Museum:

The Beauty of Lean

Timothy M. Stone
The Beauty of Lean

A Design Thesis Submitted to the
Department of Architecture and Landscape Architecture
of North Dakota State University

By

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In Partial Fulfillment of the Requirements
for the Degree of
Master of Architecture

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Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cover</td>
<td>1</td>
</tr>
<tr>
<td>Title &amp; Signature</td>
<td>2</td>
</tr>
<tr>
<td>Permissions &amp; Rights</td>
<td>3</td>
</tr>
<tr>
<td>Table of Contents</td>
<td>4</td>
</tr>
<tr>
<td>Abstract</td>
<td>5</td>
</tr>
<tr>
<td>Problem Statement</td>
<td>6</td>
</tr>
<tr>
<td>SOI</td>
<td>7</td>
</tr>
<tr>
<td>Proposal</td>
<td></td>
</tr>
<tr>
<td>Narrative</td>
<td>9</td>
</tr>
<tr>
<td>User / Client</td>
<td>10</td>
</tr>
<tr>
<td>Major Project Elements</td>
<td>11</td>
</tr>
<tr>
<td>Site Information</td>
<td>12</td>
</tr>
<tr>
<td>Project Emphasis / Methodology</td>
<td>13</td>
</tr>
<tr>
<td>Studio Experience</td>
<td>14</td>
</tr>
<tr>
<td>Program Document</td>
<td></td>
</tr>
<tr>
<td>Research / Typology</td>
<td>16</td>
</tr>
<tr>
<td>Summary</td>
<td>24</td>
</tr>
<tr>
<td>Case Studies</td>
<td>26</td>
</tr>
<tr>
<td>Summary</td>
<td>38</td>
</tr>
<tr>
<td>Historical Context</td>
<td>40</td>
</tr>
<tr>
<td>Thesis Goals</td>
<td>46</td>
</tr>
<tr>
<td>Site Analysis</td>
<td></td>
</tr>
<tr>
<td>Narrative</td>
<td>48</td>
</tr>
<tr>
<td>Qualitative</td>
<td>50</td>
</tr>
<tr>
<td>Quantitative</td>
<td>54</td>
</tr>
<tr>
<td>Program Requirements</td>
<td>56</td>
</tr>
<tr>
<td>Appendix</td>
<td>61</td>
</tr>
<tr>
<td>Reference List</td>
<td>62</td>
</tr>
<tr>
<td>Personal Identification</td>
<td>63</td>
</tr>
</tbody>
</table>
Museums are universal institutions dedicated to the preservation of culture: This one will be located in the vicinity of downtown Fargo, North Dakota, with an approximate square footage of 38,000. Architectural design, through the most efficient and minimal use of materials, can be profound. An architecture that is sensitive to natural resources and habitats should be the determinate vehicle in the built environment. As architects, we must forever continue considering the expression of enriched architectural solutions to societal problems and reduce creating them.

Key words: Museum, Minimal, Enriched, Design
Problem Statement
The Beauty of Lean

How minimal can architecture be?
Project Typology:
Museum

Theoretical Premise

Claim:
The key to an enriched design is not found in how much we use, but in how little we disturb the environment while producing quality architecture.

Who is the actor?
Enriched design

Who is the action?
Disturbance

What and who is the object?
Architecture

State the Premises:

How is the actor related to the claim?
Enrich design is a product that does not strain our resources. It is a design that possesses indisputable aesthetic value, and beautifies the site.

How is the action related to the claim?
Disturbing the environment less, emphasizes our sensitivity to our natural environment and future posterity.

How is the object related to the claim?
Architecture is the expression of design ideas implemented.

Conclusion:
By embracing an enrich design that can result from minimally disturbing the natural environment, we illuminate the path to a radiant future.

The Project Justification:

In the 21st century, our architecture is obligated to exhibit a cohesive language with the natural environment in which we are constantly engaged.
21st century architecture is on the cutting edge, so to speak. It is on the cutting edge, with new technology that allows us to build faster and smarter and with the ability to erect structures with contorted forms and shapes that would never have existed many years ago. Somewhere along the way to becoming more creative and less monotonous, it seems designers have lost the path and desire to hold architecture as the highest and functional art.

