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Crafting Form: A Tradition Reinvented

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CRAFTING FORM: A TRADITION REINVENTED

A Thesis Presented

by

ABIGAIL ROBY PRATT

Submitted to the Graduate School of the University of Massachusetts Amherst in partial fulfillment of the requirements for the degree of

MASTER OF SCIENCE

May 2010

Art, Architecture & Art History
CRAFTING FORM: A TRADITION REINVENTED

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ABSTRACT

CRAFTING FORM: A TRADITION REINVENTED

MAY 2010

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Knitting always begins with a line. As the needles and hands work together, performing the same action over and over again, the line quickly becomes a collection of lines, crossing, looping and locking. The looping and locking generates a surface, and the surface becomes a form. Knitting generates form.

Knitting is commonly categorized as a craft, associated with quick hands, idle time, and everyday objects that clothe us, and as a result, the technique is often overlooked and rarely pursued beyond its’ culturally constructed boundaries. What if knitting constructed new forms that transcended the ordinary and the expected, and challenged tradition? What if those forms spoke to shape, space, and light? The following collection of lines documents research and material explorations in an attempt to reinvent and redefine the boundaries and application of a traditional arts and crafts technique.
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CHAPTER I
MATERIAL EXPLORATIONS

Press. Scrape. Slice.

Embossing is a simple technique that involves the interaction of a surface and a material under a certain amount of pressure. When a material is placed on a surface and pressure is applied, an indentation of the material is made on the surface. Although a simple technique to explain, the possibilities of embossing are complex, resulting in intricate surfaces of imprinted imagery.

The interaction between surfaces and materials was something that I was interested in exploring, not only in the printmaking studio where I had first discovered the embossing technique, but I was also curious if the technique could translate to other applications. In hopes of uncovering a new application for the technique, I decided to experiment with knitted wire, a material that I had used in an architecture studio assignment.

The knitted wire served as the embossing material, and I relied on printmaking paper as the embossing surface. I completed a variety of studies of the embossed wire. As the compositions became more intricate and more deeply embedded in the paper, there was no longer a distinction between the surface and the material. The materiality of the wire had been permanently embedded into the paper. What resulted was a combination of surface and material, textured by the layering of knitted lines.
I continued to explore the knitted wire, but I wanted to introduce another material into the equation that would compliment the new surface that I had created. One of the materials that I experimented with were thick elastic bands because they were soft and had an organic shape, qualities that would compliment the rigidity of the knitted wire. My experiments revealed that the embossing of the elastic bands overpowered the subtlety of the knitted wire.

**Light Revealed**

There were many instances when the wire would become embedded in the paper because of the increased pressure of the press, and I would have to use my utility knife to dig the wire out of the paper. Because the paper was still damp, a thin layer of the paper peeled off as I peeled away the wire. With my utility knife, I started scraping away at the
surface of the paper. The result was a fuzzy, textured surface. I combined the embossing technique and the scraping technique. Once I completed an embossing, I would go back into the composition and scrape away areas of the paper in order to vary the surface, resulting in flat and fuzzy textures. The variety of textures achieved by the scraping added a tactile quality to the paper that complimented the embossing.

Figure 2: Paper Study. Embossed wire on paper

The holes that were created by the embedded wire allowed light to shine through the paper. As I held up one of the prints to the window, a new interaction was discovered, the interaction between surfaces, materials, and light. The variations of textures resulted in a variation in the light as it penetrated the surface.
The varying light conditions created by the different mark making techniques led me to scrape deeper into the surface. Photographs of animal skin and patterns in nature served as inspiration for the incisions I made into the surface. In my first experiment, I covered the entire surface in slices and held it up to a light source. The effect was dramatic, but I needed to be more conscious about where I made the incisions and the size of the incisions. I tried again, except this time I scraped the entire piece of paper before I made the incisions. When it was time to make the incisions, I was more deliberate about the incisions that I made, and the quality of light that could be achieved. I made only eight incisions on the paper, and although there were less incisions the effect was equally, if not more, dramatic.
I combined the incisions and embossing techniques together. The result was not as dramatic as I had hoped for because the light outshined the subtlety of the embossing, yet the interaction between the materials and the light continued to shine.

