





FRAGMENTS



“A matter that becomes
clear ceases to concern us”

- Friedrich Wilhelm Nietzsche

Preface

This book explicitly contains and displays nine months of conversations, making, doing, playing, thinking, design and process. It also implicitly displays four years of undergraduate exploration as well as twenty three years of experiences. It is impossible to distill the work contained here down into one simple statement or even a series of statements. In fact, doing so would be a disservice to this journey, as it has not followed a pre-determined path at any point throughout the past nine months. Alternatively, this journey has been one of many fragments. Fragments, that on their own rarely hold significant weight, but when combined with others, begin to form a complex web of ideas that provide the energy for this creative endeavor.

This fragmented journey was intended to be a personal, some may call it self-indulgent, exploration into the creative process. An attempt was made to discover and understand the relationships between the fragmented process and how it closely relates to the often scattered way of thinking and doing that determines the irrational paths I forge. At times, this journey made

leaps and bounds through physical acts of making and through research into the actual creative process itself. At the same time, this journey became stagnant in a variety of ways, challenging the strength of my own process and the ability to overcome these periods of stagnation. However, I confidently proclaim that this journey did yield powerful conclusions into the ways my creative process unfolds throughout the challenges and triumphs of the exploration.

This book will take you through these various fragments and expose the connections between some of those them, but it will also leave unanswered questions relating to the seemingly irrational leaps that some of these projects have made. The only explanation for this is buried in the mysterious ways that the unconscious and conscious minds interact. Fortunately, they did align and provide moments of clarity at a number of points throughout this journey.

The journey exhibits an introspective exploration of the creative process by reacting unconsciously to creative impulses and through critical observation of the built environment.

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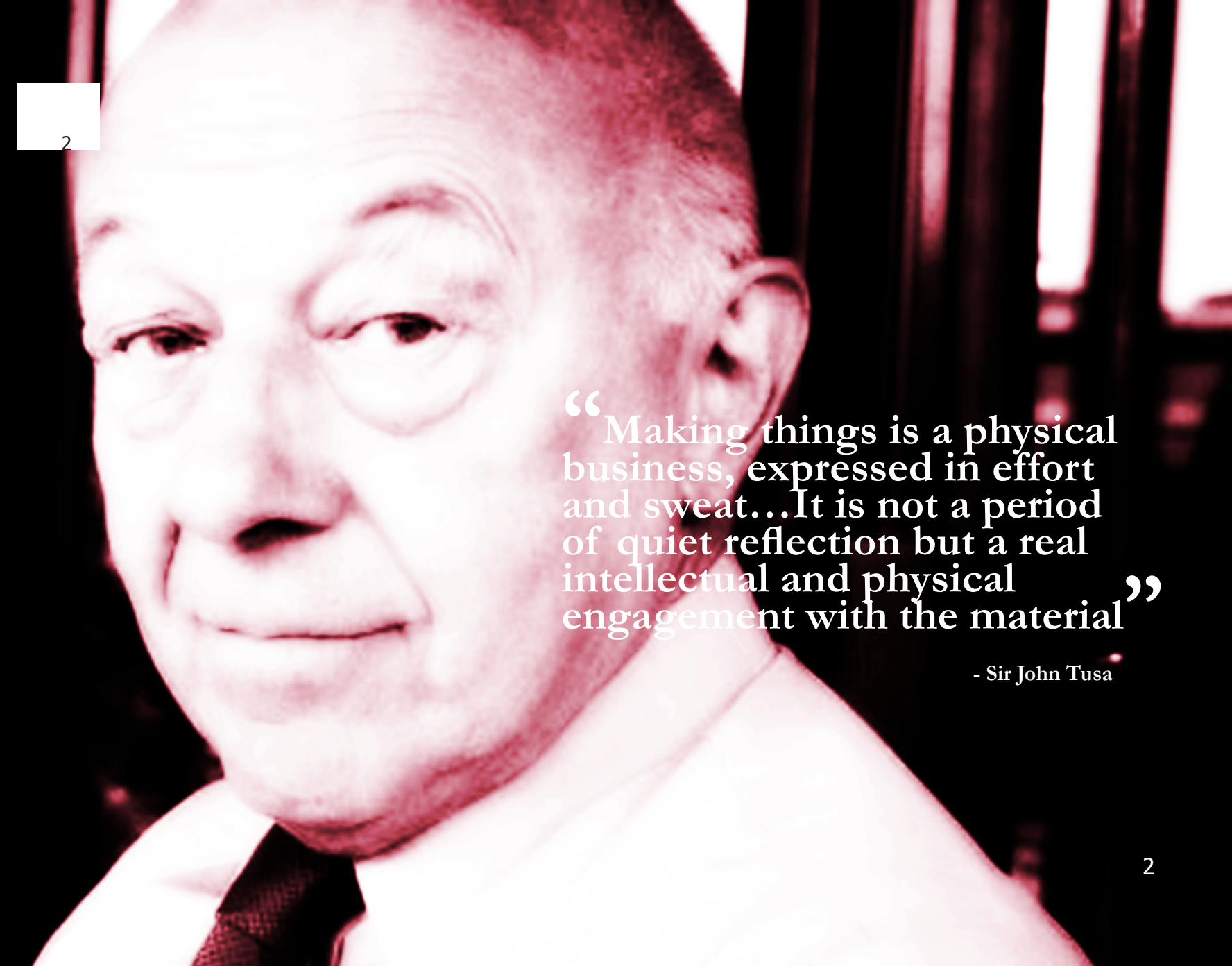


THESIS PAPER



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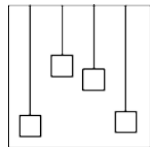
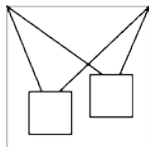
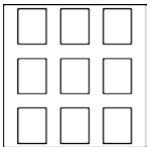
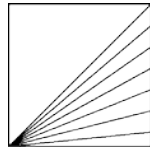
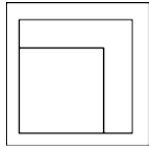
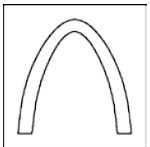
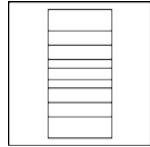
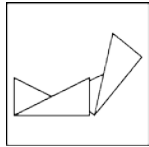
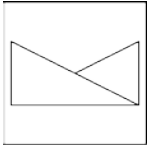
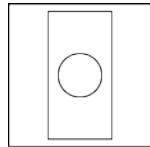
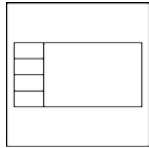
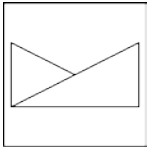


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“ Making things is a physical business, expressed in effort and sweat...It is not a period of quiet reflection but a real intellectual and physical engagement with the material ”

- Sir John Tusa

MADE OBJECT CONTENTS



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MADE OBJECTS

This series of made objects exudes the characteristics of the bricoleur, the one who practices bricolage. This bricoleur idea would only appear through exploration into making these objects and discussions to follow each of them. The notion to Make was triggered by incubating ideas over the previous four years of architecture school. The stagnate mood prevalent throughout the first half of this journey provided the motivation to Make with the availability of familiar materials. Making with the hands creates a connection with the object that cannot be duplicated through digital means. A computer graphics professor once told me, "to control the computer, you must learn how to control your hand." It takes commitment to create a concrete (as in permanent) object, once the making begins the mind and hands sync together and become a machine dead set on the creation of something. Whether that something turns out to be what is expected or not, the existence of the made things solidifies the act of making as a general practice. The discovery happens intermittently between form making, tool gathering, un-forming and finishing among

others, and through reflection on the process as a whole. These reflections are sprinkled throughout the following pages.

This series has a variety of gaps that simply cannot be explained. There are also closely related paths that can be followed with relative ease, particularly with the installations. Unknowingly in true bricoleur fashion all of these objects were made with available materials collected over the past four years. Some of these materials included foam core, rubber tubing, and a pop can.



6



CONCRETE BLOCK #1

“My favorite block with an ode to brutalism
Inspired a duplicate block out of collected wood”





CONCRETE BLOCK #2

“A block with great texture formed by lining up sections of rubber tubing. This block with its bands of voids would influence the design of a field chapel”



10



CONCRETE BLOCK #3

“A benefit to concrete models...they can withstand the beating inside the studio space shared with 25+ people”





WOOD BLOCK #1

“A duplicate made to create a solid rectangular block with the first of the concrete blocks. The concrete shrunk and the wood did not”





CONCRETE + WOOD #1

“The result of shrinking concrete and MDF. This provided a better photo than what was intended for these two blocks. It also created a nice shape”





CONCRETE + WOOD #2

“Imbedded in the center of this is a length of rebar. Not the best materials to combine since the wood absorbed water of the curing concrete”

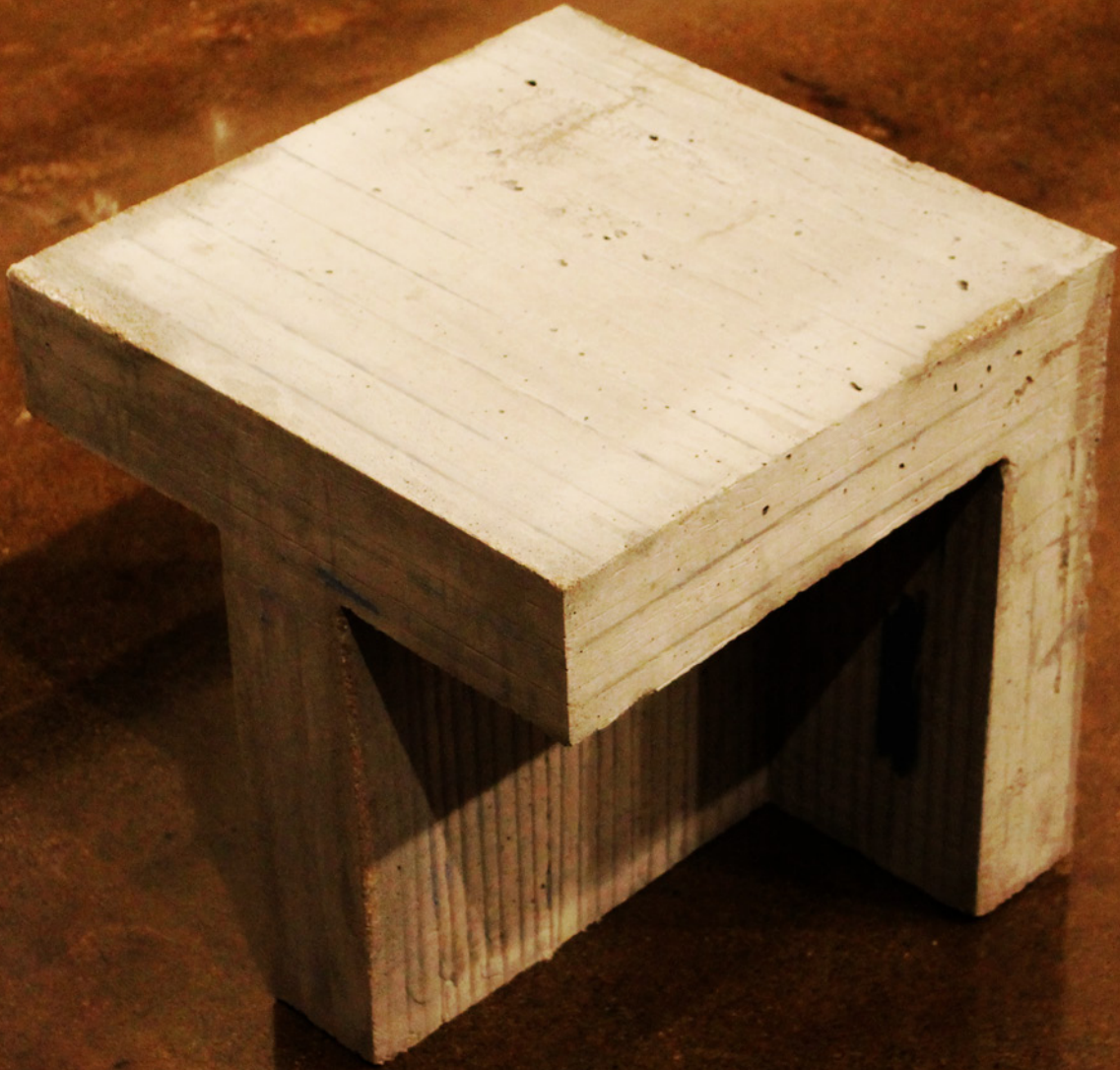




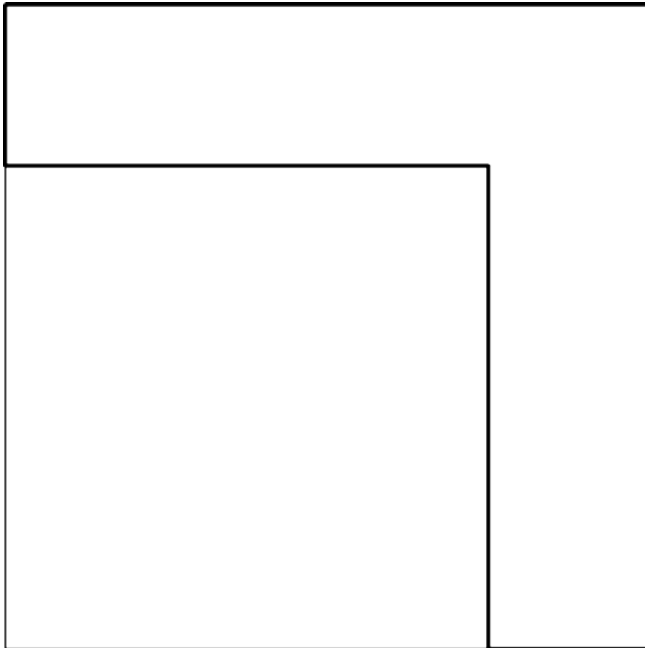
CONCRETE ARCH

“This arch ended up having a super smooth surface due to the use of sheet metal as the forming material”



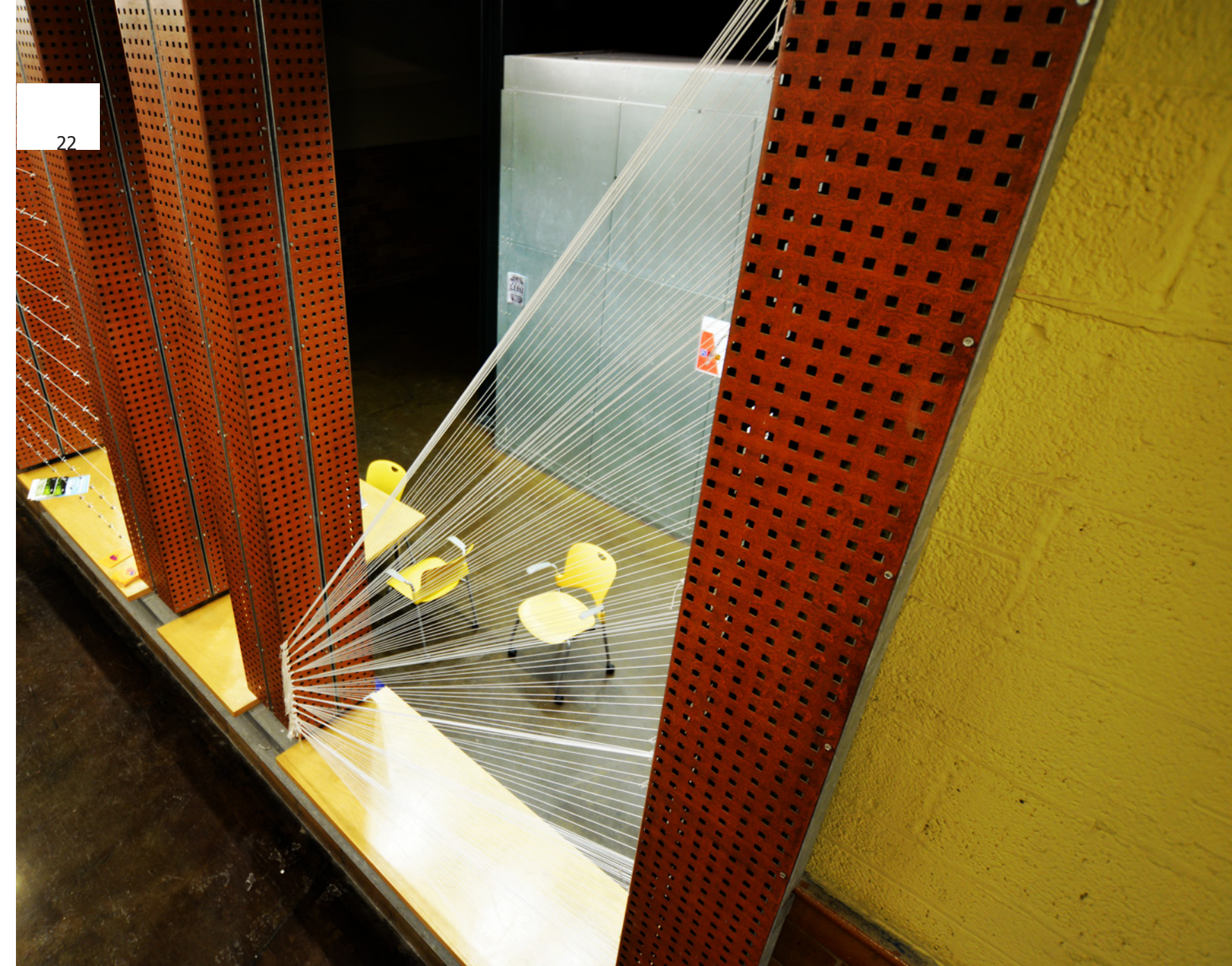


CONCRETE STOOL



“The world’s heaviest stool”





INSTALLATION #1

**“1,200 + feet of mason’s line will do one’s hands well,
but will also provide a great piece for all to enjoy”**



MARY MISS
CITY AS LIVING LAB

MARY MISS
CITY AS LIVING LAB NEW YORK, NY

MARY MISS
CITY AS LIVING LAB

MARY MISS
CITY AS LIVING LAB

WED FEB 26 5:30PM
STUDENT CENTER (FOUNTAIN LOUNGE)

PRESENTED BY THE GREAT LAKES FABRICATORS AND ERECTORS ASSOCIATION



PRESENTED BY THE GREAT LAKES FABRICATORS AND ERECTORS ASSOCIATION

WED FEB 26 5:30PM

STUDENT CENTER (FOUNTAIN LOUNGE) UDM

MARY MISS
NEW YORK, NY

WED FEB 26 5:30PM
STUDENT CENTER (FOUNTAIN LOUNGE)

PRESENTED BY THE GREAT LAKES FABRICATORS AND ERECTORS ASSOCIATION

50
GREAT LAKES FABRICATORS AND ERECTORS ASSOCIATION

MARY MISS
CITY AS LIVING LAB

NEW YORK, NY

CITY AS LIVING LAB



INSTALLATION #2

“This is still being used after 2 months... unintentional success!”