When does a building become a piece of architecture? With the placement of the last brick? How far can we strip a building down until it is no longer an architectural artifact or thing? We speak of the parthenon as an architecture although it is not occupied by humans. Is it still architecture at this point? Many times we expel wild life from their natural habitat, to create more of the same, never considering how we can preserve the natural quality of the site in which it is many times these things that produce site character; is this architecture?

Architecture as art has the ability to transcend the consumption of materials and resources. Enriched architecture has the ability to humble itself to its surroundings and yet whisper inspiration to those engaged with it. Architecture as art has the understanding that utility and purpose is its primary existence, while sensitivity to the landscape is its primary concern. Architecture as economy has the ability to re-route its users and use of space while remaining profoundly beautiful.

Not only is it my desire to make a contribution to the field of architecture, it is also my obligation as a designer to minimize the pain inflicted on our planet by reasoning with its users and they engage space.
Primary Users
Primary users are defined in this context as individuals employed at the facility. This would include all faculty or staff necessary for the efficient success of daily activities and function. This group would embody individuals of select ages, all sex, all race, various handicaps, various mental challenges, all religion, and all economic standing. This group would have all their daily functional needs being meet by the space.

Secondary users
Secondary users are defined as visitors of the museum. This group would embody individuals of all ages, sex, race, handicaps, mental challenges, religion, and economic standing. The spaces would be most beneficial to those who visit as a resource for learning and inspiration.

Other users
Other users are defined by any user that is not defined under primary and secondary users in the facility.

Transportation
Transportation will embody a combination of infrastructure paths that lend themselves to public, private, mechanically driven, and human powered vehicles. Parking will be provided for.
The major elements of this project are those necessary to implement and provide the daily functions of a cultural museum, while organically evolving to accept future anticipations. The following is a list of elements that contribute to the finished whole:

**Gallery Spaces**
These spaces will be allocated to house artifacts on display

**Cafe / Cafeteria**
This space will allow individuals to gather, eat, socialize, and reflect.

**Breakout**
This space will be used for special events, lectures, performances, etc.

**Offices**
This space will be used to conduct general operations.

**Storage**
This space will be used to house artifacts either heading for display or returning from display, as well as other inventory.

**Gift Shop**
This space will be provided to sell souvenirs.

**Work Shop**
This space will be used to repair or construct items necessary for efficient use of museum.

**Parking**
This space will be allocated for staff, visitors and the physically challenged.

**Outdoor space**
These space will help to reinforce a sense of environment.
Macro Location
Fargo, North Dakota, is a city located in the south east region in the state of North Dakota. One of the most prominent land features is the Red River, which flows north into Canada.

Macro Location
The site is located at the intersection of 1st and 3rd Avenues north and 2nd street. Due to the rapid growth and diversifying of the city of Fargo, it would behoove the city to consider the implementation of a cultural museum to continue the promotion of diversity.
Project Emphasis
This project will create an environment that uniquely satisfies its function, while respecting inhabitants and space. It is my desire for this project to speak multiple languages to multiple realms of life. These realms are, our natural habitat, other design professionals, our posterity.

A Plan for Proceeding
Definition of research:
Research will be performed in order to arrive at satisfied results to questions posed in the problem statement.

Design Methodology:
The design methodology approach that will be considered in this thesis will be that of mixed method quantitative/qualitative analysis.

Documenting the Design Process:
Documenting of the design process will consist of the copilation of design sketches, digital media, photographs, and physical models.
Previous Studio Experience

The Beauty of Lean

2nd year

Fall Semester 2005
Instructor: Stephen Wischer
Design Problem 1- Making things perform
More than one task
Design Problem 2- Broadway Project
Design Problem 3- Primitive Place
Design Problem 4- Center for the temporary blind

Spring Semester 2006
Instructor: Vince Hatlen
Design Problem 1- House that will become a Nature Center
Design Problem 2- West Fargo Library
Design Problem 3- Fargo Research Center

3rd year

Fall Semester 2006
Instructor: Mike Christenson
Design Problem 1- Addition to Lecorbusier Museum - Bearing wall
Design Problem 2- Addition to Lecorbusier Museum - Frame