**Knit and Stretch.**

When asked to diagram forces in action for a studio exercise, I turned to knitting for inspiration and was surprised to discover the transformative potential of the technique. While most people associate knitting with women’s arts and crafts, my experimentations revealed that the technique could be utilized as a form-making process, and I welcomed the challenge of repurposing the technique.

![Figure 5: Knitted yarn over foam core](image)

My experimentations began one dimensionally. I started knitting pieces of yarn and stretching them over foam core and chipboard. By stretching the yarn over a flat surface, I was able to pull and twist the yarn, manipulating the patterning that the intricate looping created. This technique also revealed the positive and negative spaces created by the knitting, and I noticed that the most interesting moments were the mistakes I had
made while knitting. Although unintentional initially, the dropped stitches, gaping holes and knots became an intentional component of the technique. As I became more familiar with the yarn and its’ potential to be manipulated, I wondered if rather than using a flat surface as the base, I could manipulate the yarn over a material that could make the knitted surface two-dimensional.

Figure 6: Knitted yarn stretched over wire

The characteristics of the chicken wire were exactly what I was looking for. It was a continuous surface of woven metal that could be manipulated and molded, and the juxtaposition of the hard wire against the soft yarn was an unconventional pairing. As I molded and stretched the wire, the yarn molded and stretched with it. The experiment was no longer about the patterning of the knitting, but rather, the relationship between the two materials, the pulling and stretching, the layering of the hard and the soft, and the reinvention of an old technique.

Just as I had become more aware about the marks and incisions that I made with the paper studies, my decisions became more strategic about how I constructed the knitted surfaces and how the yarn and wire would interact. I alternated and dropped stitches. I knitted multiple strands of yarn together, and knitted different types of yarn
together. I experimented with different sizes of knitting needles, sometimes knitting with
two different sizes at the same time, resulting in a subtle variation in the stitch. By
varying the size of the needles, I could control how loose or how tight the surface was.
The smaller the needle, the tighter the surface. These surfaces were not as transformative
as the looser surfaces made from the large needles, but they did create dense layers that
could be later juxtaposed with the more irregular layers. When I used larger needles to
knit, the surfaces were more flexible and transformative. I could manipulate and deform
the patterns by applying force, pulling and twisting the yarn across the chicken wire
layer.

In order to uncover the possible transformations of knitting, I explored the
technique on a larger scale. The limitations of the materials became more apparent, and it
became harder to control how the yarn and wire interacted with each other. Instead of
fighting against the materials, I responded to the natural bending and folding, allowing
the materials to play a part in the articulation of the form. What resulted was an organic,
cocoon-like form made up of layers of materials that were no longer recognizable.

Figure 7: Knitted yarn and wire form
**Knit. Pearl. Stretch. Dip.**

My experimentations with materials and surfaces led me to explore another well-known arts and crafts technique. Although I had never made my own paper before, I understood the process and wondered if it had the same transformative potential as knitting.

![Figure 8: Detail of Handmade paper study](image)

Making paper pulp correctly can only be achieved through trial and error. At first, the pulp was too thick, and would take days to dry. Once dry, the paper was uneven and fragile. After more experimentation with water to pulp ratios and drying techniques, I was able to control the consistency of the paper pulp, and more importantly, the quality of the paper. Once I felt confident enough with the technique, I reverted back to knitting and introduced the technique into the equation.
I envisioned a new kind of hybrid surface. The wire and yarn would act as the knitted understructure, providing a surface for the paper pulp to adhere to. I carefully dipped the knitted yarn and wire into the paper pulp, and once the surface was coated and allowed to dry, the result resembled what I had envisioned. The pulp dried and formed a tight skin over the under layer surface, revealing the textures of the yarn and wire beneath. The layer of pulp created irregular openings on the surface. In areas where the wire was exposed, the pulp was unable to dry, leaving the area open. In other places where the layering of yarn, wire and pulp was denser, tiny holes formed, revealing only a small opening to the other side. When I photographed the hybrid surface with a controlled light source, I experienced the same revelation that I had during my embossing experiments. The openings and irregularities allowed light to penetrate the materials and alter the surfaces, revealing once again the transformative power of light.
Once I developed the technique, I experimented on an even larger scale. Knitting and adhering the yarn to the chicken wire was not more difficult, but because I was working with a thinner yarn and larger surface area, there were fewer dense areas for the pulp to adhere itself to. The yarn had to stretch farther distances, so the openings became bigger and the tension became stronger between the wire and yarn.