JAMES TIMBERLAKE
CLASS OF 1974 KIRAN TIMBERLAKE PHILADELPHIA, PA
THUR, SEPTEMBER 26 6:00PM (RECEPTION @ 5:30PM) WARREN LORANGER ARCHITECTURE BLDG @ UDM

CHRISTOPHE HUTIN
CHRISTOPHE HUTIN ARCHITECTURE BORDEAUX, FR
WED, OCTOBER 23 5:30PM WARREN LORANGER ARCHITECTURE BLDG @ UDM

LIZ OGBU
DESIGNER/URBANIST/SOCIAL INNOVATOR OAKLAND, CA
WED, NOVEMBER 6 5:30PM WARREN LORANGER ARCHITECTURE BLDG @ UDM

DAN PITERA
DETROIT COLLABORATIVE DESIGN CENTER 20TH ANNIVERSARY EXHIBITION
WED, FEBRUARY 5 6:00PM OPENING RECEPTION DETROIT PUBLIC LIBRARY (MAIN BRANCH), STROHM HALL
WED, FEBRUARY 12 6:00PM LECTURE DETROIT PUBLIC LIBRARY (MAIN BRANCH), STROHM HALL

MARY MISS
CITY AS LIVING LAB NEW YORK, NY
WED, FEBRUARY 26 5:30PM WARREN LORANGER ARCHITECTURE BLDG @ UDM

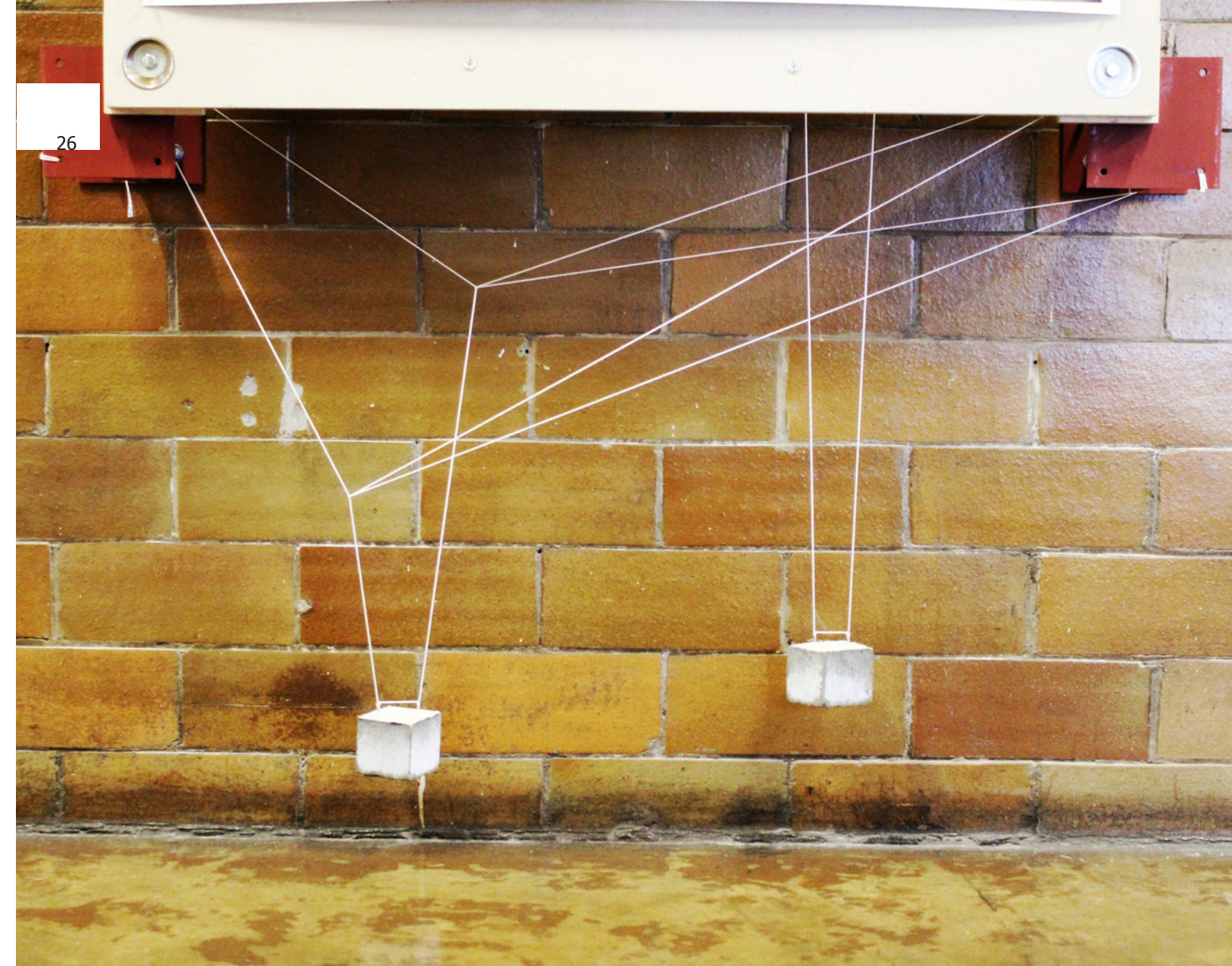
JOHN RONAN
JOHN RONAN ARCHITECTS CHICAGO, IL
THUR, MARCH 27 6:00PM LAWRENCE TECHNOLOGICAL UNIVERSITY

ALEX KRIEGER
THE REGIONAL CITY CAMBRIDGE, MA
FRI, APRIL 4 5:30PM WARREN LORANGER ARCHITECTURE BLDG @ UDM

UDM SOA 50

UNIVERSITY OF DETROIT MERCY
DICHOTOMY
SHWAGROUP
DETROIT GROUP
LAWRENCE TECHNOLOGICAL UNIVERSITY

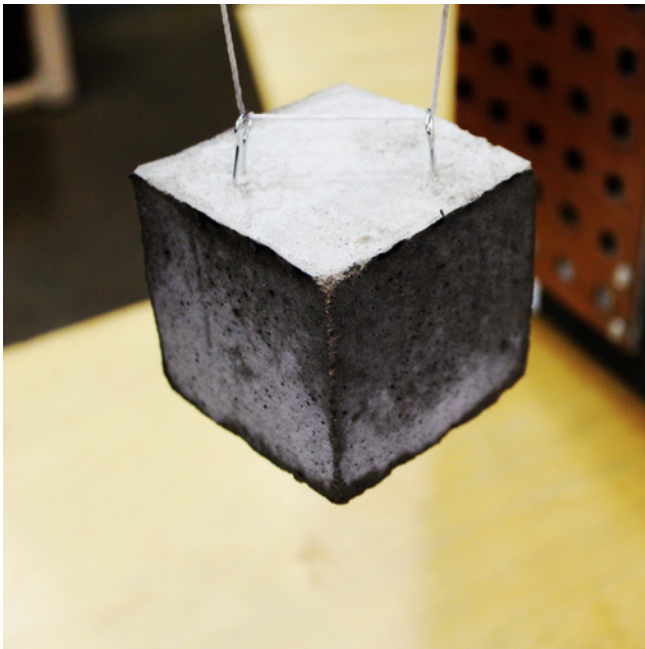
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INSTALLATION #3

“They are like the anti-ornament”

- Wlodek Fuchs

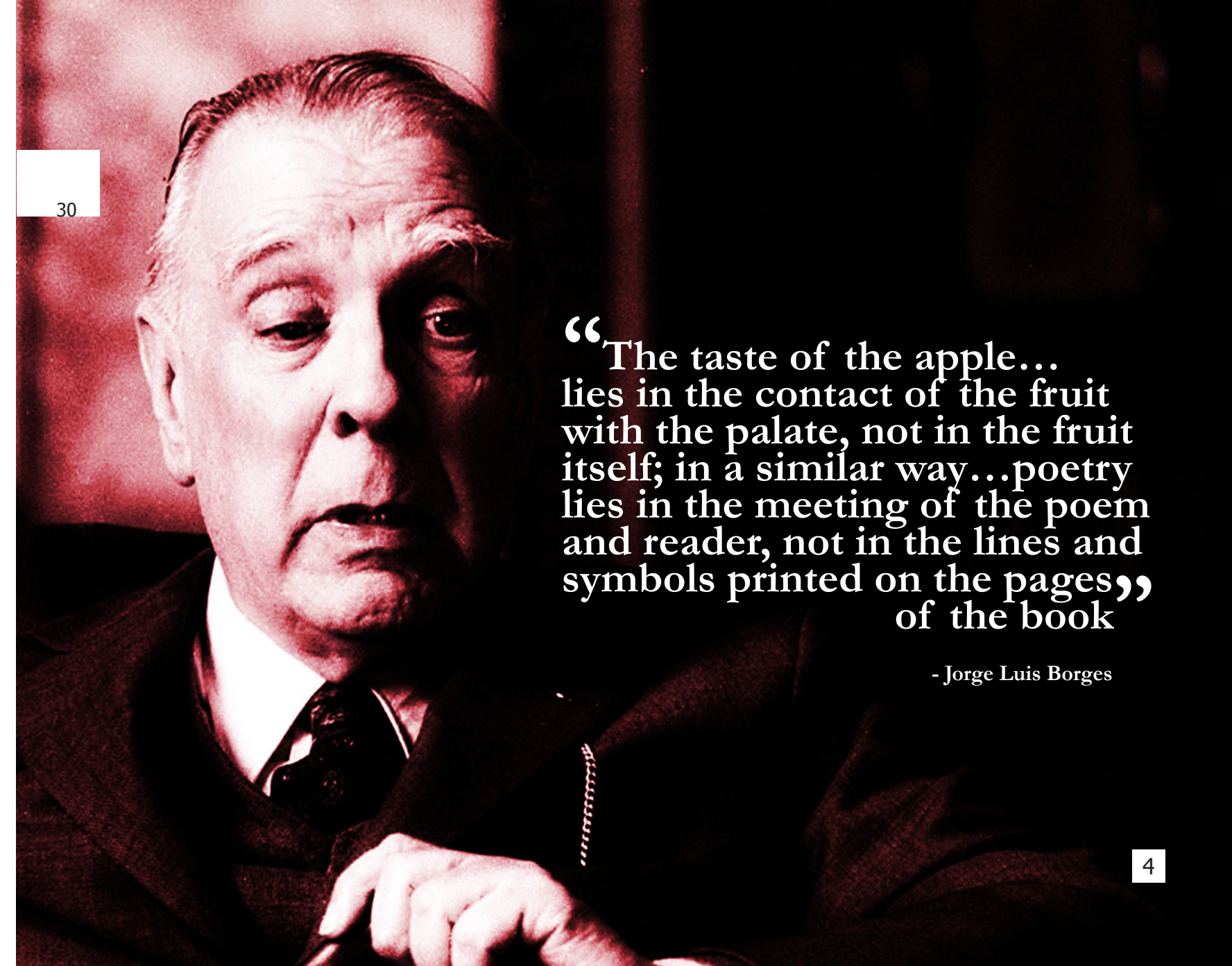




INSTALLATION #4

“The best representation of what this year meant to me as a future architect”





“The taste of the apple...
lies in the contact of the fruit
with the palate, not in the fruit
itself; in a similar way...poetry
lies in the meeting of the poem
and reader, not in the lines and
symbols printed on the pages,
of the book”

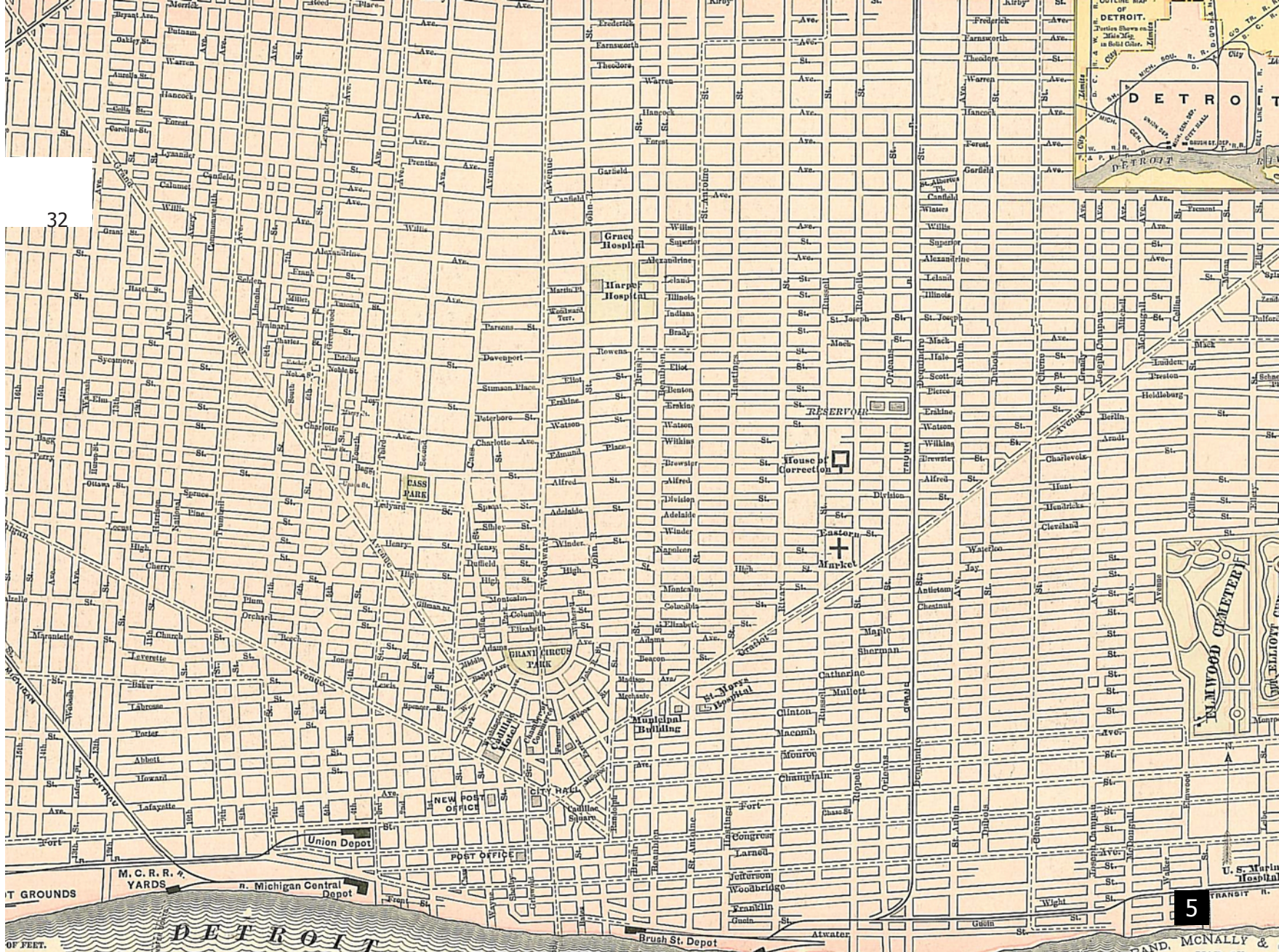
- Jorge Luis Borges

ELEMENTS

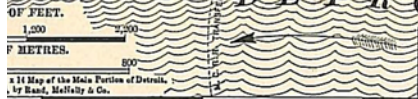
This section of the book illustrates ten elements from my design process that emerged during this journey. Each of these elements has an objective meaning from an external point of view as well as a subjective meaning from an internal perspective. While these elements have become integral into this process, I would not consider this an exhaustive list. This lists the elements that emerged during this particular time, I would imagine this list morphing through addition or subtraction in subsequent studies. The associations with these elements may differ in the future as well, but as of right now, these elements adequately illustrate this creative journey and discovery.

- 33 GRID
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Explanation:
 Railroads
 Street Car Lines

5
 RAND, McNALLY &
 MAP OF
 the Main Portion of
 DETROIT

GRID

The grid is an element that can be infinity broken down. Due to this nature it simultaneously provides a limitless structure for various parts of the design process. It also tames the playful imagination through the rigid nature of the grid, providing for useful progress in a seemingly endless design process...sometimes. Due to its rigidity the grid can also begin to hinder some of that freedom that the creative process enjoys. The grid is feared as a structure that cannot be broken without the fear of losing the efficiency that is an inherent quality in the grid.

However, even with its rigidness and efficiency, overlapping of grids or roads that slice through strict gridded systems provide beautiful opportunities to break the monotony of rectangular block after rectangular block. One such example is the Flatiron Building in New York City. The building is a right angle triangle in plan and marks the confluence of Fifth Avenue and Broadway in the borough of Manhattan. While the grid may begin to lose efficiency at certain points, the quality that unique, non-conforming blocks and buildings add to the urban landscape, more than make

up for it.

Contemplating grids at the macro level, various city grids or plans stood out as the most substantial superposition of any type of grid. The city grid is laid upon the natural



environment to accommodate the soon to be built environment. The urban environment has a remarkable correlation with the design process. As people formally trained in the medium we live our lives through, we are predisposed to think of buildings in a specific manner. Because of this, the real experience of a building is already tainted when, as architects, we read the name of the architect, the materials used, the program, etc. For me, the design process parallels the journey of traveling to new and unfamiliar places. As we wander, we observe, interpret and react to our new surroundings. So the variety of urban experiences is quite valuable in a sense that all cities are similar, so one may hypothesize what to expect, but all cities also offer unique



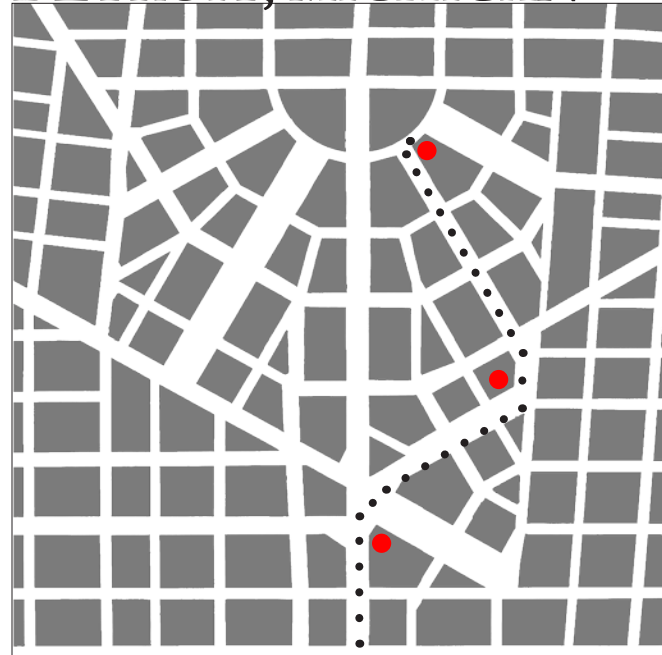
elements. Like a new design project, we must approach it with the experiences we've gained in previous projects, but also allow for the introduction of these unique elements, some that we cannot even begin to expect.

NAVIGATION

Navigating through a city is an important aspect of how the city's grid is assembled. Depending on one individual's experience certain grids may be more or less difficult to move through. Here are three examples using three different grid types to illustrate how one may navigate through a specific city.

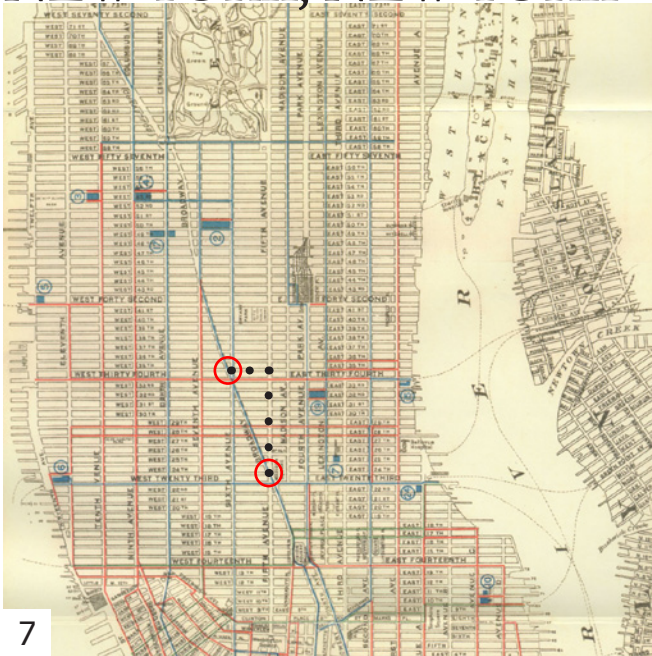


DETROIT, MICHIGAN



I still navigate and narrate directions through the use of multiple landmarks rather than streets in the city of Detroit. Even though I have grown up driving and walking through these streets, the radial plan eliminates the use of coordinates or cardinal directions.

