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Spring 5-1-2010

Urban FABRICation: The Architectural Heightening of the Urban Tactile Sensibility A Fiber Arts Fabrication & Exhibition Center in Dublin, Ireland

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Recommended Citation

Fallon, Elizabeth, "Urban FABRICation: The Architectural Heightening of the Urban Tactile Sensibility A Fiber Arts Fabrication & Exhibition Center in Dublin, Ireland" (2010). *Syracuse University Honors Program Capstone Projects*. 316.

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**urban FABRICation: The Architectural Heightening of the
Urban Tactile Sensibility; A Fiber Arts Fabrication and
Exhibition Center in the Docklands of Dublin, Ireland**

Thesis Statement

Fiber arts arguably bridge the gap between the tactile and the tectonic: the act of making and the act of making space. In other words, it is through the process of constructing and experiencing woven, knotted, or stitched surfaces that we understand the process of enclosing space between these surfaces. Revolutionary Bauhaus weaver Anni Albers states, “if we think of clothing as a secondary skin we might enlarge on this thought and realize that the enclosure of walls in a way is a third covering, that our habitation is another ‘habit’”(Albers, 49). Something we understand easily with our hands and eyes we also understand with our bodies. Fabric, whether knotted, woven or stitched, is often experienced at the personal scale, at close proximity to the body for the purposes of clothing, covering, or otherwise. Thus, when implemented as a material, pattern, and/or structure that is familiar to the body, woven or knotted surfaces often represent a familiarity to us through both tactile experience and visual recognition. In a strictly utilitarian space, “what is missing through the lack of fabrics is presumably

something that is warm to the touch, quite possibly color, the soft play of folds, the luster of fuzz or fibers in contrast to flat, hard, and cool surfaces” (Albers, 49). By implementing the strategies of fiber arts making and manipulation at varying scales, we can more easily comprehend the changing scales of space that go beyond our immediate person; most notably those of the architectural space that surrounds us as well as the urban environment which envelops this architectural space.

The Discourse of Contemporary Fiber Arts

The definition of contemporary fiber arts is broad and amorphous in scope. Primarily, it is concerned with the creation of object or surface implementing one or all of three essential techniques: knotting, weaving, and stitching. The materials that are manipulated via these techniques are not prescribed and open to interpretation. However, what is most important is the material itself and the exploitation of the abilities and inabilities of that given material: essentially, “to demonstrate an engagement between head, hand, and material” (Moyer, 8). For if the qualities of that particular material are not brought into light, then the piece itself cannot be considered a piece of “fiber art.” Twylene Moyer, author of *Fiber: The Importance of Being* writes the following:

Fiber art that merits the name...returns us to the primacy of our senses, and circumvents the mediation of thinking through language. Its form and content emerge from intuitive, bodily, tactile experience, a prolonged dialogue between the maker and the materials, a duet of exploration and risk-taking. We don't look at this kind of work and immediately formulate a script for it; our response is emotional, in the senses, and in the gut. These feelings, sensations, and impressions then coalesce in the mind as we strive to find words to communicate them, to mirror their impact. Such works are not easily categorized or pigeonholed; they are created through a deep dialogue with materials, not by self-consciously striving to make work 'about something.'...[The] work and its meanings arise from serious experimental play and immersion in materials, form, and process. (Moyer,10)

Essentially, fiber art as a discourse is unique in that it manifests as a material determinate form. The finished form of a fiber artifact is as much determined by the material as it is by the artist. A continuous thread, either woven into an assembly of hundreds of other threads or knitted into one uniform surface on its own, is limited by its length, its strength, and any and all properties that belong to it.

These limitations are emphasized by another quality belonging to the fiber arts discourse, namely the importance of interlocking, and not merely fusing materials together. Fiber art is what it is because it *can* exploit all the qualities belonging to a particular material without having to permanently join materials together that would not

attach naturally. There is a skill involved in calculating how to create an assembly of materials without gluing or welding autonomous pieces together. It is this that leads to the perishability of fabrics, as highlighted by Anni Albers, as yet another important quality of the discourse (Albers, 49).