I had envisioned covering the surface with a thin layer of paper pulp made from tissue paper, napkins and tissues, but the pulp was too thin, and fell through the openings in the yarn and wire, so I made the pulp thicker. This worked better, but I was unable to achieve a controlled and unified surface because it was difficult to apply the pulp and to control where the pulp went. I discovered that a large spoon was the best tool for applying the pulp, and tried to distribute the mixture thoughtfully over the yarn and wire base.
At first, I was not especially satisfied with the way the piece had turned out. There were some areas of the surface that were reminiscent of the smaller experiments, but as a complete composition, the pulp appeared to be applied rather haphazardly. I took a few days until I revisited the experiment again, and when I did, I photographed it with a controlled light source, just as I had with the other experiments, hoping that the photographs could reveal solutions and new possibilities for the technique.
Through the lens of my camera, I was able to dissect the materials and uncover some of the problems. The yarn was not substantial enough to support the pulp, and the knitted surfaces were not layered densely enough to provide an adequate base for the pulp to settle on. The shadows created by the light’s interaction with the materials revealed the beautiful complexities created by the materials intersecting and interacting. What I liked most about the paper pulp’s interaction with the wire and yarn was the way in which it coated the form, and I thought about other arts and crafts techniques that could offer a similar effect.

In paper maché, flour and water are combined to create a coating that dries and hardens to a particular form. I decided to replace the paper pulp with the flour and water, once again combining two traditional techniques in the hopes of discovering something new.

![Figure 13: Shadow and light study. Knitted yarn coated in flour](image)

I approached this experiment in the same manner that I did with the paper pulp. I constructed a wire and knitted yarn base, mixed two cups of water with two cups of flour, and dipped the wire and yarn in the mixture. I was able to control the consistency of the
flour and water mix much more than I could the paper pulp, resulting in a mixture that could be applied to the wire and yarn more uniformly. The mixture dried quickly and evenly over the surface, revealing like the paper pulp had, the texture of the wire and yarn beneath it. The flour coating was much more uniform and smooth, and once the coating dried the materials were able to maintain a shape.

I continued to experiment with form making by wrapping the flour-coated yarn, without the wire, around balloons, another technique of paper maché. Once dry, I would pop the balloon and the yarn would retain the shape of the balloon, resulting in bulbous-like objects.

**Practical Applications**

![Figure 14: Knitware Series. Knitted yarn coated in flour](image)

This experiment revealed the functional possibilities of the materials, and led me to research what kind of standards the materials would have to meet in order to be marketable. I consulted with lighting designer Katherine Ahern, who works primarily with natural materials, about the standards her luminaries had to meet in order to be
considered safe. Ahern required that all of her products satisfy the standards of Underwriters Laboratory, a product safety certification organization that tests a variety of products and materials. Because Katherine’s products as used in both residential and commercial environments, all of her designs are required to meet fire safety and electrical regulations. Flame-retardants, sealants and proper wattage specifications are all part of Katherine’s design process. In order to confirm the products’ viability in commercial and residential settings, the products are tested, which can cost between eight thousand and ten thousand dollars. Testing, although expensive, is a critical part of the marketing process because it ensures that the materials are safe and functional.

Crafting Form

Figure 15: Detail of interior of knitted form

As I continued to work on a larger scale with the wire and knitted yarn technique, the forms became larger, the spaces inside the form became more complex, and the technique’s potential to generate form became more evident.
In order to reveal the complexities of the spaces inside the forms, I developed a more systematic way of constructing the knitted surfaces. I manipulated the density and patterning of the knitted surfaces by varying the size of the knitting needles, the stitch, and thickness of the yarn. Tightly knitted, dense pieces concealed the wire understructure while the loosely knitted irregular pieces exposed the wire underneath and could be more easily deconstructed.