NEW YORK, NEW YORK



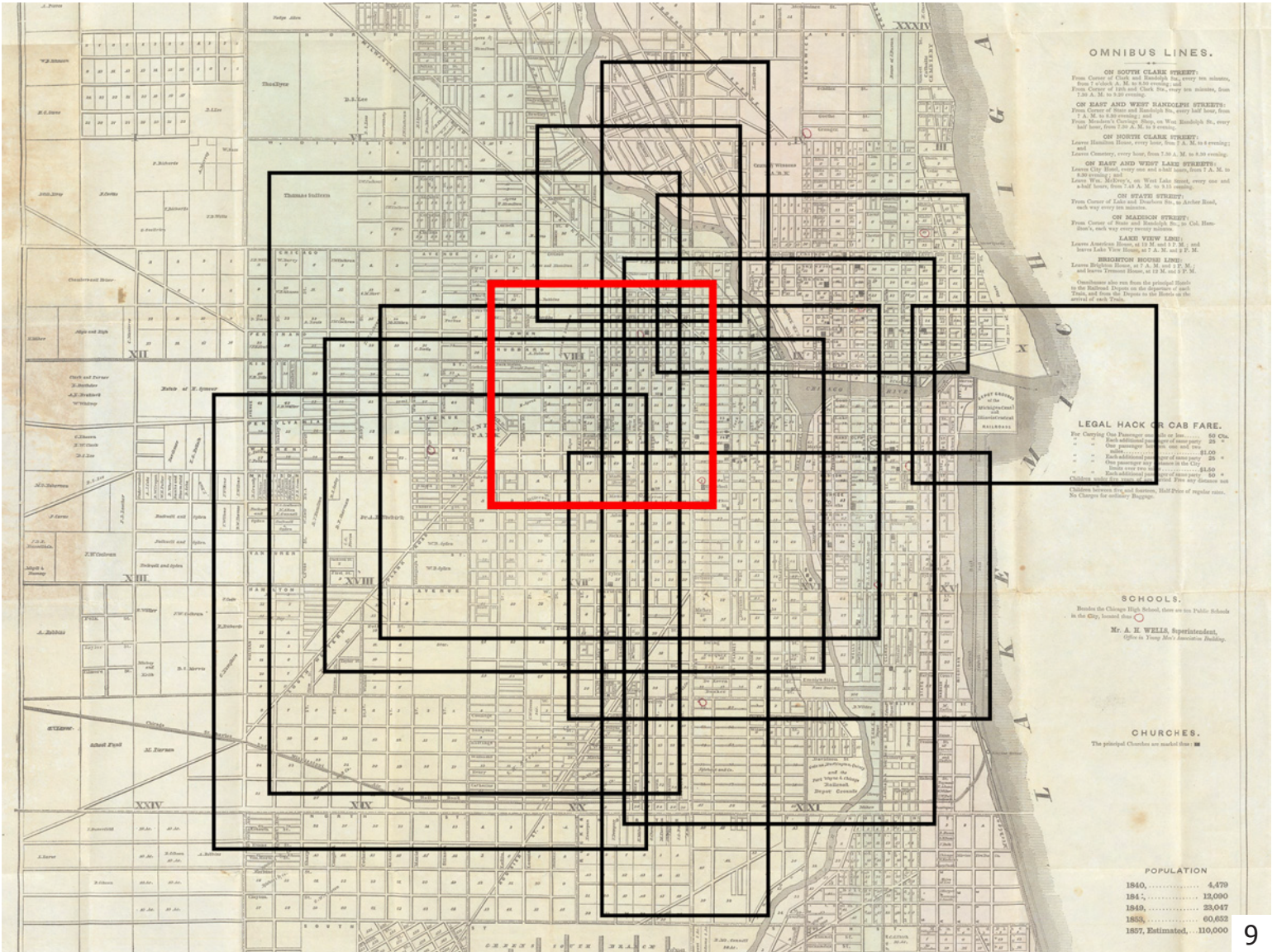
“Lost in New York? The streets are numbered. How’d you get lost in New York... you seein’ this Home Alone 2 shit lost in New York shit, it’s a grid system mother fucker, where you at? 24th and 5th! Where you wanna go? 35th and 6th! Eleven up and one over, you simple bitch.”

- John Mulaney’s “New In Town”

WARSAW, POLAND



In Warsaw, I navigated with limited knowledge of its plan, but would always reference the tallest building in the center of the city to orientate myself. A loosely defined grid would allow for more detailed navigation.



OMNIBUS LINES.

ON SOUTH CLARK STREET.
From Center of Clark and Randolph Bay every ten minutes, from 7 o'clock A. M. to 10 o'clock evening, and
From Center of Clark and Clark Bay every ten minutes, from 7 o'clock A. M. to 10 o'clock evening.

ON EAST AND WEST HANDELSON STREETS.
From Center of State and Randolph Bay every half hour, from 7 A. M. to 8 o'clock evening, and
From Randolph Street, on West Randolph Bay, every half hour, from 7 o'clock A. M. to 10 o'clock evening.

ON NORTH CLARK STREET.
Leaves Hamilton House, every hour, from 7 A. M. to 4 o'clock evening, and
Leaves City Hall, every hour, from 7 A. M. to 4 o'clock evening.

ON EAST AND WEST LAKE STREETS.
Leaves City Hall, every one and a half hour, from 7 A. M. to 4 o'clock evening, and
Leaves Wm. McEwen's, on West Lake Street, every one and a half hour, from 7 o'clock A. M. to 4 o'clock evening.

ON STATE STREET.
From Center of Lake and Randolph Bay, on Archer Road, each way every ten minutes.

ON MADISON STREET.
From Center of State and Randolph Bay, on Col. Hamilton's, each way every twenty minutes.

LAKE VIEW LINE.
Leaves American House, at 12 M. and 2 P. M. and leaves Lake View Station, at 7 A. M. and 2 P. M.

BRIGHTON HOUSE LINE.
Leaves Brighton House, at 7 A. M. and 2 P. M. and leaves Brighton House, at 12 M. and 2 P. M.

Conductors also run from the principal Stations in the Railroad Depot on the departure of each Train, and from the Depot on the arrival of each Train.

LEGAL HACK OR CAB FARE.

For Carriage One Passenger one mile or less 50 Cts.
 - - - - - Each additional passenger for one mile 25
 - - - - - One passenger for one mile and one cent
 - - - - - Each additional passenger for one penny 25
 - - - - - One passenger for one penny in the City 15.00
 - - - - - Each additional passenger for one penny 10
 - - - - - Outside the City for one penny for every 100 feet distance but
 - - - - - Outside the City for one penny for every 100 feet distance but
 - - - - - Six Cents for ordinary baggage.

SCHOOLS.

Besides the Chicago High School, there are ten Public Schools in the City, located thus:

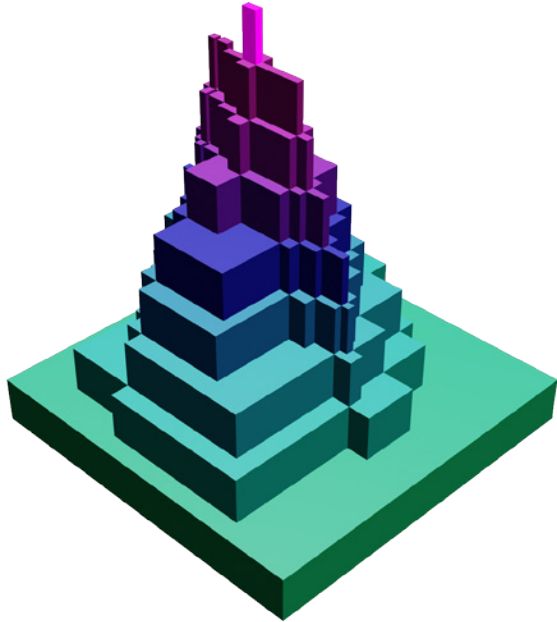
Mr. A. E. WELLS, Superintendent,
Office in Young Men's Association Building.

CHURCHES.

The principal Churches are marked thus:

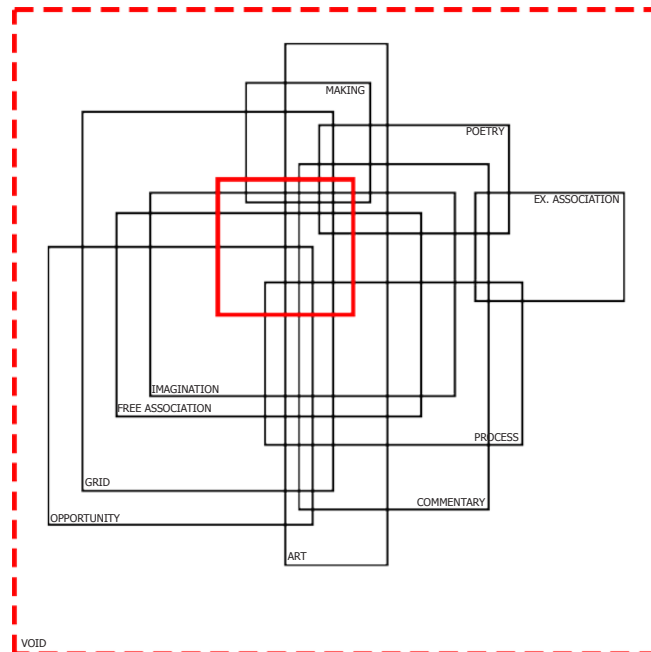
POPULATION

1840,	4,479
1841,	13,090
1842,	33,047
1853,	60,632
1857, Estimated,	110,000



◀ A 3d extrusion highlighting the intensities of the overlapping areas that the paths created. The center showing the most because that area becomes representative of the individual and what they know best.

The original diagram showing the placement of each element. Notice that external association does not interact with the center red space.



◀ This diagram was the final in the series depicting these 10 'elements' as exploratory paths within an urban context. This illustrates a personal experience of walking through a city and trying to explore a new area. These paths inevitably end up overlapping at many locations. These locations become better known to myself and become personal landmarks that show "I've been here."





FREE ASSOCIATION

As a young child, I imagined an architectural scale as a tall building. A naïve association but at the time, I was unaware of what an architectural scale was or what it was used for. After conversations on the idea of associations, it became clear how often these occur and to the extent that they do. At some points, entire programs and designs are developed unconsciously while driving through some of the most devastated neighborhoods in the city of Detroit. I am able to look well beyond burned out homes and imagine them simply as student housing around the university for instance or what the materials in these homes could be used for if deconstructed. Normally this view would be written off by others and even me as just another overly optimistic plan for another outsider to save the city. However, with the ability to literally imagine all the inner workings of a new function for the home or its materials I could not simply ignore the opportunity to view objects and buildings as more than what they are at this particular moment in time. This development informed the idea that these associations are exposing inherent flaws within the architecture, society

or both. These flaws then become the invitation to generate these new designs for existing objects and buildings.

The term 'free' association was developed because of the irrational nature of these associations. Do these associations have a root in the experiences as a Detroitite? Does a memory plus a specific object inform the association? Or is there simply no explanation to associating an architectural scale as a tall building?

◀ This image was built upon this very literal association of the architectural scale as a super tall building. It was incorporated into the form of Le Corbusier's plan for Paris. The tower plans offer abundant sunlight into the interior of the structure as did Le Corbusier's and they are all set in the ultimate green space, the rainforest.





◀ The apartment with Christmas lights became a symbol of this idea of associating a cheerful or exciting object (the lights) with the something that representing so much despair and doubt.

One of the more detailed associations that developed through this interest in derelict buildings. Admittedly, a more idealist way of looking into the element of free association. ▶



DYNAMIC
 PERCEPTION VIS-A-VIS COMPRESSION
 CONTEXT TEMPORARY
 PEDAGOGY
 VACUUM NODE
 IDEALISTIC TRANSITION
 SUSTAINABLE
 ZUMTHOR MANIFESTATION
 THRESHOLD
 GRID ABSTRACT FORM
 PURE JUXTAPOSE
 PERSONAL

CRITICISM

ON CONCEPT

As a critical observer of the built environment, criticism was a natural element to explore and participate in. The most difficult part of this entire journey was the struggle to find that one, single, all-encompassing statement or word that would describe what this 'thesis' was. Well, I never found that and as stated previously, I truly do not believe that exists. I find this idea of single statement disturbing in a field where the future is anything but clear. So, while stressing over finding that single statement, the process itself missed a lot of opportunity to grow and mature. So while having a single, concrete statement may be ideal for most, it is not for this journey. This statement at best is an idea that continuously morphs and adapts to the irrational leaps and actions that the process endures.

Unfortunately, as students we are often taught to develop a concept and stick to that concept at all costs. If what we do does not respond directly back to the original concept, it is 'arbitrary.' (While I do not agree with an overarching concrete concept determining

every move in a design process, I do not want this mistaken with the ability to consider every single idea to be an intelligent design decision. Essentially, just because something may seem arbitrary does not mean it is not a legitimate idea). That idea, no matter how arbitrary it may seem, was still developed out of the same design process that non-arbitrary ideas came from. The idealist process inhibits the ability for that concept to grow and morph along with the development of the project. The concept should have just as much flexibility as the design itself. What I imagine is that this concept, rather than being an overarching idea, should be a reference point when the designer gets lost or becomes stagnate. Use it as a sort of jump-start back into the project.

ON LANGUAGE

Architects and architecture students seem to use incredibly inflated language that in many cases is used incorrectly. This language becomes a crutch for projects that may not have been well-developed or projects that may appear to be too 'simple.' In



observing critiques, it seems that the simpler the projects (in formal composition), the more inflated the language becomes. Whether this is because the student may not have crazy forms to wow the jurors or the thought that simple projects need to be balanced with complex language or vice versa, I do not know. While architecture maintains its own word bank, I think it is important not to use this language to hide insecurities or the unknowns of our projects, instead use them to help convey the true desires behind the project.

ON PRECEDENTS

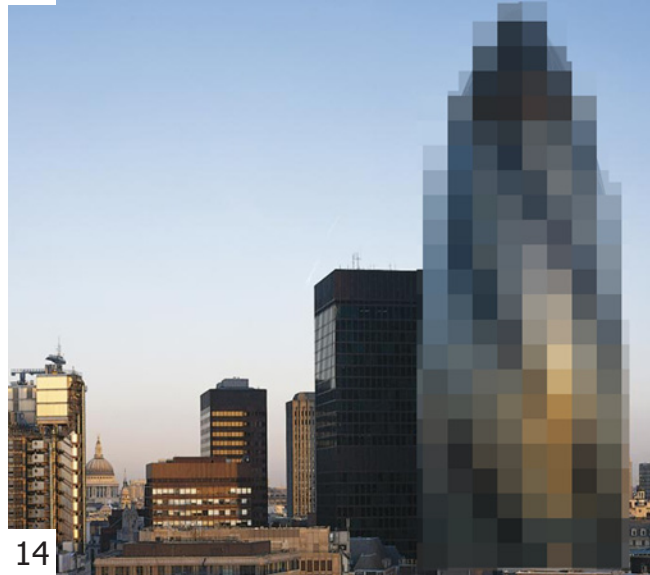
Throughout this journey I have participated in many underclassman juries. I became concerned about the overly dependent use precedents after seeing almost identical copies of them presented as final projects. I believe like the concept idea I imagined, precedents should be a way to inform your designs and should be introduced into the design process strategically, rather than at the beginning which is most typical. I believe, as students of architecture, we all have relatively good taste and valuable ideas. These ideas barely stand a chance when looking at projects by Frank Gehry, Zaha Hadid, or Norman Foster. This is why, I believe initial stages of design

should nurture the ideas that are already being developed, and then when those ideas are on paper, introduce precedent research to further the ideas of the individual, not of the starchitect.

ON THESIS

The approach to this thesis, if not apparent, has been one of discovery through a variety of investigations. There was no predetermined end point which was important to allow the creative process to expose itself. In observing a variety of other creative processes, it seems as though many require a loosely or even clearly defined end point to move forward. The problem with this is that with the end point already there, the 'question' that has yet to be determined already has an answer. The answer does not necessarily need to be 'designed' but with a defined point, the creative process or in this case, the thesis structure is already skewed toward that one point. So, while designing that end point, the individual is simultaneously justifying it through a development of a problem. This is essentially how architecture is approached and to be profitable and practical, this approach works. The problem is that the answer that gets built is often just a duplicate of an existing answer.

There is an inherent lack of creativity in this approach resulting in these duplicates. Some argue that instead of spending the majority of the time on problem solving (designing the building), the majority of time should be spent on **problem finding**, the actual process of designing the problem, which results in more creative outcomes.¹ ■





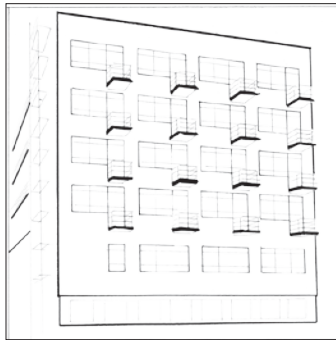
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Fagus Factory Shoe Factory
Walter Gropius, 1913



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Bauhaus Dessau
Walter Gropius, 1919



17

Weissenhofsiedlung
Mies van der Rohe, 1927



18

Walker Guest House
Paul Rudolph, 1952



▲ These sketches allow for the subtle nuances that speak to the drawer. They Choose the details to emphasize as well as the line weight to do so.

▲ Not all 'making' has to be an object per se, but something where the hand interacts with physical materials in some manner.

MAKING

The act of making something physical solidifies its existence in the world, which cannot be challenged on any basis. The existing of a thing provides an opportunity to interact with it in a physical manner, answering the desire for a tactile object to be available. As an action theorist, the act of making is integral to the development of a design in almost any capacity. The initial thought of a design is simply the first conscious stepping stone for the final product. Contrary to idealists who believe the ability to argue the initial idea is the ending of the creative process.² Making allows for the unforeseen issues involved in construction to be exposed, allowing for a better understanding of assembly and materials. Many of these issues were exposed while building several of the installations discussed in **Made Objects**. Various issues with the string being used, concrete not drying completely due to porous materials, and many others that would have never been encountered if not for physically making them. ■

◀ This journey has also presented the opportunity to allow materials used for other elements to become relevant in other ways. These sketch studies were done originally to digest the early modernists and their way of critiquing previous styles through a new one. Each piece, digital or analog provides insight for multiple fragments in this journey.





OPPORTUNITY

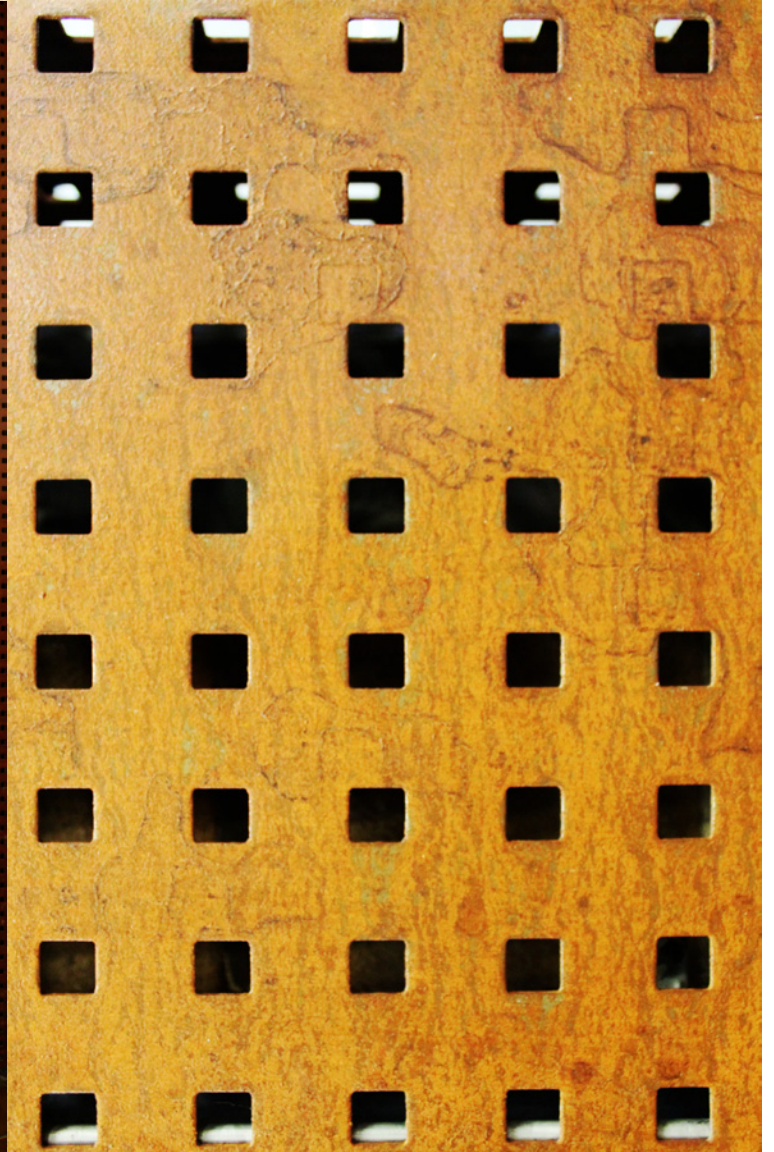
Opportunity in the context of this thesis presents opportunities to ask the question 'What could this be?' It has close ties back to the element of free association in the idea of questioning current and future uses of a specific object or building. However instead of replacing the program altogether, opportunity is discussing what is missing or what can be added to the existing space to make it more conducive to its use. Installations do exactly that and vary in the scale and complexity of the construction. Some spaces are inherently accepting to an installation based on a combination of their use and visibility as well as many other factors such as the condition of the surrounding materials and size. Installations have been the larger outreach of this personal journey since the majority of the made pieces have been smaller objects. These are pieces that, while created by myself, may have serious implications when constructed in a public environment that is not necessarily one hundred percent controlled.

Four installations have begun to shape the idea of opportunity, all within the school of architecture at the University of Detroit Mercy.

Once again the installations were made from readily available materials that have been used by me in the past. Concrete and mason's line in addition to binder clips have been able to morph the spaces through simple, yet complex pieces inserted into the already complex motif that is the school of architecture. Due to the color palette of the materials used, they began to play off of the building itself and stand on their own with the school as their backdrop.

◀ Installation #2 was designed as a piece to promote the continuing lecture series that is hosted at the University of Detroit Mercy. It was also played with to produce a stop motion video. This installation's use blew up once the post cards were taken down. It took on an entirely new use as a bulletin board for school and student announcements. Outside posters also began using it as if it had been there for longer than a week.

