used, and how it should work. She responds to gravity; she incorporates precise engineering principles to ensure that garments will fall, wrap, or enclose the body in a particular way. She also develops a structural framework- often as simple as a single seam- that will carry the weight of a dress.

In 2004, a major section of "Metamorph", the vast international exhibition organized by Kurt W. Foster for the Venice Architecture Biennale, explored the properties of building "skins", which can be defined as the continuous exterior surface that covers the structural framework, or "bones" of the building.⁶ Skin as an architectural element is a remarkable innovation that can be so sophisticatedly challenged when creating the envelope of a building. The translation of drapery folds into rigid building skins is seen in two projects by Boston-based architects Office dA. The Zahedi House in Weston, Massachusetts, the architects wrapped a taut skin of corrugated metal around a wood-frame house. On one façade, the skin becomes looser and more evocative of domestic interiors as it is distorted and manipulated into gentle curtainlike folds to reflect the shifts in program that occur on the interior and the need for openings on the exterior. In their design for casa La Roca, the architects combined a brick skin with the idea of drapery. Varying from solid and taut to 'perforated' and folding, the skin's terra-cotta blocks, bricks, and tiles weave together. The skin signals the domestic function of the building as well as provides enclosure, privacy, and ventilation.⁷

Folding and pleating may be the tectonic strategies shared most frequently by fashion and architecture. In folding, one flat piece of material becomes a volumetric form through the introduction of

alba d'urbano
"Il sarto im-
mortale" (the
immortal tailor)
garments that
cover the body
with photo-
graphic images
of itself. This
project deals
with the relation-
ship between
bodies, external
appearance,
and technology,
with a special
emphasis on the
topic of sewing
and the various
operations it in-
volves. It includes
all elements
connected with
fashion. The
work of tailoring:
cutting, measur-
ing, analyzing,
and putting back
together again



creases; pleating is a subset of folding, in which regularly shaped folds or creases occur at close intervals. This strategy is a similar approach used by Teng, where she uses only one piece of fabric to create the entire garment. The idea of a continuous fold that wraps around the landscape of the body to create a complete skin, involves the techniques of making origami. Morphosis's Sun Tower in Seoul features a perforated aluminum surface wrapped around the building, culminating in origami-inspired folds at the top. Since the 1990's, architects have used folding as a device to create a greater visual interest through dramatic effects of light and shadow on a buildings exterior and to manipulate the volumetric forms of the interior.⁸

With these methods incorporated it is essential to continuously consider the scale of the body. The evocative folds of the architectural skin allow the inhabitant, for a still moment, to experience the exterior conditions- the notion of the sunlight leaking through the openings, expressing the form of the exterior as well as casting a shadow of forms in the interior- employing the sensual experience through its entirety.

investigation of skin+body

Skin is a complex multilayered, multipurpose material. Besides being the medium that harbors touch, it also is an important layer of protection. Skin is the body's largest sense organ, registering warmth and cold, pleasure and pain, and an infinite array of textures.⁹ The skins of objects, buildings, and garments today respond to input from users and the environment, from shifts in temperature or light to a range of textural information. Contemporary designers approach the surfaces of products and buildings as similarly complex, ambiguous forms. Manufactured skins are richly responsive substances that modulate the meaning, function, and dimension of things. Incidentally, skin has a likeness to the function and qualities of fabric and clothing. This comparison has been interpreted through the work of Alba D'Urbano. D'Urbano created a series of garments that cover the body with photographic images of itself.¹⁰ The artist clearly establishes a link between the expressive and protective qualities of skin and clothing. Furthermore is the notion that skin [a layer that encloses a number of existing elements of the body] can be related to the fabric of a building in the sense that they are both thin-membranes wrapping a complex series of elements. This 'skin' can be

interpreted as an enclosed envelope or as an added protective layer to the existing structure. The function of the structure or of the 'body' provides the developed framework of the tectonic skin. The function and qualities of 'skin and body' is important. The skin collects information through the sense of touch, which allows the inhabitant to identify space and gain a memory of time. We have an innate capacity for remembering and imagining places. Perception, memory and imagination are in constant interaction with the body, allowing the inhabitant to be in conscious or sub-conscious awareness to the identity of space they dwell within. The body's interaction with space helps collect information that is transformed into our inherent understanding of how we move through space. An individual is more likely to experience a space on a deeper level if they actively engage in it, move through it, rather than solely observe it.

Our engagement in the space embeds in us a sort of memory that is registered through the layers of experiences. Understanding architectural scale implies the unconscious measuring of the objects or the building with one's body, and of projecting one's body scheme into the space in question. Wrapping, extending, covering, exaggerating our bodies' innate functions, we have adapted through our lifestyle to the use of these mechanisms of the human form. We feel pleasure and protection when the body discovers its resonance in space. "When experiencing a structure, we unconsciously mimic its configurations with our bones and muscles: the pleasurable animated flow of a piece of music is subconsciously transformed into bodily sensations."¹¹ The architectural program should then assist some type of formation in a condition that the inhabitant will engage and feel the space through the physicality and senses of their body. Place speaks to the soul through a medium we call our body with the ambiguity of a poem.¹² We constantly involve our body in experiencing the elements of the world, whether it's the interior space or exterior space. Juhani Pallasmaa poetic reflection: "I confront the city with my body; my legs measure the length of the arcade and the width of the square; my gaze unconsciously projects my body onto the façade of the cathedral, where it roams over the mouldings and contours, sensing the size of recesses and projections; my body weight meets the mass of the cathedral door; and my hand grasps the door pull as I enter the dark void behind."¹³

Every touching experience of architecture is multi-sensory; qualities of matter, space and scale are measured equally by the eye, ear, nose, skin, tongue, skeleton and muscle.¹⁴ Architecture allows for a collaboration of senses to interact with each other to discover and identify our surroundings. All the senses, including vision, can be regarded as extensions of touch; the senses are specializations of the skin. You can identify the senses as the interface between the skin and the world, the interface between opaque interiority of the body and the exteriority of the world. Our senses mediate information for the judgment of the intellect, and they are also channels that ignite the imagination and articulate sensory thought. Transparency and sensations of weightlessness and flotation are central themes in modernity. In recent decades a new architectural imagery has emerged, which employs reflection, gradations of transparency, overlay and juxtaposition to create subtle and changing sensations of space, movement and light.¹⁵ This project wishes to explore this new sensibility that promises an architecture that can turn the relative immateriality and weightlessness of recent technological construction into a positive experience of place and meaning.

conclusion-departing thoughts

So as the boundaries between fashion and architecture continue this project explores and commits to the inherent connections that exists between the two methods of design and links the relationship of the bodies that inhabit within and around the architecture. It is important to acknowledge and identify that the 'body' is the origin connection of the two practices. Therefore the investigation and outcomes of these notions engage and delight all of the senses at the multiple scale of the building- through a delicate set of techniques such as: folding, wrapping, draping, weaving, piercing, etc- and which is essentially lead through the process of studying the tectonic skin of the building/garment and the human scale as a reference to spatial experiences. Using the design of an educational facility for the visually impaired as a programmatic design vehicle, which is pursued by the questions of the thesis within this specific architectural situation. Because the predominant audience is visually impaired, this provides a rich and complex set of opportunities to investigate the capacity of a material presence overlaid with the sensual to affect the perceptions of space and experience. Certainly, there

would also be individuals who are not visually impaired who would use this space. The architecture would map their experiences as well but in a different way. Where the architectural clothing speaks to the inhabitant and becomes an experience of all our given senses. The authenticity of architectural experience is grounded in the tectonic language of the building and the comprehensibility of the act of construction to the senses. We touch, listen and measure the world with our entire bodily existence.

precedent analysis

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precedent analysis pg.17-38		
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a study of influential work that expresses the larger questions of the thesis project. the precedents that i've researched express an interest in the *making* and *joining* of architectural elements in the construction of an architectural tectonic skin.

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shigeru ban::curtain wall house::

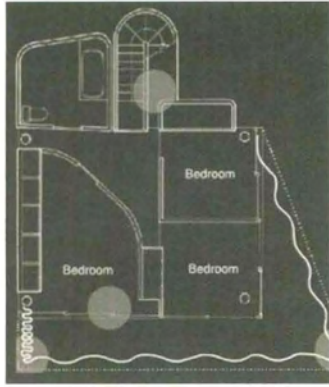
[biography]

Shigeru Ban was born in Tokyo, Japan in 1957. He studied architecture at SCI-arch and Cooper Union before working briefly for Arata Isozaki in Tokyo. He established his own practice in 1985. Mr. Ban has served as a professor of architecture at Tama Art University, Yokohama University, and Nihon University. He became a consultant for the United Nations high commissioner for refugees when his shelter design for Rwandan refugees was adopted in 1995 that same year he established the humanitarian organization, voluntary architects network. Mr. Ban's work has won numerous architecture awards in Japan including the 1996 Kansai architect grand prize from the Japan Institute of Architects and the best young architect of the year 1997



[curtain wall house]

The clients for the 1995 curtain wall house wanted a contemporary home that would carry out the openness of the traditional Japanese house. The project, situated on a constricted intersection in *Itabashi-ku, Tokyo* consists of an elegantly spare two-floor block of open living spaces sandwiched between a large, overhanging triangular roof and deck that extend almost to the curb line. Around the perimeter of the triangle Ban hung billowing white curtains that can be opened or closed to regulate the degree of transparency between interior and exterior. The house displays a taste for the surreal and demonstrates an inventive reinterpretation of local construction techniques. Ban describes the curtain as a 'thin membrane' [that] takes the place of shoji screens, fusuma doors, shutters and sudare screens in a traditional Japanese house. The house is totally transparent "visually" but not "physically" because most of the glass windows are fixed. The Japanese houses are totally transparent "visually" when all the sliding screens are open, even "physically" transparent because outside spaces are always integrated with inside spaces.



floor plan shows a curved wall of the masters bedroom and two squared-shape bedrooms for the children at the right. the two story curtains can either be drawn closed, creating privacy, or left open, revealing the interiors of the house and the movements of its occupants. if closed during the day, soft light filters through the fabric into the living areas on the second floor and the bedrooms on the third floor, functioning like the rice-paper shoji screens of the traditional japanese architecture. parking is on the ground level.



view with curtains open. the outer skin of the house is comprised of two elements: transparent glass panels and opaque fabric curtains. when they are retracted the result is an almost palpable "nakedness" that even those who live in glass houses might find surprising



"Always we are depending on trust, not on the agreement. Always we try to keep a good relationship with the client. If I do some experimental building, if some problems happen afterwards-as long as I keep a good relationship with the client and as long as the client likes the house, it's no problem. We just have to fix it.."

-Shigeru Ban

significance of[curtain wall house]

Shigeru Ban's "curtain wall house" demonstrates an interesting concept that relates to the investigation of fashion and architecture, with the use of fabric as a dominating interior/ exterior curtain wall. It begins to integrate a 'physical' and 'visual' connection with outside spaces. The significance of this project becomes an important exploration to the ideas of relating the study of 'skin' as an exterior envelope to an applied structure.

[this precedent study has formulated a series of concepts to help guide and strengthen the thesis program]

- .the transparent glass and opaque fabric curtains draw in natural light.
- .the winds play freely with the unfixed curtain walls, swinging them from the inside out onto the street [with .the house being elevated it does not interrupt traffic].
- .the cantilevered [open] terrace is exposed to the street creating a public setting.
- .the public setting allows for social interaction.
- .the curtains when closed create private spaces on both levels, yet still feeling the presence of nature through its opaqueness.
- .the openness of the floor plan, allows for any individual to engage the space with their own interpretation.



office dA::mantra restaurant::

[office dA history]

Architecture and design firm located in Boston. Established in 1991 by principal partners Monica Ponce de Leon and Nader Tehrani. The firm's work ranges in scale from furniture to urban design and infrastructure, with a focus on architecture. office dA seizes on the challenges unique to each project-the peculiarities of a site, requirements of program, material properties- as the catalysts for transformation in architecture. An investigation of the potentials of materials and construction techniques, often imported from fields outside of architecture, is the foundation for every design. Office dA explores unique material qualities in conjunction with both traditional and digital techniques of design assembly, and resolves every project to a high level of detail. office dA's simultaneous rigor and sensitivity have allowed the firm to develop a portfolio of projects around the world-from Boston to Caracas to Beijing-which uniquely marry local craft and tradition to global and contemporary techniques



[mantra restaurant]

Is located in a historic bank lobby in downtown Boston, Massachusetts. The existing space, composed of tall spaces clad in a richly grained marble and a steel-lined vault with a monumental three-foot-thick door, served as a fantastic site for intervention of various kinds. The thematic transformation of the space is achieved using Indian silks, tents, and jali screens, among other allusive techniques, to provide different dining environments-some public and others-are manipulated using methods adopted from apparel design. Two pieces stand out as backdrops for the activity of the restaurant: a reflective steel mirror, laser-scored, ripples as a folded ribbon behind the bar and a monumental wooden structure fashions a pleated still life inside the restaurant space, acting as a lounge space for appetizers. Both structures are treated as fabric liners, articulating the shape of the restaurant.

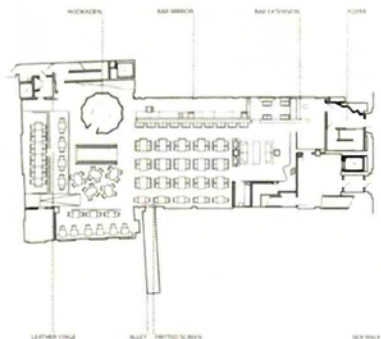
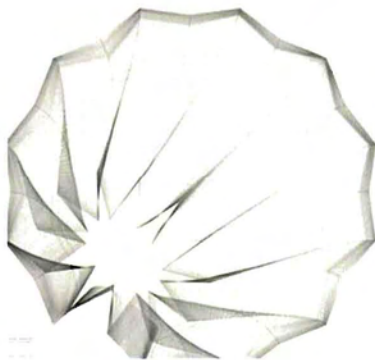




A colossal wooden structure fashions a pleated still life inside the restaurant. Known as the hookah den, the structure serves to anchor the main axis of the restaurant. A monumental figure with the urban interior, the structure houses low intimate couches as a space of repose. The mantra restaurant emerged out of a divergent architectural strategie. The existing space, worn down yet composed of tall proportions was a simple archeological approach of renovation and reconstruction which was all that was needed in order to restore the space to its original aura and splendor.



The restaurant required spaces of varying kinds, some public while others more private and intimate. as such, a second strategy incorporates techniques of inserted spaces. The culture of the restaurant served as an alibi to give particular allusions to the various installations. Responding to the menu, drawn from french culinary techniques and indian spices, the architecture of the restaurant is hybrid in approach- working with indian typologies, materials, and references while at the same time using techniques specific to contemporary architectural and constructional culture.



significance of [mantra restaurant]

The concept of having a private and public space in an environment that is meant for social interaction, creates an experience for an individual to inhabit private space through a screen like structure. A structure such as this creates a distorted perception of the surrounding area. The thematic transformation of the space provide different dining and leisure environments while giving cultural specificity to the proposal. [the use of indian silk, and japanese screens]. Also the significance of the installation is the underlying structure that creates the form of a 'wave' and is applied over with wooden slates that act like a second skin which flows with the inner structure.

[this precedent study has formulated a series of concepts to help guide and strengthen the thesis program]

- .skin as a formless shape, but with the structure of bones it creates its shape
- .formation, deformation, and reformation
- .layering of skins, textures and membranes
- .poetic inhabitations
- .balance of open space [public] and closed space [private]



office dA::harvard university::

[Harvard Graduate School of Design renovation]

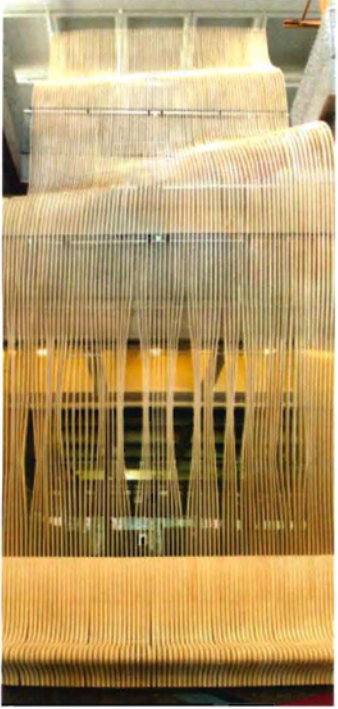
Located in Cambridge, Massachusetts. Completion of renovation, 2000-2001

The design of this project results from experimentation with new technologies, emerging techniques of fabrication and economical material. Working with cad-cam technologies, much of the design is composed of complex routing, formwork, and bending techniques, defamiliarizing the very materials from which each piece is fabricated to transform the appearance overall



[installation wall piece]

[installation wall piece]





behnisch architects
[school complex for disabled children]

Hervrectingen, Germany 2004

The new school for a good 100 children with mental or physical handicaps is situated in a natural park in Herbrechtingen on the "Schwäbische Alb". Behnisch, Behnisch & Partner propose a flexible and open structure, a composition of several small one-story high buildings offering protected, individual worlds grouped around a central courtyard.



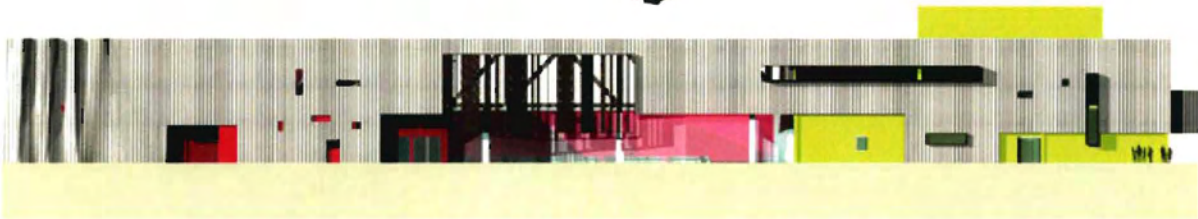
Both the buildings and the natural environment with a small water feature offer numerous opportunities to communicate, to play and to learn. Terraces for "open-air" lessons, trees and hedges which provide shelter without hiding anything create an atmosphere in which the children can develop their imagination and their social awareness.





pugh & scarpa architects
[LATTC]

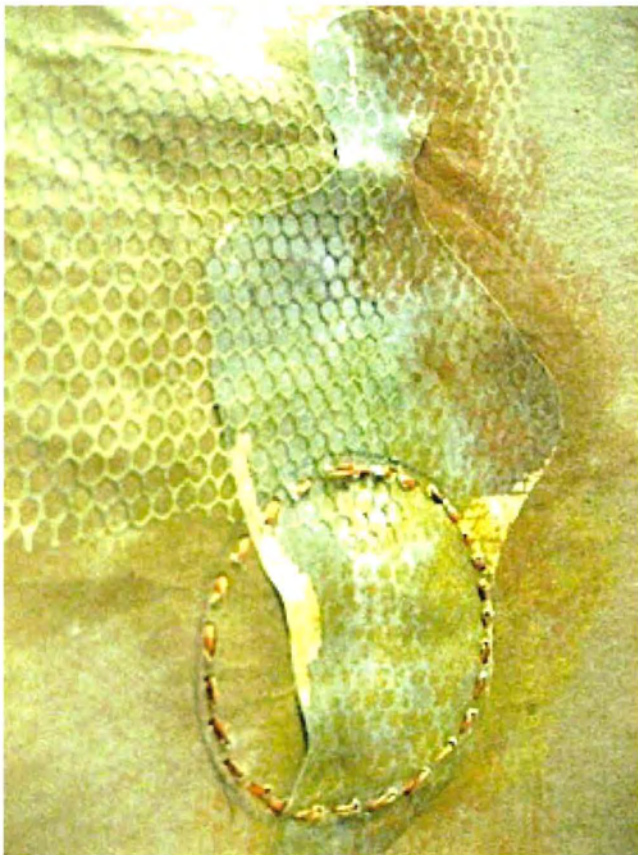
Los Angeles Trade Technical College Physical Education and Gymnasium Buildings, Renovation, repair and modernization of existing 1960's Buildings G and J on the LATTC campus. Building G is a 13,690 square foot one story concrete structure that houses the college's basketball gymnasium and associated facilities. Building J is a 15,068 square foot two-story concrete structure that houses the College's Education Department, fitness center etc. Building will be LEED certified