One particular characteristic that is present within each of the three techniques (knotting, weaving and stitching) is the importance of the component. For the purposes of this project, a component can be defined as either an autonomous element which is repeatedly implemented to create a fiber artifact. Present in all fiber arts fabrications, one or many components become integrated together, both with those of its kind and with those of others. For example, a knitted fabric, created through a series of hundreds of knots made consecutively one after the other, can be further manipulated by a number of individual stitches attaching pieces of the knit fabric together. This combination of techniques leads to an integrated system of interlocking components (knots and stitches) that articulate this as a work of fiber art. Components may take the form of many different elements in the fabrication of fiber artifacts, manifesting as a knot, a fiber, a string, or any repeating unit of any type of material that can be woven or integrated into an assembly.

In addition to these important characteristics, fiber arts' qualities make it uniquely pertinent to their implementation in open space. Fiber artifacts have the ability to manifest as tensile, temporal, and flexible structures. These types of structures are essentially made for play with the elements, using water, light, and air to amplify the success of these pieces. Whether they are intended to be interactive at the human scale is relative.

The Spatiality of Fiber Arts

"...[T]o cover, to hold,

to dress, to enclose."

Gottfried Semper, *The Four Elements of Architecture*

These are the responsibilities which fabric is obligated to fulfill in all aspects of human life. Although it may appear that the last, enclosure, is the sole responsibility with which we as architects are concerned, the opposite is actually true. In fact, all four are extremely integral to the act of making space at all scales and in any situation. In architecture, not all of these functions are performed using fabric as a primary means. However, using various methods and materials, these responsibilities are carried out through architectural form, essentially transferring Semper's definition of the role of fabric, to also describing the role of

architecture.

If Semper was the first to realize the potentialities and overall importance of fabric and fiber arts in the making of space in his text *The Four Elements of Architecture*, Anni Albers was integral in articulating and fabricating these principles in the twentieth century. Rather unknown in the general sense, Anni Albers, wife of famous color theorist Josef Albers, was a revolutionary in her time, essentially pushing both theory and practice of fiber arts where it had not been taken before. Throughout her career, she wrote a number of enlightening essays discussing fibers, art, architecture, design, and the relation and overlaps between these discourses. She argued that building design and construction are far removed from the realm of personal understanding at the human scale; that architecture, urban design, and spatial qualities in general can be understood by the greater population, but unfortunately are not. Though, she states, by implementing a craft such as textiles into the act of making space, a craft much more easily understood by a larger number of people due to the personal scale at which it is produced - this gap between the scale of the human and the scale of the space surrounding them can be bridged. Although it may not be completely understood by all people, as far as technique and construction are concerned, fabric making is a material work

completed at the personal scale, forcing a relationship between the work and the viewer. She highlights the aspects of fiber arts that articulate the practice's intriguing role within the discourse of making space: the repetition of elements and motifs within a woven piece can be manipulated in all ranges of scales. She also stresses the architectural intrigue of a unique characteristic of any woven piece, the creation of two different sides of a surface at one given time.

Albers concludes her essay *The Pliable Plane: Textiles in Architecture* with this: "The essentially structural principles that relate the work of building and weaving could form the basis of a new understanding between the architect and the inventive weaver. New uses of fabrics and new fabrics could result from a collaboration; and textiles, so often no more than an afterthought in planning, might take a place again as a contributing thought."

Throughout this project, the writings of Anni Albers will provide a lens through which to view weaving and fiber work as not only a means of making art but as a means of understanding it as a legitimate discourse in the realms of both design and human existence.

Fiber Arts & the Personal Scale

The Art of Labor

There is a distinctively strong relationship between fiber arts, material, and the process of making. Arguably more so than most other art forms, fiber arts is the art of labor and manifests as the evidence of that labor through its byproducts. There is nothing more indicative of the labor of making than seeing a knitted fabric not as a surface but as a series of individual knots forming a larger assembly. These individual knots can be visually evaluated as the evidence of the laborious process as well as quantitatively evaluated by the number of stitches completed within the whole.