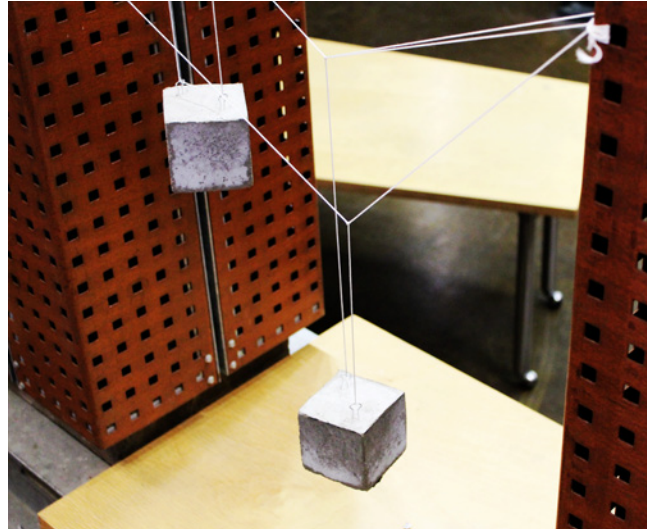


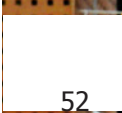


Far Left | Installation #1 created a nice buzz around the school as it was getting installed over a weeks' time. A result of this installation is that it forces people whose class is having a critique to sit down and pay attention. Installation #1 + #2 prevent sitting up in the hallway and therefore eliminated the chance to mill around during a classmate's presentation.

Near Left | The surface material in the pit is perfect for the installations I was doing. The metal grate has great strength and offers a versatile surface to install onto.

Installation#3 involving 3 x 3 x 3 inch concrete blocks was to begin showing the interaction and relationships between the many fragments that made up this journey. When moving one of the blocks the positions of the strings change, revealing a slightly different line pattern. These patterns represent the ever shifting connections between the fragments.





EXTERNAL INFLUENCE

Through these installations, others were invited into this journey. Architecture and design are rarely intended for a single person, so feedback and engagement with the made objects was important to see how accessible and interactive they actually were. Putting these installations out there proved to be very valuable. With the second installation, 50th Anniversary, the initial and only immediate intention was to show that the school of architecture was celebrating 50 years; however, by shifting only four of the postcards, it could also celebrate the Detroit Collaborative Design Center's 20th anniversary. This alone illustrates the importance of collaboration within the design process and being critical of the work you create.

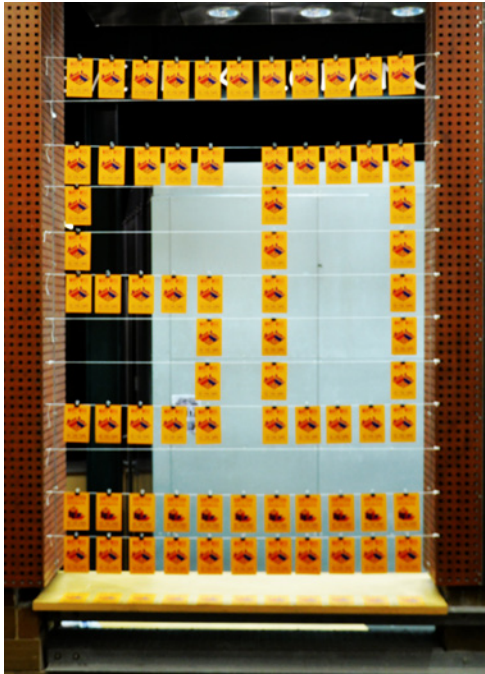
This element of external influence also shines light on the idea that no architect can accurately predict how each person will experience the space they designed. This invites another critique on architectural education which was elaborated on in Criticism. It's the idea that students try to design with the intention that the users will feel X in the space because the floor is smooth and there are lots

of windows. You, the architect, may feel X with all these windows, but will everyone feel the exact same way as you? Absolutely not. I offer another approach. Instead of trying to make everyone feel X, design with X in mind, but with the notion that anyone feeling Y will also be comfortable and the person feeling Z will be able to move about just as successfully as anyone feeling X or Y.

Once the postcards were taken down, the taught mason lines were almost immediately filled up with flyers, additional postcards for future lectures and a variety of other information for the students and faculty to notice. It became an ad hoc message board and most likely was more visible than any other board throughout the school even if parallel to the direction of travel down the hallway. The installation itself was different enough from the surroundings that it caught the eye of even the least observant passerby's.

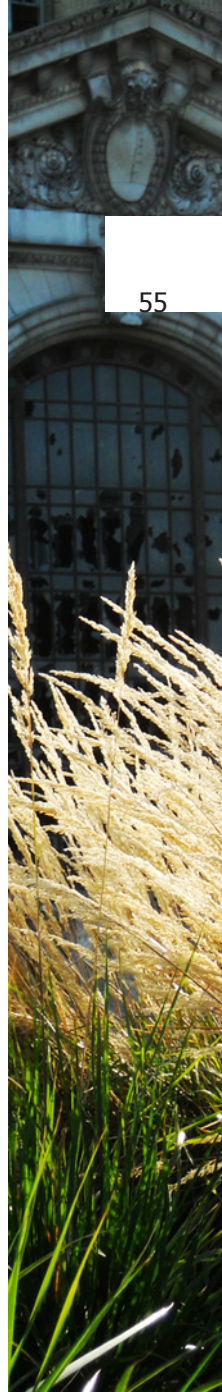
◀ The original version on the left and the modified version on the right.







◀ These are the stages of the 50th anniversary installation from day one through the last day it was up. This also shows the removal of half of the lines in an attempt to take down the installation as it began to get stagnant.





10 | 4 | 2013

OPEN AIR, THE STREET FLOODS IN,
AS DOES, IT FLOODS OUT TO THE STREET

SWEET AND BRISK,
AN ADVENTURE FOR OUR TASTEBUDS;

THE AFTERNOON BURNS OFF,
AS NIGHT PREPARES

THE WORDS MEAN SOMETHING, BUT,
NOT TO US

CASUAL ATTITUDES WELCOME
EVEN THE OUTSIDERS,

CLARITY FACES OBSCURITY,
BOTH THROUGH PERCEPTION AND
THROUGH COGNITION.

J M

POETRY

Poetry is one's own interpretation of the author's words and narratives. Poetry has mastered the ability to provoke emotions through the assemblage of simple words and phrases into more complex narratives. These narratives allow the reader to interpret as they wish and apply it to a familiar experience whether it causes joy, fear, pain, etc. On the same wavelength is Architecture. We must realize that architecture is not only the concrete representation of the architect's desires; rather it is also the unadulterated human experience that determines the experience and instills lasting memories. Poetry also allows for a large variety of readers to interpret the narratives, allowing for a large variety of people to enjoy the poem. The poem allows for points of entry at various levels allowing the reader to interpret the poem differently the next time they encounter it.

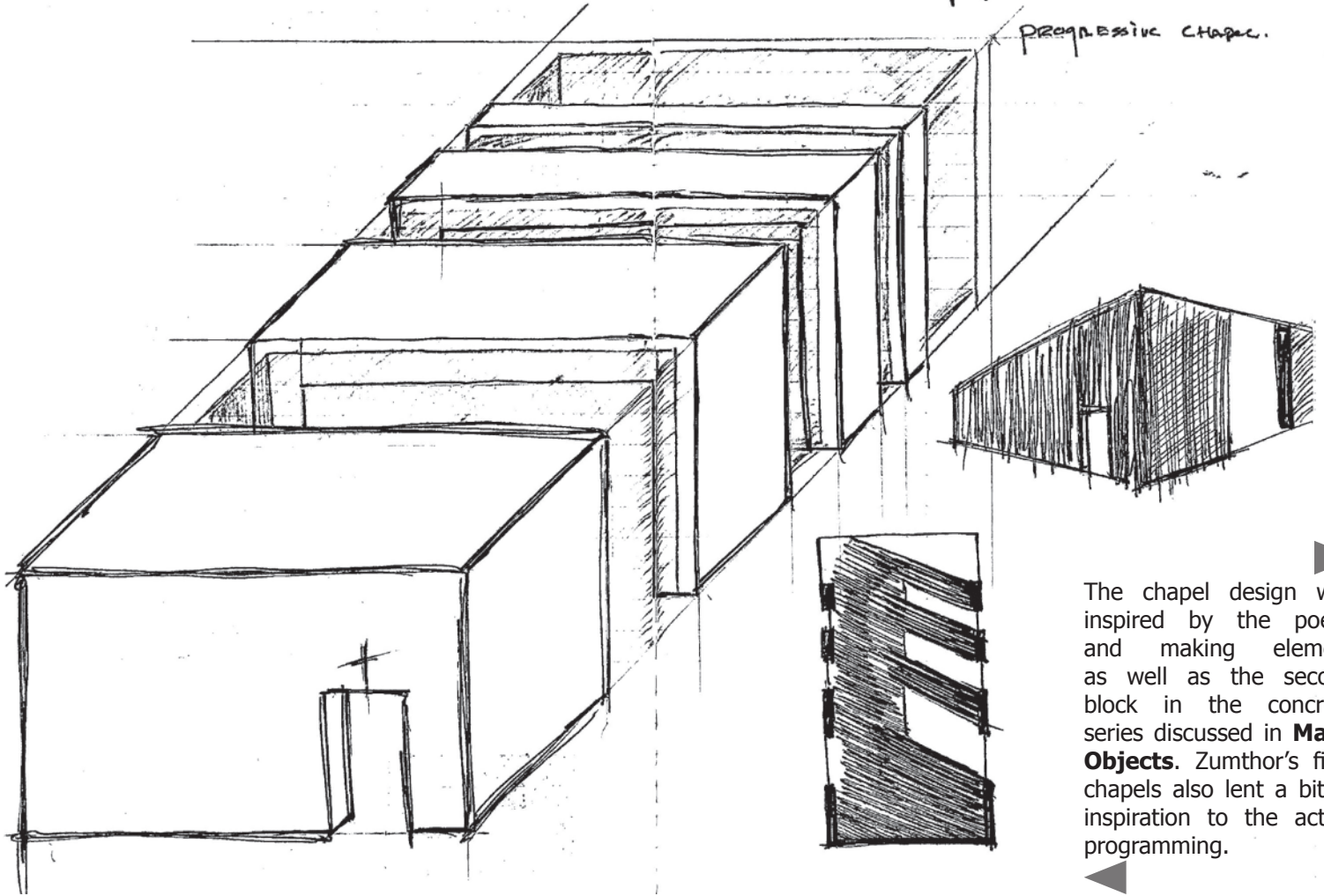
The act of making became a very poetic move throughout this journey as well. Assembling simple materials echoes the moves made by poets in their assembling of simple words to incite a significant emotional reaction. The making portion provided a tactile

involvement with the materials that make up the built environment. These materials are most pure during construction and soon become part of the larger piece by the time anyone else experiences them. Through this assemblage, these materials become much more than they were on their own and it is these relationships between them that carry the most weight. So when people dissect poems, they kill the expectation that they are to interpret the poem as they wish and not as the author did. A similar phenomena exists in architecture, it has its people who try to break down the architecture...the architects themselves. Admittedly, this is how they are trained to look at architecture and break it apart whether they are doing this consciously or unconsciously. However, they must realize that architecture is not for architects, as Peter Zumthor states it in an interview with the RIBA, "architecture is experienced by laymen ■ without thinking."³ Architecture, like poetry, shall provide the opportunity for people to interpret as they wish, not as the author/architect thinks they should.



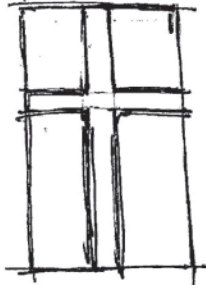
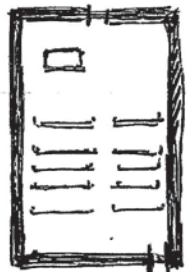
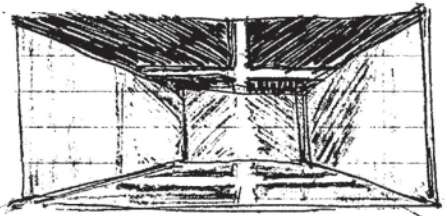
11/6/2013

Progressive Chapel.

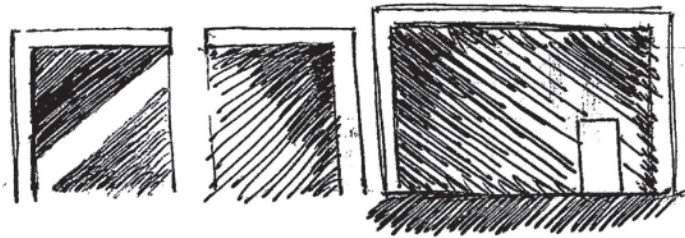


The chapel design was inspired by the poetic and making element as well as the second block in the concrete series discussed in **Made Objects**. Zumthor's field chapels also lent a bit of inspiration to the actual programming.

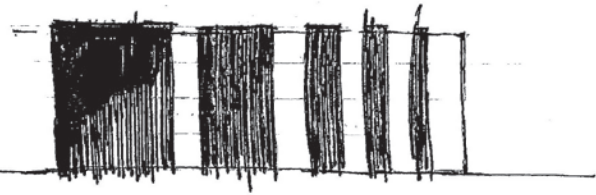
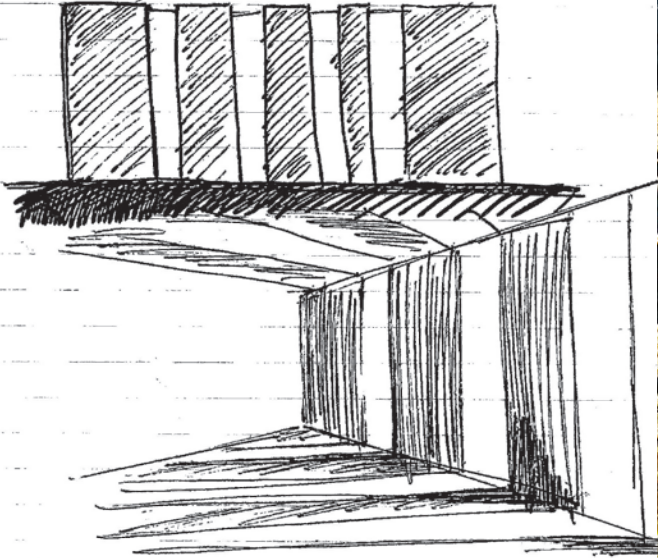
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DEA FORA CHAPEL



11/6/2019





IMAGINATION

Imagination covers a wide variety of mental actions, including, but not limited to assuming, thinking, believing, imagining, supposing, to plan, fancy, or plot.⁴ Within the element portion of this book, imagination is used in two ways explicitly which complement each other. Imagination is also implicitly interwoven throughout almost all parts of **Elements** and the rest of the book. The first explicit introduction was as the Grid's counterpart. When the grid becomes too rigid and unforgiving, imagination would be there to challenge that rigidity. On the opposite side, when the imagination becomes to 'fanciful' the grid would be there to keep it in check. These two working together would be the ideal working relationship. Each one challenging the other and ideally producing a creative solution based on the problem presented.

The second part of imagination was the actual projects when the solution proposed exploited the grid for what it was worth and produced a solution that highlighted the irregularities in the grid itself. Some of the best solutions to these irregularities are the flat iron buildings that appear throughout

the cities where strict grids dominate the plan. The most famous and largest being the Flatiron Building (1902) in New York City at the confluence of Broadway and Fifth Avenue. Additional examples include; The Herring Safe and Lock Company Building also in New York City (1849), Gooderham Building in Toronto (1892), English-American Building in Atlanta (1897), Milner Hotel in Detroit (1917) and the more modern example is the Het Strijkzer in The Hague (2007).



◀ The Gooderham Building in Toronto, Ontario. The building was and continues to highlight one of Toronto's iconic axis'.

◀ Detroit's Water Board Building. The building has an equilateral triangular plan that responds directly the piece of the city grid it sits on.







PROCESS

Process in the context of this thesis represents the idea of process documentation, as the process of creating has been discussed in various locations throughout this book. Making, as mentioned before allows the connection of the maker to the made object. This process is often missed by the users of these objects, as the process does not have any value to them. Andy Goldsworthy, a sculpture, photographer and environmentalist produces site specific work out of the natural materials around him. His work is almost entirely ephemeral, lasting only for a short time, sometimes only a few minutes. The process of documenting his work is not an afterthought but rather a necessity and is just as important as the work of art itself. If the documentation was not there, his work would be known only to himself and would cease to exist to a larger community.

The physical documentation also begins to take on a beauty all its own. Whether it is a beautiful documentary such as "Rivers and Tides" that presents Goldsworthy's process or it is a series of photos that form a stop motion animation, each of these is an additional piece in the overarching idea of making physical

objects. "The Gates" is another documentary that follows the 26 year battle to get the work of Christo and Jeanne-Claude built in Central Park. A videographer followed them around to meetings and conversations with multiple New York City mayors, officials, the public and anyone else that had any sort of support or opposition to the project. This documentation was standard for the couple and was used extensively in the final documentary

The documentation throughout this journey was focused heavily on the making of forms. For instance, the forms made for Installation #4 consisted of many different parts captured in a stop motion animation. The animation shows the amount of work and repetitiveness that is required to produce, in this case, over 400, 1.5 x 1.5 x 1.5 inch concrete cubes.

◀ The tide in the background of this photograph would eventually come in and take the driftwood creation that Goldsworthy built purposefully in the tidal plain.



66



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◀ Christo and Jeanne-Claude directing volunteers and others during an exhibition of the project for the public to review.



26

◀ Conversation about Christo's philosophy that the process is just as important as the finished product. The men are discussing that during a meeting with the one on the right, Christo asked if they could bring in extra lights for the camera man who is filming them at this very moment.



27

◀ A meeting with Gordon Davis, the commissioner of the Parks Department at the time of the proposal in 1979

▶ The finished installation that remained for three weeks weaved through 20+ miles of paths. Christo and Jeanne-Claude saw this as a project they simply wanted to make, but also a gift to New Yorkers. Residents and tourists alike interacted with the installation for the entire duration. With the exception of recycling the materials, the interaction was seen as the final step in entire process.