Spring Semester 2007
Instructor: Steven Martens
Design Problem 1- Agricultural Research Center
Design Problem 2- Environmental Cultural Center

4th year

Fall Semester 2007
Instructor: Regin Schwaen
Design Problem 1- Urban Planning & Design Winnipeg
Design Problem 2- Redevelopment of Urban Planning

Spring Semester 2008
Instructor: Phil Stahl
Design Problem 1- Master Plan and Design Affordable Housing
Exercise 1- On site build with Habitat for Humanity

5th year

Fall Semester 2008
Instructor: Regin Schwaen
Design Problem 1- Hotel on Broadway

Spring Semester 2010
Instructor: Regin Schwaen
Design Problem 1- Thesis
Typology

What defines a museum? The word museum originates from the Greek word, mouseion. Mouseion is translated to mean "seat of the Muses", which denotes a designated institution or a place in ancient times mainly used to engage philosophical discussion (Henry George Liddell-Greek/English Lexicon). Muse is defined by Merriam Webster (2009), as being mentally absorbed by something, as to meditate on something till one loose themselves. The great Museum at Alexandria was considered more of a prototype university than an institution to preserve and interpret materials of various cultures. The museum of Alexandria, was to have been erected around early third century B.C.

The word museum was used in fifteenth century Europe to describe the Medici collection of Lorenzo de Florence, but it did not denote a building. In seventeenth century, the term museum was being used in Europe to describe collections of curiosities.
The titled and published collection of work named Musaeum Tradescantianum, in 1675 was transferred to the University of Oxford. A building was constructed to receive the collection and opened to the public in 1683, and became known as the Ashmolean museum. The idea of a museum: established to preserve and display a collection to the public, was established in the 18th century.

Use of the word museum during the 19th and most of the 20th century denoted a building housing cultural material to which the public had access. Later, as museums continued to respond to the societies that created them, the emphasis on the building itself became less dominant. For example, open air museums, were composed of a series of buildings preserved as objects, and eco-museums involved the interpretation of aspects in an outdoor environment. Lastly, there is the idea of virtual museums. Virtual museums are simply various collections of artifacts arranged to be viewed over an electronic source.
The role and need for museums in society is to collect and maintain artistic, historical, and scientific artifacts of importance for the enrichment of the public. These artifacts are typically on display either permanently or temporarily for the public. There may also be lectures, films, or tutorials given by staff. Museums enable people to explore collections for inspiration, learning, and enjoyment. Museums exist on a dynamic scale: from small and intimate to grand. Other types of museums are: art, history, science, archaeology, music, military, special interest, and zoos. During the late 19th century and early 20th century, there was intense museum building in America. This has become known as the museum period.

**Minimal Art**

The fundamental nature and relationship to site of the work of minimalist artist, has been extremely provoking to American architects. Minimalist art is defined as continually engaging, inspiring, and delighting its audience. It is the use of simplistic form, often basic geometry in paint and sculpture. Other terms associated with the concept of minimalism, ABC art, Cool art, Literalist art, Object art, and Primary Structure art.
The concept of minimalist art is said to have emerged out of Europe during the late 1800's, being marked by painter Kasimir Malevich. One of his well known works is the black dot. Minimalism as an art concept began to populate in the U.S. around the mid 1900's, respectively, in New York. Minimalism is said to have been a response to the abstract expressionism concept. The difference between minimalism and abstract expressionism is that abstract expressionism is art that is non-representational. Abstract art can be sculptural and two dimensional with some overtones of geometrical form, but not characterized by geometrical form.

In most works, what is simply the distortion of ideas, objects, and things. Minimal art can be found in abstract expression; thus, abstract expression is the predecessor of minimal art. Where abstract art is unclear and chaotic, minimalist art is clear, precise, and tranquil.
Minimalist paintings and sculptures are typically composed of precise, hard-edged, geometric forms, with rigid planes of color. Often, minimal art utilizes cool hues or one color. They tend to negate the use of hierarchy, but catapult geometrical compositions, which are often arranged in a grid format and made from industrial materials. Whatever the precise details, the idea of minimalist art is to filter the work of any external references or gestures. The minimalist painter or sculptor is chiefly interested in how the spectator perceives the relationship between the different parts of the work and of the parts to the whole thing. The repetition often seen in minimalist sculpture is designed to highlight the subtle differences in this relationship. Donald Judd is a well-known minimal artist whose work is a solidifying example of this.