Once constructed, the relationship between the inside and outside of the form became more apparent. I was able to expose the intricacies of the interior by deconstructing the layers and surfaces of the exterior. When cutting the knitted surface, the stitches would unravel and the traditional knitted pattern could be manipulated to create a new pattern. The new patterns were irregular, unpredictable, and unrecognizable. The knitted surfaces were no longer knitted surfaces, but rather, they became an encasing skin that dictated form.

Figure 16: Knitted form. Yarn and wire
Figure 17: Knitted form. Yarn and wire
Figure 18: Knitted form Yarn and wire
The articulation of form was revealed even more clearly with the presence of light. As light penetrated the openings in the surfaces, the forms within forms became more visible, and the layers of materials appeared as one continuous surface, bending and folding into one another. The subtle twisting and turning of the form paired with the gradual shift of the sunlight revealed the transformative qualities of the materials. No side appeared the same. With every turn, the light seemed to weave itself through the form.

The intricacies of the materials were echoed in the complex shadows casted on the floor, walls, and ceiling surrounding the form. The shadows recorded every movement, every fracture and sparkle of light. The three dimensional form became one dimensional, as the lines of shadows traced the contours of the form. Light revealed the multidimensional possibilities of the technique. It was no longer just about the three-dimensional form, but also the patterning of light and shadow created on the surfaces surrounding the form. The essence of the form was no longer confined to the limitations of its’ shape, but rather, the presence of light illuminated the complexities within, and projected them beyond the boundaries of the form, allowing the materiality to speak to its’ surroundings.

Figure 19: Shadow and light study. Knitted yarn and twine
CHAPTER II

PRECEDENT ANALYSIS

As my experimentations continued and the direction of my research became clearer, I looked to the work of others for more guidance and inspiration. What I discovered during my research was a diverse group of artists and designers whose work prompts many of the same questions that I hope my work inspires, namely, the reinvention and application of traditional arts and crafts materials and techniques in interior spaces. Tara Donovan, Ruth Asawa, Anne Wilson, Erwin Hauer, and Petra Blaisse all challenge preconceived notions of arts and crafts application in interior spaces.

By covering a ceiling with over twenty five thousand Styrofoam cups, or transforming a wall into an undulating surface with drinking straws, Tara Donovan challenges the function of ordinary materials in her quiet yet complex installations. Ruth Asawa’s crocheted and tied wire sculptures paired with strategic lighting reveal the dynamism of a traditional arts and crafts technique and its potential to create patterns and forms. Anne Wilson offers a similar approach in her work. Wilson’s interest in the generative potential of sewing, crocheting and knotting results in intricately organized surfaces of overlapping and intersecting materials. Anne Wilson’s installations, like Ruth Asawa’s sculptures, address the dichotomy between “women’s art” and fine arts while challenging the use of traditional form-making techniques in unorthodox ways.

Erwin Hauer’s architectural screens demonstrate the power of modulation and repetition as transformative design tools. A simple shape repeated and woven together becomes a complex three-dimensional surface, and the addition of light enhances the sculptural quality of the design. Petra Blaisse’s work addresses the inside and outside of
architecture. Her unique solutions to spatial definition, acoustic modulation, and screening position her work somewhere in between architecture and design. Although each designer’s approach may be slightly different, they all share a curiosity in material exploration, and the materials’ ability to influence the experience of a particular space.

**Subtle Complexities: The Work of Tara Donovan**

Tara Donovan reinvents ordinary materials in a way that transforms their function. No material is off limits. Straws, scotch tape, cups, paper plates, tar paper, toothpicks, polyester film, and shattered glass are just a few of the materials that have been monumentalized in Tara Donovan’s installations.

Although Tara Donovan’s design approach is complex and labor intensive, her designs is that they are not overwhelming or imposing, but rather, her work evokes a quiet and subtle environment. The subtle complexities that exist in Tara Donovan’s work are achieved by the monochromatic hues of her materials and the intricate repetition of actions that harmoniously joins the materials.