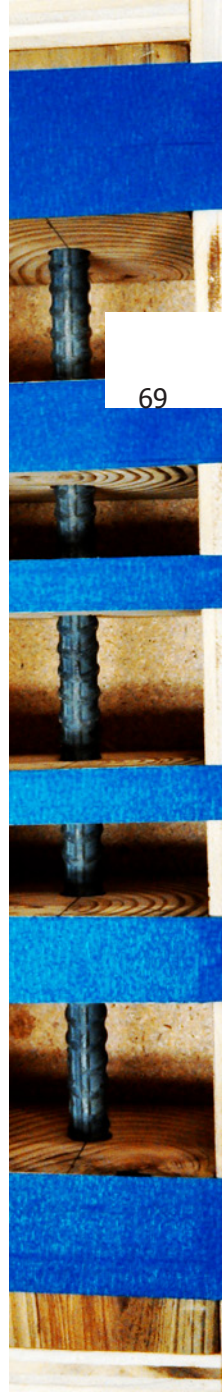


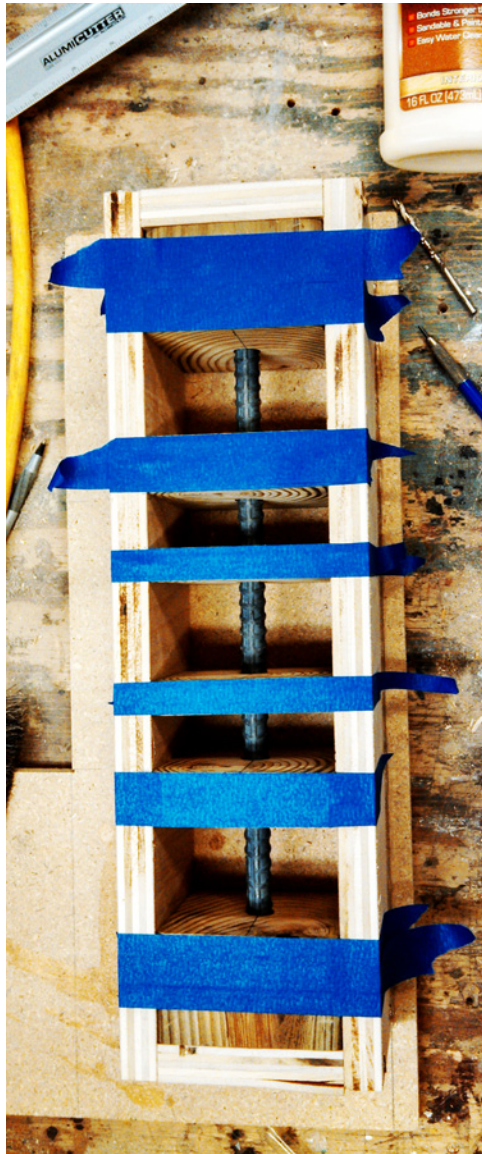
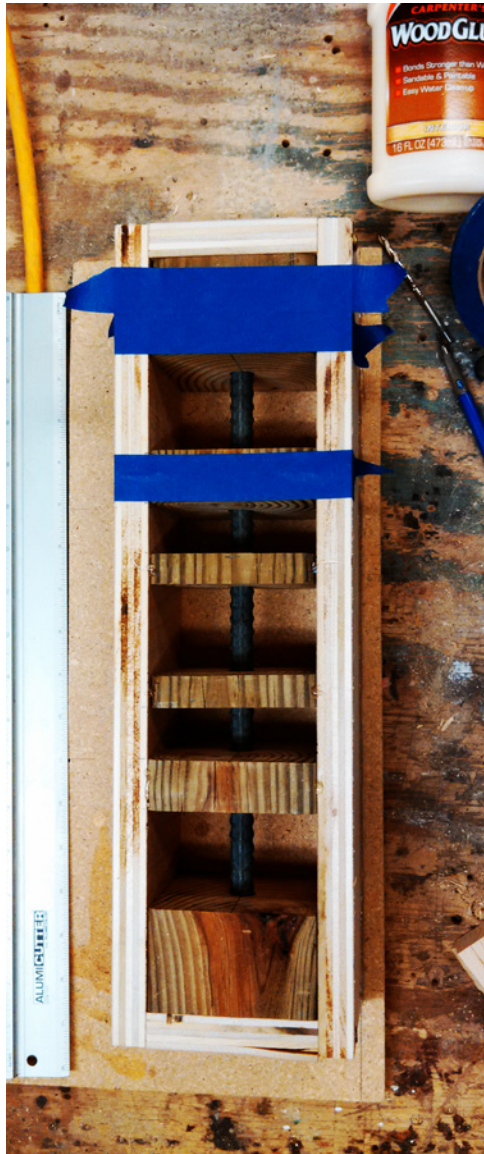
“ My sculpture can last for days or a few seconds -- what is important to me is the experience of making ”

- Andy Goldsworthy

PROCESS + DOCUMENTATION

- 70 THE TRIPLE DECKER
- 73 CONCRETE ARCH
- 78 250 LB. STOOL
- 82 READ ALL ABOUT IT
- 91 AND THEY COME MARCHING...
- 101 GRID CONCRETE FORM
- 105 THE PERFECT POUR

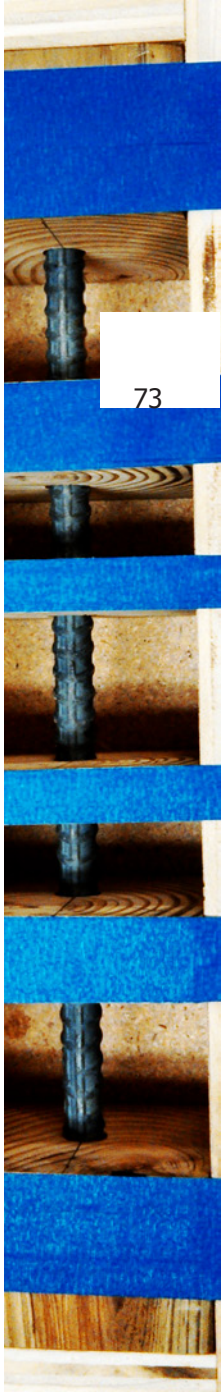
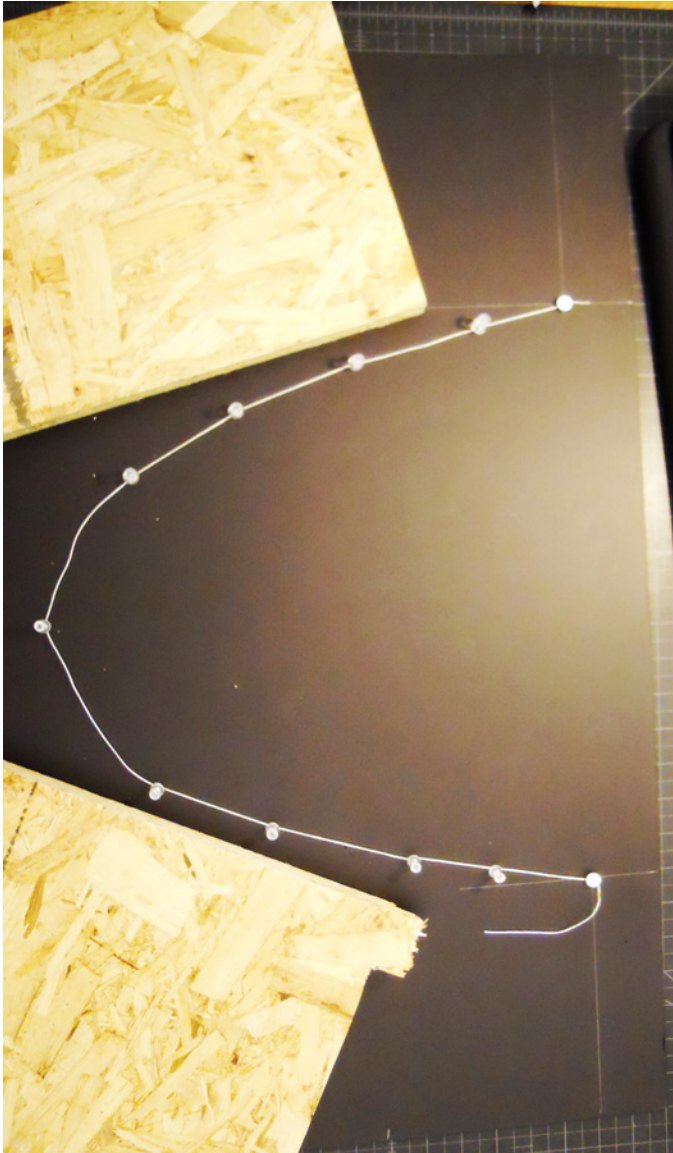




THE TRIPLE DECKER

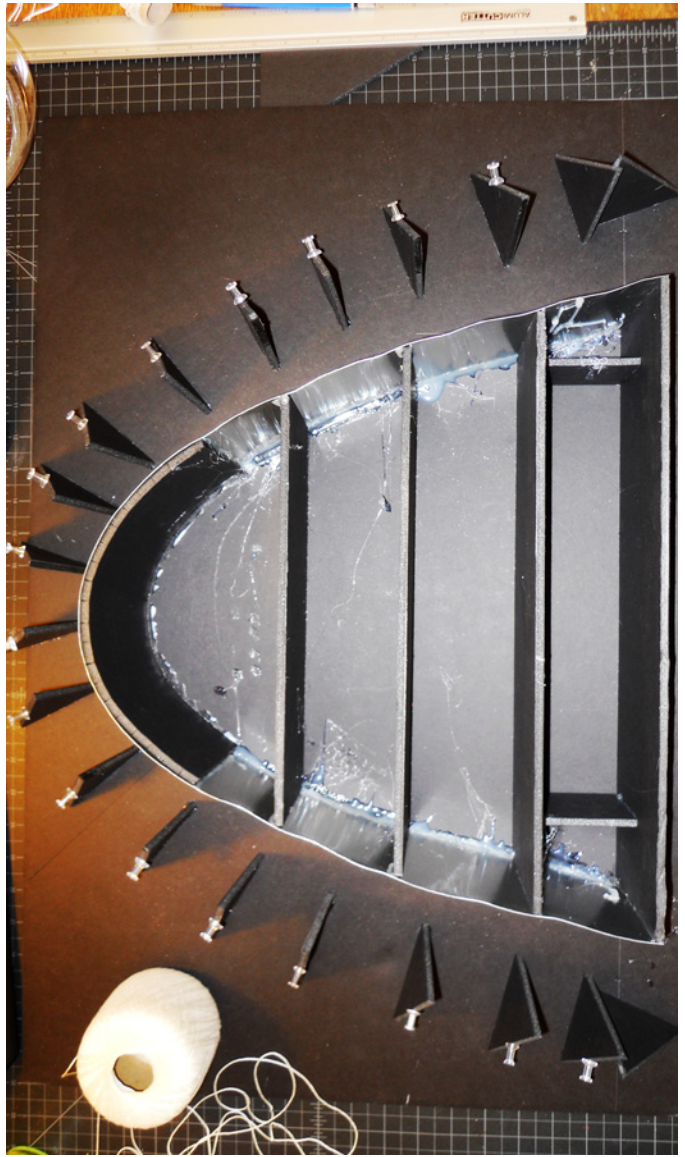
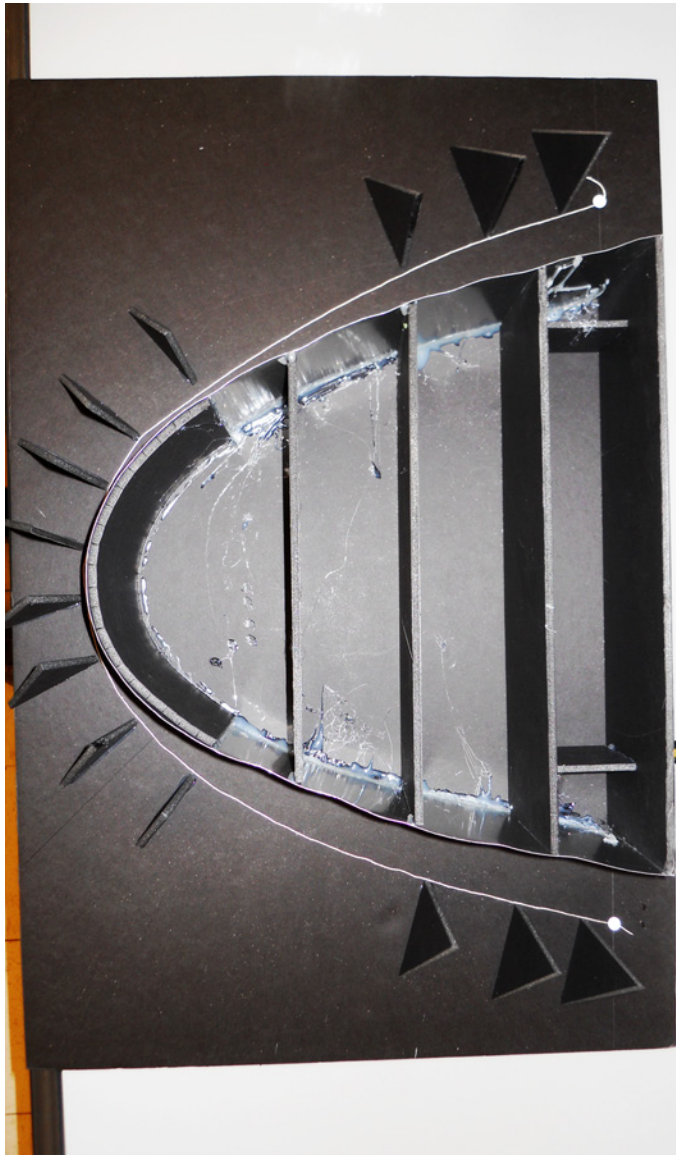
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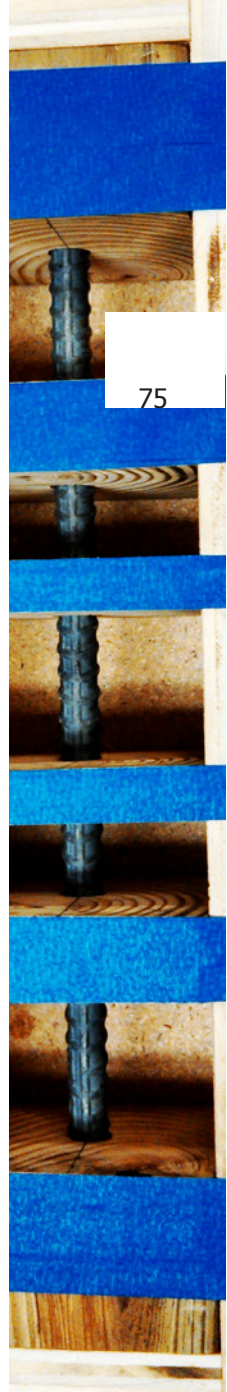
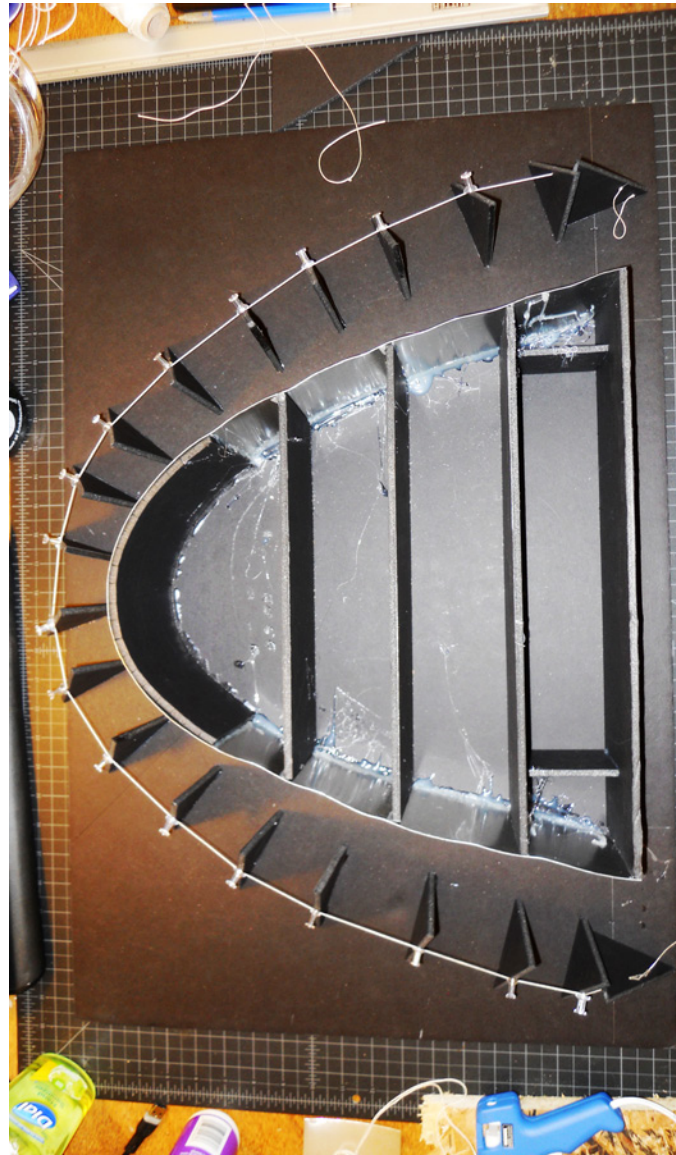
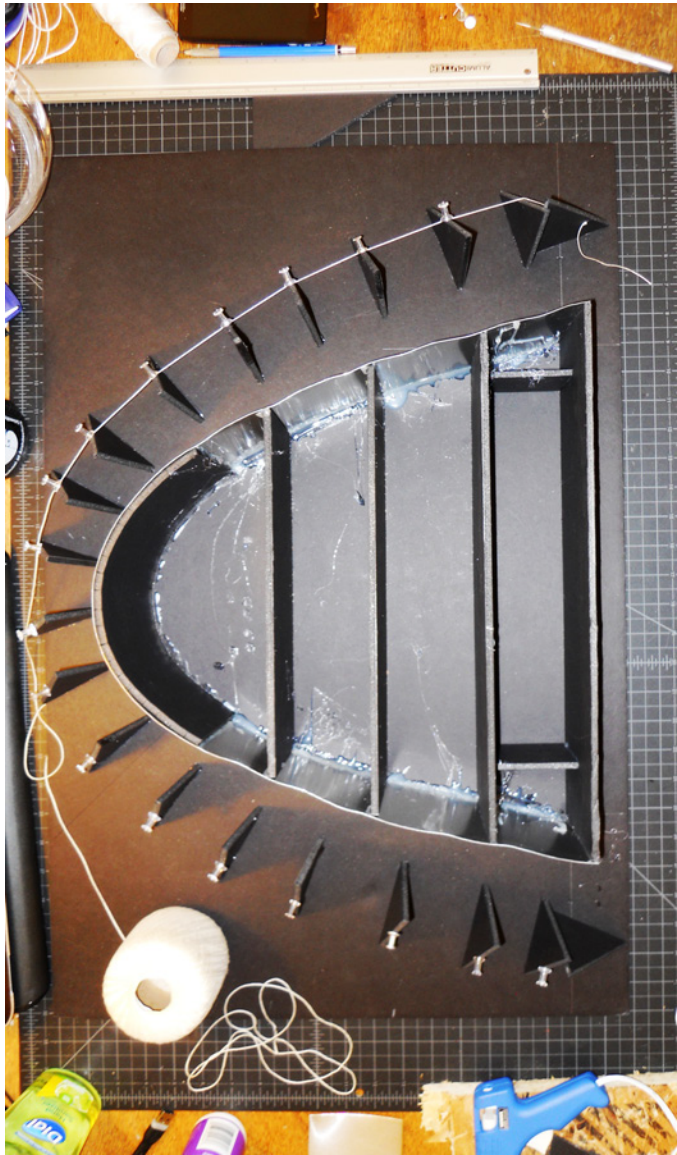




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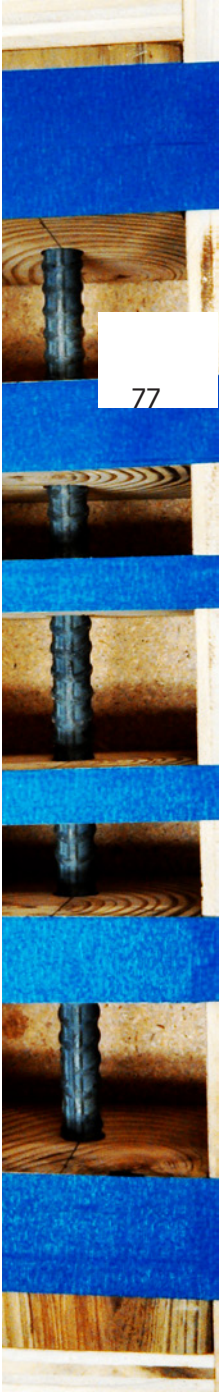