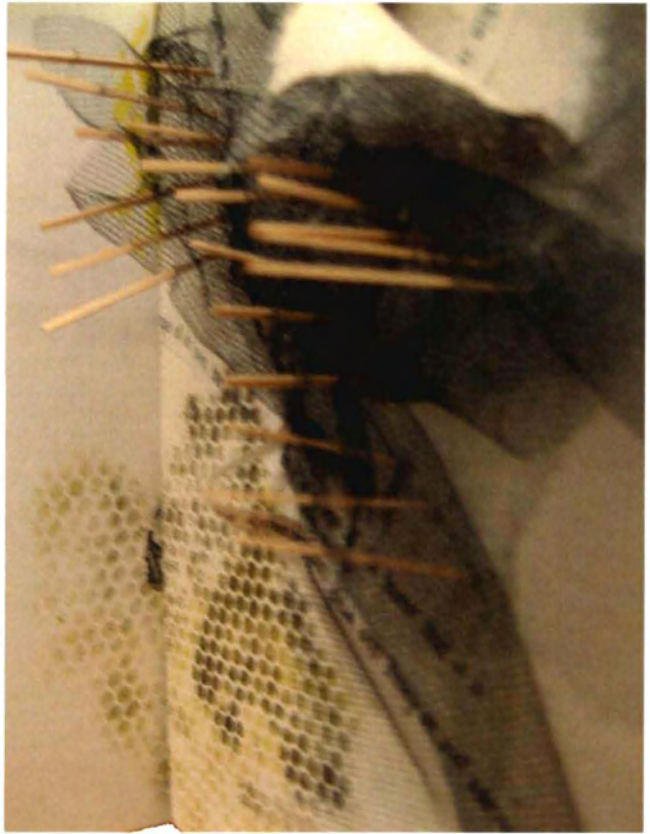


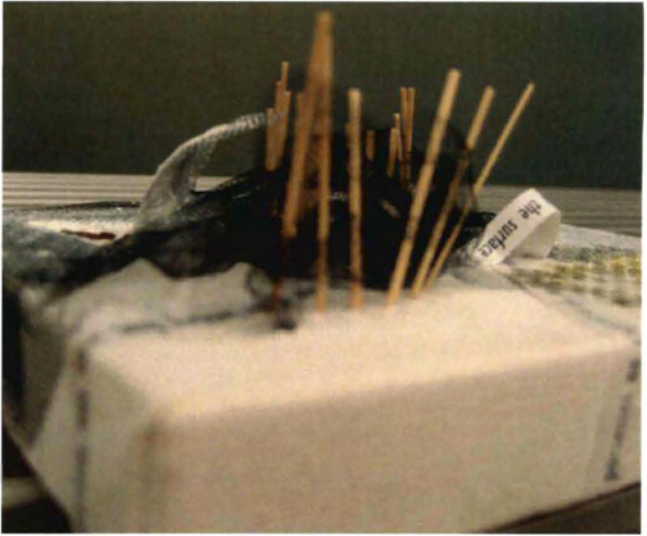
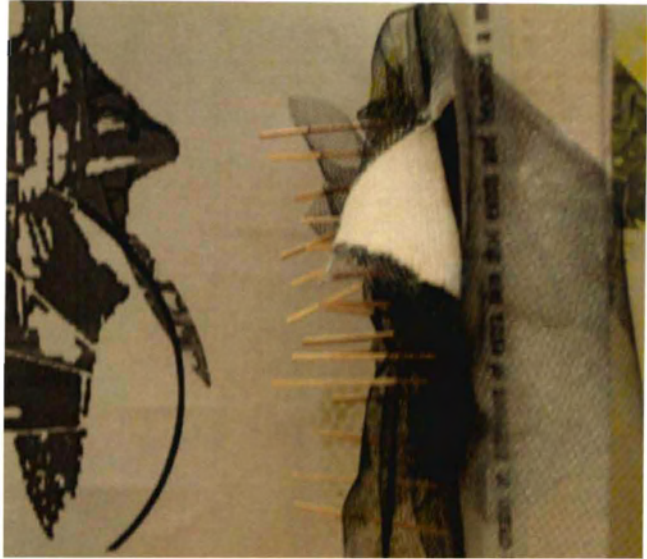
shift to the right...
[the process of making]

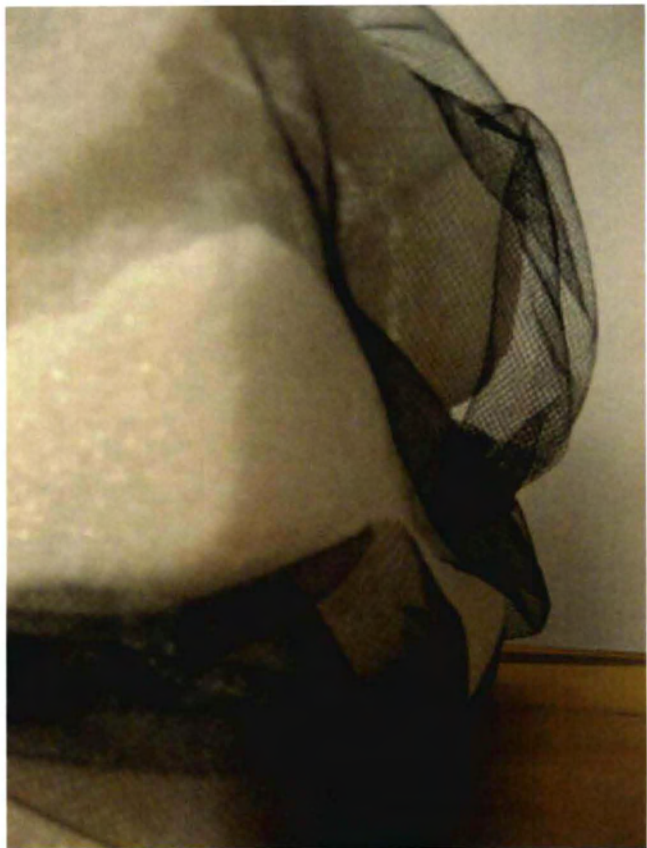
[analysis-artifacts]

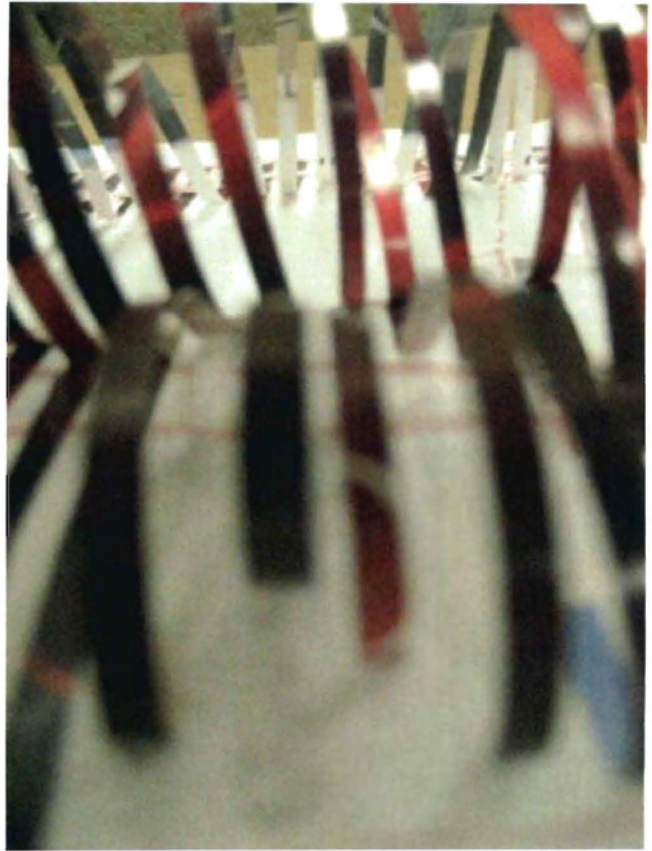


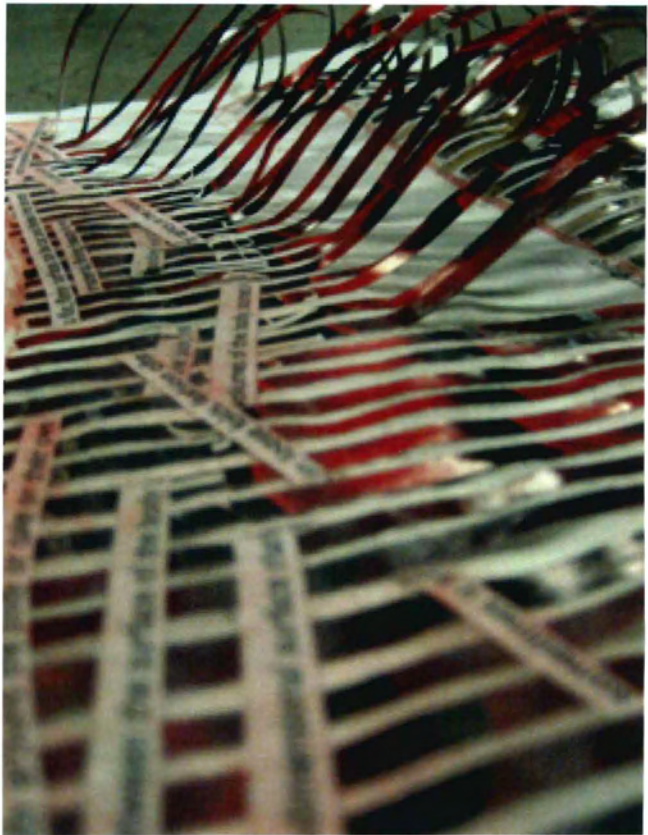


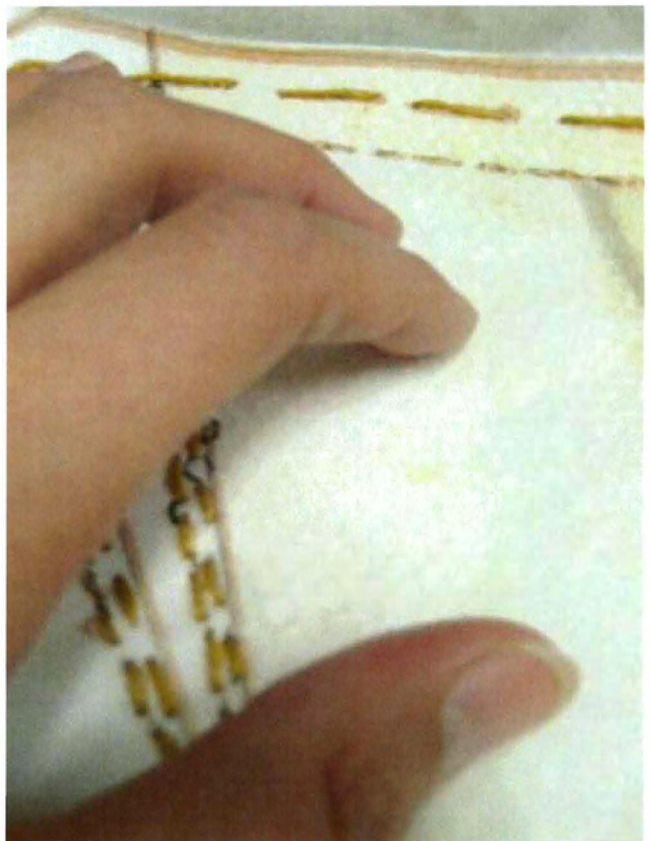
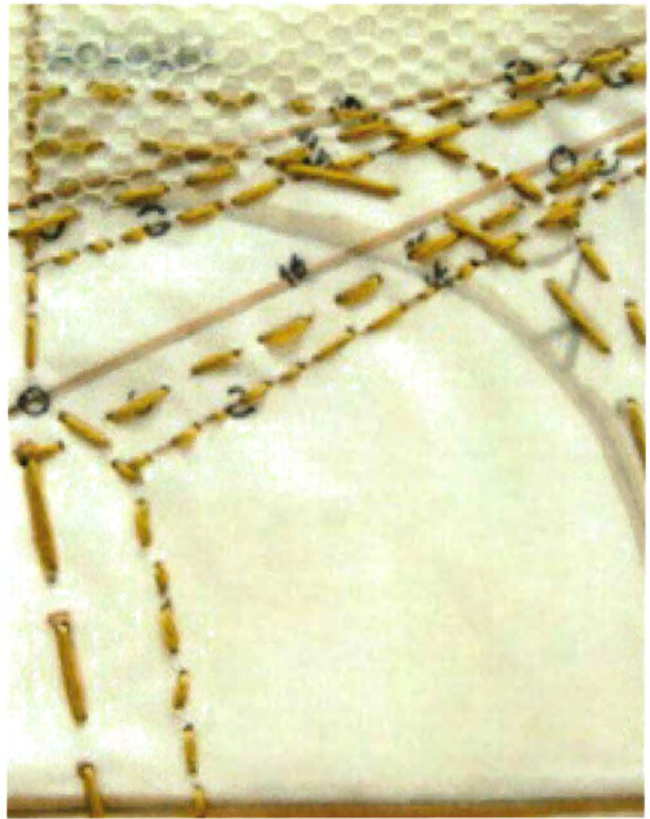


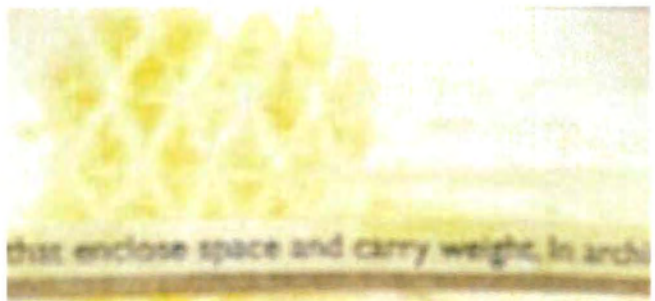












The artifacts created are explorations of the tectonic skins, which investigate and analyze the research gathered. Specifically looking at the skins of a building and abstracting the idea of skin and body. 'Skin' acting as the layers that envelope or conceal the body, and the 'body' acting as the structure of the building.

visual data research

abstract pg.4-5	project summary pg.6-7	thesis paper pg.8-16
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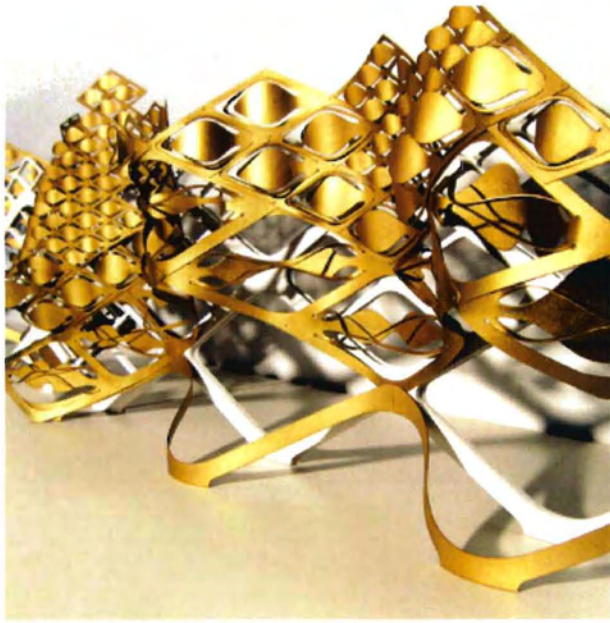
precedent analysis pg.17-38	independent research pg.39-42	
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other forms of research
that i have investigated,
separate from the prec-
edent studies.

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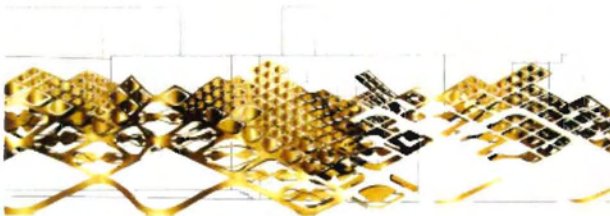
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fashion of architecture/architecture of fashion

[elena manferdini]

She approaches the design of a garment as she would the skin of a building by using tools and techniques more commonly applied to architectural and aeronautical design. Trained as both a civil engineer and an architect, Manferdini has included fashion in her interdisciplinary practice as well. She creates garments using maya three-dimensional modeling software, translating patterns through a machining computer application to laser-cut individual pieces of fabric and texturize them with slashes, cuts, or perforations.



Her 'clad cuts' collection, include designs that both reveal and conceal, cleave to and flow from the body. "It was a trial and error at fist...There are things you can't predict with the computer about how a fabric will fold...The cuts are meant to create three-dimensionality on the curvature of the body. They move and stretch, they open and distort as you walk.

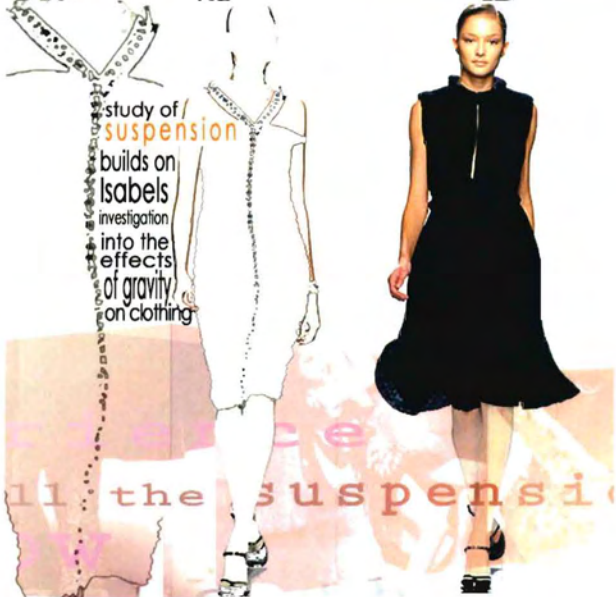




it is the physical layer between ourselves and the world and can cast shadows both ways. the play of fabrics becomes a game of light and shadow



Isabel gives herself and her clients greater freedom. to counterbalance extravagant shapes her search for plasticity and volume ranges over the entire natural world.



study of suspension builds on Isabels investigation into the effects of gravity on clothing

architecture of fashion

[isabel toledo]

She approaches clothing design by focusing on function. Just as an architect might design a building based on the program of activities that it will house, Toledo looks at what particular garment needs to do, how it will be used, and how it should work. As part of determining what a finished garment should look like, toledo considers how it will respond to gravity; she incorporates precise engineering principles to ensure that a garment will fall, wrap, or enclose the body in a particular way. She develops a structural framework. She investigates the properties of fabrics the same way an architect studies building materials.

Toledo's study of suspension builds on her investigation into the effects of gravity on clothing. She explores various distributions of weight and uses tension, torsion and compression as structural and esthetic elements. Instead of being hindered by the forces that make rigid structures vulnerable, she uses them to coincide with the shape and articulation of the body.

[graphic design project]

intention-create a catalog of isabel toledo's work.



architecture of fashion

[hussein chalayan]

he is one of the most innovative, experimental and conceptual fashion designers. known for cerebral collections that, especially in the context of the performance he stages to present his work , are more connected to the art world than to commercial fashion. he takes his inspiration from a wide range of different disciplines such as architecture, philosophy and anthropology. chalayan is a designer with the heart of an artist and with the brain of a scientist. the twice-crowned british designer of the year became famous in fashion by using unconventional materials and unorthodox techniques - putting the creative process itself on view. blown-up skirts, armchair covers which transform into dresses, chairs into suitcases, a coffee table reveals itself to be a wooden skirt... this and more will give you an idea how chalayan uses fashion as a medium for expression.

site analysis

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precedent analysis pg.17-38	independent research pg.39-42	site analysis pg.43-51
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[context of considered actions]
describes site conditions that would be beneficial to the development of the project.
focused on the qualitative.
explores rural, urban and suburban.