Material

The priority given to material in fiber arts is essential in understanding what defines this art form. Anni Albers defines material as unformed, unshaped matter. Throughout a series of states of change, material is translated into product. For example, raw wool is processed through a spinning wheel to create thread, which is then used for crochet, knitting, stitching or weaving. It is used for two primary purposes, to make “useful things and beautiful

things, equipment and works of art” (Albers, 7). Albers claims that our relationship with these states of change has been severed, that we as humans have been separated from material in its original state as civilization has progressed. “We must come down to earth from the clouds where we live in vagueness, and experience the most real thing there is: material” (Albers, 6). To reconnect with the world around us, with reality itself, we must reconnect with material, and the process by which it translates matter to product.

The exploitation of the qualities of a material is inherent in all fiber artifacts. The manipulation of a material is governed only by the limitations and abilities of that material, not by any outside authority. Although there are guidelines and rules that belong to any craft, they can be interpreted and removed as seen fit. They are challenged by the artist/maker, and thus reciprocally challenge us back. However, no matter how the work and the maker are tested, both are firmly checked by the laws of the material in the end.

Making

Making is the process by which material becomes product. It is a transformative procedure: the translation of raw material for use, for appropriate interaction with the human. Claire Pajaczowska

states the following in her text *On Stuff and Nonsense: The Complexity of Cloth*:

Weaving is an activity that is both supernatural/divine and mundane. It transforms the natural materiality of animal, vegetable, or mineral into the cultural clothing of humans. It is, in Levi-Strauss' terms, a symbolization of the fact of culture itself. Weaving, like cooking, transforming the "raw" material of nature into the "cooked" language of culture. In weaving, the raw material of animal hair or vegetable fiber is transformed into a medium for human relationship. The loom can be seen as a frame, portal, or aperture which opens through the two-dimensional world of surface into the third dimension of space. (Pajackowska, 233)

In addition to the physical and sociological qualities to the process of making, there is also a conceptual benefit in a psychological and emotional sense. According to a number of theorists of epistemology, or the theory of knowledge, "thinking arises through making" (Pajackowska, 243). Through making, states Anni Albers, we as people are able to grow, to become self-dependent, and to increase our self-confidence. She states that "[c]reating is the most intense excitement one can come to know." Through "free experimentation," we as humans can instigate the "fulfillment of an inner urge to give form and give permanence to ideas" (Albers, 7). Thus, making leads to thinking, which leads to ideas that inspire making. Although appearing to contradict one another, these writings are both factual and inextricably linked to each other and

are inherent to the process of making as critical to our mental and physical development. Whilst not entirely giving credit where it is due, Freud has stated the role of “thinking as the practicing of action” (Scanlan, 50). What is certain is the importance of action in our development as humans. Contrary to all of these theories, a common statement in epistemology is the exact opposite of this - that thought arises from idleness - what we can now determine is a common misconception.

Fiber Arts & the Urban Scale

The contemporary urban environment has become an amalgamation of concentrated people and processes acting around, near, within, on top of, and adjacent to each other. Various urban elements or components articulate a framework for the basis of the urban environment as we perceive it. These components can manifest as city monuments or major thoroughfares, essentially forming the set pieces of the cities we live in and move through. It is through the relationships between these elements that another network or set of networks are defined, those of the various processes and sequences which occur within a given city. These networks of process and sequence (where specific types of movement and activity occur) lead to socialization and highlight

hidden and underappreciated systems of patterns and urban “textures” within the city. These patterns and textures are how we negotiate through the urban landscape as an urban participant. We understand them because they are at the scale of the participant: how we get to work, where we had coffee last week, the bench where we tied our shoes yesterday.

At times, the scale of the city is out of the urban participant’s realm of understanding. As exemplified in abandoned, less developed urban areas, the patterns and textures that help us negotiate the city are less articulate and more difficult to interact with. We are unfamiliar with them and are thus less prone to going outside of our collective comfort zone. Redevelopment strategies within cities often rely on the implementation of architectural and programmatic elements to attract and engage the urban participant. However, this engagement is often conversely dependent on the participant’s overall understanding and comprehension of the surrounding urban landscape; the ability to maneuver through and manage the urban context is essential. The mere implementation of an architectural project is not always enough to “redevelop” an urban environment.