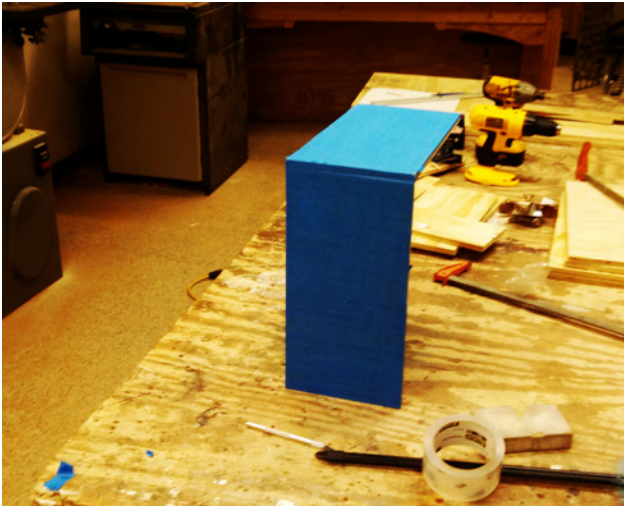
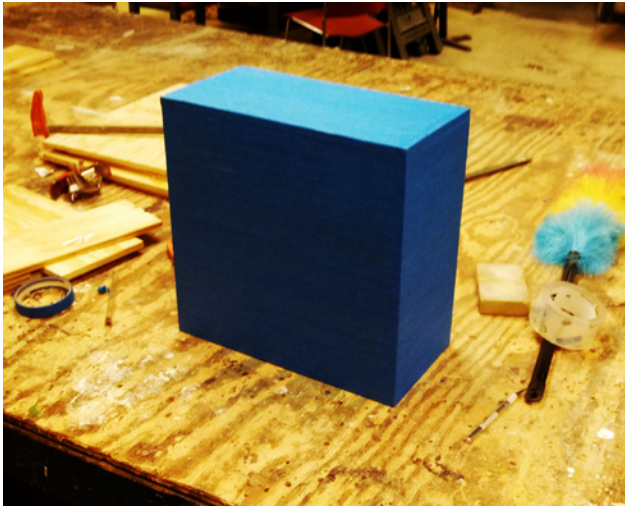
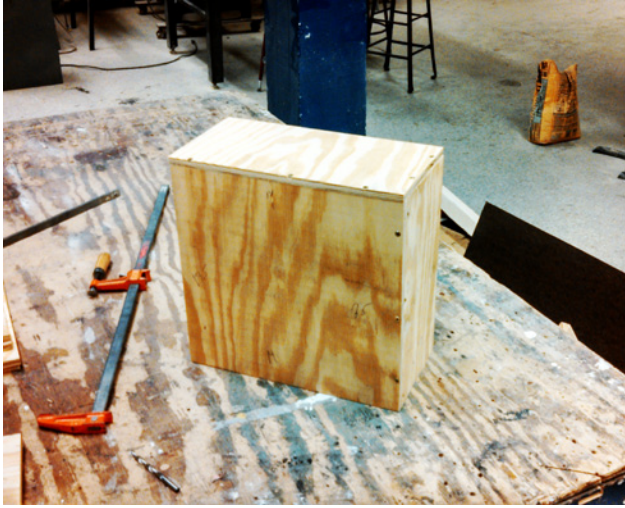
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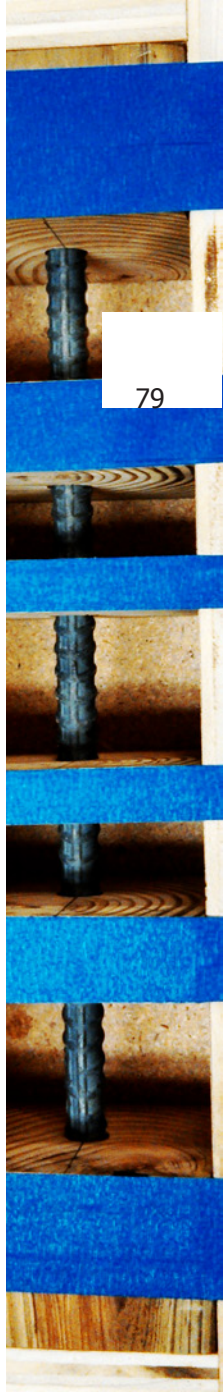
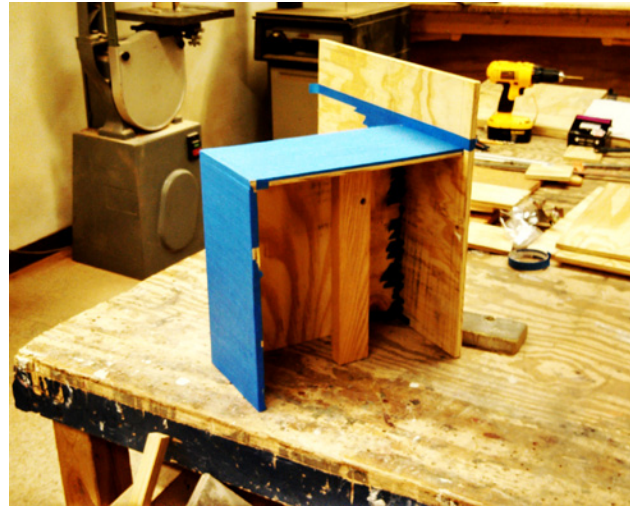
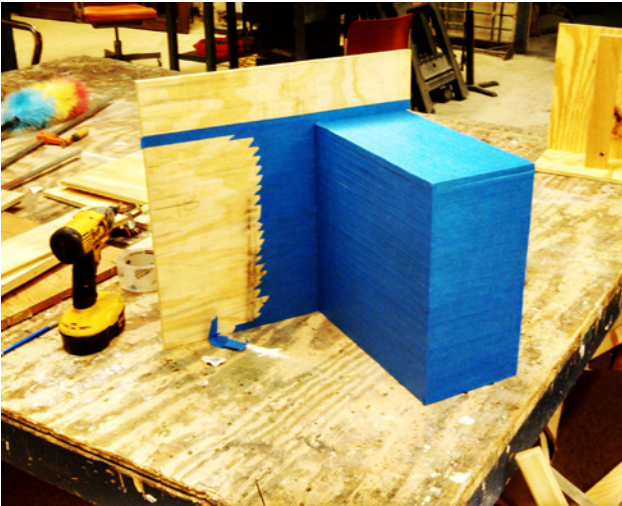
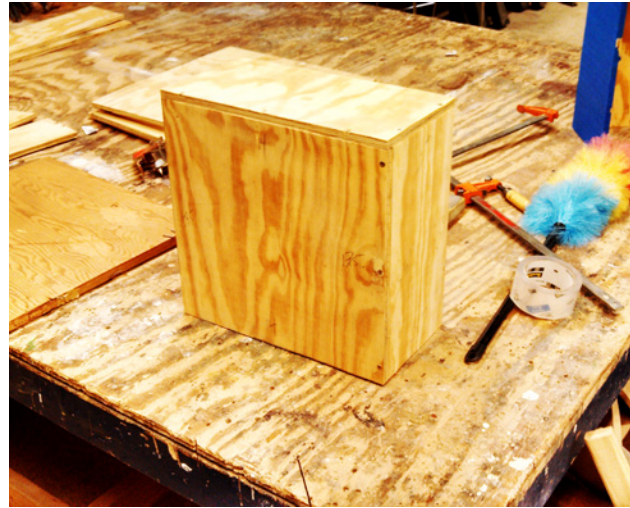


CONCRETE ARCH



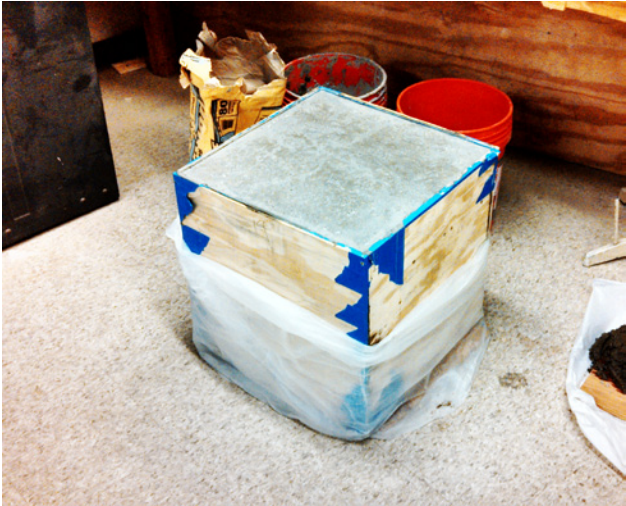
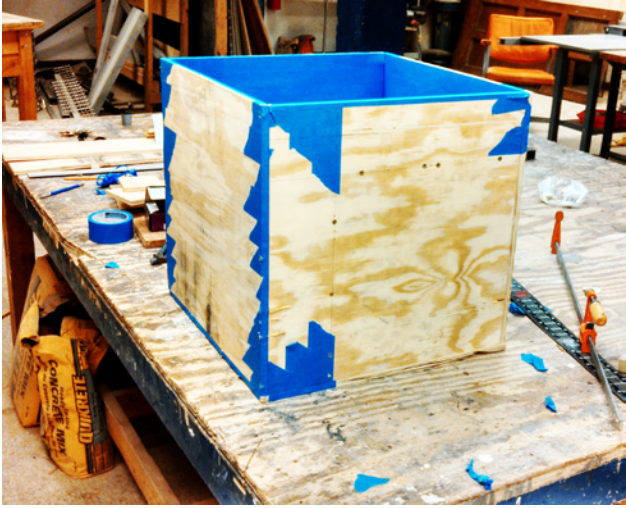
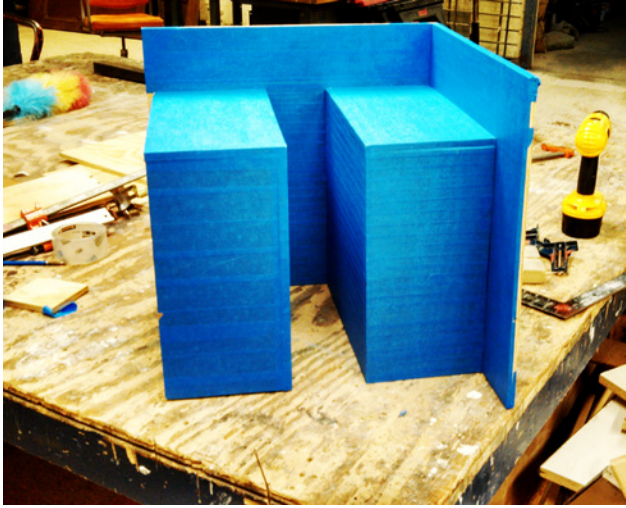
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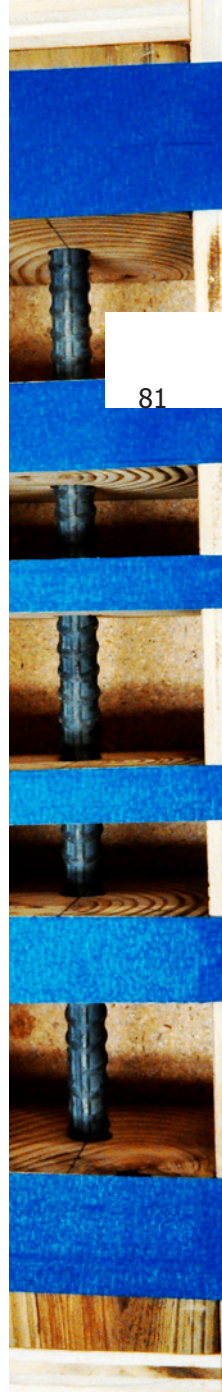
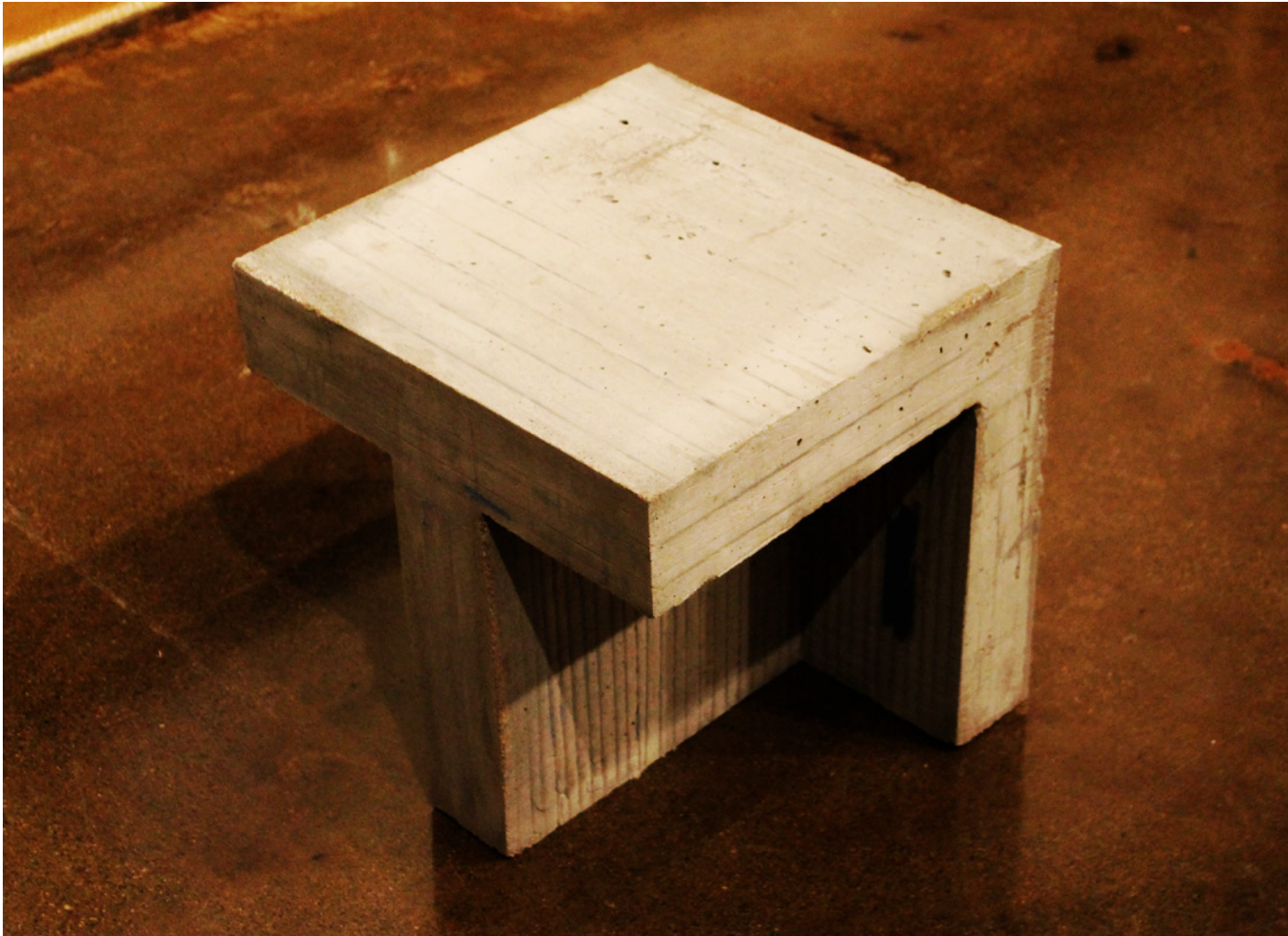


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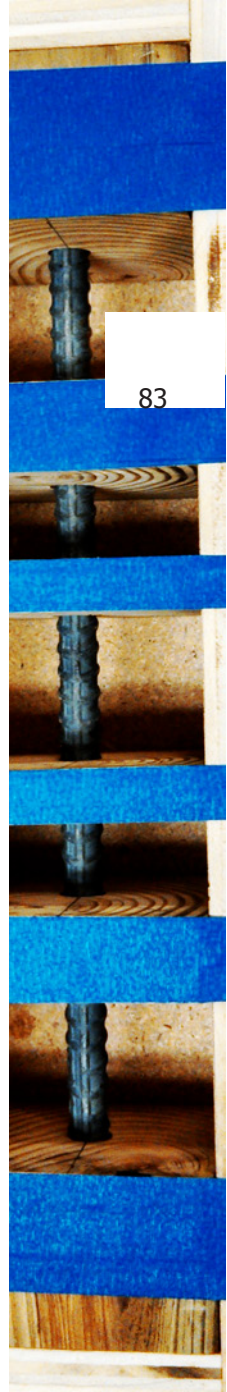


250 LB. STOOL



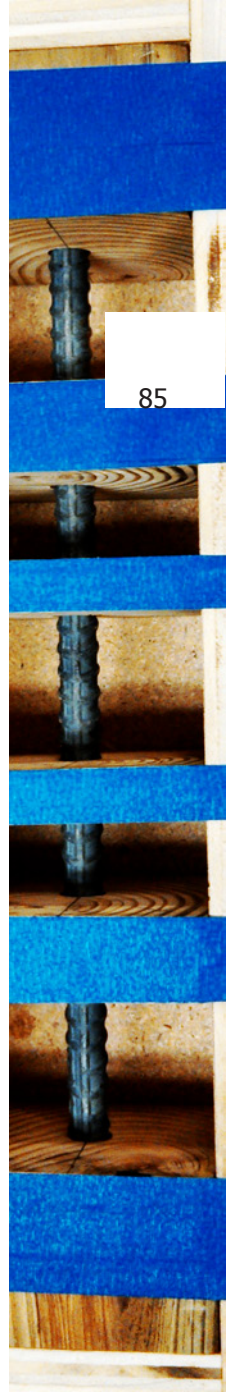
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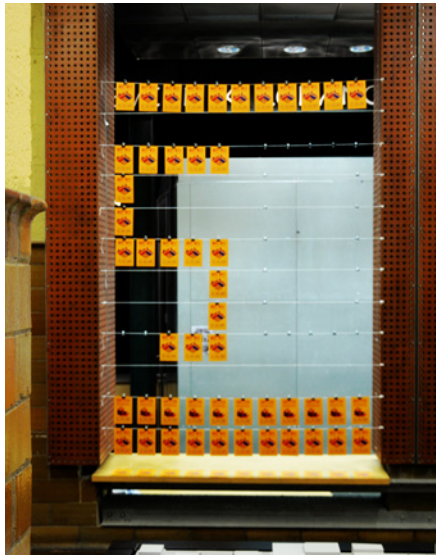
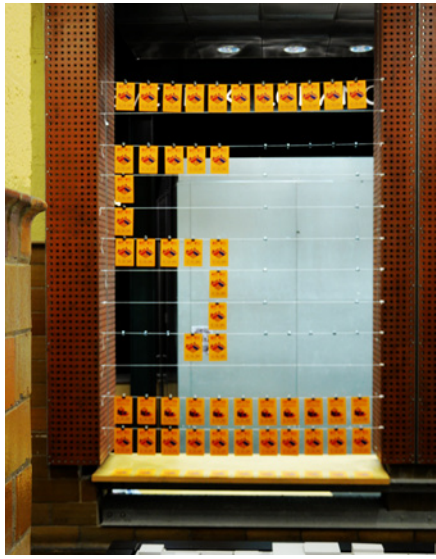


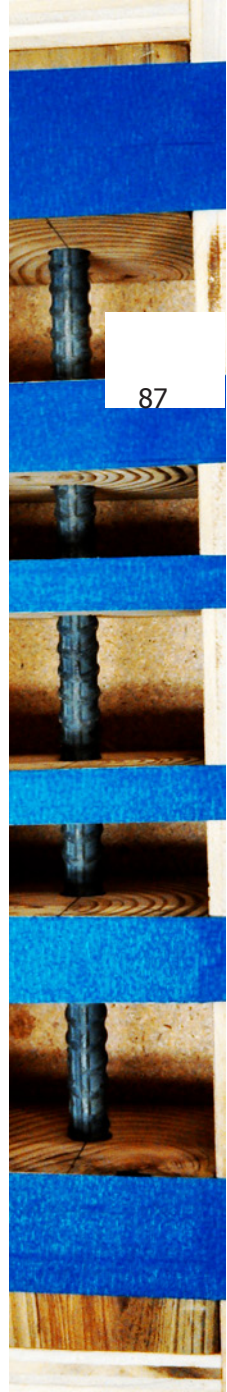


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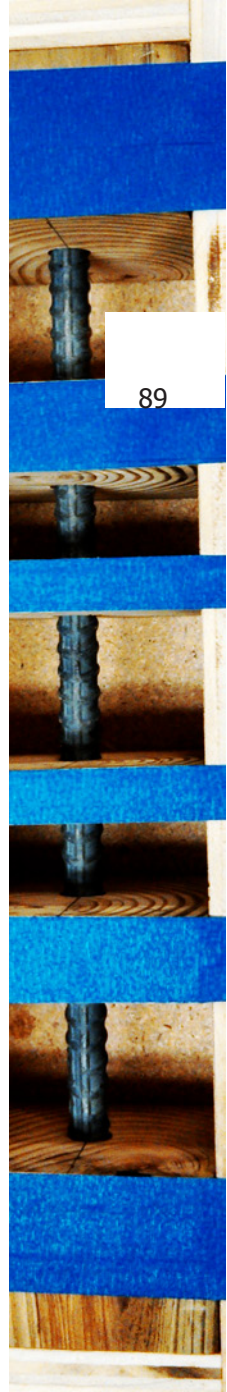