Repetition is a design strategy that is employed in all of Donovan’s work. Repetition enables her to transform the materials without physically changing them. It is the systematic grouping and joining, resulting in a tremendous shift in scale, that elevates the ordinary materials into a new realm.
Donovan’s installation *Untitled* is made up of twenty-five thousand Styrofoam cups that are stacked and joined together by hot glue and thread. Donovan is able to transform the space by mimicking the movement and shapes of the outdoors. The effect created by the white undulating forms hung beneath strategic lighting is reminiscent of clouds floating in the sky. The transformation that occurs during Donovan’s process has nothing to do with altering the structure of the cups, but rather it is the reinvention of the cups’ use that transforms them. By grouping the cups together, they are no longer cups, but rather, they become elements of an interior space.
Similarly, in the installation entitled *Haze*, Tara Donovan covers an entire gallery wall at Rice University with close to one million clear plastic drinking straws. Kelly Klassmeyer, a writer for *The Magazine of Rice University*, commented:

Entering the gallery, you have no idea what the sculpture facing you is composed of. It looks like a snow bank but far more delicate; the tiny circular straw ends look as ephemeral as a wall of bubbles. The surface undulates in and out, cloudlike and faintly organic. It is a spectacular visual effect that is only enhanced by the knowledge that it is composed of such a stupidly ordinary material.¹

Again, Donovan relies on the intricate stacking and accumulation of transparent straws to completely transform a gallery wall into a wall of texture. The irony of Tara Donovan’s work is what intrigues viewers most. The transformative power of her installations forces viewers to reconsider the applications of commonplace materials.
At first glance, the work of sculptor Ruth Asawa may appear complex, yet her technique is quite simple. By continually looping wire, Asawa is able to invent both a surface and a form that, when paired with light, results in an innovative design that is the result of a common technique:

As Asawa once described it, ‘What I was excited by was I could make a shape that was inside and outside at the same time.’ This duality comes not from a transformation of the material, as the basic character of the metal wire remains the same throughout the sculpture. Nor does it derive from a dramatic manipulation of the looping process…Asawa creates a dynamic sculpture by bringing a different approach to a conventional form of needlework and the prosaic material of wire.”
The spatial quality that Asawa is able to achieve in her sculptures elevates her technique from craft to form making. The scale at which she works is an element of her designs that suggests the technique’s spatial possibilities. Even though the method remains the same, the size transforms the form into something new. It is no longer simply about crocheting, but also the space that the technique generates.

Asawa’s work would not be complete, however, without the presence of light, an element that has continually revealed itself throughout my material explorations. The shadows casted on the wall as the sculptures hang from the ceiling speak to the origin of the form. The patterning of loops becomes a line drawing on the wall as the linear nature of the wire becomes evident. It is as though Asawa is drawing in space.

Figure 23: Ruth Asawa, Untitled, S042, 1955.
Hanging three continuous spheres with a hanging single sphere and small sphere in center middle sphere.
Crocheted aluminum wire (36" diameter x 90" high).
Photo copyright Laurence Cuneo
While many recognized the ingenuity of Ruth Asawa’s work, many are quick to dismiss her work, labeling it as merely a decorative craft created by a woman:

Rather than noting her use of industrial wire and its uncanny transformation through her deceptively simple manipulation of interlocking loops, these writers related her sculptural process to the domestic traditions of craft, especially weaving, knitting, and crocheting.iii Asawa’s choice of technique and her gender as a female artist practicing a “domestic tradition” distracts those from recognizing the ingenuity of her work. While many critics categorized her work according to the stereotypes associated with her technique, it is the reinvention of the crochet technique that elevates her work from merely craft.

**Infinite Surfaces: The Work of Erwin Hauer**

![Image of architectural design](image)

Figure 24: Erwin Hauer. Design 3. Light diffusing wall in church in Liesing, Vienna, Austria. Architect: Robert Kramreiter 50-cm module, cast stone

Copyright Princeton Architectural Press

The catching and casting of light through surface openings and the mesmerizing interlocking of forms are characteristics of Erwin Hauer’s work that intrigue me most. It is not just about the modulation of form, but it is also about the modulation of light, a concept that is becoming more evident in my own experimentations with materials and
form making. The relationship between form, void, and light exists at the core of Erwin Hauer’s sculptural surfaces, and it is this relationship that enables his designs to transcend decoration and function as fundamental elements of a space.