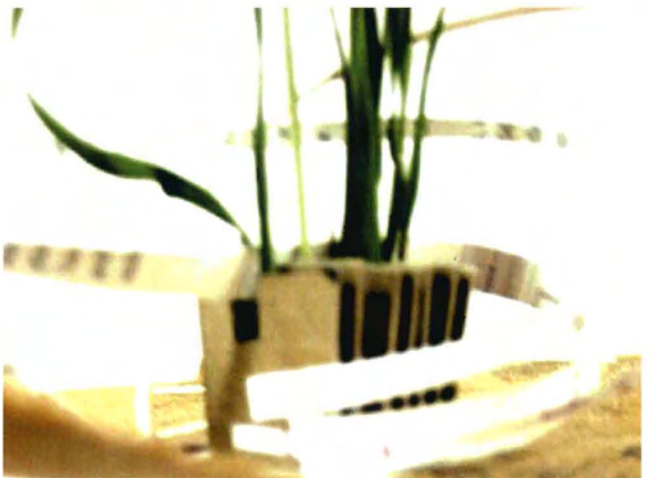
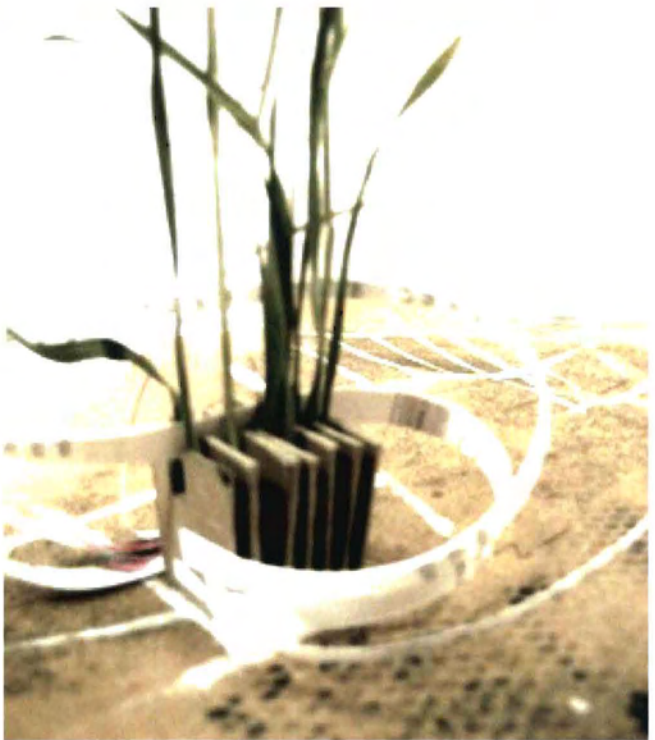
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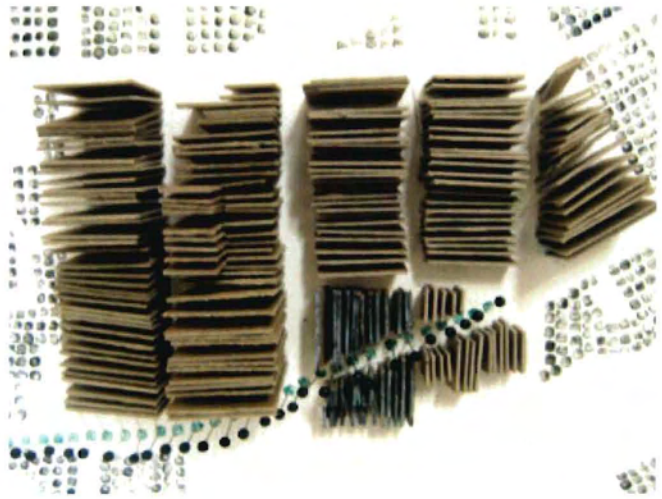
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[greenwich village, ny city, new york]

the site chosen is located between little w. 12th st. and 13th st. it runs alongside the 'high line' [an elevated railway that stretches for 1.45miles], it also runs along the hudson river. the site is currently going through a massive master plan in which the abandoned 'high line' is the main design focus. It was constructed in 1929 to help support 2 fully loaded freight trains. the highline is 30-60 feet wide and 18-30 feet high. this site offers many subtle existing conditions, which possess strong tactile qualities: the scent of existing vegetation, a result of the abandonment of the tracks, the sounds and smells of the waterfront and the streets, all intended to continue to have a strong presence, regardless of the intervention. the most dominant is the sound and smell of the hudson river at the western edge. The sounds of the soft current that caress the waterfront are very tame, but splashing water excited by passing watercraft resonates at this place.

in order to address the experience of a visually impaired individual, it became clear that the site analysis boards and site model studies had to focus on the qualities that would present a clear understanding through different senses other than sight. the sense of touch, smell and sound signify the sites elements.





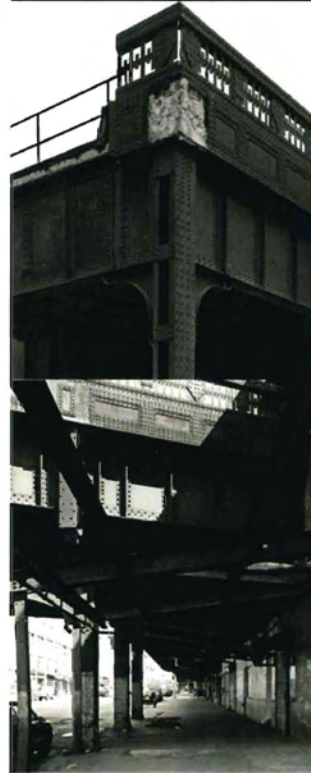
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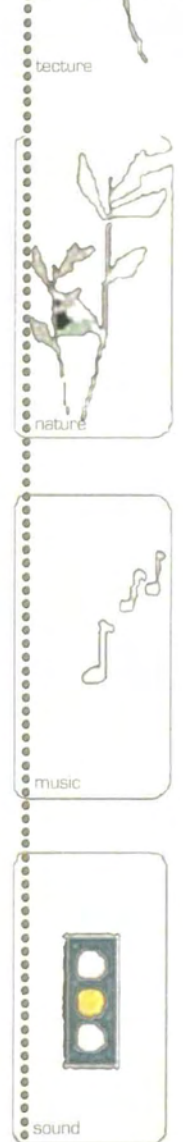


[greenwich village] new york city, new york
the high line

[The High Line] runs through three of Manhattan's most dynamic neighborhoods: Hell's Kitchen/Hudson Yards, West Chelsea, and the Gansevoort Market Historic District. When the High Line was built in the 1930s, these neighborhoods were dominated by industrial and transportation uses. Now many of the warehouses and factories have been converted to art galleries, design studios, retailers, restaurants, museums, and residences.



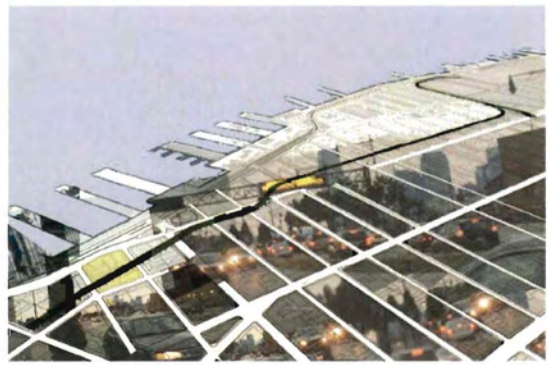
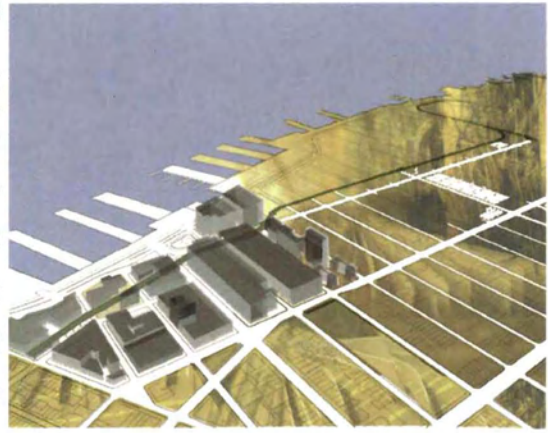
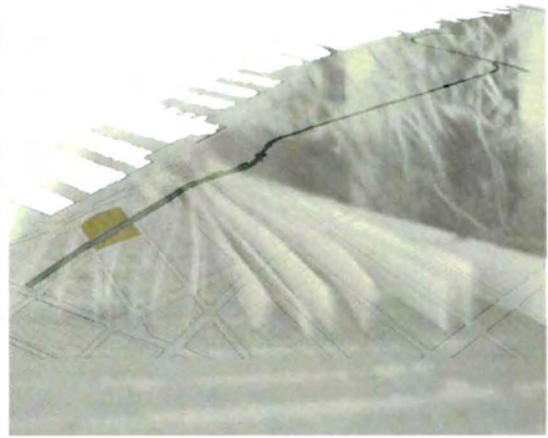
experience...

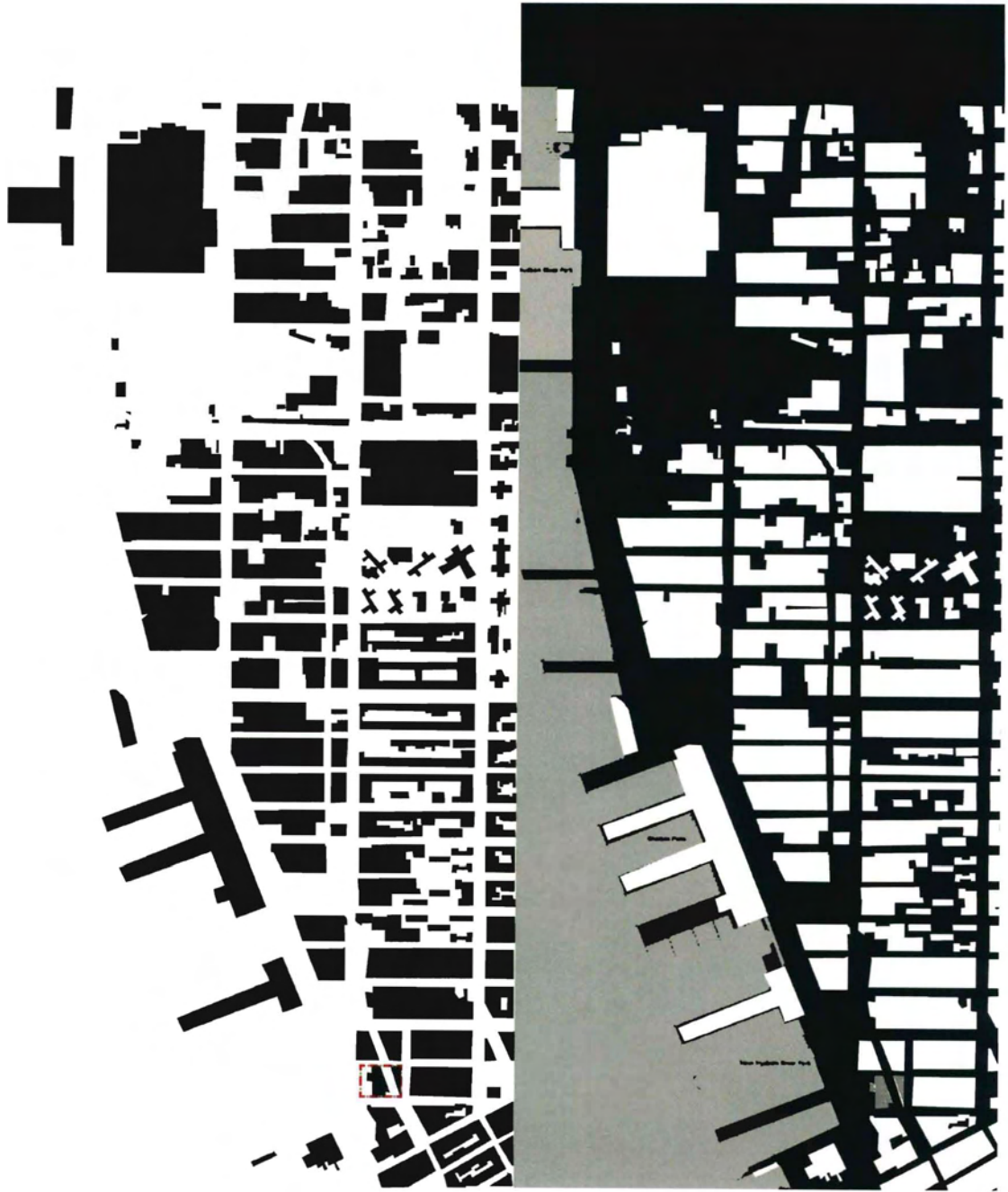


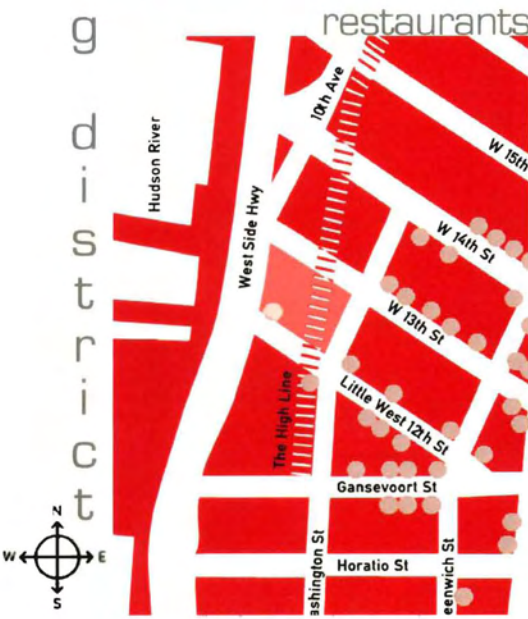
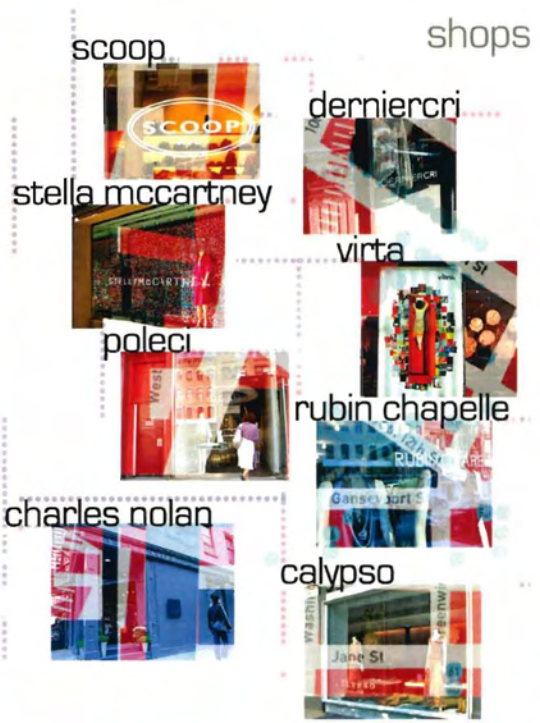
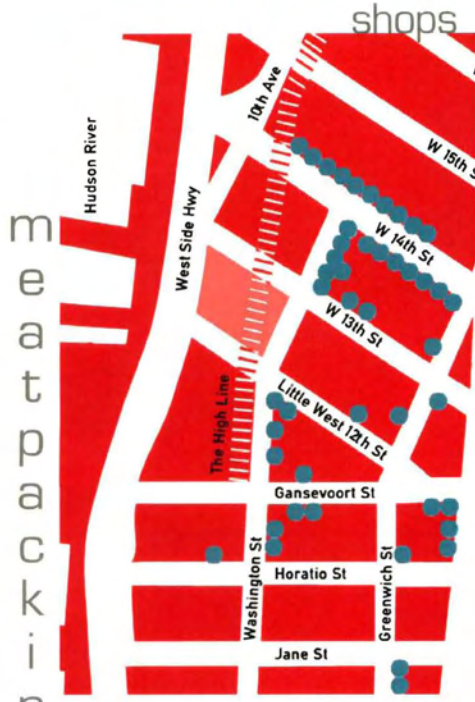


little w. 12th street









Project Program

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precedent analysis pg.17-38	independent research pg.39-42	site analysis pg.43-51
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project program pg.52-62		
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[educational facility for the
visually impaired]
quantitative summary
space details

[program quantitative summary]

doing or making things-

:crafts- partitioned work studios

. 3 [partitioned] = 1,800 sqft

. height- 12 ft

:physical activity - 4 assorted spaces [training, martial arts, pool, meditation]

. 10,000 sqft

. height- varies 16 ft – open completely

experiences with friends- games, competition, playing, partying

:lounge/café- 2 spaces [private and public]

. private- 500 sqft

. public- 900 sqft

. height- 12 ft

working together- helping, teams, sharing, advising, counseling

:conference rms- 3 spaces

. 2 [375] student rms- 750 sqft

. 1 instructor rm- 400 sqft

. height- 12 ft

:administrative rms- 4 rms [advising, counseling, offices]

. 4 rms- 800 sqft

experiences at home- learning to [fold clothes, clean up, cook, wash] sleeping, dining...

:living spaces - 9 total

. 9[400]- 3,600 sqft

. height- 16 ft

:dining- 2 [formal/informal]

. formal- 1,600 sqft

. informal- 1,300sqft

. height- 16 ft

experiences with books- reading, telling stories, writing

:reading rm-

. private- 250 sqft

. height – 12 ft

:group gathering-

. public- 430 sqft

. height- 12 ft

experiences with family- traditions, birthdays, presents, holidays, death, birth

:‘traditional’ gathering space

. 800 sqft

:informal gathering space

. 700 sqft

exploring the arts- dancing, singing, instruments, music, painting, drawing, galleries

:2 music rms- instrumental, choir

. instrumental- 1,500 sqft

. choir- 900 sq ft

:dance studio-

.1 large space- 1,800 sqft

:2 galleries- public exhibition, informal exhibition

. public- 4,000 sq ft

. informal- 630 sqft

total square footage= 32,660 sqft

in addition 20 % circulation = 39,192 sqft

:: the list below is a continued extension of experience that occur in the spaces conducted above::

experiencing emotions and a sense of well being- feelings, sickness, growing, freedom, imagination, love, hate, anger, anxious, clam

experiences with eating- food, meals, cooking, eating, preparing, serving, putting away

school experiences- rules, knowledge, classrooms, behavior, promptness

searching for or finding something- mystery, treasure, paths, trails

learning about people- conversation, interacting, discussing, debating, acting, awareness

:: some of these experiences suggest exterior spaces, although some are a collaborative of both interior and exterior::

experiences with living creatures- animals, pets, birds, dogs, cats

experiences in the community- city [micro to macro],

occupations, places in the community, parades, volunteering, private/public

traveling or visiting- relatives, friends, loved ones, neighbors

experiences with weather- changing seasons, rain, snow, fog, hail, ice, wind, sun

exploring nature, plants, insects- things in the sky, outdoors, flowers, gardens, nature trails water [Hudson river.

[space detail]

[Doing or making things]

Crafts/Working Studio

Quantities Required

1. unit capacity- 30
2. number of units- 1
3. net square feet- 1,800 sqft
4. total net area- 1,800 sqft

Purpose/Functions

this space provides the inhabitant with an opportunity to create and explore the qualities of craft. To challenge the meaning of art that is invited from the experiences one encounters daily. Allows for an invigorating experience with all of the senses.

Activities

the inhabitant will practice the arts and crafts with the challenge of being visually impaired. Painting, drawing, sculpting.

Spatial Relationships

the studio will be considerably open, but with individual areas for the specific genre of art. Orientation of space is important for the inhabitant; it is organized to help the process of making more comfortable.

Special Considerations

the studio will be easily accessible to the exterior spaces, natural light will be important.

Behavioral Considerations

the students will need to understand and identify with the space easily, tools and equipment will be located in categorized areas for a smooth transition into making and crafting.

[Physical Activity]

Dance

Quantities Required

1. unit capacity- 30
2. number of units- 1
3. net square feet- 1,800sqft
4. total net area- 1,800sqft

Purpose/Functions

this space provides the inhabitant with an opportunity to explore the qualities of a physical activity, to encourage a healthy life style. To challenge the relationship of body and space and creates an experience that promotes all of the senses.

Activities

the inhabitants will practice the art of dance, a time for stretching, learning, and teaching with the opportunity to collaborate with the movement and sound.

Spatial Relationships

the dance studio will be considerably open with appropriate floor materials, for sensitivity to sound and the touch of the body, windows are not important in this space.

Special Considerations

the dance studio will be easily accessible to the lockers/ bathrooms and music room.