Thus the urban environment, or specifically for the purposes of this project, that which is less “developed” in the traditional sense,

needs to be mediated by interventions implemented at a scale closer to that of the human body, whether through actual smaller-scale elements or through patterns and textures familiar and understandable by our bodies. These interventions can manifest as physical, functional set pieces in the landscape, designed for our interaction as urban participants, ranging from park benches and telephone booths to small-scale shop kiosks. In addition, public fiber art pieces can help to reframe this mediation between the scale of the city and that of the participant.

At an urban scale, methods of material insight and production will remap a person's experience and understanding of the surrounding cityscape, heightening the tactile sensibility of a place less often "touched" than other, more familiar places in the city. The importance of creating a local environment from the "bottom-up" is integral in translating an idle urban environment into a functional and active one.

The Dublin Docklands serve as an example of this type of less developed urban area, the participants in and future residents of which would benefit from the heightened tactile sensibility that will be brought about through implementation such as these.

Fiber Arts: Installation & Environment

Contemporary fiber arts installations are of particular relevance to this project because of their ability to react to and interact with the surrounding environment and processes taking place within that environment. In contrast to more traditional examples of fiber arts pieces created in two-dimensions, such as woven rugs, tapestries or table covers, contemporary installation pieces are meant to interact with space in a three-dimensional aspect. At bare minimum, these contemporary pieces are designed to manipulate existing spaces, either indoors or out, to reframe our overall perception of a space into one that would not have occurred otherwise. In addition to this quality of literal space shaping and reframing, what now will be referred to as “architectural installations” are also often designed to interact proactively with environmental qualities such as light and air.

Wind, water, light and space: these are the earthly elements that artists who work out of doors depend on in making their works of art. To move into a space and possess it is their immediate goal. If the work of art is successful, ...the artist transforms the viewers' relationship with the environment...

Environmental works in cloth are temporary, but their existence is permanent in memory and through documentation. They go beyond Conceptual art because they have a powerful physical presence during their brief moments of being. It matters not

whether they are in an urban setting, within a natural landscape, or tied to the sea. It only matters that the cloth be brought in contact with the essential elements. While many of these works are site specific, those that depend on transitory elements such as the wind are movable works of art capable of being installed in other places. (Constantine, 146)

Many architectural fiber installations are free from the limits of gravity, due to their tendency to be light, ethereal assemblies. The purpose of an individual piece is able to mediate between embracing certain limits of gravity and discounting others. For the most part, these types of architectural installations require an anchor of some sort, either integrated as part of the piece itself or implemented as a simple tow for the purpose of security. They confront earth, water, wind, light and space and play with them; the particular way in which the pieces interact with these elements depends on the nature of the material itself as well as how that material is manipulated.

A Fibrous Heterotopia

Grahame Shane, author of *Recombinant Urbanism*, argues that the city is no longer a master plan with the name of a single designer on a label. It is a complex system of networks that conversely interact to create the urban landscapes we are familiar with.

Shane's text becomes an articulated definition of three urban

elements (the armature, the enclave, and the heterotopia), and how these elements define the composed networks that make up our cities of today. Shane argues that the heterotopia articulates the epitomized urban element in a post-industrial city, in which both city and element deal with multiple activities simultaneously as well as addressing equally the principles of “stasis and flow”¹, negotiating the inherent gap between the linear element of movement within the armature versus the self-centering device present within the enclave. The heterotopia, as originally defined by Michel Foucault in his essay *Of Other Spaces*, is a unique urban component type, embodying certain specific defining principles. Although a multitude of types of heterotopias exist, most of which are irrelevant to this discussion, the following principles can define what this project has termed a “fibrous heterotopia”, taking advantage of these qualities and applying it to this project, essentially aiding in implementing an extremely specific and specialized program into the grand-scale public realm.