Scale is most often used in minimal art to agitate space. It is with this quality that the minimal artist is able to influence the use, arrangement and perception of space. It is scale that influences the use of positive and negative spaces within minimal design.
In order to balance beauty in minimalist art, the accurate and dominant use of positive and negative, is fundamental. Positive and negative spaces allow space to become defined, and potentially evoke various attitudes. This is where the complexity arise in minimal art: the artist must construct art out of the relationship of scale, space, voids, site, mechanical, architectural enclosure, human function, and the artist his/herself.

Minimal design is not and should not be considered an extension of abstract expressionism; in minimal design many times, there is no difference between line and edge, although edge is found in it. Color is used to heighten various moods and develop or emphasis shape, but, where color ends, so does its edge. When we began to uncover and examine minimal sculptural works, this is the point where we began the datum of minimal architecture.
Minimal sculpture encases the notion of architecture. Minimal sculpture has structure; architecture has structure. Minimal sculpture expresses line; line is the fundamental thing in architecture. Again, Donald Judd expresses this concept well, although he never considered himself a minimalist.

Minimal design in architecture is often connected with modernism. Minimal architecture is not modernism. Modernism is an architectural style defined by the adoption of the principle that the materials and functional requirements determine the result, adoption of the machine aesthetic, emphasis of horizontal and lines, a creation of ornament using the structure and theme of the building, no rejection of ornamentation, simplification of form and elimination of unnecessary detail, and the adoption of expressed structure. Minimal design can be found in some modern work, but minimal design is not modernism. Modernism is also called international style. Modernism is not bound by reduction. Modernism is not a response to consumerism. Modernism is not a reduction of ideas or elements. The significant and meaningful use of light and forms to define functional space is the wedge between minimal design and modernism.
In my exploration to understand and better grasp the fundamental concepts of what minimal architecture and art really is, I feel that many of the articles and books I read could only express the concept vaguely. I was hoping to discover more of a pattern of construct, but what I repeatedly found was ideas of artist and architects, along with passionate objection from artist and architects.

In my research I was hoping to find an architect or artist, (preferably an architect), who questioned or entertained the question, when does an object constructed becomes architecture? Who is to say that this is architecture but something similar to the object in question is not? Maybe the question has already been asked but not arranged as I have asked it. Maybe the question of; what is the minimum we can use to produce architecture?

In any case, the search for minimum architecture is more of a challenge than art. Art is open to any media; architecture is limited to use of constructible functional materials. Art is not required to be functional; utility is mandatory of architecture. Architecture without function is equivalent to a body without a soul. My challenge is to infuse this study into an architectural design that fulfills these concepts.
The concept of a museum arose in the early 3rd century B.C. The physical dwelling of a museum came to fruition late 1700s. A museum is deemed an institution; an institution is an organization within a society or culture. A space designated to house and display artifacts of a specific culture is defined as a museum. Many artifacts on display in museums are imbued with artistic, scientific, or historical importance. Much of the information gathered at museums is concluded to be representative of the culture and history found there. There are multiple divisions of museums.

Minimal art is about the use of planes, geometry, light, voids, color, scale and time, to produce delightful works. It is more than just a reduction of random elements, it is a process of arranging and manipulating those basic elements, and ideas to express or capture beauty. It is the intent of the artist to constantly engage the audience.
It is the intent of the artist to illuminate the possibilities imaginable to express our world, culture and view. Minimal design is sensitivity to not only the materials of usage, but the whole. Site selection is important. There is no division between form and content. Minimal design is not modernism. Minimal design is found to connect with modern. Architecture in its most raw state is not a style, but the manipulation of light and space. Light and space produce form, and the result is art. Functional art produced from the elegant arrangement of light and space is architecture. Essential, elegant, delightful architecture is considered minimal. Simply put, it is simple; it is lean; it is beautiful.
Research: Case Study 1

The Beauty of Lean

(All images on this page are online images). Retrieved December 11, 2009. From http://www.christnerinc.com/.../pulitzer-foundation/
Pulitzer Foundation for the Arts
Location: St. Louis, Missouri
Architect: Tado Ando
1991-2001

Introduction:

The museum is located in the St. Louis Grand Center district. The initial planning of this project was ignited as the city was experiencing sprawl and decay, along with the desire to create cultural revival. This is the first project of its kind done by Tado Ando in the U.S.