Hauer’s designs are inspired by his interest in infinity and continuity, concepts shared with Ruth Asawa and Tara Donovan, that led him to experiment with modularity and form making. “The three-dimensional modules I created had boundaries lacking closure and found completion only when joined by replicas of themselves.”\textsuperscript{iv} What begin as simple forms quickly become seamlessly woven three-dimensional surfaces in which positive and negative spaces intersect and overlap, creating intricate patterns of light.

![Figure 25: Erwin Hauer. Design 2. Light diffusing wall in church in Liesing, Vienna, Austria. Architect: Robert Kramreiter 50-cm module, cast stone. Copyright Princeton Architectural Press](image-url)
The modulation of light is another powerful dimension of Erwin Hauer’s designs. Even though the physicality of concrete may suggest qualities such as heaviness and permanence, the addition of light as a design element alters the characteristics of the concrete in such a way that the material becomes light and ephemeral. Without the presence of light, Hauer’s forms would convey a much different sensation.

Erwin Hauer’s technique, which he used in all of his work from the 1950s, could be considered just as important as the role of light in his designs. Trained as a sculptor, Hauer created all of his early designs by hand. Individual molds were created and the forms were cast in concrete. Although a time-consuming process, it is Hauer’s technique that enables him to maintain the unique sculptural quality while modulating space and light.

**Mapping Materials: Anne Wilson’s Topologies**

![Image of Anne Wilson’s Topologies]

*Figure 26: Anne Wilson. Details of Topologies*
Anne Wilson’s installations constructed from found textiles reflect her curiosity in material interactions and the social connotations embedded in them. Traditional techniques such as crocheting, knitting, knotting, and sewing are commonly explored in Wilson’s work. In her installation *Topologies*, Wilson investigates these handwork techniques in the form of an abstract topographic surface that maps the intersection and overlapping of black lace, thread, and insect pins. In her artist statement Wilson comments:

This project references many things simultaneously: relationships between systems of materiality (textile networks) and systems of immateriality (Internet and the web); microscopic, specimen-like images of biology and the internal body; and macro views of urban sprawl - systems of organization of city structures, interdependent and/or parasitic, processes of expansion. No single theme or position is privileged over another. *Topologies* is not just about materials and surfaces, but rather, it is about what they represent when taken out of their normal context and forced to exist among other materials. Wilson’s careful selection of the materials and the organization of the materials in relation to one another deconstruct their traditional meaning and establishes a new interpretation.

Although *Topologies* only exists in one dimension, Anne Wilson’s concept echoes that of Tara Donovan, Ruth Asawa and Erwin Hauer. She is extracting the common from the commonplace, and deconstructing social constructs.

**Inside Outside: The Designs of Petra Blaisse**

Petra Blaisse’s approach to design is not secluded to one specific area, but rather, her designs address both the inside and outside; interior design, landscape design, garden and park design, and exhibitions. Spaces are defined and yet the boundaries that separate
them are blurred. When asked about the relationship between interior and exterior design in Melissa Milgrom’s article, “OMA Mother Earth”, Blaisse commented, “they are totally different professions, yet they are completely connected through the roles they have. Open the window and the garden comes in, the curtain comes out.”vi Petra Blaisse’s concept of space has no boundaries, allowing her designs to respond both internally and externally to the site.

Sylvia Lavin, author of “Petra Envy: The Designs of Petra Blaisse” also recognizes Blaisse’s position in design as something that cannot be labeled:

Blaisse lives on the topological surface that separates and connects inside and outside, the impossible space of both and neither…Blaisse’s interventions demand to be understood as comprehensive, conceptually omni-present, everywhere-inside and out. She says that her work touches every aspect of a building. On the other hand, Blaisse is also nowhere, since she occupies no known professional or disciplinary niche.vii

Petra Blaisse’s design solutions for the Prada Epicenter in New York for example, demonstrate Blaisse’s unique design aesthetic.
The challenges that needed to be met at the *Prada Epicenter* were to design a curtain system for the VIP dressing room that would define spaces and provide privacy for Prada’s clients, and to invent a way to disguise the building’s audio system. Both challenges demanded that the materials have the capability to modulate sounds, whether it is a conversation between a client and staff member in a dressing room or music playing in the store.