As defined by Michel Foucault, the heterotopia:

- is unlike ordinary cultural spaces, and no one is the same from city to city.
- juxtaposes several incompatible sites within one space simultaneously.
- embodies slices of time, both accumulating and flowing.
- embodies a system of simultaneous opening and

closing.

- holds a role with respect to all other space within the city.

- is connected in some way with all sites, groups, or distinctions in the city.

Obviously, the concept of a heterotopia is much more complex than the statements mentioned above. In addition, the concept that every heterotopia is different from the next is not hard to believe, as the roles and characteristics of heterotopias change over time and place, depending highly on its urban surroundings.² However, these specific qualities can be used as a point of departure for defining the programmatic goals of this particular project in an urban realm. Essentially, the heterotopic qualities of interest to this project are related to the concept of contradiction. What makes a heterotopia successful in articulating its goals in an urban setting is its ability to contrast both with its surroundings in the urban landscape, as well as with the elements within its simultaneously defined and undefined walls. The programmatic needs as specified for this project qualify the above characteristics in a number of ways:

- The incompatible combination of work with a raw material and the experience of the final product made from that material.

- The simultaneous documentation of the accumulation of the past (exhibition and gallery space) with the temporal flowing of time in the present (market and festival infrastructure as implemented into the park scheme)

- The openness of a public park juxtaposed with the

specialized and “closed” nature of fiber arts production facility and equipment use.

Thus, the specialized nature of the fiber arts fabrication center juxtaposed against the public realm as represented by the sculpture park is inherently contradictory, essentially defining it as a derivative of a heterotopia. The role of this project with respect to the city as a whole is to merge the discourses and practices of fiber arts and architecture within an urban setting, allowing the urban participant to experience a heightened tactile sensibility of a place otherwise deficient in deeply embedded existing urban textures and processes, present in and characteristic of the city center. This particular heterotopic derivative is connected to the rest of the city in its exemplification of texture, material, and process as necessary for a means of understanding the environment, and our common ability to understand these principles as urban participants and human beings. Essentially, this project intends to derive a type of “fibrous heterotopia”, disassembling the properties that one could identify with a heterotopia and reassembling them into a mode for urban intervention in this particular project with its particular goals in mind.

Fiber Arts & Gender

Gender is unavoidable as a topic of relevance and intrigue within the discourse of fiber arts, deeply embedded within the art form from its origins. Often the practice of making fiber artifacts is referred to as “women’s work,” either in a stereotypical light drawing an umbrella over all of the textile arts and crafts, or as a critical re-examination of the term in a feminist light.

Throughout the development of civilization, men were charged with the responsibility of hunting and gathering for their dependents while women were usually charged with the production of textiles for practical use in the home. Essentially, the female role of producing textile was not only for home making in the cliché sense, but also for the literal making of the home. The first nomadic structures for living were often tents requiring both the processing of hides and plant fiber into proper workable material, as well as stitching and knotting techniques for fastening and attaching the pieces of the shelter together. And this, according to Anni Albers, makes women the first structural designers. In addition, as described by Nancy Tanner, American physical anthropologist, original tool making and, by proxy, the introductory development of

communication and language were due to mother and infant performing duties and playing games within the home (Pajczkowska, 241). The common misconception is that men are solely at the center of evolutionary progress. However, it could be argued that this “women’s work” and thus fiber arts in its most basic and traditional sense share, or even supersede this archaic view of the evolution of the human race.

In *The Direction of Cloth: The Horizontal Dimension*, Lois Martin describes the relationship between gender and the physical orientation and display of fiber artwork as inextricably linked. In a classical sense, what was “elevated” was related to man, while what was “debased” was related to women. Men were traditionally associated with air and fire, the elements most often associated with the heavens, while women were associated with the remaining two elements, earth and water, both firmly rooted to the terra firma. Further, the patterns on Peruvian garments of Andean natives also follow this tendency, with horizontal stripes present on women’s garments and vertical stripes present on those of men. It is this “horizontal dimension” which conceptually links Classical notions of the female with the essence of most traditional fiber artifacts that are meant to be displayed on a horizontal plane. “Face it: cloth just wants to lie down.” (Martin, 8)