Analysis:

The museum is approximately 9500sqft and made of cast in place, reinforced concrete. The concrete is what gives the museum its qualities of primitiveness, firmness, spiritualness, geometry of sharp clean lines, and planes.

Natural light helps to reinforce the feeling of humility and enhances the quality of being in the museum by creating an array of contrasting shadows. The designer was fortunate that the site allowed him to take advantage and manipulate the natural light, creating a phenomenal dimension to the museum.

Spaces move fluently one into the other and even though the scale of the museum can be compared to that of some homes, the museum has many contrasting spaces. One space in particular is the stairway leading to the permanent sculpture of Richard Serra. This space creates the notion of ascending into a temple.

The basic geometry of the museum is rectilinear. This pattern of geometry is maintained on every level within this project: sections, plans, and elevations. The museum is fundamentally two rectilinear boxes sandwiching a planar reflecting pond. It is the extension of horizontal and vertical planes that create the illusion of being something more.
Research: Case Study 2

The Beauty of Lean

(2007), Louis Kahn-Beyond Time and Style: A Life in Architecture

(2007), Louis Kahn-Beyond Time and Style: A Life in Architecture

(2007), Louis Kahn-Beyond Time and Style: A Life in Architecture

(2007), Louis Kahn-Beyond Time and Style: A Life in Architecture
Research Case Study 2

The Beauty of Lean

(2007), Louis Kahn-Beyond Time and Style: A Life in Architecture

(2007), Louis Kahn-Beyond Time and Style: A Life in Architecture
Research: Case Study 2

The Beauty of Lean

(2007), Louis Kahn-Beyond Time and Style: A Life in Architecture
Kimbell Art Museum
Architect: Louis Kahn
Location: Fort Worth, Texas
1966-1972

Introduction:

The museum is 2 miles from the center of Fort Worth and joined in the same location on approximately 9 1/2 acres in the city park along with the Modern Art Museum of Fort Worth, the Fort Worth Museum of Science and History, and the Ammon Carte Museum.

Analysis:

The museum can be eluding as it appears as one the most ancient structural forms: a vault, which is essentially a series of arches. The structure is actuality reinforced site cast concrete post and beam carrying concrete site cast vaults. The architect reveals this in the entry court. Essentially, this museum is about natural light revealing concrete structural form.

Natural light is the second material and fourth dimension in this museum. Words cannot articulate the spiritual quality and height sense of expression that is poured into exhibit spaces due to the sensitivity to the planing of natural lighting system. Although reflectors are used to bounce the solar light of the polished concrete, it is the profound way natural light enters the museum and is redistributed. It was Kahns desire to create a volume of spaces that engulfs intrinsic characteristics. Those characteristics include the presence of light, not only as a form giver, but also as a being.

The space of the museum is a very open plan created by the use of the concrete post and beam structure and the vault roof. The space can be narrowed to 16 individual bays, interwoven together to create an estimated 120,000sqft. How much of that space is allocated to storage, rest rooms etc is unclear at this point.

It is very clear that the museum is balanced symmetrically from the entry court. Why the architect chose this approach is unclear. There is also a respect happening between the spaces, and there is no one dominant or overbearing space.
Research Case Study 3

Concrete Architecture.

(2004), Concrete Architecture.
Research: Case Study 3

The Beauty of Lean

(2004), Concrete Architecture.
Maryhill Museum of Art:
Sculptural Overlook
Location: Goldendale, Washington
Architect: Allied Works
1999

Introduction:

This sculpture is more of an investigation than it is a commissioned project. It was the architect position to explore the idea of architecture as sculpture in form and space.

Analysis:

The Sculpture is a simple monolithic site cast post-tensioned concrete pour. This work stands at human scale.

The structure is void without the presence of light. There are only two characters in this composition, the concrete and the light. The light express multiple layers of interesting contrasting shadows.

