architectural fabric
a fibre arts cooperative for Indianapolis

an architectural thesis by
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College of Architecture and Planning
Department of Architecture
Ball State University
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course requirements for Architectural Thesis ARCH 404 in completion of
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committee...

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abstract...

A concern for the direction of Architecture in the nineties and beyond led to the thesis question within which looks to the spirit of the arts for parameters of design development. The art of weaving, fabric, and fibre sculpture are translated into an architectural vocabulary in the design of a fibre arts cooperative for the city of Indianapolis.
concerns...

The point of departure for this thesis inquiry was a concern for the future direction of our profession. The arbitrariness and confusion; the general lack of direction and the disappearance of quality architecture are all symptoms of a problem my generation of professionals will need to address. What differences lie between the successes of our rich architectural past and the state of the art - controversial and directionless though more informed, discussed and written about than any architecture of the past?
questions...

Architecture may be most fundamentally an extension of and an expression of society. Juhani Pallasmaa addresses this notion in "The Social Commission and the Autonomous Architect: The Art of Architecture in the Consumer Society" where he continues "...the disappearance of quality from architecture may be caused by loss of the spiritual or ideal dimension from a civilization." (62) Have we as architects allowed ourselves to become simply the tools of a society of materialism and empiricism tied to a system of patronage which has clouded our real purpose? In our wealth of convenience and in times of "the quick fix" have we allowed image to replace sensory experience and quality? Certainly the technology of our time distinguishes us from the past, yet Pallasmaa notes "...we fail to achieve humane architecture." (66) What then contributes to creating a sense of place? The following passage provided a clue to my inquiry.

"The man-made world of things, the human artifice erected by homo faber, becomes a home for mortal men, whose stability will endure and outlast the ever-changing movement of their lives and actions, only inasmuch as it transcends both the sheer functionalism of things produced for consumption and the utility of objects produced for use. Life in its nonbiological sense, the span of time each man has between birth and death, manifests itself in action and speech, both of which share with life its essential finitude. The "doing of great deeds and the speaking of great words" will leave no trace, no product that might endure after the moment of action and the spoken word has passed. If the animal laborans needs the help of homo faber to ease his labor and remove his pain, and if mortals need his help to erect a home on earth, acting and speaking men need the help of homo faber in his highest capacity, that is, the help of the artist, of poets and historiographers, of monument builders or writers, because without them the only product of their activity, the story they enact and tell, would not survive at all."

Hanna Arendt, The Human Condition
Perhaps we are a profession which has lost sight in the value of architecture as a realm of art. Building has become sheer utility and function, more a craft than an art. The architect as artist will distinguish between art and craft to transcend efficiency, utility, and technology. Artistic creations are those infused with a level of intensity, articulation, and depth which would otherwise go beyond our scope of understanding. Architecture needs to do more than reflect the commission and the client. It needs to transcend the level of the society that commissioned it; to banish the specter of arbitrariness, allowing opportunities for respite from our complicated existence. Creative architectural minds will help society redefine reality by opening up a second level of reality, one which allows space to be inhabited, as Louis Kahn taught. Action and experience will then dominate our existence and the architect will then have truly created architecture.

Hannah Arendt wrote of transcending the norm. So too did William Hubbard in Complexity and Contradiction when he stated:

“If there is one characteristic that links the diverse art movements of the modernist period, it is perhaps the hyperawareness that one’s personal sensibility could have been otherwise.” (21)

An architect needs to be deeply aware of this sense of otherliness - an important idea informing my search for creative direction.

With these notions in mind, my thesis inquiry departs as a search into the artistic expression of building; an art which acknowledges the value of the existing urban fabric and uses the spirituality and passion of which it is woven to give birth to an architectural vocabulary.
Fabri: (fr. fabrique, fr. fabriquer to fabricate, L. fabricari, L. fabrica artisan's workshop, skillfully wrought object, building — mor: et forma: a product of building (as a house or ship) (four high houses on the sort lane-dwellers' call — Daniel Corkery) b: under: deriving structure: framework (the work of restoring the ~ of Westminster Abbey — Conrad von Bahr) (the very ~ of daily life) (whether the political ~ had the strength to withstand war — S.E. Morrison & H.S. Commager) 2 obs: contrivance, device; esp: a military engine 3: an act of constructing 4: construction, fabric; spec: the construction and maintenance of a church building 4: structural plan or style of construction (the whole complex ~ of flowers and floral organs that makes up the head of a composite plant) (soil ~ (arrangement of the constituents of the soil in relation to each other) — L.D. Bayer) b: texture, quality — used chiefly of textiles (a linen cloth of fine silky ~) a: the form of the planchet of a medal or coin (a coin with thick ~) b: architec: something made by man; artifice, product (the earliest ~ of the Venetian glassblowers) b: cloth in ~ of cloth in a particular kind (satin is a ~ with a smooth shining surface) or for a particular use (a sheer curtain ~) d: a material (as leather or woven wire) that in some respect resembles cloth. 8: a place devoted to manufacture: factory (the chief shapes manufactured in this ~ were bowls — V.G. Childs) 7: structural material (the more usual ~ was timber or coursed masonry) (using a ~ of silken threads the spider builds her web) 8: the appearance or pattern that is produced by the shapes and arrangement of the crystal grains or of these with glass in a rock and that includes those orientation features which are not evident from grain shape alone.