Aristotle's misconceptions about biology have also added to these conceptual notions about the female, fueling what many feminist fiber artists use as inspiration for their artwork. Essentially, Aristotle believed that the two elements that created humans, "matter" and "form," came respectively from a person's mother and father. Matter, coming from the mother, "was a universal substrate, which was not only passive, but had something of the mucky vileness of dirt" (Martin, 8). Contrarily, "form" was what Aristotle associated with the soul of a person, essentially appointing the father as the "artist" or "creator" of said person. It is the connotation of words such as "create" or "originate" that imply "the greatness of art depends on how forcefully the 'great master' artist has overcome matter's resistance and imposed his form" (Martin, 9).

However, some contemporary feminist views can be interpreted to embrace the idea of matter, material, and the feminine persona through the outlet of fiber arts to create material determinate, beautiful things. The beauty of fiber arts pieces is embedded within the essence of the material itself, which is thus the "feminine" nature of the artwork.

Fiber Arts: Historical & Cultural Background

The production and usage of fiber artifacts has been well established in all cultures since the beginning of human civilization. The procedures involved in producing these artifacts have had significant influence on economic, religious, and social processes of any number of cultural and historical backgrounds.

Traditional Production of Fiber Artifacts

In a traditional sense, the discourse of fiber arts has an arsenal of specialized tools associated with specific processes involved in the making of artifacts, both for aesthetic and practical use. The most iconic and complex machines for the purpose of creating fiber artifacts are the floor loom and the spinning wheel. Both of these elements often come off as sculptural in themselves, with a truly iconic presence in the history of fiber arts.

Fiber Arts & Social Processes

In the more general sense, various types of fiber art production and making have manifest as social events, most notably those of quilting bees, in which early American settler women would gather

in the summertime to simultaneously work on quilts together. Different stitching and fabric materials were combined from any number of participants to create the finished product.

Also, the predominantly English spring tradition of the maypole could be considered an example of a social fiber artifact.

Consisting of a large pole with ribbons falling down from the top, these ribbons were held by participants on the ground continuously weaving in and out of each other to form a web of sorts essentially tightly wrapping the pole from top to bottom.

Fiber Arts and Economic Processes

Just as in other crafts or vocations, guilds organized for the processing of material and production of artifacts were designated for the practice of fiber arts. For example, the history of the development of the Irish Guild of Weavers, Spinners & Dyers has been active under one title or another since 1936 and still holds a presence to this day in the capital city of Dublin.

In addition, the prominence of wool and its importance in the development of the Irish economy cannot be contested. The proliferation of wool processing and products caused a great deal of economic growth to occur in this predominantly rural nation during its development. In fact, certain limits were often placed on

the export of woven materials because of the great effect this particular division of industry had on the Irish economy.³

Program

Infrastructural & Architectural, Creative & Practical Space

In order to implant such a highly specialized program type into an urban, public setting, this project has adopted certain qualities associated with Michel Foucault's heterotopia, an essentially contradictory space which both confronts and interacts with the surrounding urban environment as well as its own internal elements. The program assembly is composed of four contrasting elements, permuted from two groupings of dichotomies: the architectural versus the infrastructural, and the creative versus the practical.

Infrastructural elements in the project will take the form of a designed set of stand-alone pieces, appearing structural or sculptural in form and purpose. In the practical sense, a network of these infrastructural pieces will provide a base structure for various temporary tenting strategies, intended for the purpose of programming various types of event space, including public festivals as well as a local farmer's market. These tenting

strategies can be assembled and disassembled depending on the requirements of an event at a given time. In the creative sense, certain pieces will act as physical anchors for architectural fiber art installations out in the public realm. This sculpture park is intended to bring an additional textured layer to this public space, reframing the urban participant's perception of the space as the art pieces are installed, interact with the environment and its participants, and thus replaced by new installations as time progresses. This constant manipulation creates a vibrant and active urban experience, constantly changing as the installations and events change over time.