Although the structure is linear, it reaches out on the landscape, unfolding in some areas and compressed in others. This provides a balanced amount of dynamic spatial juxtaposition.

The geometry is rectilinear, with a strong presence of primitiveness. In some instances it is simple but carries the feeling hedge stone.

In my opinion, this unique structure is a build up of positive and negative spatial movement, which fills the landscape with simple beauty.

This structure makes a contribution to the philosophy of architecture in the capacity of what architecture really is to architects, in that architecture is defined by architects as light, form, and spatial manipulation.
The three case studies examined strongly illustrate meaningful elements on enriched properties of simple design. Those properties are:

- Use of natural environment and resources
- Use of minimal materials
- Use of fundamental geometry
- The inclusion and manipulation of light
- Sensitivity to existing site
- Fundamental structure

These three case studies are involved in the engaging and culmination of these basic elements to produce Architecture.

Natural resources are seen in the use of solar lighting. Although this idea is more prevalent in the Maryhill overlook sculpture, it is successfully carried out in all three examples and is a major component in all three examples.

The unavoidable evidence of material usage is profound. In all three examples, concrete is the primary material of construction. It is found in the structural system and sections of the envelope present at the Kimbell and Pulitzer art museums. After investigating these museums I feel that an understanding of concrete is important.
Fundamental geometry is an idea that connects man's basic needs for canopy. This is a connection of ancient form with a modern emphasis. The rectangle has been a basic form throughout history. It is evident in all ancient, postmodern, and modern architecture on every level of architecture. This is due to the fact that it strongly lends itself structurally and organizationally. The rectangle is the beauty in Maryhill and Pulitzer museums. It is strongly emphasized in the jutting roof plane in the Pulitzer museum. Although the Kimbell has vault ceilings, the plan is rectilinear, and its arrangement of spaces embody the luster of luminous use.

Architecture is not prevalent without the use of light. Light is a revealer, of form, path, and space. Form, path, and space are all fundamental components of architecture. The arrangement of these three components determines the mood of architecture. Light would be the essential proponent of the three. This notion of light is capitalized on by Kahn in the Kimbell. It is also the balanced dimension in Maryhill.

Simply put, it is the connection these three case studies make with the qualities of natural resources, minimal material, minimal site disturbance, and fundamental forms that produce an elegant art work.
Much has been written and discussed about minimal architecture, even in our modern era. There has been the argument of minimal design is modernism. There is the argument that minimal design is abstract expressionism. There is the argument that Minimal design is a response to consumerism. There is the argument that Minimal design is and was a style that cannot exist outside its period. There is the argument that minimalism is not minimalism but essential artifacts and things.

History:

The idea and foundation of Minimal design is attributed to De Stijl. In general, De Stijl proposed simplicity and abstraction both in architecture and painting by using only straight horizontal and vertical lines and rectangular forms. Colors: red, yellow, blue, (primary values), black, white, and grey were used.
The works avoided symmetry and attained aesthetic balance by the use of opposition. The style was also known as neoplasticism and was supposed to have originated with the Dutch around 1917.

The De Stijl movement was influenced by Cubist paintings and ideas about geometric forms, like the perfect straight line. The works of De Stijl would influence the Bauhaus style and the international style (modernism) of architecture. De Stijl sought to express spiritual, harmony and order. It advocated abstraction and reduction to the essentials of form and color. It reduced visual compositions to the vertical and horizontal directions. It was based on the fundamental principle of geometry of the straight line, the square, and the rectangle, combined with the relationship of positive and negative elements in an arrangement of non-objective forms and lines.
De Stijl influenced architecture, but it was architecture that maximized De Stijl's goals among the arts. Mies van der Rohe was among the most important persons of its ideas, Coining the term "less is more". The only building to have been created completely according to De Stijl principles is the Rietveld Schroder House, designed by Gierrtit Rietveld.

Consumerism is defined as happiness being supplied by the consumption of goods and material possessions or, essentially; societies purchasing and consuming goods beyond their basic needs. Even though the undisputable evidence of consumerism is prevalent in western culture, it can be witnessed globally. The term may be new but the concept of consumerism isn't and can be traced back to ancient civilizations such as Egypt and Rome.
Consumerism began rising in America before the industrial revolution, although the industrial revolution lead to the exponential spread of it. The industrial revolution allowed the average consumer to have access to an abundance of products in extremely large quantities at affordable prices. While consumerism is not a new phenomenon, it has become widespread over the course of the twentieth century.