fabric vt: fabricated; fabricating; fabrication; fabrics [V]: fabrication a: frame, build, construct.
parallels...

The point of departure is an analogy between the creation of fabric and the creation of architecture. As a novice in the art of architecture and the art of weaving, with love and respect for both disciplines, I see important parallels which inform the creation of each product. Architecture and fabric have reflected culture since the dawn of man. In their most elemental sense they are both utilitarian; they provide shelter for the body. They also evidence the technology and artifacts which are representative of the cultures of society; they are clues to understanding our world. An examination of their dimensionality is a measurement of the human soul and man's attempt to reconcile with his world. We are submerged in fabrics daily. We feel, inhabit, not merely perceive each. Both need to perform, not merely appear. Both are studies in proportion, balance, rhythm, color, texture, and structure. As architects we create within the warp of society, whose weft are three-dimensional forms which have surface, texture, and circumference. Our creations impact human lives and become woven into the urban grid through time in a multitude of variations, over and under each other with remarkable individuality.

My creative efforts also focus upon the work of an artist who herself has infused a utilitarian craft with the spirit of "otherwiseness". Leah Orr, a fibre sculptor in Indianapolis for the past seventeen years, has evolved her art form from traditional tapestries to her own invention, knotted copper PVC wire compositions called "Wireworks". On an antique rugmaking frame with modules four foot square, Leah creates three-dimensional constructions of impressionistically layered color which are stiff enough to drape into defined shapes. "Wireworks" realize their full potential in large scale pieces for architectural spaces.

It was Leah who first recalled the value of an artist to a society, and so my thesis study focuses upon the development of a facility for the design, manufacture and sale of woven pieces. It uses the act of weaving and the notion of fabric as a metaphor for its construction to infuse the process of designing with an aesthetic spirit. The creative atmosphere is an artist's cooperative for downtown Indianapolis. It houses work spaces, exhibition, gallery, and retail spaces, storage, office, computer, resource, business and sales spaces. There is also an artist-in-residence living space comprised of sleeping, eating, living, and bathing facilities with a private rooftop studio.
translations...

The revitalization of the Riley Area in downtown Indianapolis led me to believe it an appropriate site for my proposed project. Further examination led me to the vacant site chosen at the corner of Massachusetts Street and Alabama. Once the most heavily travelled street in Indianapolis and the original business district of the city, Massachusetts Street is also one of the few streets "on the bias" of the city's orthogonal urban fabric grid. There are presently small shops, businesses (at least three architectural firms and one graphic design firm), housing above street level store fronts, restaurants, and a few small galleries. The district takes in such historic sites as the Stout Shoe building, the Athenaeum, and the Murat Temple. The restored Sears Roebuck building, now an O'Malia's grocery store, is across the street, and the Hammond Block office building occupies the corner at the opposite end of my block. It is felt the addition of a major gallery and studio spaces will compliment and encourage improvements which continue in the surrounding neighborhoods. It is also hoped that the profile established by a major facility for the pursuit of the fibre arts will aid in marketing the talents of the individual artists, enabling them to continue to pursue their work while bringing art in Indianapolis to the forefront of Indianapolis business.

The Massachusetts Avenue corridor becomes a fabric woven between setbacks and lot lines. Cornice heights and window lines become the weft, varying from building to building, creating interest in the weave from street level and tying the blocks together. The footprints of all buildings respectfully "line up" at the sidewalk edge. My facility respects the soldier-like footprints of its neighbors insomuch as the columns line up with the sidewalk also, however several streetside windows angle back away from the grid in an effort to suggest the creativity of the efforts housed within. A parallel can be drawn here to the simple four foot module Leah works within and the creativity possible within her simple square.