Behavioral Considerations

the studio is designed so that the students will be seen from the ground level gallery space. the wall detail is a screen like structure, so the view is distorted and all that is seen is the shadow of the body moving through the space.

[Physical Activity]

Yoga

Quantities Required

1. unit capacity- 5-15
2. number of units- 6
3. net square feet- 600
4. total net area- 2,800sqft

Purpose/Functions

this space provides the inhabitant with an opportunity to explore the qualities of a physical activity, to encourage a healthy life style. To challenge the relationship of body and space and creates an experience that promotes a relaxing, meditation period.

Activities

the inhabitant will practice the art of yoga, a time for stretching, and learning, with the challenge of being visually impaired.

Spatial Relationships

yoga/meditation space needs a quiet atmosphere separate from any loud environmental conditions.

Special Considerations

the spaces will be easily accessible to the exterior spaces, natural light will be important.

Behavioral Considerations

the students will need to understand and identify with the space easily. the design of this space is intended to be a double-level experience. the upper-level is more private than the lower level.

[Physical Activity]

Swimming

Quantities Required

1. unit capacity- 20
2. number of units- 1
3. net square feet- 2,770sqft
4. total net area- 2,770sqft

Purpose/Functions

this space provides the inhabitant with an opportunity to explore the qualities of a physical activity, to encourage a healthy life style. To challenge the relationship of body and space and movement through water.

Activities

the inhabitant will practice swimming and the experience of body and water, a time for stretching, learning, and teaching with the challenge of being visually impaired.

Spatial Relationships

the pool space needs finish material appropriate for wet area, natural light during the day, and accessible to locker rooms and showers.

Special Considerations

the spaces will be easily accessible to the exterior spaces and garden space [high line]

Behavioral Considerations

the students will need to understand and identify with the space easily. the space is easily accessible to exterior spaces, as it is

designed along the highline, provides a private and public space.

Mechanical/Electrical System

pumps and other equipment needed to comfortably ventilate the pools atmosphere.

[Exploring the Arts]

Singing/Choir

Quantities Required

1. unit capacity- 20
2. number of units- 1
3. net square feet- 900sqft
4. total net area- 900sqft

Purpose/Functions

this space provides the inhabitant with an opportunity to explore the qualities of a vocal exploration, to encourage a musical enhanced life style. To challenge the relationship of body, sound, and language which creates an experience that promotes the sense of sound.

Activities

the inhabitant will practice as a choir, with an opportunity for performance. Learning to read lyrics and present them in a sensible way with conducted music from the instrumental program.

Spatial Relationships

the choir room needs space for students to gather and practice singing, a space for learning and teaching the music and a space for private individual practice.

Special Considerations

the spaces will need the correct spatial attribution for music to sustain in the room, echo resistant materials.

Behavioral Considerations

the students will need to understand and identify with the space easily. The spaces will be considerably organized for the specific activities and is sensitive to the more private practices allowing for decreased distraction caused by the alternative singing and music practices.

**[Exploring the Arts]
Instrumental/Band**

Quantities Required

1. unit capacity- 20
2. number of units- 1
3. net square feet- 1,500sqft
4. total net area- 1,500sqft

Purpose/Functions

this space provides the inhabitants with an opportunity to explore the qualities of a instrumental exploration, to encourage a musical enhanced life style. To challenge the relationship of body, sound and language which creates an experience that promotes the sense of sound.

Activities

the inhabitant will practice as a band, with an opportunity for performance. Learning to read lyrics and present them in a sensible way with conducted music.

Spatial Relationships

the band room needs space for gathering of the students to practice certain instruments, a space for learning and teaching the music and a space for private individual practice.

Special Considerations

the spaces will need the correct spatial attribution for music to sustain in the room, echo resistant materials.

Behavioral Considerations

the students will need to understand and identify with the space easily. The spaces will be considerably organized for the specific activities and is sensitive to the more private practices allowing for decreased distraction caused by the other music practices.

[Presentation]

Galleries

Quantities Required

1. unit capacity- 50-150
2. number of units- 2
3. net square feet- 1000sqft
4. total net area- 4,700sqft

Purpose/Functions

this space provides the inhabitant with an opportunity to explore the qualities of presentation, with invited jury, to encourage an experience of communicating ideas and allowing for critical analysis. To challenge the relationship of personal and public.

Activities

the inhabitant will practice presentation of crafted art, with an opportunity to learn how to communicate ideas, and allow for discussion with outside visitors. A networking system.

Spatial Relationships

there is a formal gallery space and an informal gallery space. Located near the art studios and café.

Special Considerations

the spaces will need the correct spatial attribution for different scale models and art pieces, appropriate lighting and no windows in the larger gallery.

Behavioral Considerations

the students will need to understand and identify with the space easily. The spaces will be considerably organized for the specific activity of presentation and allows for a comfortable walk-through for the outside visitors.

Mechanical/Electrical System

an appropriate lighting system for the gallery is necessary.

[Experiences with Friends]

Lounge/Café

Quantities Required

1. unit capacity- 50
2. number of units- 2
3. net square feet-1,000sqft
4. total net area- 2,000sqft

Purpose/Functions

this space provides the inhabitant with an opportunity to explore the qualities of gathering and socially communicating with others, and relaxation. Connecting with friends and family.

Activities

the inhabitant will have the opportunity to casually lounge and socialize: reading, eating, drinking, conversating, playing games and hosting private parties.

Spatial Relationships

there are two café spaces, one that is public that allows for more loud activities and one that is private and acts as a relaxation getaway. It is open towards the gallery space and exterior space.

Special Considerations

the spaces will need the correct spatial attribution for different scale of activities, appropriate lighting and windows that bring in natural lighting during the day.

Behavioral Considerations

the students will need to understand and identify with the space easily. The spaces will be significantly organized for a relaxing atmosphere for all social inhabitants.

[Working Together]

Conference Rooms/Administration

Quantities Required

1. unit capacity- 35
2. number of units- 7
3. net square feet- 700sqft
4. total net area- 4900sqft

Purpose/Functions

these spaces provide the inhabitant with an opportunity to explore the qualities of the facilities status as an academic school. Interaction with the all the faculty and students.

Activities

the inhabitant will have the opportunity to meet for counseling and advising for personal and school issues.

Spatial Relationships

there are two conference rooms for students to use for organization meetings, and one larger conference room for the faculty. The administration has 4 separate areas, on open space for public administration and 2 private rooms for counseling and advising.

Special Considerations

the spaces will need the correct spatial attribution for different counseling and advising behavior, appropriate spatial orientation is necessary for private meeting.

[Experiences at Home]

Dorm Building

Quantities Required

1. unit capacity- 10
2. number of units-9
3. net square feet- 400sft
3. total net area- 3,600sqft

Purpose/Functions

these spaces provide the inhabitant with an opportunity to explore the qualities of living independently. an on-campus living space.

Activities

the inhabitant will have the opportunity to experience normal house routines such as cleaning, laundry, and cooking. learning to be independent and take care of oneself.

Spatial Relationships

there is a total of 9 living spaces. for each two rooms there is a bathroom to share. the rooms also have an outdoor balcony which is screened off with a curtain wall, to allow the inhabitant to be less distracted by the busy street front.

Special Considerations

the spaces will need the correct spatial attribution for living arrangements. allowing for two students to live in each room.

design process

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project program pg.52-62	design process pg.63-89	

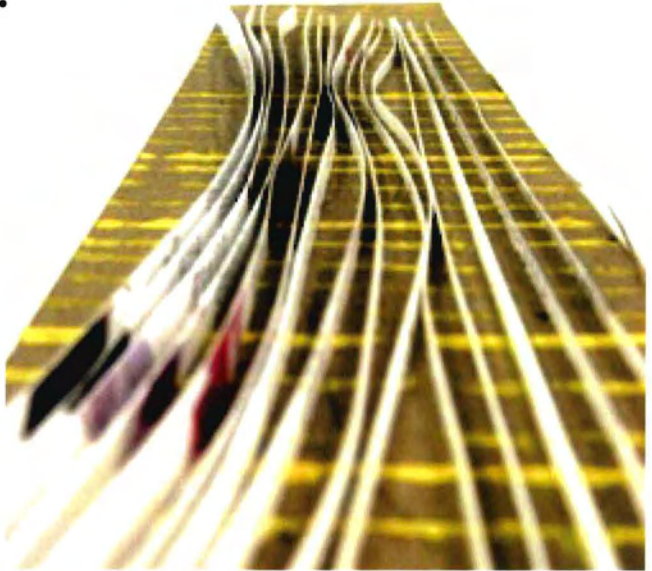
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project documentation.
.springboard
.building design

[springboard- schematic design]

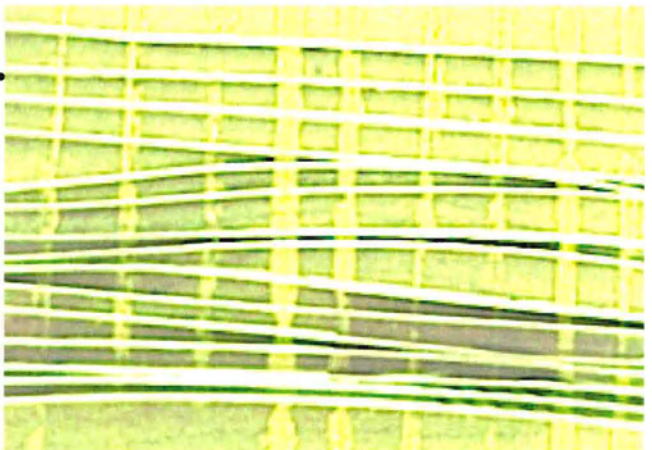
exploring the concept of an exterior skin interacting with the natural elements.



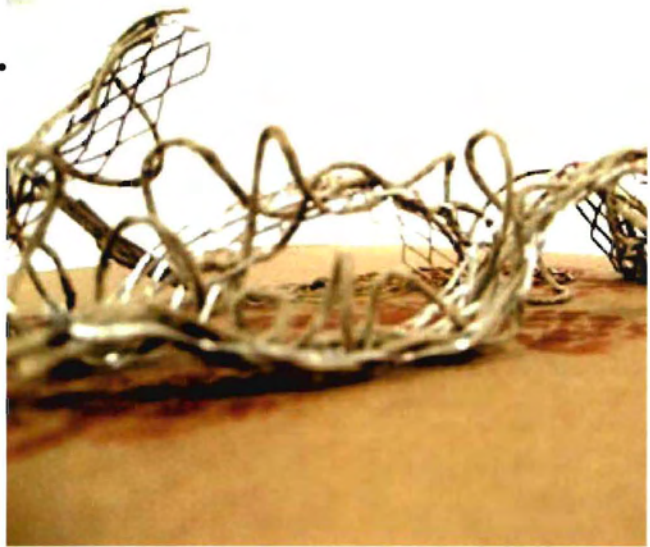
same artifact with an alternate view, suggests the concept of a plan and crossing paths. narrow paths.



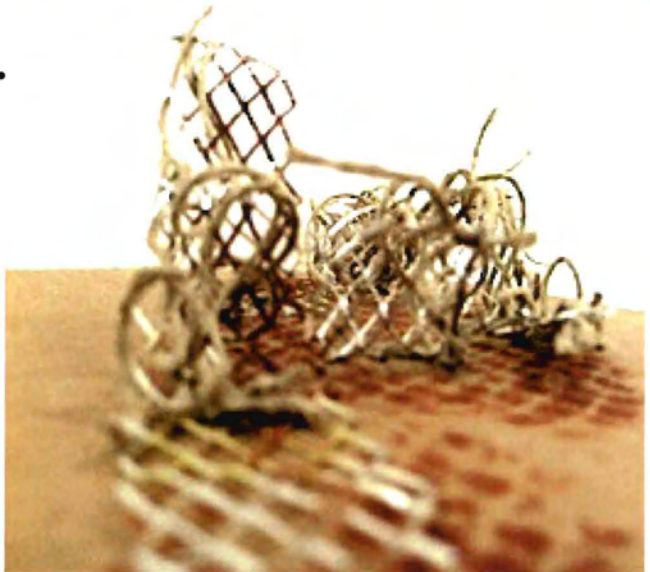
a detail view of the artifact with an edit to its materiality, suggests technique of wrapping.



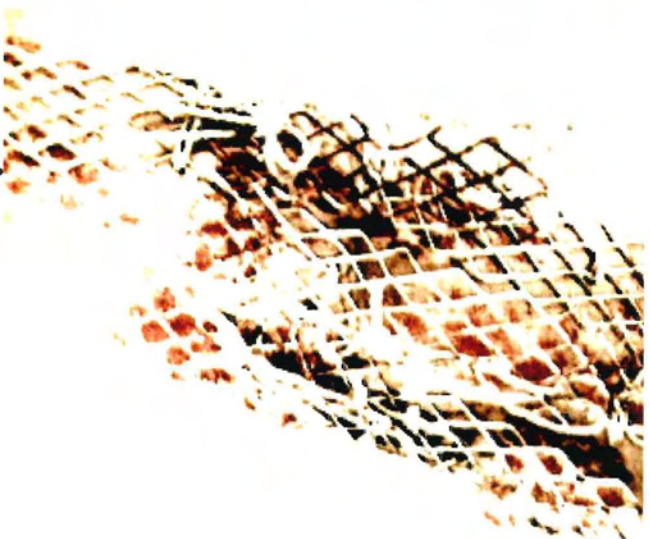
exploring the concept of weaving. materials represent the body and the skin.



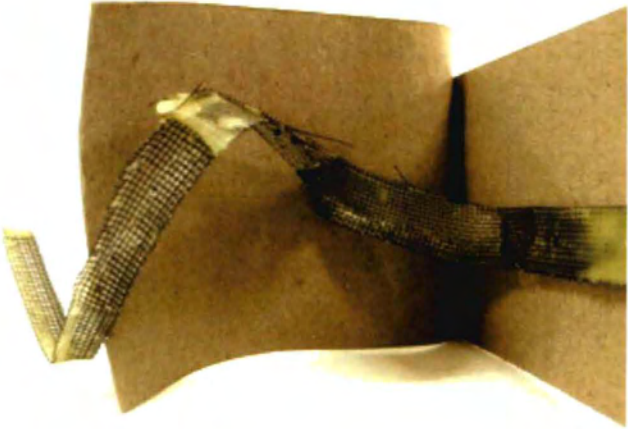
same artifact with an alternate view.



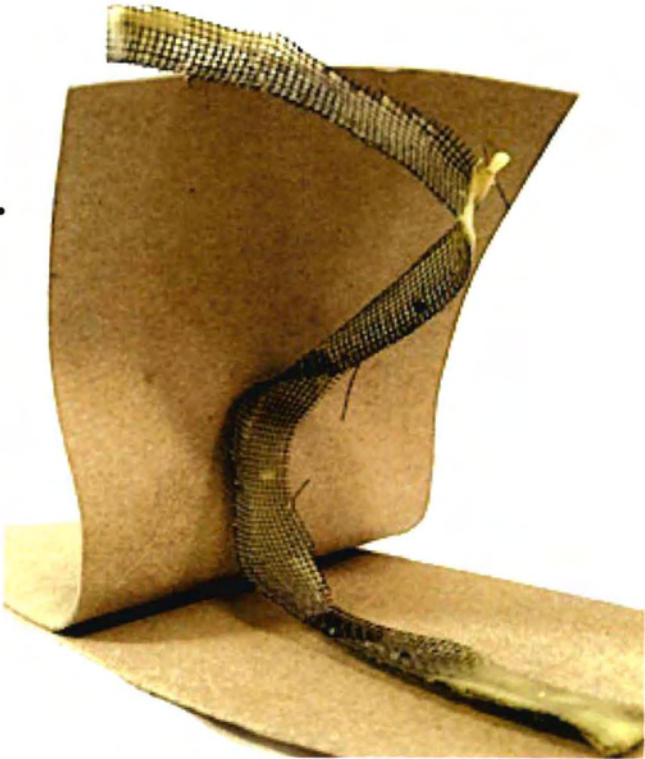
a detail view of the artifact with an edit to its materiality, suggests a conceptual skin.



exploring the concept of
one plane extending itself
and wrapping creating, a
new plane



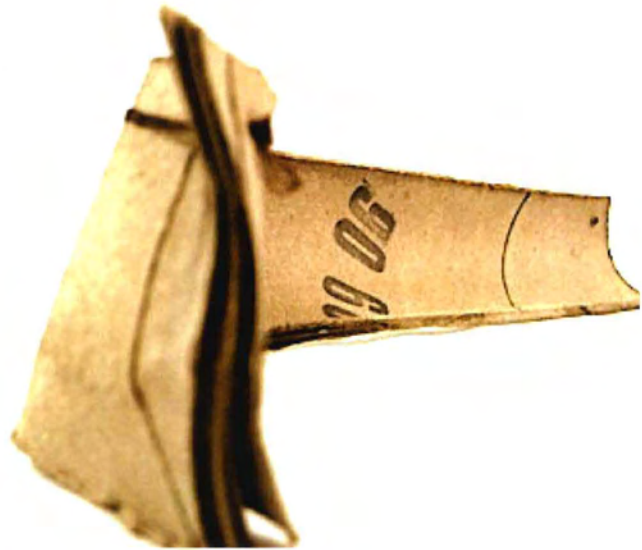
same artifact with an
alternate view.



same artifact with an
alternate view.



exploring the concept of a skin and its flexibility, creating texture and dimension to a material that once was flat.



new artifact with a developed idea of skin and texture. this is a suggestion of a wall.



an alternate view of the same artifact. showing the space inbetween or a narrow path. personal scale to the inhabitant.



this view suggests that the exterior wall also holds the same characteristics as the interior.



same artifact with an alternate view.



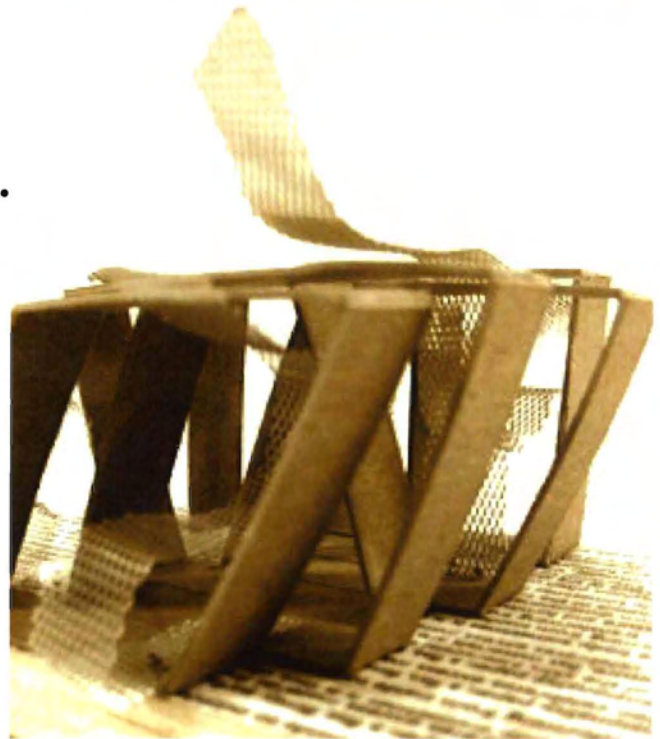
this view suggests the concept of what's above. the inbetween space above is a suggestion of mechanical placement.



exploring and developing
on the idea of folding of a
material, where one plain
begins on ground and cre-
ates different planes as
it folds around from the
interior to its exterior.



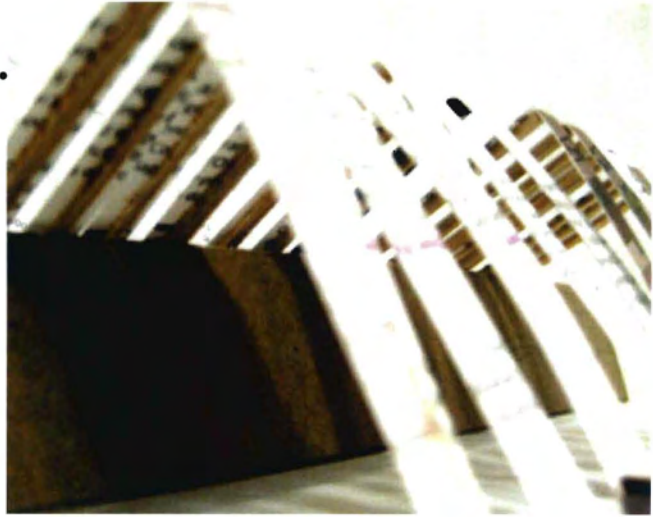
same artifact with an
alternate view.