From an architectural standpoint, certain built elements are also necessary to create a vibrant and active urban experience. The monumentality of the city of Dublin is contrasted by its tightly knit small-scale urban fabric. In the Docklands, the establishment of these monumental elements is beginning. However, there is a need to bridge the scale jump between these large-scale projects and the small-scale urban street environment manipulated by the fiber arts installations and infrastructure. The design and implementation of a medium-scale architectural project, as exemplified in the Fabrication and Exhibition Center will serve as a counter balance between the large and small-scale urban elements

as well as mediating the urban space between them.

The fabrication center is composed of private, specialized program elements, including dye-labs, weaving studios, and private studios. There is also an opportunity for live-work studios for a select number of residents to interact with this environment on a constant basis. Classrooms and public studios will provide semi-private access to the learning of these specialized processes of making in a hands-on sense. As a “practical” and more public counter balance to the creative nature of the fabrication center, a formal gallery space will be implemented into the building. This gallery will serve as an exhibition space for work produced in the fabrication center, as well as an accumulation and display of traditional work as well as traditional equipment required for making these artifacts.

In a heterotopic manor, the project will manifest as a simultaneously closed and open system, both literally (in the sense of a “closed” architectural space and an “open” public space) and programmatically (in the sense of the “closed” private and specialized quality of the fabrication center and the “open” public exposure to exhibition spaces). The priority of all of these architectural manipulations is that they can adapt and readapt, create and recreate new urban space and architectural experience

as time progresses.

Goals of the program include:

- + To manifest in four urban elements, each with characteristics that identify its role in creating a heightened tactile sensibility in the underdeveloped urban condition of the Dublin Docklands.
- + These characteristics create dichotomies and contrasts between these elements.
 1. architectural vs. infrastructural
 2. creative vs. practical programs
- + The cross combination and/or permutation of these qualities manifest in the four urban elements of the complex.
 1. Fiber Arts Fabrication Center (A & C)
 2. Urban Square/Sculpture Park (I & C)
 3. Fiber Arts Exhibition Gallery (A & P)
 4. Festival/Market Space (I & P)
- + These elements will interact with each other in according hierarchical relationships.
 - Fabrication center and sculpture park together will

articulate a creative environment

- Museum and Market elements will react with and against each other due to their programmatic qualities, one serving as a documentor of the past, the other serving as a resource and urban instigator for the present.

Design Process: Introduction

The designing of partis and architectural strategies will be done simultaneously with architectural fiber arts installations and projects, from the small to the medium scale. Fiber artifacts will be physically constructed from a variety of materials, including both those traditionally used within the art discipline, namely yarn, string, or thread, and those considered non-traditional, which essentially need to have the properties of being able to attach and interlock with other materials in some way, shape, or form. The act of physical construction and manipulation of material will inevitably inform the overall architectural and urban design of the project. This material and constructive research and experimentation will strive toward creating details, architectural assemblies and urban strategies that will have the ability to be assembled, disassembled, reassembled, and/or built upon for the purposes of constant adaptation to an ever changing urban environment.

For the purposes of this project, techniques for manipulating interlocking materials will be investigated in depth, including specifically how to knot, stitch, and weave. More dominate and specialized methods of interlocking, namely knitting and crochet, will also be investigated in order to assess their viability in manipulating materials at the building scale.

Fiber Arts & Architectural Implications

If the nature of architecture is the grounded, the fixed, the permanent, then textiles are its very antithesis. If, however, we think of the process of building and the process of weaving and compare the work involved, we will find similarities despite the vast difference in scale. Both construct a whole from separate parts that retain their identity, a manner proceeding fundamentally different from that of working metal, for instance, or clay, where parts are absorbed into an entity. This basic difference, however, has grown less clearly defined as new methods are developing, affecting both building and weaving, and are adding increasingly to fusion as opposed to linkage. (Albers, 44)

In her essay entitled *The Pliable Plane: Textiles in Architecture*, Anni Albers describes the multitude of overlaps between the discourses of textiles and architecture. These overlaps include not only methods of shaping space, as discussed previously, but also an articulation of the architectural qualities of textiles implemented

in this light. Most notably, these include acoustic and olfactory qualities of bringing a fabric piece into an architectural space, creating contrasts or not only material and tactile affect, but of other sensory experiences as well. Albers also discusses how fabrics and other fiber arts pieces can have insulating qualities, as well as performing more recent, modern roles in sound absorption and privacy (Albers, 47).