The problem is that many individuals believe consumerism is a substitution for the growth of healthy human relationships and introduces inferior social groups. Another problem with consumerism is that it contributes to the degradation, disruption, and pollution of the environment, society, water supplies, landscapes, and contributes to global warming.

Consumerism is linked to the consumption of resources at an exponential and alarming rate. The attempt to reduce consumerism is a modern challenge.
Consumerism has become the underlying progenitor of the twenty-first century. This is because many people today equate success with the accumulation of goods and products. Theorist feel that this attitude has caused a loss of value, integrity, community, and spirituality; while creating a culture of disconnection, superficiality and materialism becomes more important than caring about our neighbors, future and environment. This spills into environmental design through the manipulation and altering of our landscape. When architecture is driven by the purpose of inducing the demand of consumer spending on goods, services, and emulating celebrity personalities, it has deviated from functional art to consumerist architecture. An example of this is urban sprawl, shopping malls, commercial enterprises, and restaurants, particularly fast food.

Historically, American culture is constantly in a cycle. There was a time when the automotive industry only produced fuel consuming V6 and V8 automobiles. After some one realized that we can still get from point A to point B without exhausting 30 gallons of fuel, society downgraded to smaller, more efficient vehicles. The idea of consuming fuel and persevering the environment lasted for about a decade until SUV's came along. The SUV, or Sport utility vehicle, became the new status quo of the old V8. At one point many Americans were driving full scale Hummers as a daily vehicle.
Many of these vehicles couldn't even fit in the average garage and were significantly larger than the average American car. Now in the new millennium, many people, including automobile makers are going green again. The same company who sold you the un-ecofriendly artifact, is now advising you of how bad it is and now selling you something more eco-friendly.

American architecture has unfortunately shared the same fate. Although building practices and techniques have developed and improved over time, the architectural concepts are killed and resurrected. It should be noted as a culture how we continue to resort to our fundamental life. Why do we continue to return to this datum point if excess perceived as a way of happiness and life? Historically the average American home has grown in square footage. According to the National Association of Home builders, the average home square footage in 1970 was 1400sqft., compared to an average of 2300sqft in 2004. But recent reports show that many Americans are again choosing to purchase and build smaller homes.

Historically, this has been the trend of American culture, the cycle of excess and then minimalization. Why not just minimize initially and preserve what already exist?
Fargo, ND is a mid-western city experiencing tremendous growth in the last ten years. In spite of relative national economic decline, North Dakota has the lowest unemployment rate in the nation; this has made many of the major cities in North Dakota, particularly Fargo, ND, attractive to job seekers.

North Dakota State University is the largest educational institution in North Dakota. Many of the sports programs at the school have progressed from NCAA division 2 sports, into NCAA division 1. The student enrollment has shown record increase in the last five years, from 12,000, to 14,000. The campus has undergone much construction with the addition to the Memorial Union, Wallman Wellness Center, and main campus library. The campus has also expanded the departments of Art, Architecture, and Business to the downtown area with Renaissance hall, Klia hall, and Barry hall. The continual growth and refinement of NDSU has become attractive to many individuals.
Along with the economic growth and vitality of Fargo and North Dakota State University, comes the growth of American subculture in Fargo. Inarguably, there is a wedge between American culture and American subcultures. The state and city is concerned about diversifying and has instituted several programs to promote diversity within the region. A cultural museum is an amicable solution to facilitate the understanding and promotion of subcultures within America.

It is the goal of this thesis project to explore and investigate, the ideas of essential beauty while expressively imbuing them upon an institution dedicated to the development of people who impact a culture.
Narrative

As I engage my-self within the city of Fargo, I can't help but absorb the many inspiring qualities that exist within the city. Fargo is the largest city in North Dakota, and being from the state of Illinois my-self as well as residing in the largest city in illinois, being down-town Fargo is allows me to feel at home even though im over 700 miles away. I enjoy being in the downtown atmosphere; it is an experience like no other.