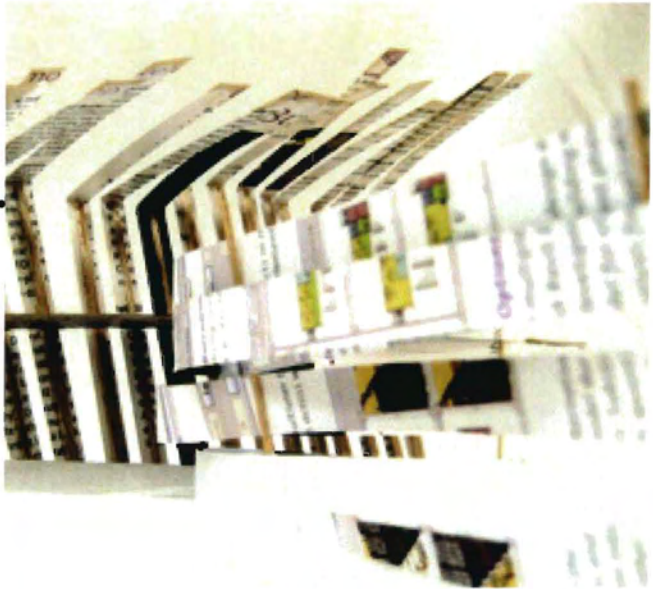
same artifact with an
alternate view.



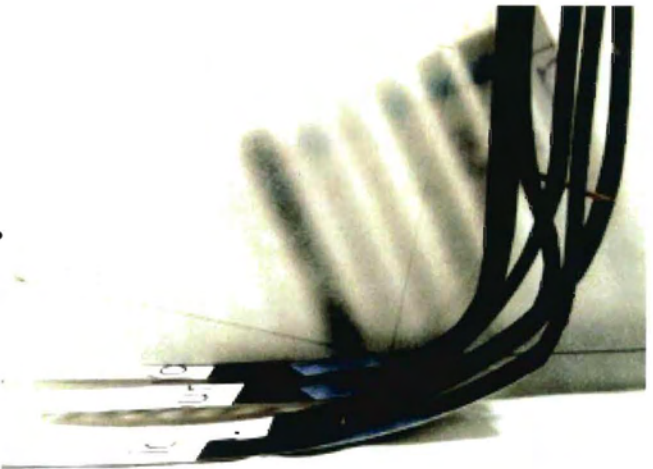
exploring the exposed structural elements to create an art of shadow. layings of shadow cast a new skin to the existing layers.



a different view of the same artifact. exploring folds.



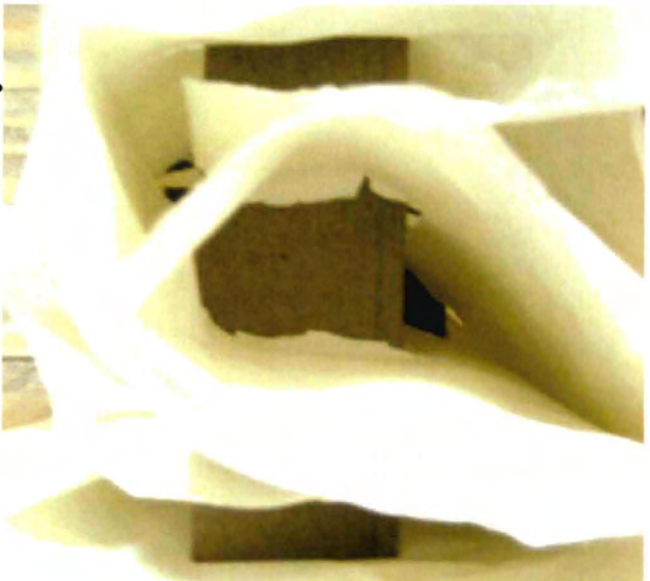
studying the materiality of the artifacts. whats solid and whats translucent.



an artifact that studies the folds of a two dimensional plane which evolves into a three-dimensional form.



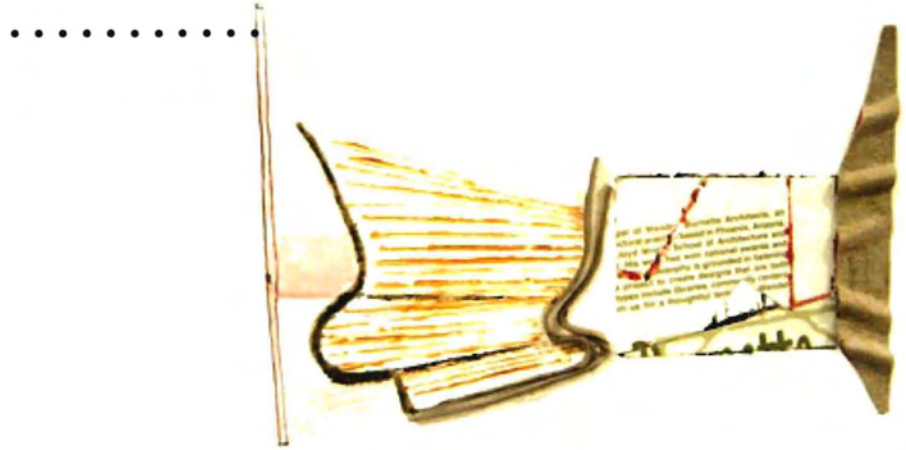
same artifact with different view.



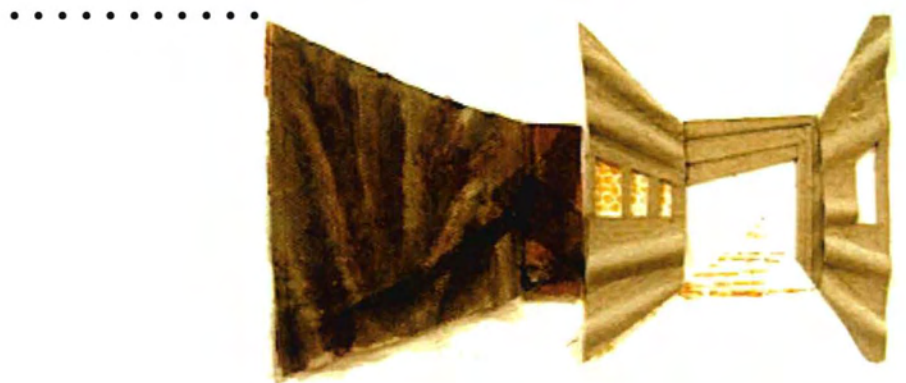
same artifact with different view.



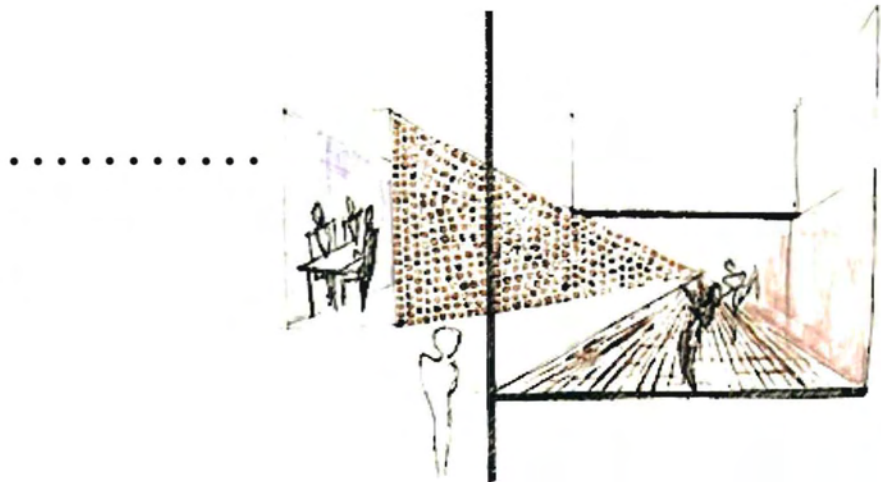
exploring sectional vignette with the intention of showing texture that one can read the image through the sense of touch.



same artifact with an alternate view.



this view suggests a scene of a proposed program: dance, exploring what it is to occupy a space when practicing dance. body and space



exploring the act of
painting with blind folds.
realizing that orientation
of body to tools/canvas is
very important.

.....



painting two.

.....



painting three.

.....



painting four.

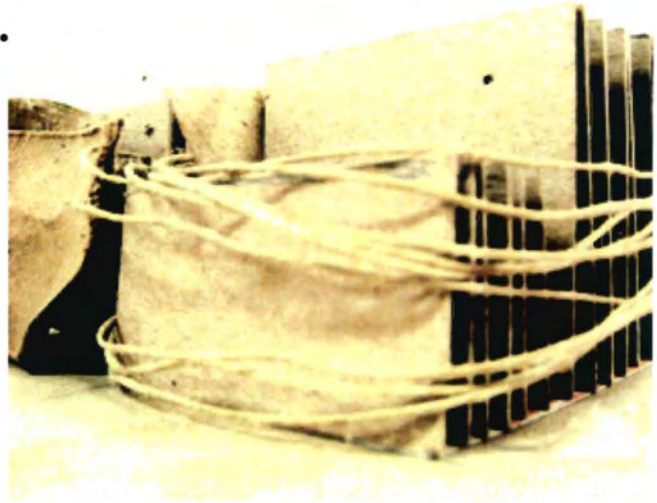


using a leaf to explore its
texture and form through
different media- paint

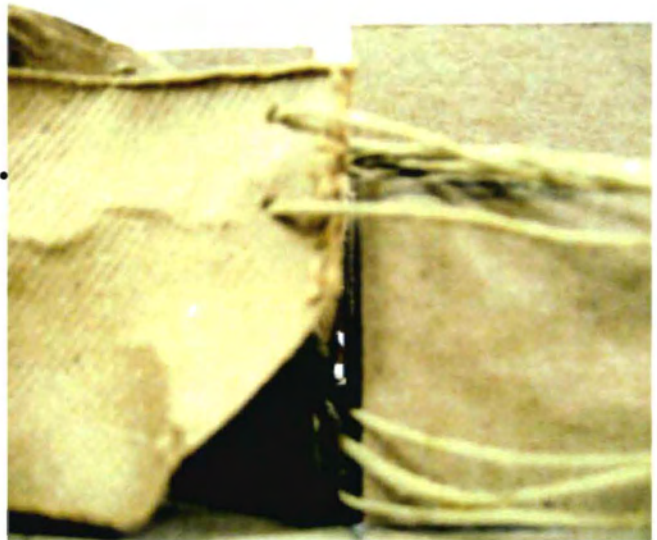


[building design phase]

exploring the act of wrapping or drapping the architectural skin.



piercing the two skins, with the wrapping technique, suggesting a relationship of the existing building and the addition.



reinterpreting the model to allow a different level of form studies, that suggest whats bellow and whats above.



same artifact with different orientation, showing the possible layers of the program.



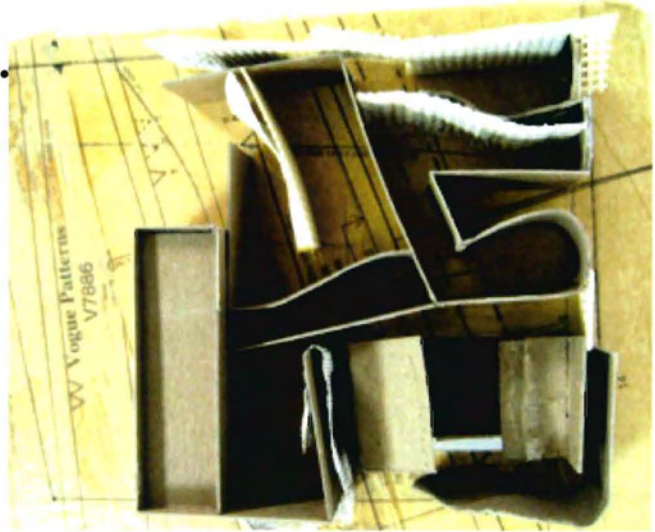
same artifact, showing a detail view, which starts to translate the ideas of light and dark spaces.



reinterpreting the model to allow a different level of form studies, that suggest the exterior layer is a complex three-dimensional fold, which then relates to its adjacent programs



an overview of the program layout on the site. the plan view relates to the edges of the site as well as the instruction lines of the shirt-pattern.



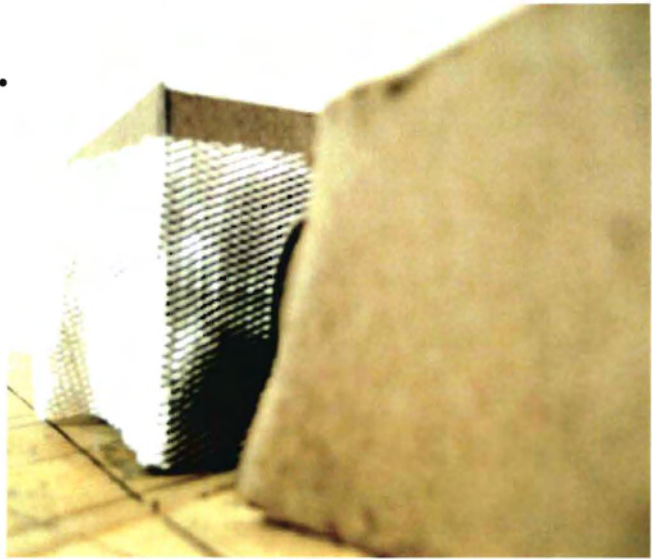
a view of the model as a vertical elevation.



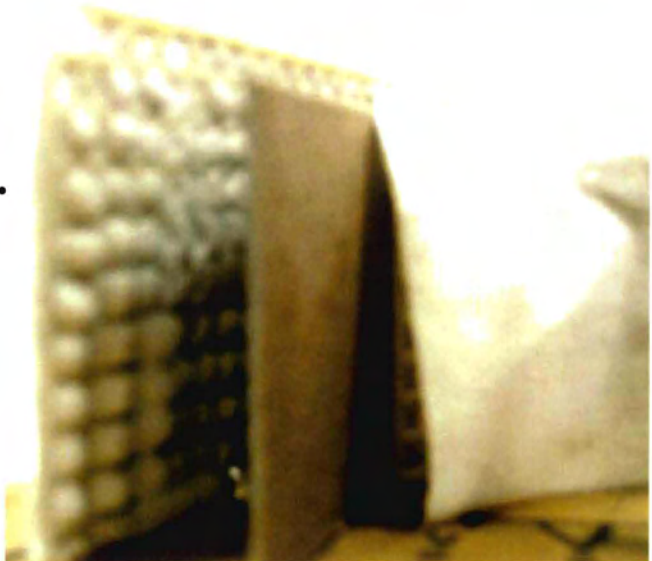
showing the techniques of folds and how they become an interactive relationship of the exterior elements, casting shadows as the skin peels away from the surface or the piercing of light into the interior spaces



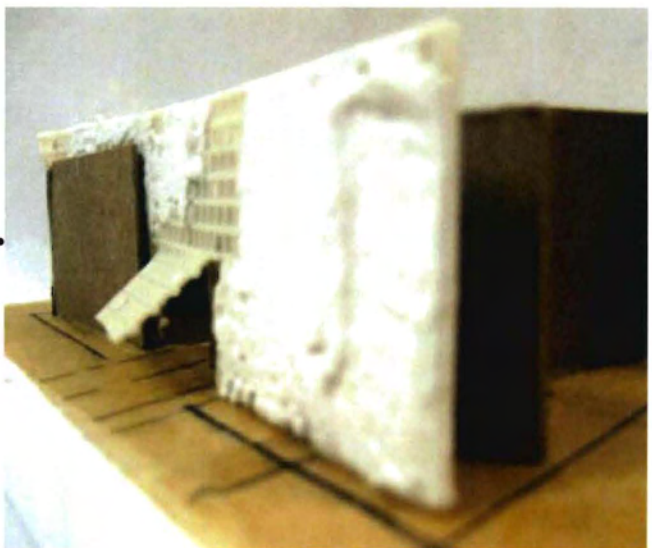
expressing a new skin
that wraps around the
existing building.



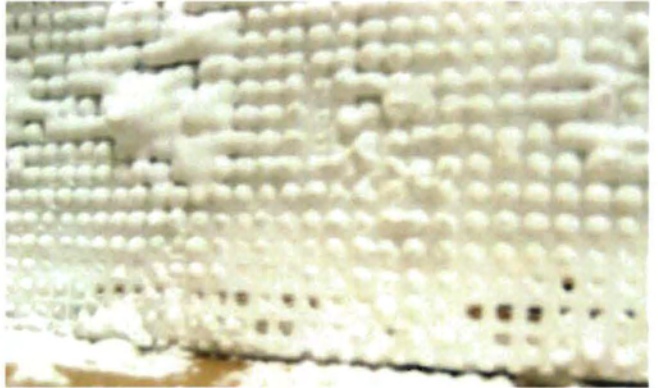
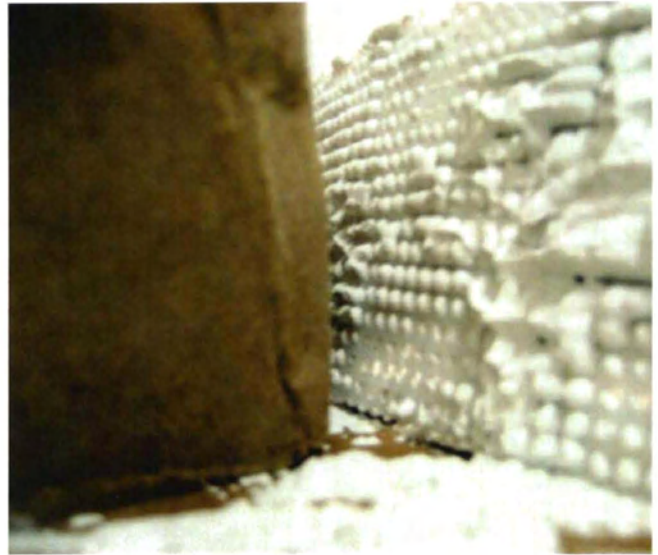
multiple layer of textures
allow for different pro-
gram spaces. rough and
solid, solid and flexible,
flexible and translucent.



showing the exterior wall detail
as a textural material overlaying
a smooth material.

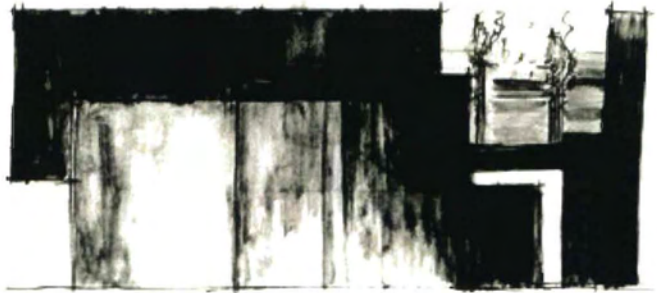
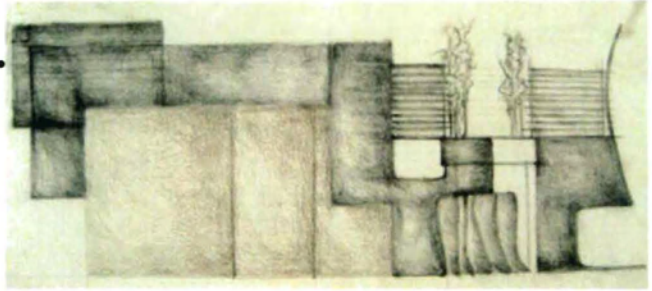


[detail of textured wall]

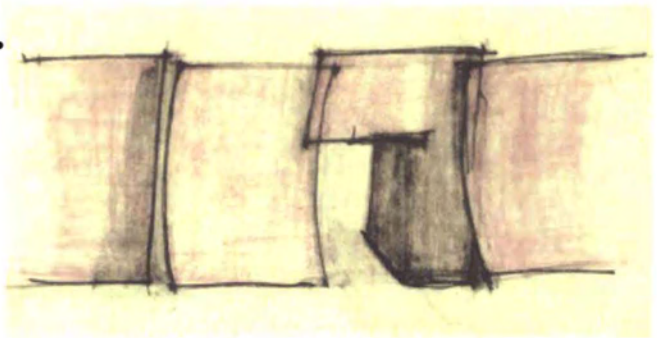


[expressive drawings]

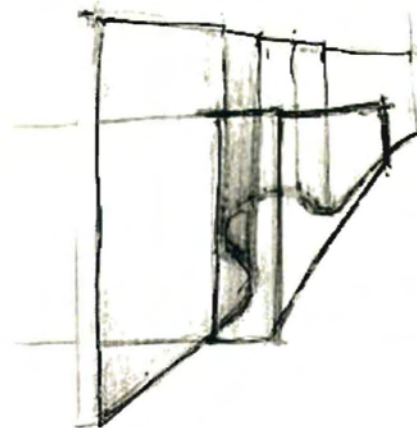
expressing the solids
and voids of the program
wrapped around the site



delaminating of exterior
skin. creates an evoca-
tive moment of light and
dark. open and closed



edges and curves



in section this drawing
was inspired by a dress
created by isabel toledo.