For the VIP dressing rooms, Blaisse designed a plisse curtain made up of millions of pleats that acted as sound and air chambers, muffling the whispers of staff and clients inside the dressing rooms. In order to prevent intruders from coming into the dressing rooms, Blaisse left openings at the bottom edge of the curtains so that people could tell if the space was being occupied.
Figure 28: Conceptual drawing for Prada Epicenter design
Copyright Inside Outside

The conceptual drawings reveal the inspiration for the audio system encasement—a knitted sock. Blaisse’s team knitted an enormous double-layered silver voile sock that was hung from a mechanical hood that housed the audio system. The giant sock concealed the tangles of cords and wires and filtered the sound coming from the audio system.

Blaisse’s solution to conceal the audio system in the Prada Epicenter is unpredictable and unexpected. Viewers do not expect to see a giant sock hanging from an audio system in a clothing store, so they do not interpret the form as a sock, but rather, the sock becomes a component of the interior space. Scale is transformative design tool that forces viewers to see objects in an unconventional way. A sock is no longer a sock,
but rather, it is an enormous sleeve that encapsulates wires and cords. Knitting is no
longer a craft, but rather, it is a design solution that generates form for a particular space.
Once the site of my installation had been decided, I was able to fully immerse myself in my experimentations, but with a new perspective from which to approach. My investigations were no longer just about uncovering the generative potential of the materials, but rather, how the materials responded to the site in which they would be exhibited.

In order to respond to the site I first had to develop a clear understanding of the building’s program. Conversations with the architect, dissecting drawings, walking the
halls, and watching people live in the space were important exercises that helped to familiarize myself with the space. The concept of Gordon Hall was based on the intersection of two forms resembling tobacco sheds. The purpose of these sheds was to house fifty private offices for the Legal Studies Department at the University of Massachusetts Amherst. In order to break up the repetition of the office spaces, the architect designed a sculptural ellipse-like form to house two conference rooms on the first and second level of the building. Each conference room looks out onto the atrium through small irregular windows.

The atrium is a space of intersections, a place where materials, forms, movement, and light meet beneath a visible sky, and my job as the installation artist is to create forms that respond to these interactions occurring in the space.

During my first visit to the Gordon Hall atrium, I couldn’t help but notice the curvaceous white wall of the conference rooms that subtly undulated out into the atrium.
I recognized that the materiality of the walls of the conference rooms shared many of the nuances that existed in my knitted wire forms. The rounded wall and the irregularity of the small windows echoed the irregularity of the knitted layers that covered the curvaceous surface of the wire. A connection had been made, and a close analysis of the architectural drawings of Gordon Hall helped me to plan how I could emphasize these connections in the final installation.

The atrium is a social place, emphasized by groups of tables and chairs and communal kitchen. The proximity of the conference rooms to the more social activities of the atrium reveals that the programs of the building are not rigidly divided, but rather, they intersect and exist simultaneously.

Analyzing the architectural drawings gave me a sense of the scale of the building, and helped to determine the appropriate placement and size of the forms for the installation. Although the atrium is a very open space, with a ceiling height measuring thirty-six feet, floor place is at a premium because the atrium is centrally located, resulting in a lot of foot traffic. Because of the nature of the space, the ceiling would be the most practical and impactful site for the installation.
In order for the forms to speak to the space as well as one another, the placement, scale, and composition of the forms required rigorous analysis and planning. Even though the atrium has thirty-six foot high ceilings, the maximum height that is accessible is twenty-two feet. This measurement was important in order to determine the final scale of each installation piece, (10’-12’), and arrangement. The forms needed to be large enough in order to have a strong visual impact in the space and to prevent them from being overwhelmed by the space of the atrium.
Material, light, and form shape experience. Interaction between the installation and those who inhabit the space is essential in order to fully experience the physicality of the forms. Rather than dividing the space into an installation space and a viewing space by hanging the forms out of the reach of visitors, human experience and form should coexist, allowing the forms to truly transform and shape the experience of the space.
Notes


BIBLIOGRAPHY