Many times when one considers a city, one often considers and unconsciously discusses the downtown or urban context of a city. Why is that? Do we care about the rest of that city? Is that where the city is most dense with its population? Obviously the people outside of the down-town region typically make up and contribute to the city. Many people when traveling desire to even lodge in or adjacent to the city's downtown. No one ever says please reserve a room for me right outside the city’s suburb or next to that new housing division that just built.

In general, if you ask a friend or colleague about a city they have visited, typically their response is confined to the physical, cultural, environmental, political, and economics of that particular city's downtown region. They usually never began talking about residential aspect of the city. People will respond, commenting about the food at a greek restaurant, coffee at a local stand, the traffic, the noise, the trains, subways, lights flashing green then red!
I can remember being a child when I had my first downtown experience! I remember taking the journey with my mother as we caught the public bus that would take us to the public L-train in Chicago, and from there into downtown. All those tall buildings evoked feelings of wonder and amazement that I became saturated in. I fell in love with the city's downtown. From that day forward I love to be downtown.

As a kid, I loved to see the people entering and leaving the trains, the sound the train made when it left the station, my mom pulling me along the crowded walk ways, smiling at other kids and people on the street, taxis pulling up dropping business men off and picking others up, musicians on street corners, beggars asking for change, the smell of the public bus leaving its last stop as it blows out a cloud of thick black exhaust, ethnic mom and pop restaurants, guys selling long stem rose's to cars that pass by! All these thing solidified my love for the city downtown. This love was not just for the city I grew up in, but for any cities downtown. That is why it is my philosophy that one cannot love a city and not love its people.

To experience people and culture one must be engaged within it. That is why it is my desire to create such a place not just for knowledge, but for the experiential qualities that do not exist within the pages of a million books or six-hundred cable channels.
Site Analysis: Qualitative
The Beauty of Lean

Qualitative
There is an array of interesting views located in the vicinity of the site. One pleasurable view that certainly had everyone on their toes last spring is that of the Red river.

There is plenty of juxtaposition and variance in the height of structures in the downtown area to play off of. This is yet another reason why I love the cityscape of downtowns.

Although these images capture the current existing weather conditions, we can see the abundance of light quality that is offered here. As in our case studies, the light will be a pleasure to work with. These photos also reveal the layering of heights and what is able to be seen once the leaves of the vegetation have shed for the season.
Site Photos
Site Analysis: Qualitative

The Beauty of Lean

Soil

Soil on the site is classified as no. 12Hegene-Enloe. This complex consists levels of, deep, poorly drained soils on glacial lake plains. The Hegne soil is on swells. The Enloe soil is in swales and shallow depressions. The natural drainage pattern is poorly defined, and excess surface water is removed in most areas by artificial drainage. The mapped areas are about 45% Hegne soil and 35% Enloe. There are ranges from about 30 to 300 acres in size.
Utilities

Due to the site being located in downtown Fargo, sufficient utilities are engaged to sustain the selected structure. Those utilities are, gas, electric, waste, telecommunication, all necessary infrastructure and all plumbing systems.

Vehicular Traffic

Vehicular traffic is open to all motor vehicles. Traffic is at peak times during am surges as well as p.m. traffic.

Pedestrian Traffic

Pedestrian traffic is open to all non-motorized vehicles. Adequate and safe pedestrian infrastructure is presently provided for the allowance of pedestrians to move to and from the site.
Site Analysis: Quantitative

The Beauty of Lean

Wind


January April Fargo July October Annual

Sea Level

Percentage of Possible Sunshine
Fargo, North Dakota

1948-2000

Exhibit Space

This will be the primary space and sole reason the museum exists and will occupy most of the museum floor space. The purpose of the museum is to foster and cultivate learning. This series of spaces will embody that purpose.

Utility Space

This space will serve the primary space, which is the exhibition space. It will be important to provide spaces for the maintaining of the individuals and artifacts occupying the spaces. This will include all infrastructure and necessary facilities.

Storage Space

This space is reserved for exhibits and artifacts awaiting display. This space will be located on the primary level to facilitate arrival and departures.
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Clark, Irwin & Company
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Quote:
I am proud to be part of a system dedicated to making a positive impact on the world.