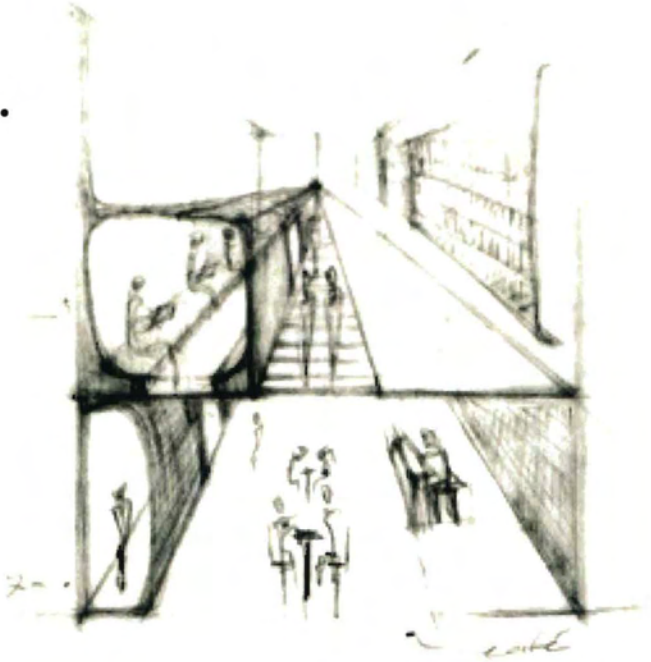
a sketch of a section that
suggests the wall inter-
actions with the human
scale.



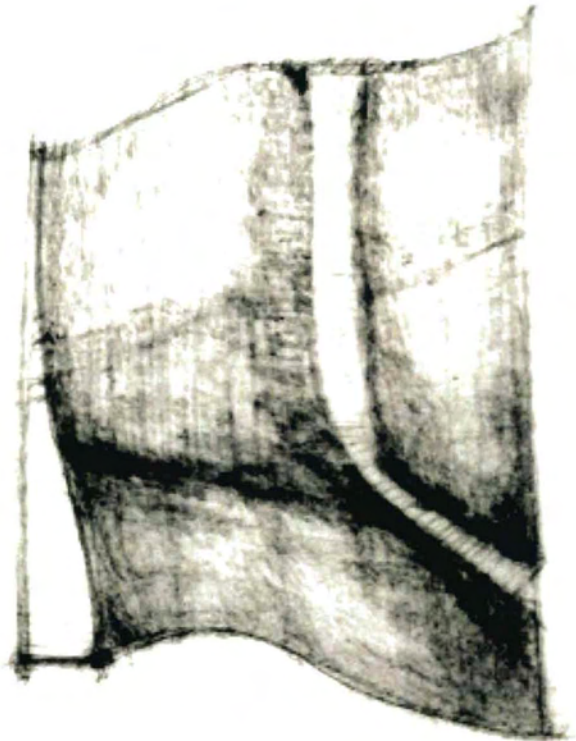
a sketch of a wall. the ap-
pearance of delaminating
the layers of the skin



a section that suggests
a program of the experi-
ence of reading and com-
municating with others.



a deconstructive wall
detail.



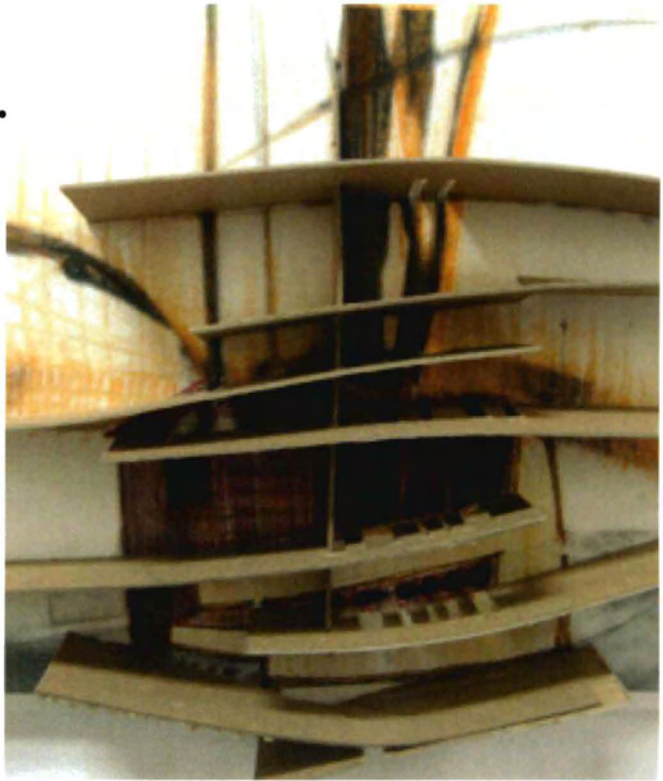
a detail of the highline and the active move of folding or overlapping layers to create a space for inhabitants to experience



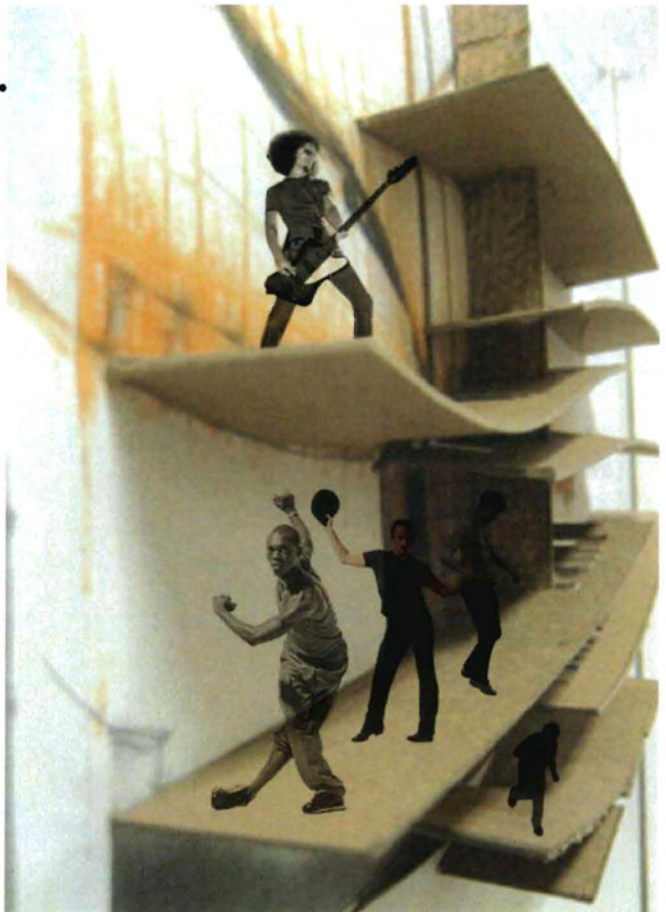
evaluating the width of a path within the program of the building. a staircase suggests an open and interactive multi-layered space.



exploring the experience of interior volume in section. expressing the idea of light and dark.



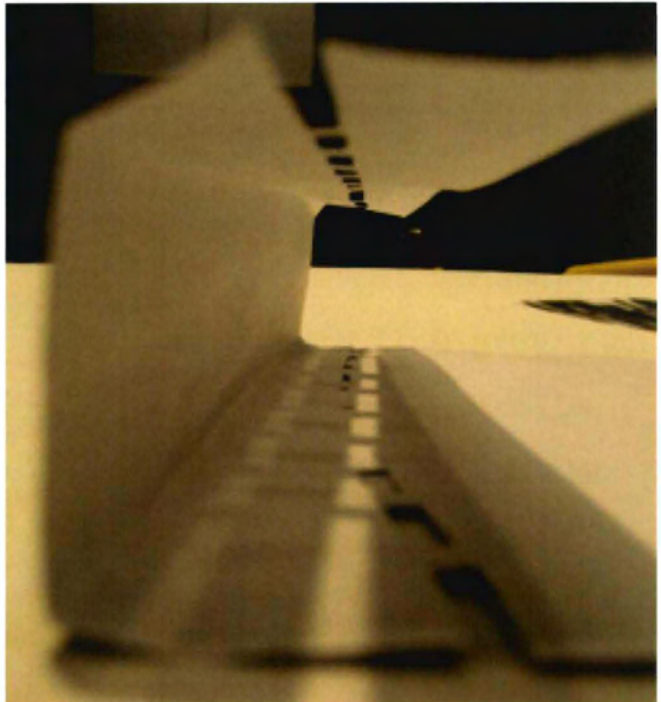
expressing the activities created in these spaces.



using origami as a technique to create a form or a space within the architecture. folding a two dimensional plane and creating a three-dimensional space.

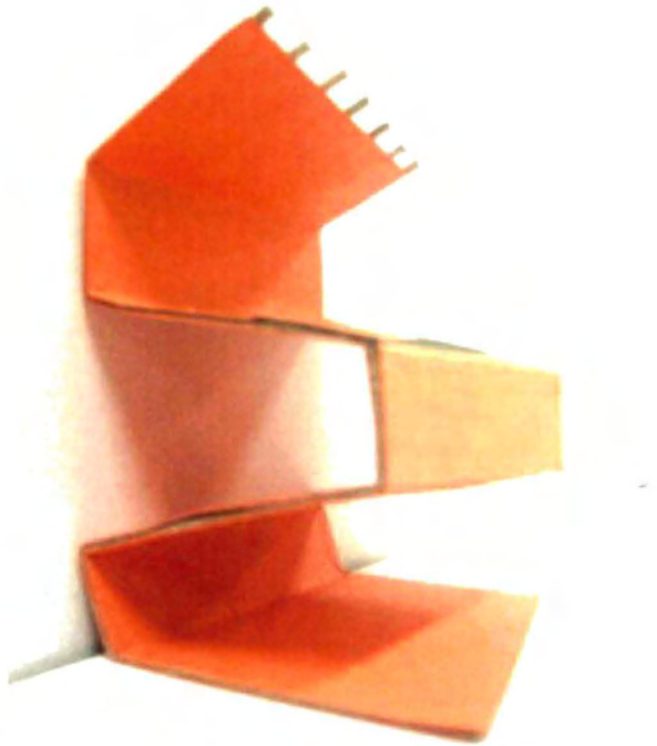


the act of folding also explores the materiality, and what enables the flexibility of such a form.

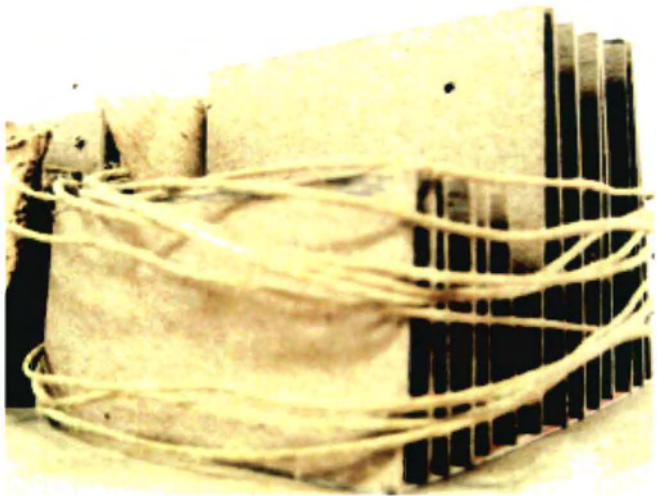


during the final design process, a focus on the design technique of 'making' became more coherent, where fashion design starts to inform the making of the architecture. the techniques are : folding, draping and wrapping. each of these are creating the architecture from the interior level to the exterior envelop of the building.

fold



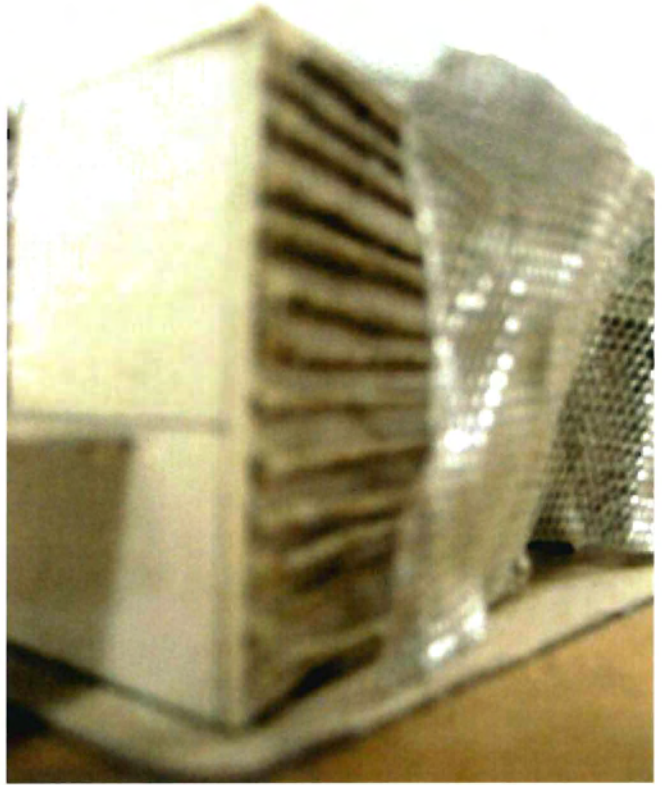
wrap

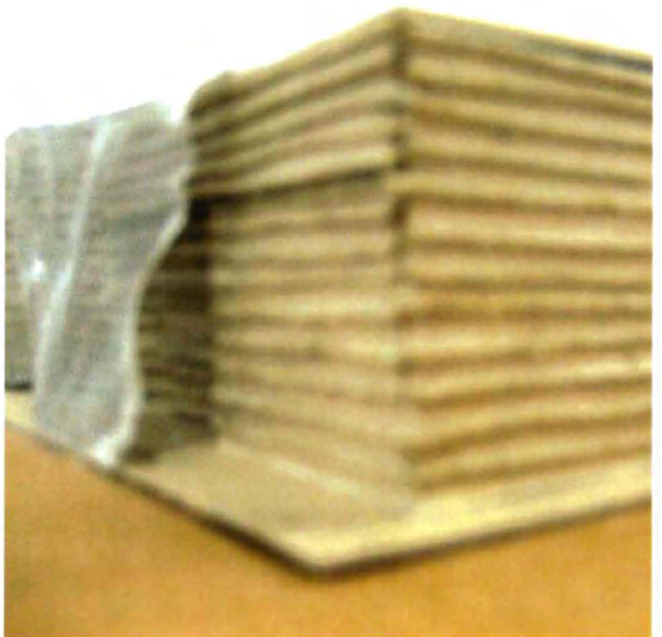


drap



[final process of building design]





final project

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precedent analysis pg.17-38	independent research pg.39-42	site analysis pg.43-51
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project program pg.52-62	design process pg.63-89	final project pg.90-106
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final documentation of
thesis project

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This thesis investigates the parallels of [the skin + body of architecture], and [the fashion of architecture]. Regardless of scale, the body shape is a perfect exercise in spatial design, a testing ground for ideas and techniques to apply to buildings.

The architecture as a body concealed within a layer or layers of skin is what is most intriguing to me. The methodology employed in this thesis investigation was to perform a series of in-depth studies of tectonic skins, surfaces, and materials. Using the design of an educational facility for the visually impaired as a programmatic design vehicle, I pursued the questions of the thesis within this specific architectural situation. Because the predominant audience is visually impaired, this provided me with a rich and complex set of opportunities to investigate the capacity of a material presence overlaid with the sensual to affect the perceptions of space and experience. Certainly, there would also be individuals who are not visually impaired who would use this space. The architecture would map their experiences as well but in a different way.

[skin + body of architecture]

The final investigation culminated by developing a series of study models looking specifically at a sensitivity to the idea of 'skin'. The 'skin' presents itself as a textural element, which invites the idea of experiencing space with the sense of touch. Allowing the inhabitant to engage the building at a delicate level of textural quality. The skin acts as protection, or a concealed layer/element of the body of architecture. There, exists the bones or the structure of the building, which intentionally is sealed and never revealed. Leaving the skin to constantly form itself around the structure of the building.

[fashion of architecture]

An overlapping, continued investigation is the idea that fashion informs the 'making' of architecture and vice versa. The practice of origin for both architects and fashion designers is the body. Fashion designers create garments for the human body, while architects create buildings large enough for many bodies to inhabit simultaneously.

There is a striking similarity in the construction, the approach of creating a complex three-dimensional design from a two-dimensional medium. Garments and buildings share a stylistic or structural quality, or obtain common creative impulses. Wrapping, folding and draping as a fashion designers vocabulary has influenced my approach to designing the architecture. One in specific that occurs as the interior layers of the building is *folding*. Exercising the idea of origami and constructing a three-dimensional form from a two-dimensional plane. This technique constructs the vertical layers of the building, encasing the activities of the building, which belong to learning, craft-making, music, dance and meditating. Therefore, the architectural clothing of the building leads to specified functions or activities within the program.

The highline, [which exists on the third level] acts as a public and private space in an environment that is meant for social interaction, it creates an experience for an individual to observe private space through a

screen like structure. A structure such as this creates a distorted perception of the interior space, yet allowing the person to experience the music and life that comes out of the building. The technique of *draping* occurs within this section. A continued wall from ground level is folded and drapes into the third level where the highline exists and the path is created. The draping of the wall on the third level allows for inhabitants to sit and rest, as well as observe the activities of the building within. The constructed path that cuts through the building is distorted, so that the north end of the path is at least 20 ft wide and as you head closer to the south end it becomes as narrow as 10 ft in width. The idea for this construction brings in the inhabitant at a personal level with the individuals in the interior spaces of the building.

The exterior clothing of the building is constructed through the technique of *wrapping*, as if you were wrapping a fabric material to construct a garment. The strips that wrap around the building envelop acts like a skin that conceals the buildings structure and the interior volume. As the strips separate in some areas [acting like a slit in a dress], it allows for light to pierce through the building and for a relationship of the interior and exterior environments.