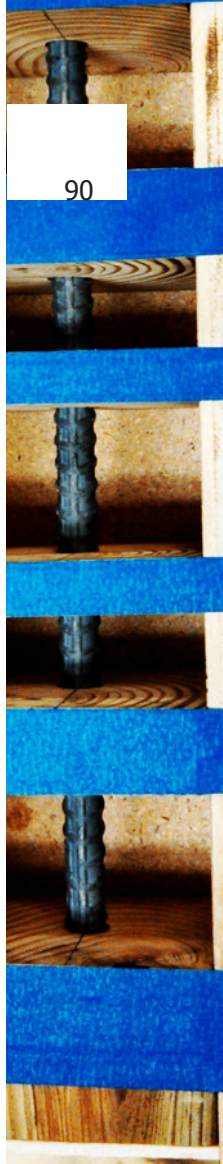


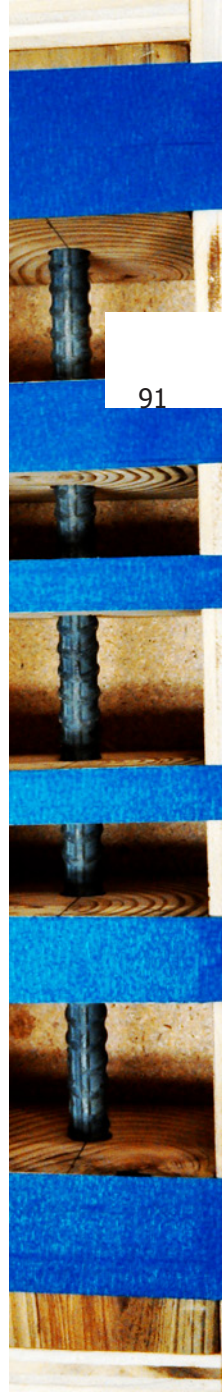
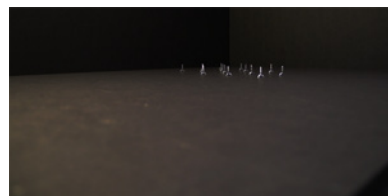
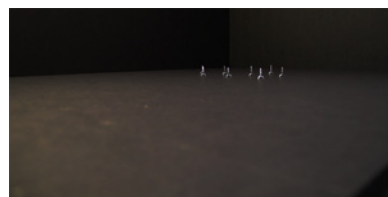
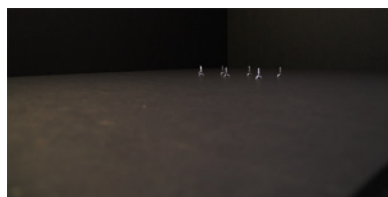
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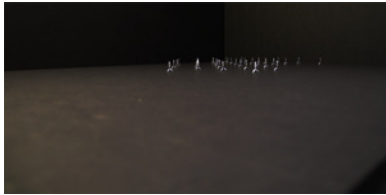
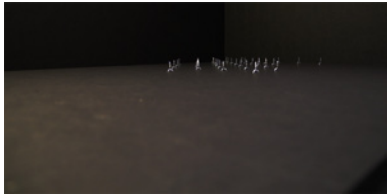
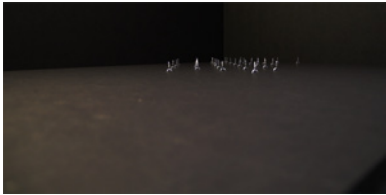
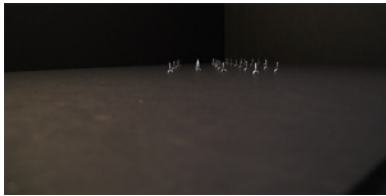
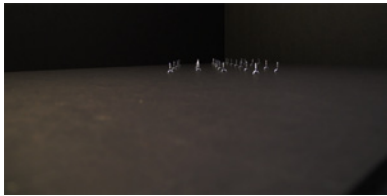
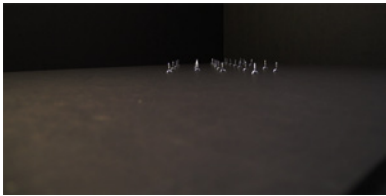
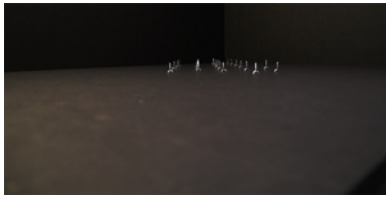
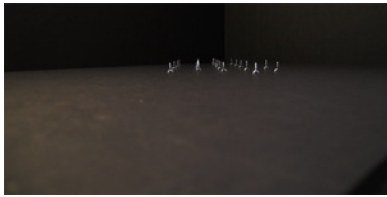
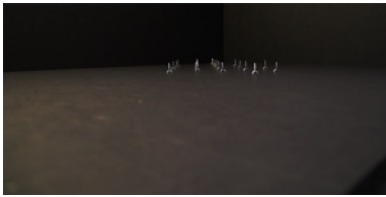
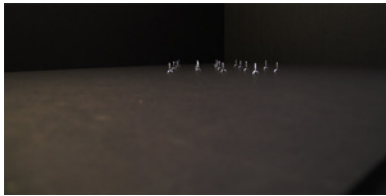
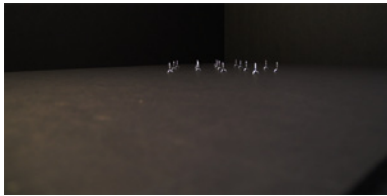
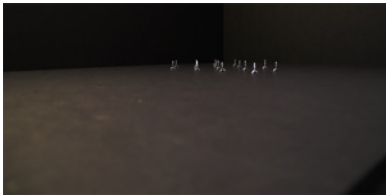


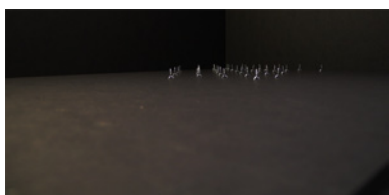
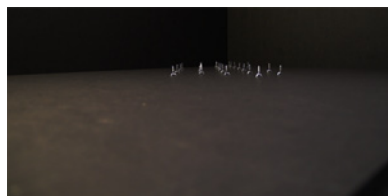
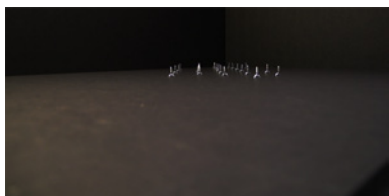
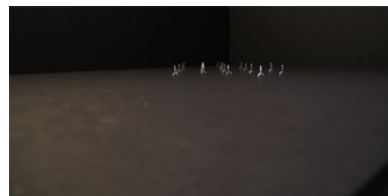
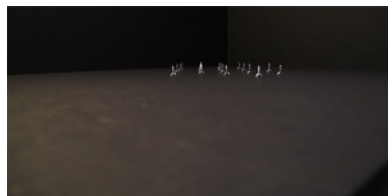
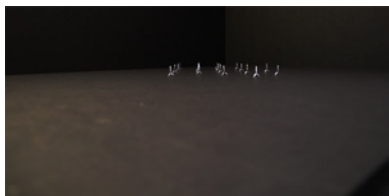
READ ALL ABOUT IT





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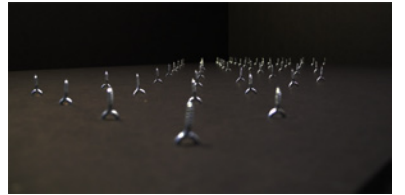
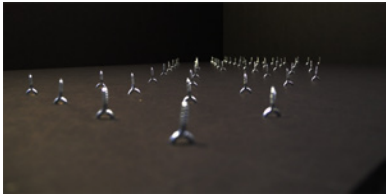
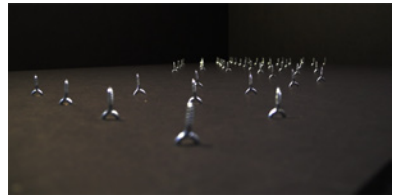
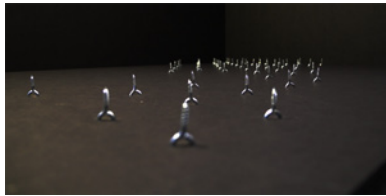
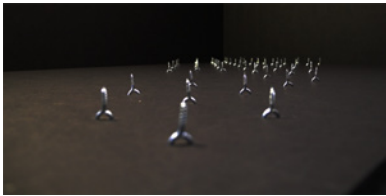
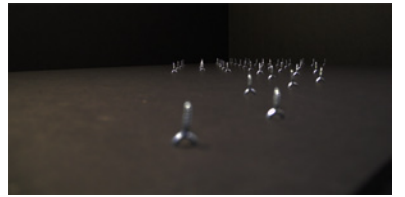
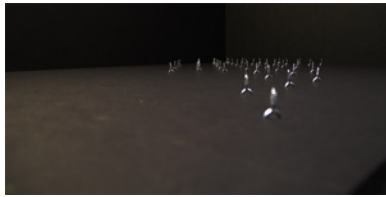
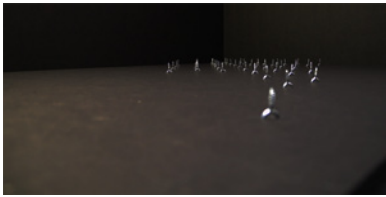
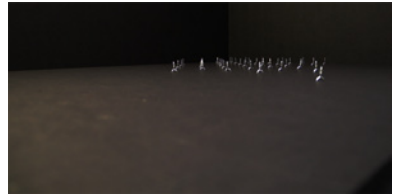
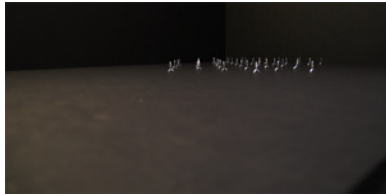
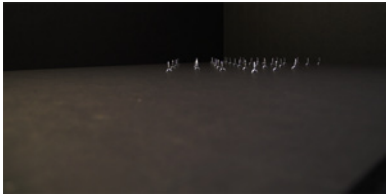


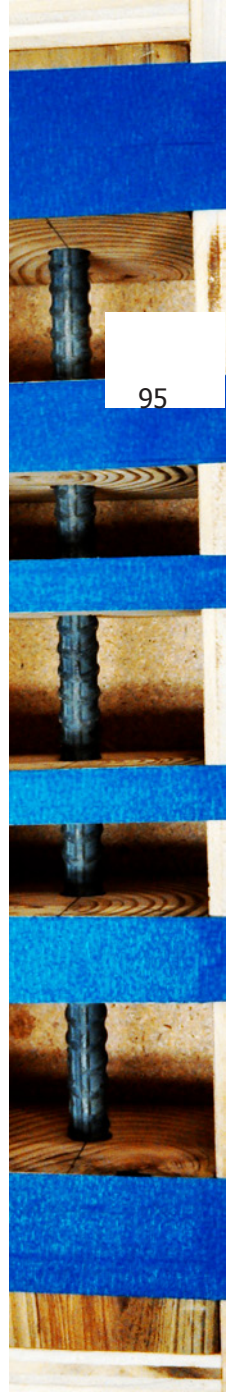
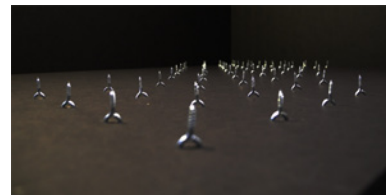
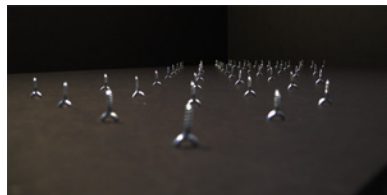
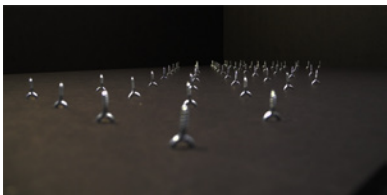
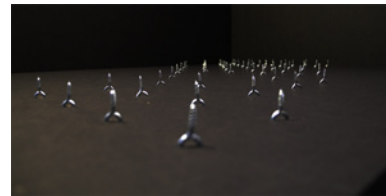
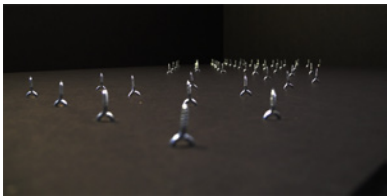
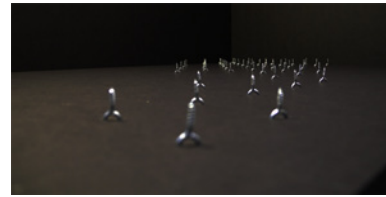
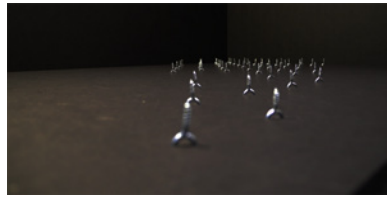
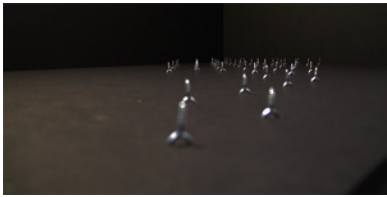
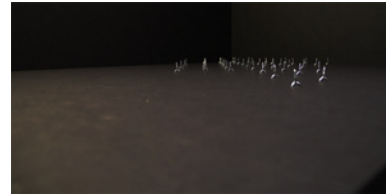
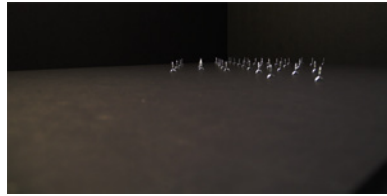
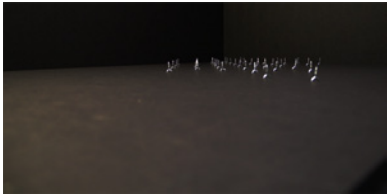


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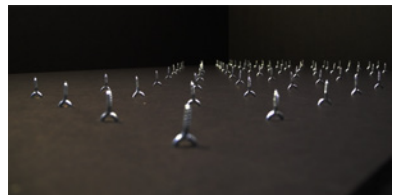
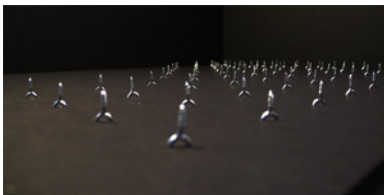
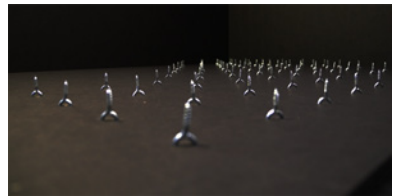
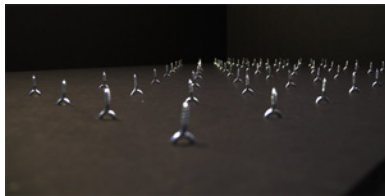
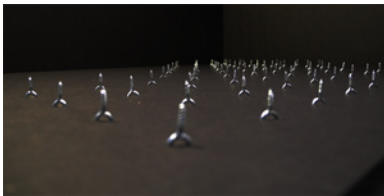
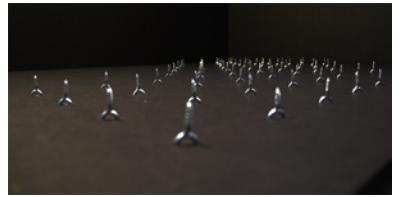
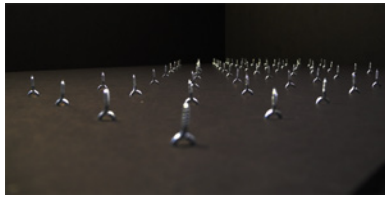
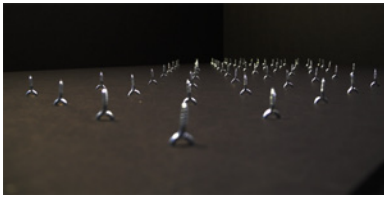
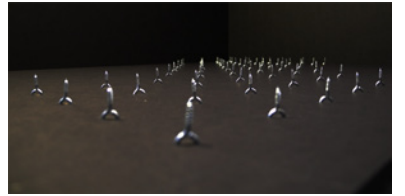
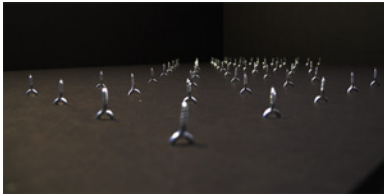
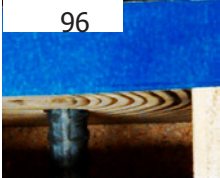
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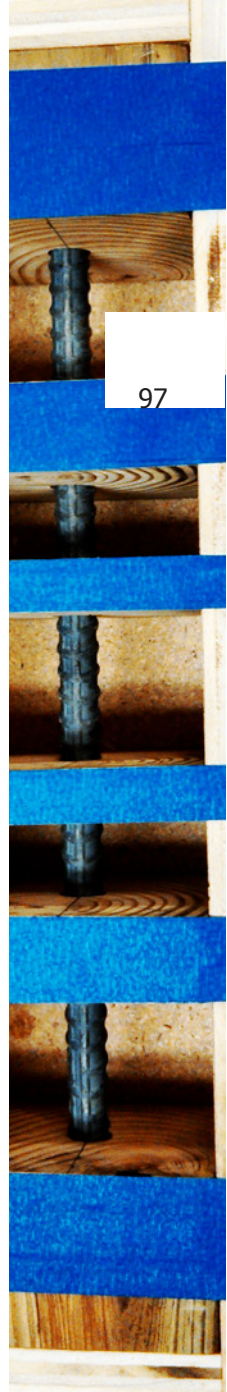
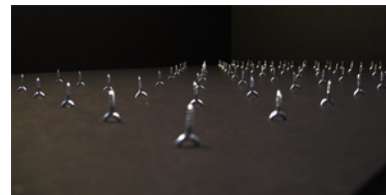
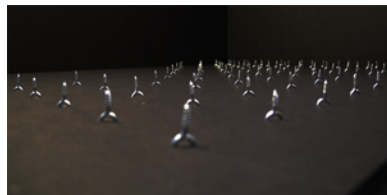
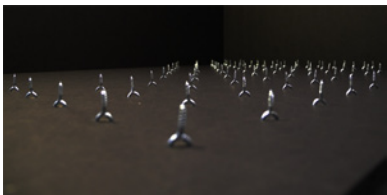
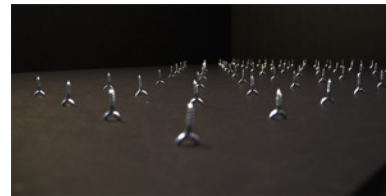
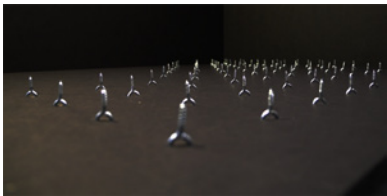
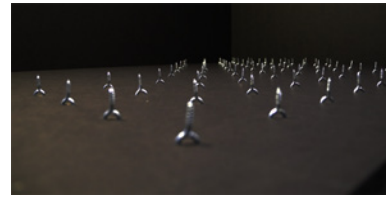
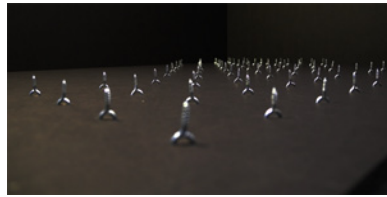
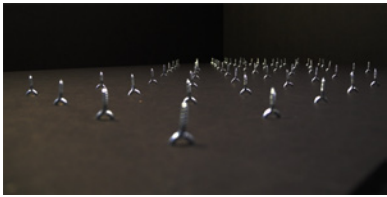
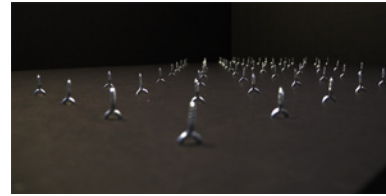
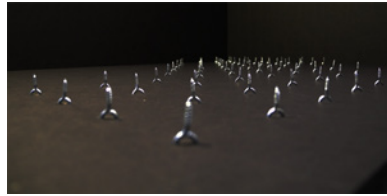
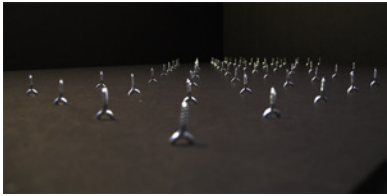




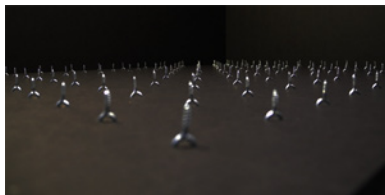
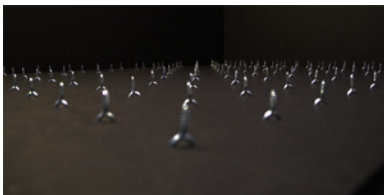
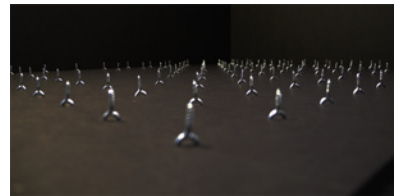
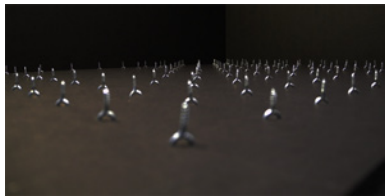
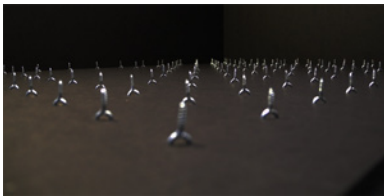
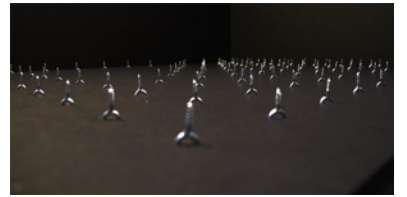
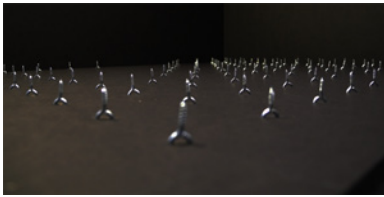
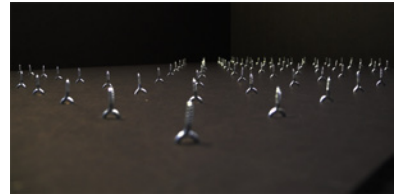
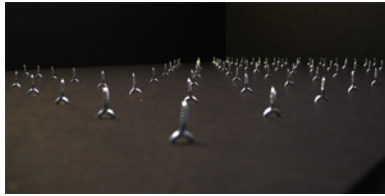
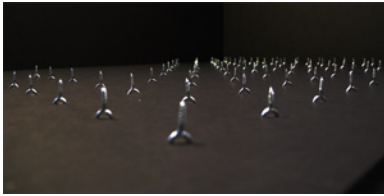