The angled corner site I chose immediately gave rise to a parallel with the dynamic of weaving. The triangular shape is reminiscent of the shed created when certain warp threads rise to allow the shuttle to pass through and begin to create the weave. Gallery, studio, and support spaces thus surround the perimeter of this open exhibition space, ready to be filled with finished pieces of work. The exhibition space is also square in response to Leah's module, and it is aligned with Alabama Street to respond to the orthogonal grid of the city fabric. The corner also presents a unique opportunity to address the notion of creative process. By their nature, buildings sited on corners become significant because of their unusual shapes. The point often signifies entry. Here it can be construed as entry to the business district as well as entry into the facility, which reinforces the notion of restoring Massachusetts street to a vital business corridor.
I have chosen to let my corner entry speak in terms of a seam - a part of the urban fabric in the throws of creation. One enters at the seam and begins to experience the process of creation. The entry hall, on a diagonal axis with the square central exhibition space, begins in a thirty-eight foot high atrium space which attempts to inform the user of the creative acts within by visually weaving the spaces accessible to the entrant. Structural support columns of the first and second floors rise overhead to guide the eye upward to balconied levels sharing the atrium space overhead. A stairway threads the levels together at this point also, as do long, thin slivers of light from the windows of the exterior facade. The columns also draw the entrant forward to engage center court shops. The atrium area is to be filled with plantlife representative of the natural fibers used in dyes and threads - beginnings in the process of woven pieces.

Movement inward along the "seam" allows visual connections of the work completed and in process. Viewers experience the range of creativity possible within the discipline, each level successively more private than the next - an allowance for the moments between conception and realization which compose any creative act. The "seam" terminates with the gallery and a finished piece of "Wireworks" which rise to the ceiling of the exhibition space, sixty-two feet high. These elements add verticality to the court, expanding it skyward and tying together the horizontal bands of the studio floor levels. The elevator's movement can be evidenced through its windowed shaft behind the Wireworks sculpture, adding the dynamic of action to the space and using the motion to again weave the floors together.

Interior spaces are also woven together through a series of interior terraces which offer artists and visitors opportunities to meet, share, discuss, "get away", and gain fresh perspectives. In this manner, not only space but people are woven together and actions and experiences shared become part of the esthetic which defines a true sense of place. As the sun alters shadows falling upon the pieces within, new perspectives are cast in the minds of those engaged.

Whereas the interior spaces address completed work and work in progress and use the horizontal as a means to suggest weft filling warp, the exterior expression is quite the opposite. The Massachusetts Avenue and Alabama Street facades hang like empty warp threads ready to engage creative pursuit. The emphasis streetside was to relate the notion of building as a framework in much the same way as the reed organizes the weft on a loom. The vertical lines strive to be clean and unchuttered so as to respect the time-honored lines of the neighboring historic facades. Angled brackets meet the cornice line to suggest a rise of the shed and are a modern translation of the bracketed facades nearby. Translucent stone is used to speak to the grace of the historic district and to suggest to the interior spaces a fragility in the "cloth" wrapping the structure. A thin line of curved glass windows wrap the perimeter (directly above streetside) into the corner entry which begins a vocabulary more horizontal in nature, sympathetic to the interior spaces. The idea of a seam at the corner is subtly reinforced by the stepping back and the separation of the artist-in-residence's studio terrace and by the notched facade and Mullions.
**Reflections...**

A semester has been spent in the endeavor to create architecture from a piece of art; an attempt to prove quite literally architecture as a realm of art by relating the processes of the creation of fabric to the processes which inform the creation of a piece of architecture. The method which guided my process was at times quite literal and I feel could become a trap if ideas and thoughts were not nurtured carefully or too were too biased. However, I feel the strong conceptual notions I began with helped answer many design problems I encountered and were important in the creation of my finished work.

Too often the pitfall becomes our craving for order, for in the solving of problems and in the creation of physical forms we strive to create the perfect technological "whole". Unfortunately, the array of information and technology the architect has at hand seems to date to have been more often than not his greatest misfortune. I often found myself consumed with what was available for me to use and how my idea could accommodate it, instead of what I could design to make my idea work the way I wanted it to. When I posed such questions to myself and others, I was reminded that the ability to create was within myself.

Creating image is a step in the process of creating architecture, yet image alone will not produce quality architecture; we need the basic information technology and history impart in order to create. We cannot start to create without our experience being applied to this information, and selecting from the possibilities offered by this information is essentially an ability of the soul.

Fine contemporary architecture is a result of the human spirit and new technology working hand in hand. Creative people crave and thrive upon new ideas which change forever their previous notions. If we as architects are to impact the direction of architecture in our generation, it must come from the artist within us - from a spirit to create and nurture ideas.

The success of my attempt to conceive the thesis work by this means was a factor of my present experience level, knowledge and spirit. Experience and knowledge come with time. Spirit was the vehicle by which the artist Leah Orr created and the vehicle with which I was most comfortable developing my design. I will need to develop a command of each factor in order for my work to impact human consciousness and serve society.
resources...


exhibition court