As a whole the building is clothed in three inspiring techniques, folding, draping, and wrapping. In certain cases these techniques expand on developing an experiential existence of the body within the architectural clothing, allowing the body to engage and delight all of the senses in a considerable way at the multiple scales of the building and the bodies within it

fashion of architecture...

wrapping

draping

folding

piercing

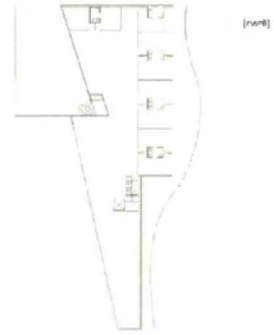
laminating

delaminating

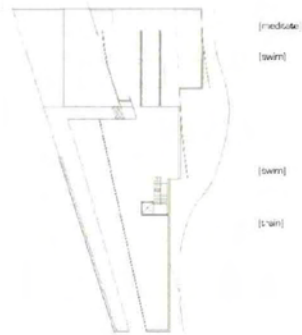
origami



[fourth floor]



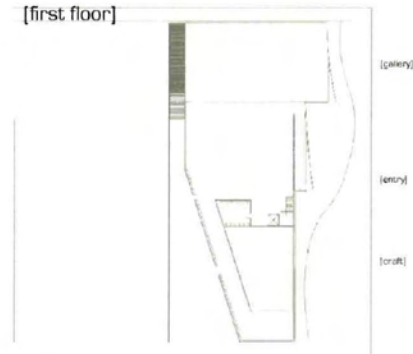
[third floor]



[second floor]



[first floor]



[the fashion of architecture]

university of detroit, mercy school of architecture, julie kim, masters studio

FLOOR PLANS
scale 1/32" = 1'

[body and space]
[open and dense]
experience with...
friends
community
teaching
learning
living

dwell

[fourth floor]

[work]
[work]
[work]
[work]
[work]

[body and space]
[open and dense]
experience with...
friends
community
learning
public
private
meditate
physical
stillness
movement
materiality

physical

[third floor]

[meditate]
[work]
[work]
[work]
[work]

[body and space]
[open and dense]
experience with...
friends
learning
teaching
music
dance
sound
quiet/ loud
reading
stillness
movement

perform

[second floor]

[work]
[work]
[work]
[work]
[work]

[body and space]
[open and dense]
experience with...
friends
gathering
community
learning
teaching
making
presenting
crafting

craft

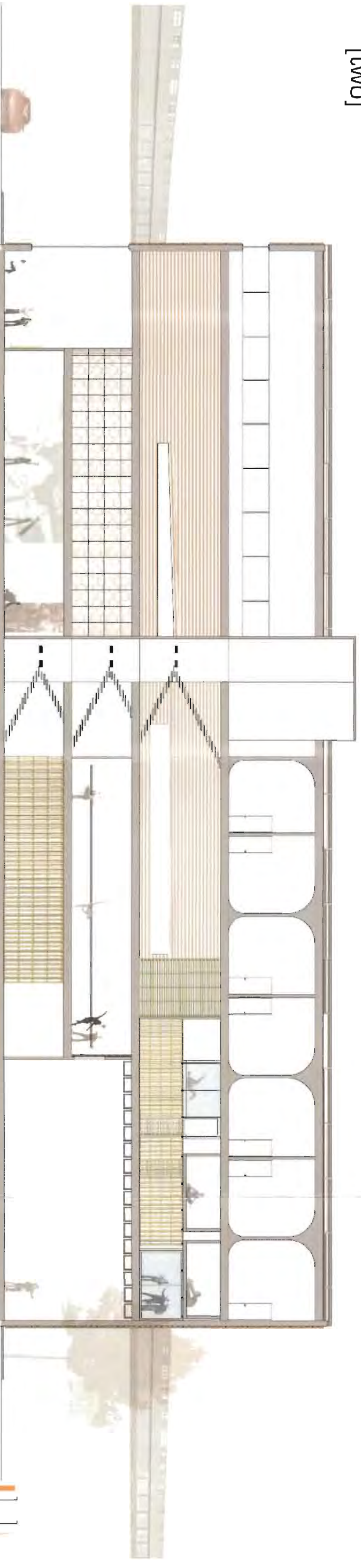
[first floor]

[work]
[work]
[work]
[work]
[work]

[one]



[two]

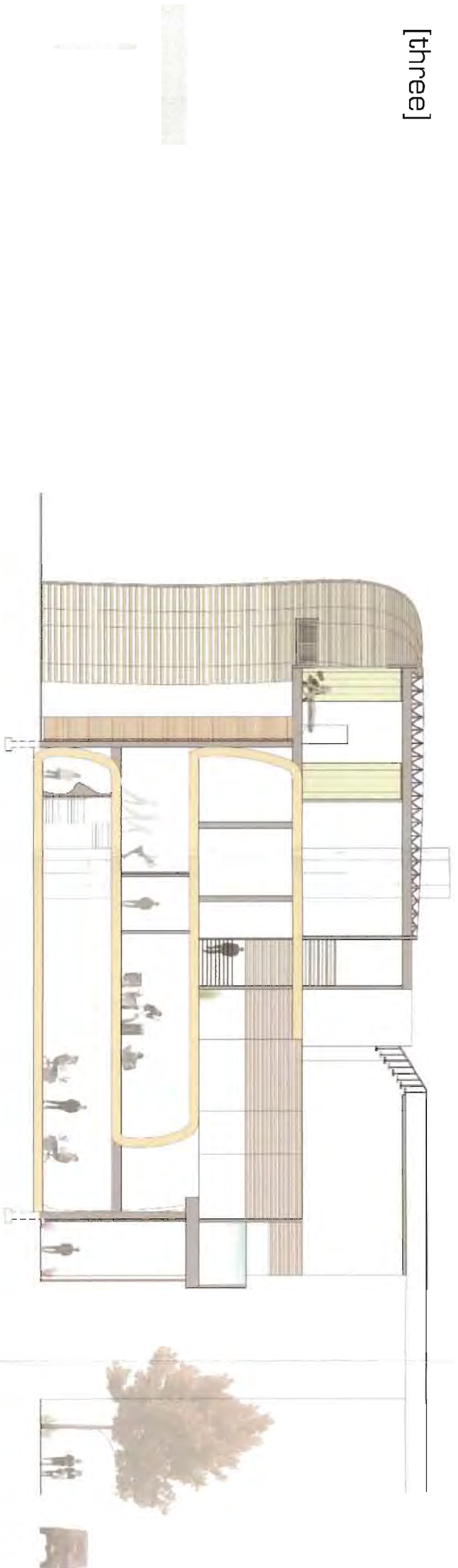


[the fashion of architecture]
university of detroit: mercy
school of architecture: julie kim masters studio

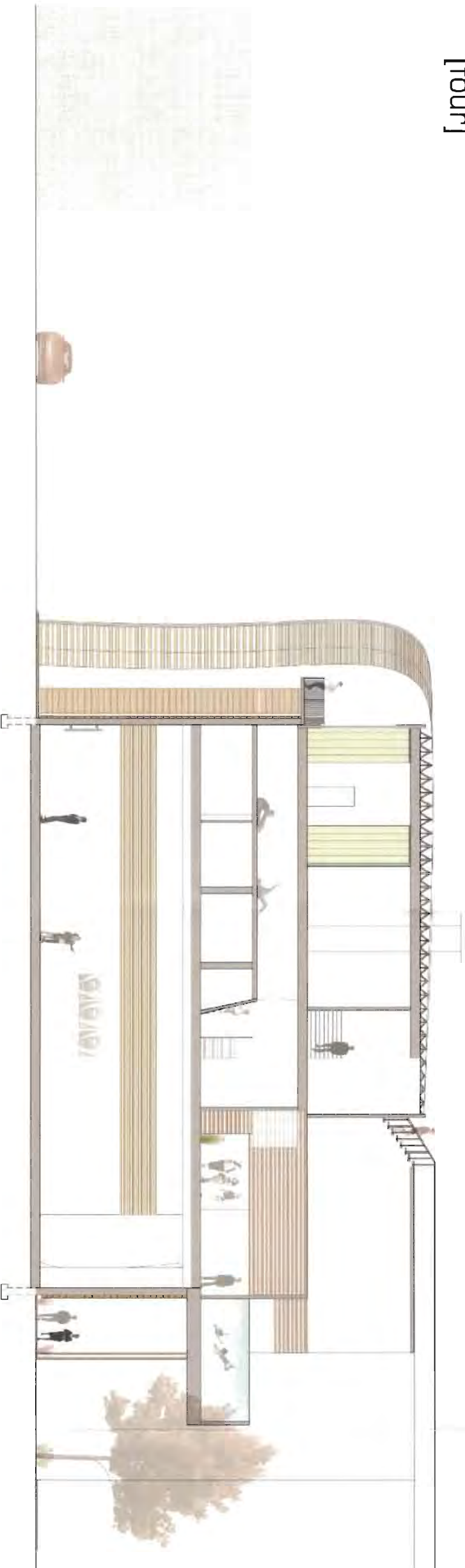
SECTIONS [one and two]
scale 1/18" = 1'



[three]



[four]

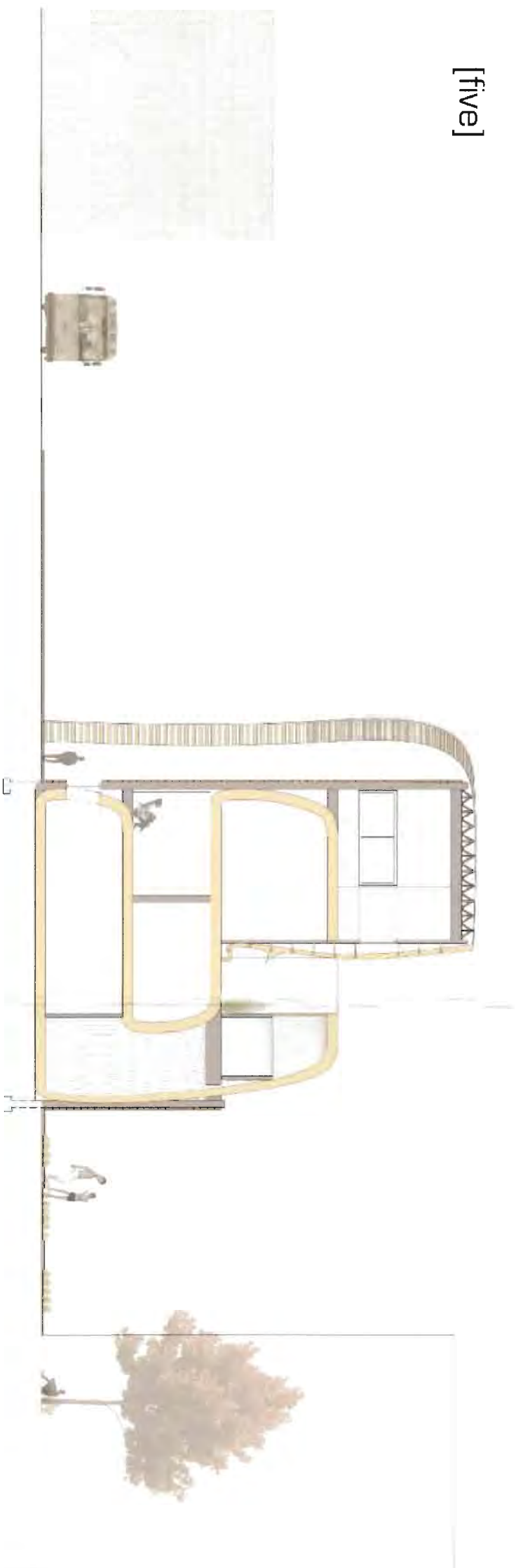


[the fashion of architecture]
university of detroit mercy school of architecture. julie kim, masters studio

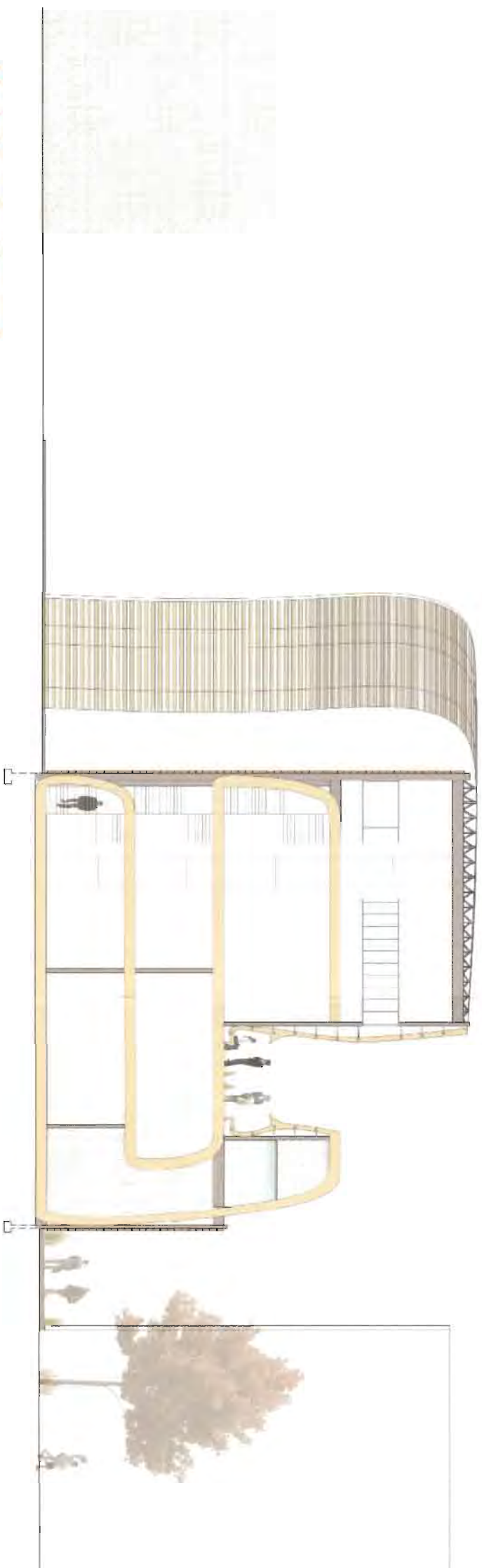
SECTIONS [three and four]
scale 1/18" = 1'



[five]



[six]



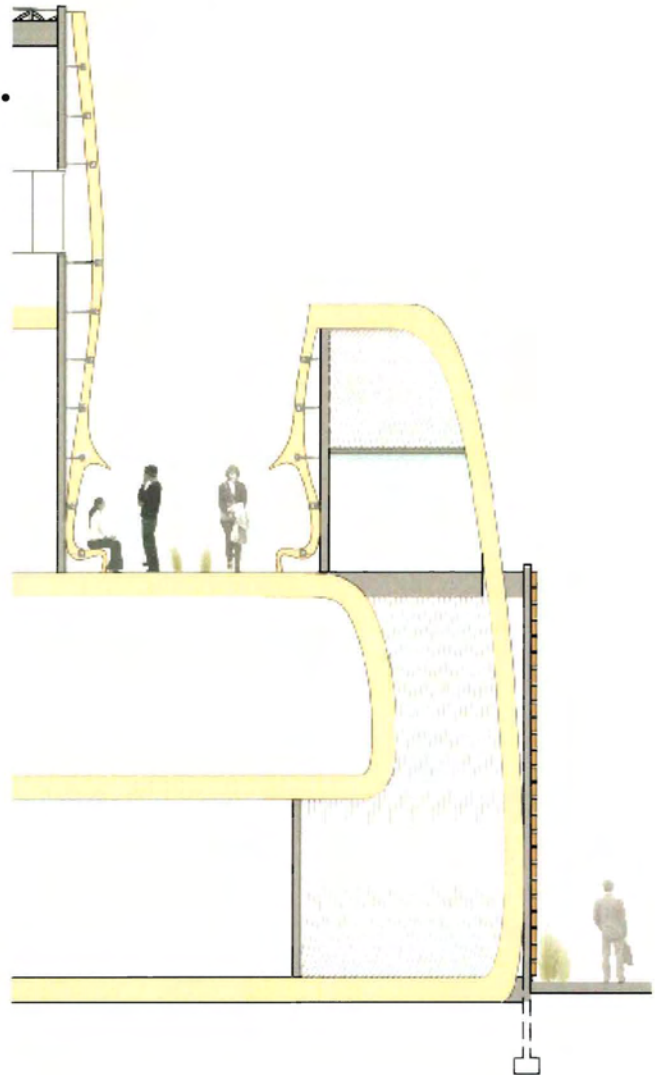
[the fashion of architecture]
university of detroit: mercy school of architecture. julie kim, masters studio

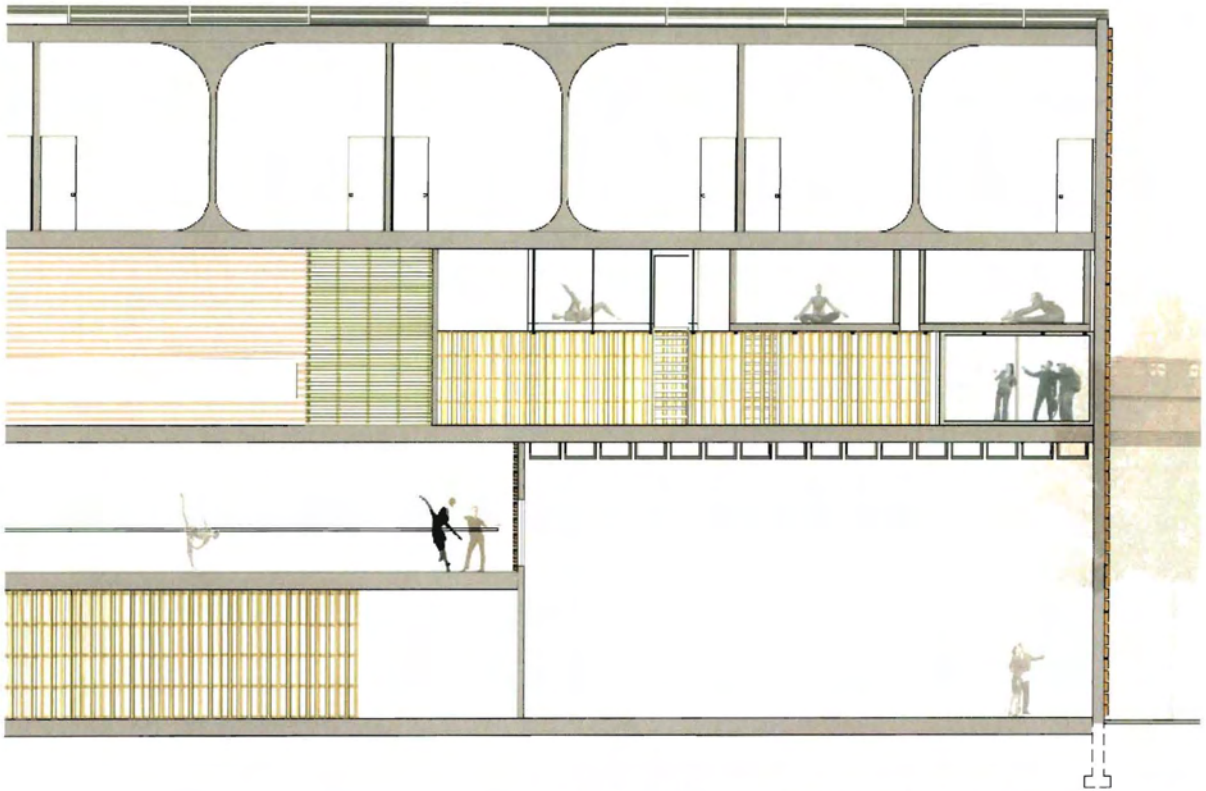
SECTIONS [five and six]
scale 1/18" = 1'



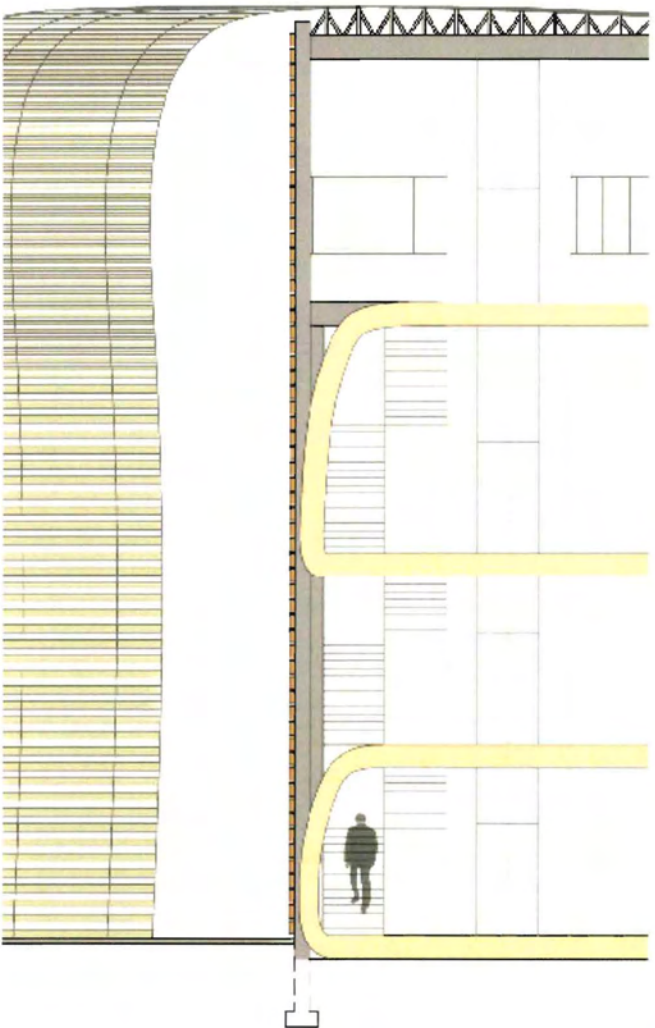
[section explanation]

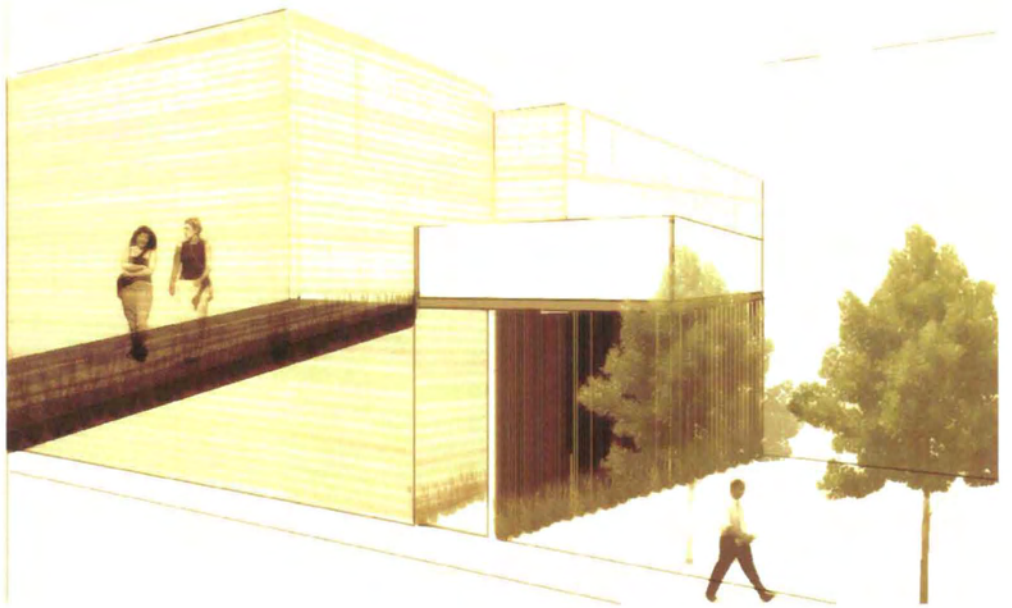
curtain wall folds over building and drapes down on the third level of the building, creating a resting area through the public path way. below illustration, same intent different section view.





the technique of folding
 is shown as the vertical
 layer of the interior vol-
 ume, this section shows
 the fold encasing the
 vertical circulation of the
 building, leading up to the
 third floor.
 above illustration shows
 the gallery space on the
 first floor, dance studio on
 second floor, yoga space
 on third floor and the
 living space on the fourth
 floor.