Endnotes

¹ Term used by the author. Shane, David Grahame. Recombinant Urbanism. West Sussex, England: John Wiley & Sons Ltd.

² Foucault, Michel. "Of Other Spaces," *Diacritics* 16 (Spring 1986), 22-27

³ <http://www.weavers.ie/>

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Capstone Summary

This project, entitled *urbanFABRICation*, is the integration of the discourse of contemporary fiber arts into the manifestation of an architectural design. Throughout the past academic year, the development of this project has occurred in multiple stages. The first of these stages involved research and development of a theoretical basis from which to design an architectural project. Through my interests in fiber arts, urban design, and Irish culture, the project soon manifested itself as a fiber arts fabrication and exhibition center in the Docklands of Dublin, Ireland.

The primary driver for the first stage of the project was the research of fiber arts and its relevance as a discourse with respect to architecture and urban design. The architectural and theoretical definition of the innate and intimate relationship between the principles that define fiber arts and the way we as humans experience space became a critical element in this project and continued to develop throughout the duration of the year.

The second stage of this project manifested as a more traditional architectural design. The project is approximately a 40,000 square foot art center located in the east of Dublin, a formerly industrial area of the city. Left mostly abandoned by the

absence of industry, businesses and residential elements, the Docklands are in great contrast to the iconically rich and “textured” city center of Dublin, as exemplified by the neighborhood of Temple Bar. This project intended to bring both the process and experience of texture to an area of the city currently lacking in this quality, a quality that is so incredibly prominent elsewhere in the city. The act of making, installing and viewing fiber art is a process which brings a particular richness and “texture” to our human experience, and can equate to the experiences we have when moving through a thriving, layered urban environment. The ability to relate the personal process of experiencing texture to the greater experience of public, urban space through the mediating scale of an architectural design was a primary goal for this project.

In addition to these stages, the physical production of fiber artifacts became a supplemental and unique process, implemented from the beginning of the year in order to add another level of research and design experience to this project. While more traditional research and design methods took place, I worked with the Fibers Department of the College of Visual and Performing Arts, to produce fiber art pieces as well as to constantly learn new techniques and to push my ability as a designer both in art as well as in architecture. The process began with a number of smaller

pieces, each with a different intention in learning a different technique, and finished with the public installation of two larger scale pieces. The first, entitled *Space Filler* was installed in Slocum Hall at the conclusion of the Fall Semester of this year, and the second, entitled *Cable Encampment* is installed in the first floor of Bird Library and will be in place through the summer of 2010. The simultaneous study of an art form and programmatic practice which would take place within this architectural project helped to define more clearly what is important in designing this specific project as well as what principles to maintain throughout the design process.

The hyper definition of fiber arts principles with respect to architecture and experience became an outline by which to design the project. These definitions set a series of priorities to maintain as well as became a starting point from which further development could occur. Thus, the design process was affected in a uniquely productive way, constantly and consistently relating the programmatic and theoretical goals of the project back to the physical building design in an elegant, abstract, and elemental way. Further, the simultaneous production of personal fiber artifacts allowed for a complete immersion into a practice that has defined this project literally from the inside out. Learning new methods of making, techniques in manipulating material, as well as specific

strategies for installation of fiber artifacts in an architectural space all brought a particular richness and rigor to the design process; a design process which had been clearly defined from the start.

Essentially, this project is the manifestation of an extension of the traditional architectural thesis. Not only did the project manifest as an architectural design as proscribed by independent research and development, but also it became an exercise in the benefits of a complete immersion into a discourse that is unfamiliar and somewhat distant from that of architecture, and the challenge of creating a palpable and symbiotic design logic from this experience. Its significance also manifests at a personal level, as I view it as the complete synthesis of my greatest passions and is a testament to my academic and intellectual interests.