[models]

interior model shows the vertical layer of the building. the folds encase the activities that withhold the facilities program.

craft-making

music

dance

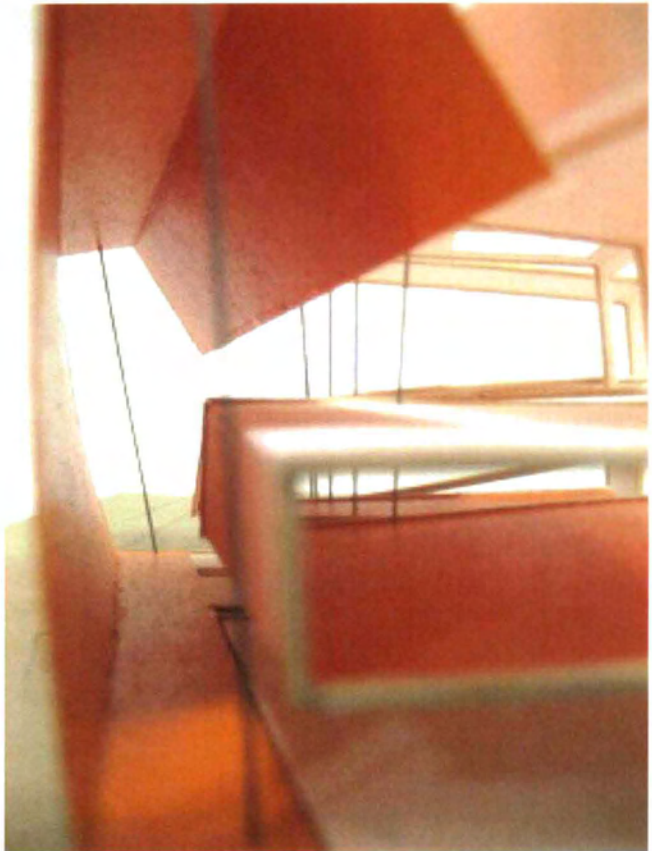
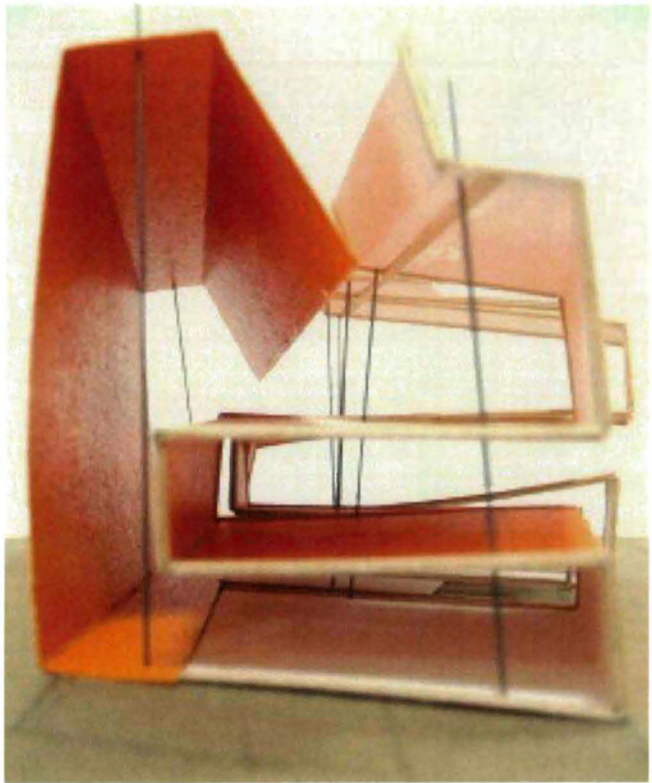
singing

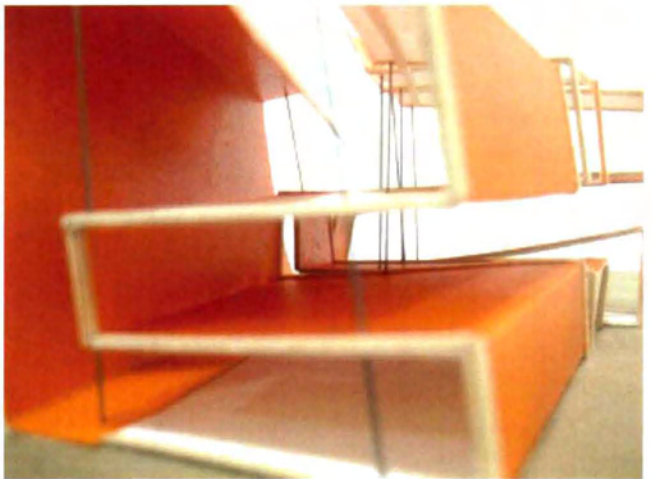
physical training

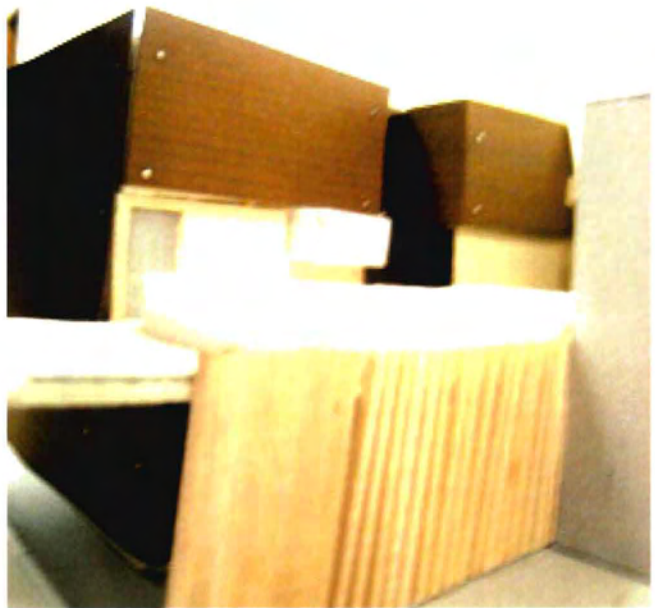
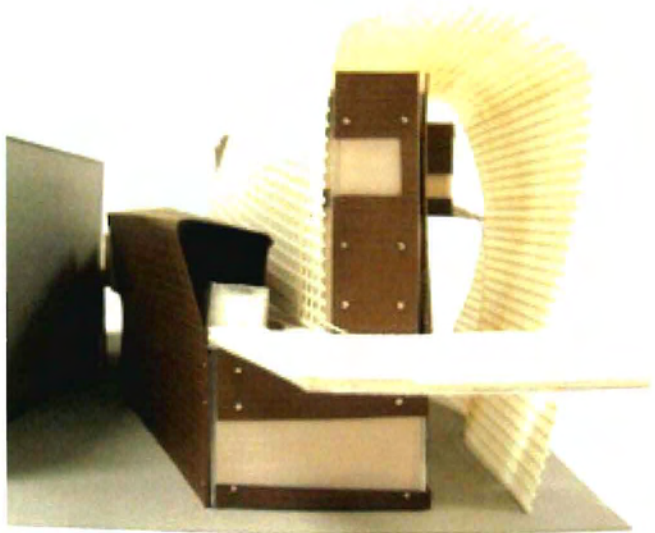
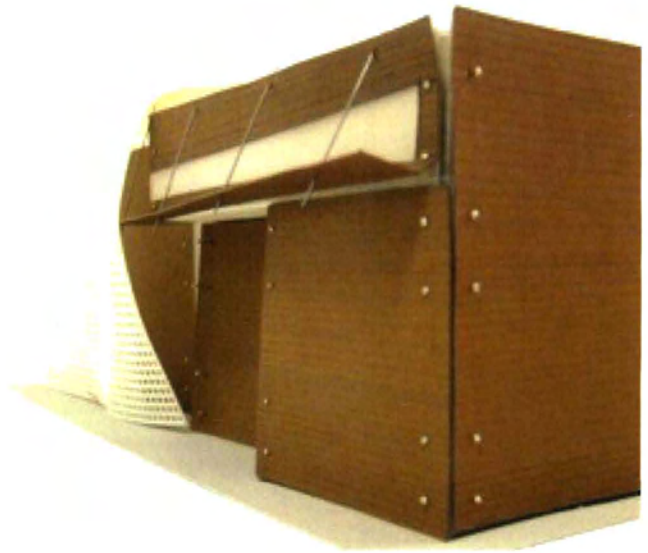
martial arts

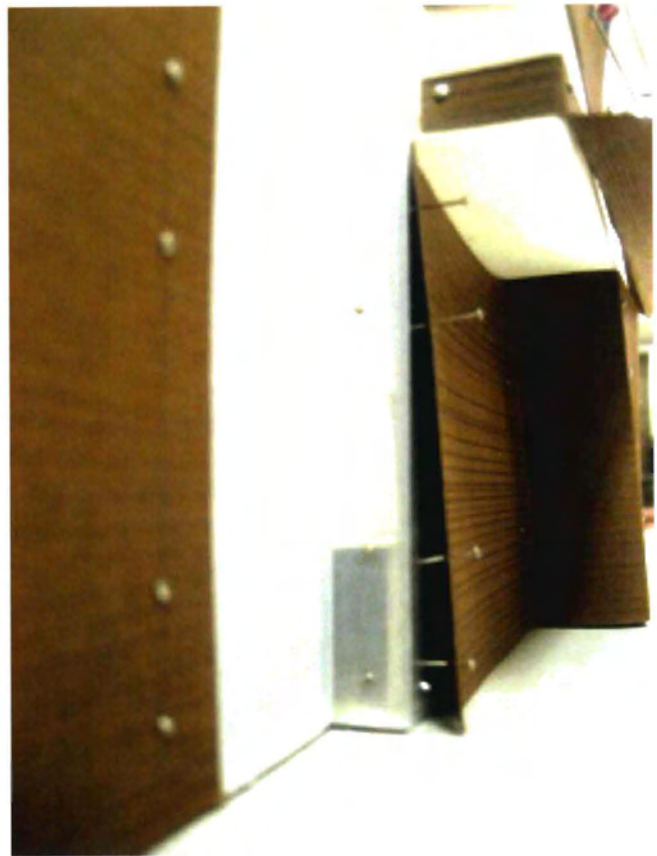
yoga

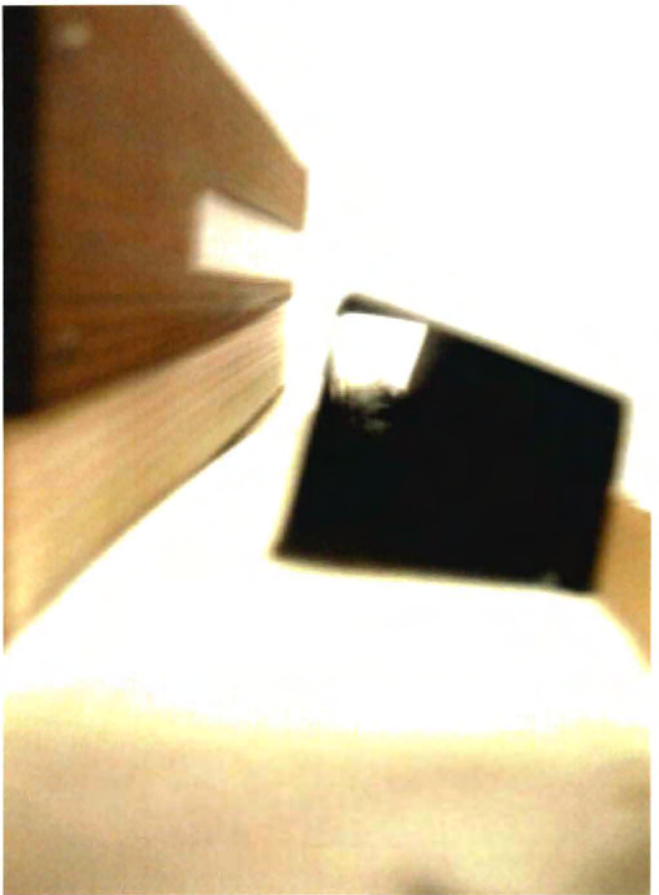
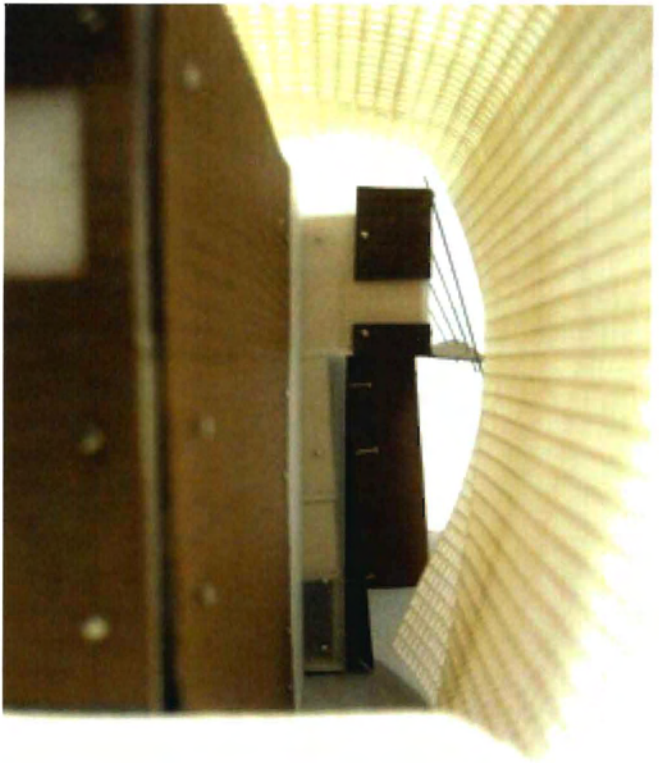
exterior model expresses the building as a whole in the context of the site conditions. the model shows materiality, illustrating the technique of wrapping and draping.











conclusion

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project program pg.52-62	design process pg.63-89	final design pg.90-106
conclusion pg.107-108		



summary of the overall process, focusing on the relationship between the thesis position and the final building proposal

So as the boundaries between fashion and architecture continue this project explores and commits to the inherent connections that exists between the two methods of design and links the relationship of the bodies that inhabit within and around the architecture. It is important to acknowledge and identify that the 'body' is the origin connection of the two practices. Therefore the investigation and outcomes of these notions engage and delight all of the senses at the multiple scale of the building- through a delicate set of techniques such as: folding, wrapping, draping, weaving, piercing, etc- which is essentially lead through the process of studying the tectonic skin of the building/ garment and the human scale as a reference to spatial experiences.

Using the design of an educational facility for the visually impaired as a programmatic design vehicle, which is pursued by the questions of the thesis within this specific architectural situation. Because the predominant audience is visually impaired, this provides a rich and complex set of opportunities to investigate the capacity of a material presence overlaid with the sensual to affect the perceptions of space and experience. Certainly, there would also be individuals who are not visually impaired who would use this space. The architecture would map their experiences as well but in a different way. Where the architectural clothing speaks to the inhabitant and becomes an experience of all our given senses. The authenticity of architectural experience is grounded in the tectonic language of the building and the comprehensibility of the act of construction to the senses. We touch, listen and measure the world with our entire bodily existence.

As the investigation and the design process lead to the final design, the proposal of the architecture focuses in on three specific techniques of design. The interior volume is encased with an 'origami' inspired vertical layer that folds itself from the ground floor all the way to the third floor. Within this folded layer exists the program activity. Draping as a second technique is created on the exterior of the building. A curtain wall, that facades the east side of the building, folds itself over the building top and drapes down onto the third level. This 'draping' creates a functional seating area, a resting space for the activity that exists on the highline path. The third technique, wrapping, is an exterior skin. Woodsiding wraps itself around the building and slips apart to create window openings.

With this deep interest in investigating and analyzing the similarities of fashion and architecture, brings together an evocative kind of architecture. Allowing the building to speak, to breathe and redefine its existence through its appearance and through the experience that it allows an inhabitant to receive. With an extended interest in the innovative physical environment the possibilities are endless. The investigation of materials has continued to encourage the potential to dislodge the conservative mindset we face today. I believe it is a paramount that we inform ourselves about innovative materials and methods so that extraordinary buildings and products can become the norm within our physical environment, rather than the exception

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- ² Thames&Hudson. **Skin+Bones: Parallel Practice** in Fashion and **Architecture** p13
- ³ Thames&Hudson. **Skin+Bones: Parallel Practice** in Fashion and **Architecture** p38
- ⁴ Thames&Hudson. **Skin+Bones: Parallel Practice** in Fashion and **Architecture** p18
- ⁵ Thames&Hudson. **Skin+Bones: Parallel Practice** in Fashion and **Architecture** p18
- ⁶ Thames&Hudson. **Skin+Bones: Parallel Practice** in Fashion and **Architecture** p19
- ⁷ Thames&Hudson. **Skin+Bones: Parallel Practice** in Fashion and **Architecture** p19
- ⁸ Thames&Hudson. **Skin+Bones: Parallel Practice** in Fashion and **Architecture** p19
- ⁹ Lupton, Ellen. **Skin- Surface, Substance + Design** p142
- ¹⁰ Lupton, Ellen. **Skin- Surface, Substance + Design** p106
- ¹¹ Pallasmaa, Juhani. **The Eyes of the Skin, Architecture and the Senses**. p47
- ¹² "peter zumthor works"
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- ¹⁴ Pallasmaa, Juhani. **The Eyes of the Skin, Architecture and the Senses** p28
- ¹⁵ Pallasmaa, Juhani. **The Eyes of the Skin, Architecture and the Senses** p21

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