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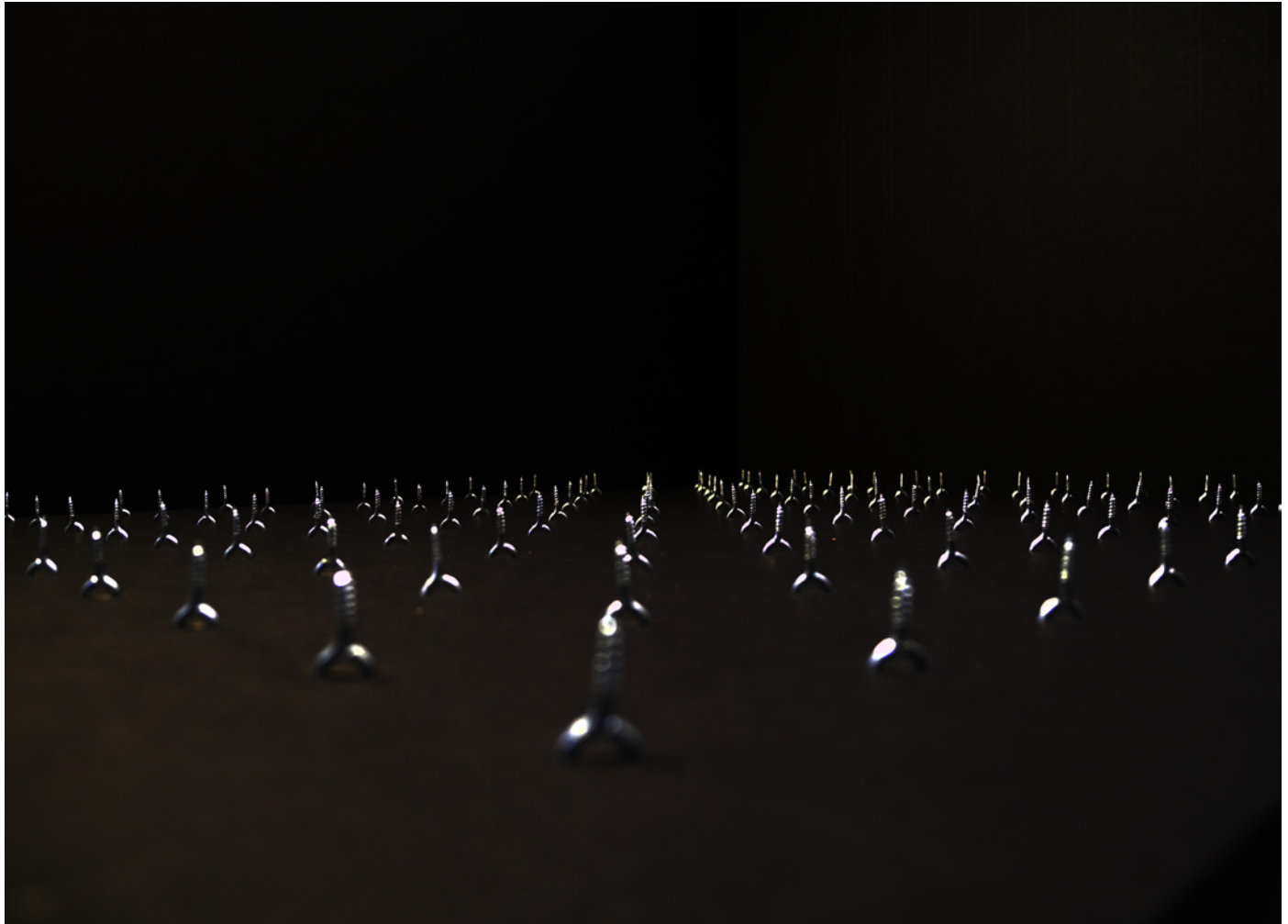


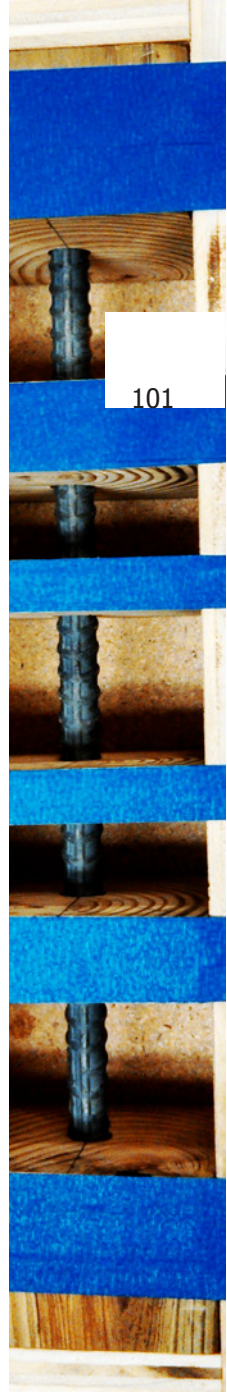
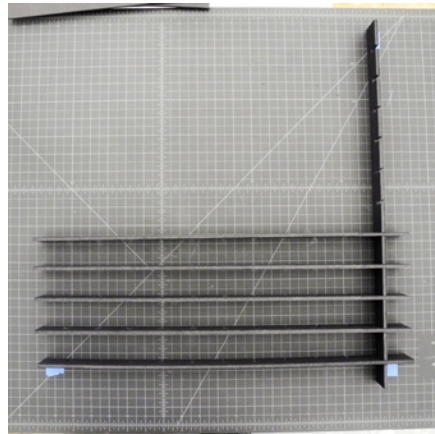
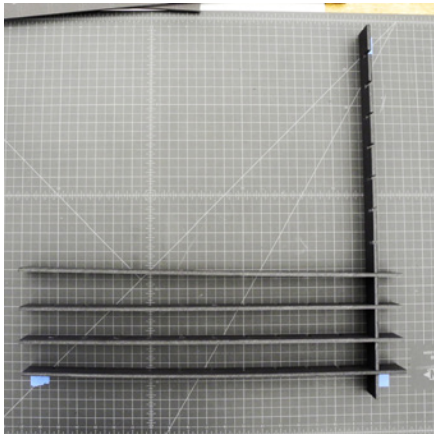
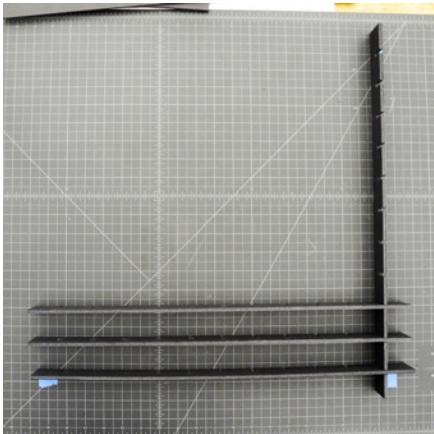
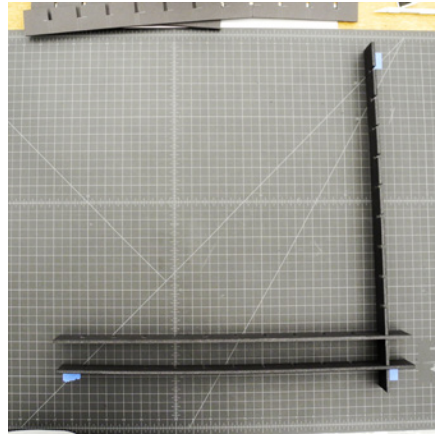
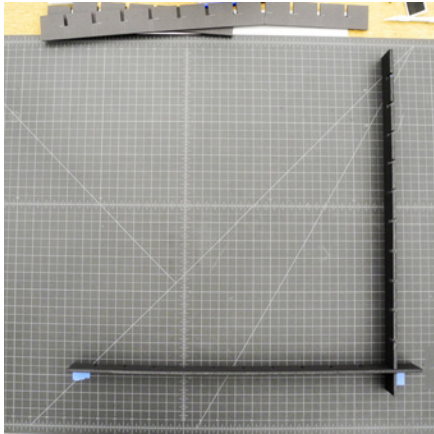
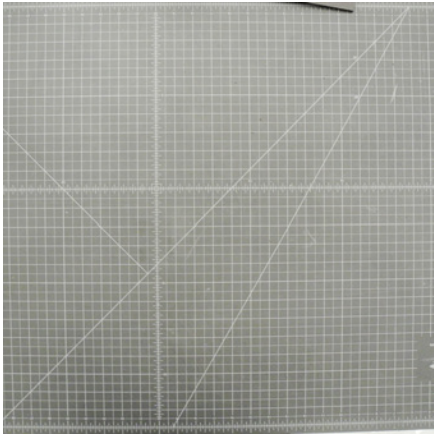


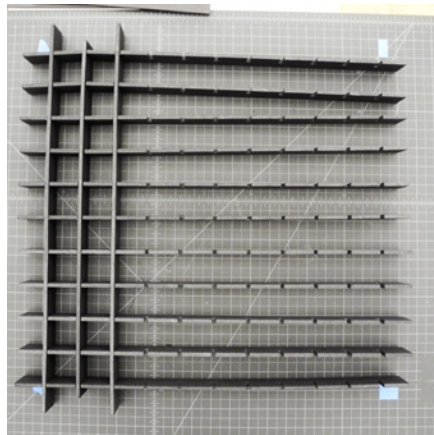
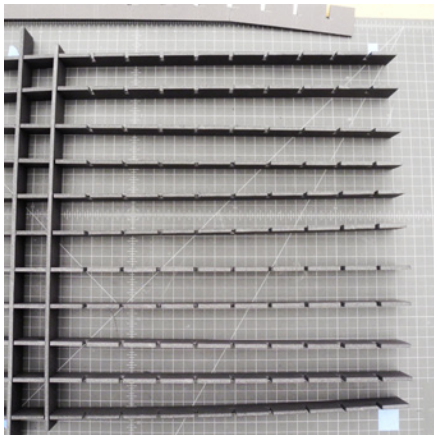
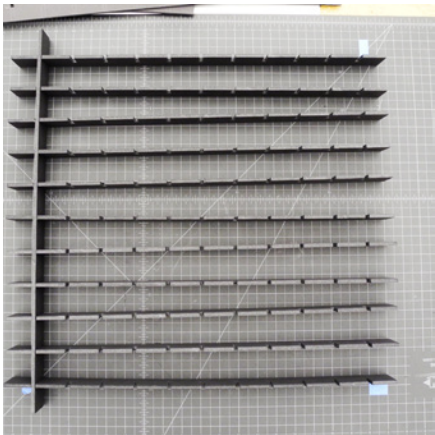
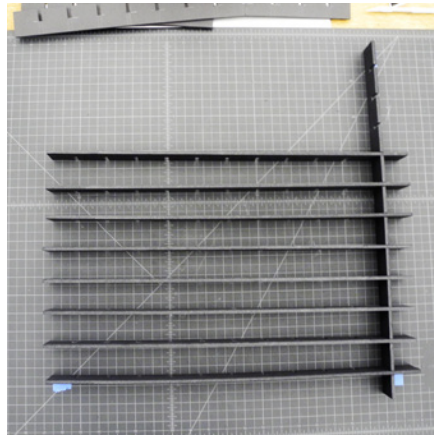
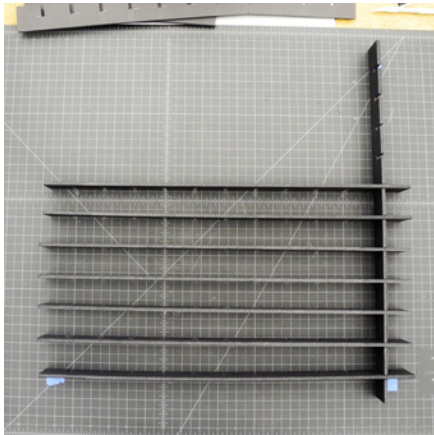
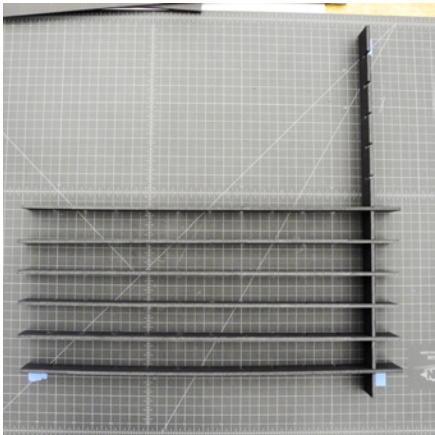
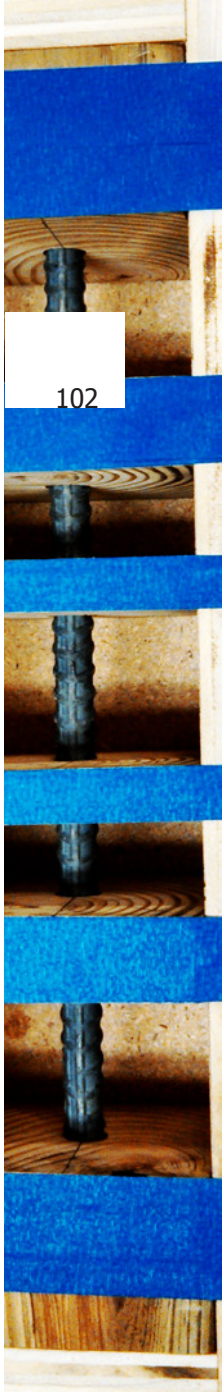
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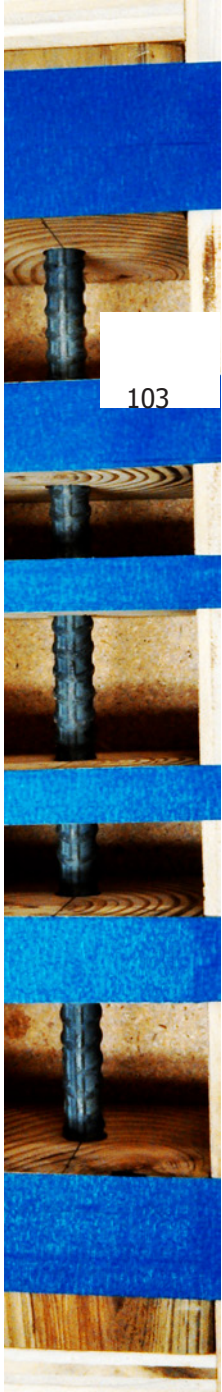
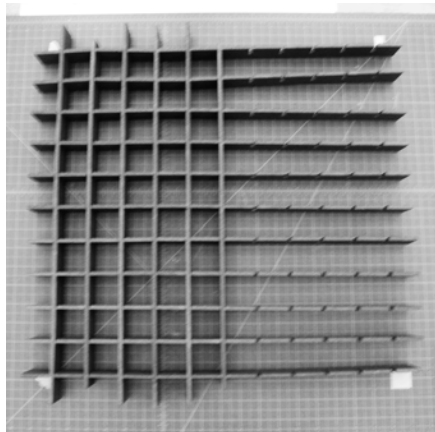
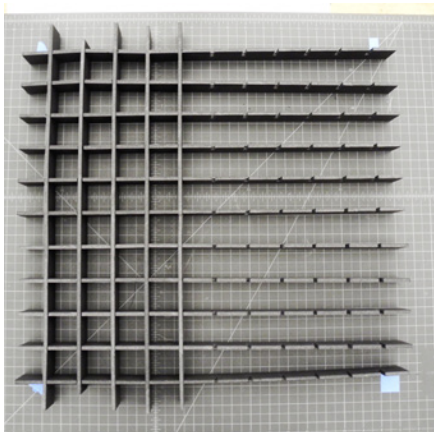
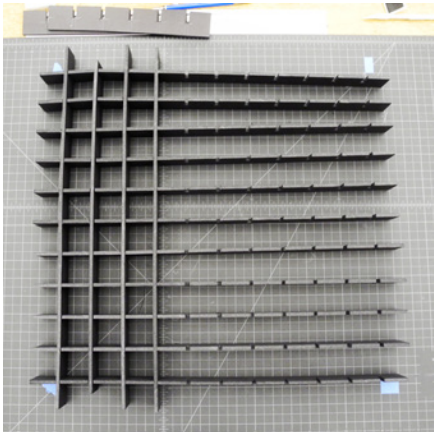
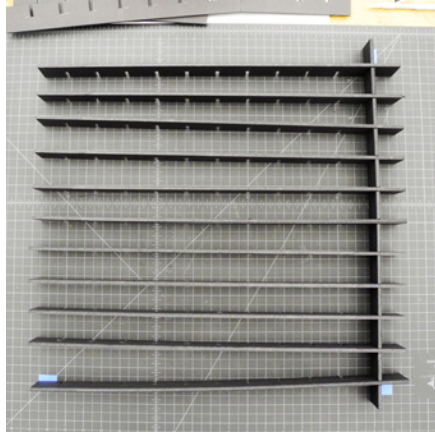
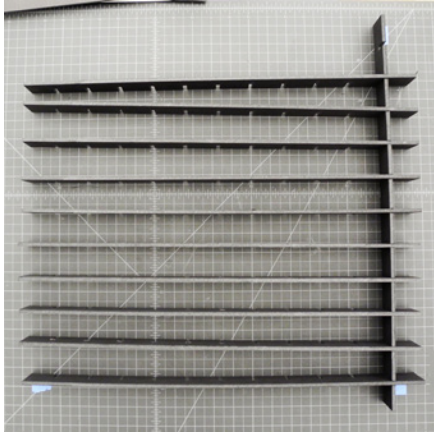
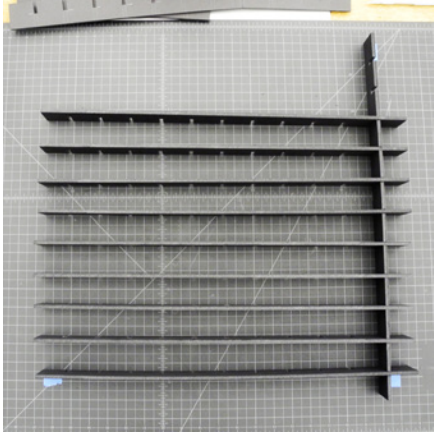


AND THEY COME MARCHING...

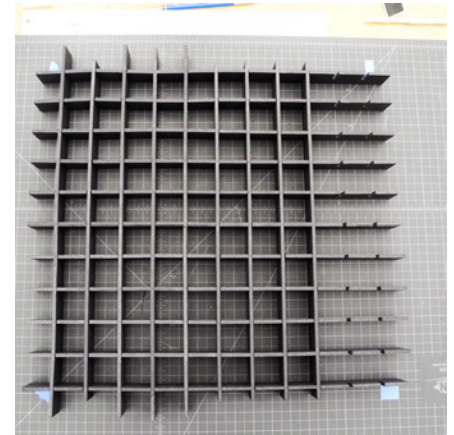
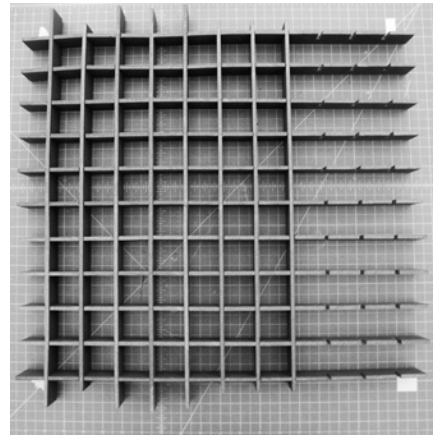
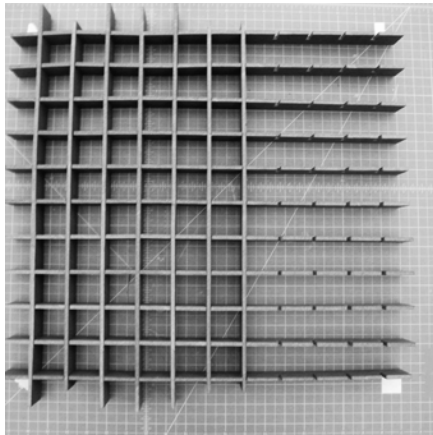




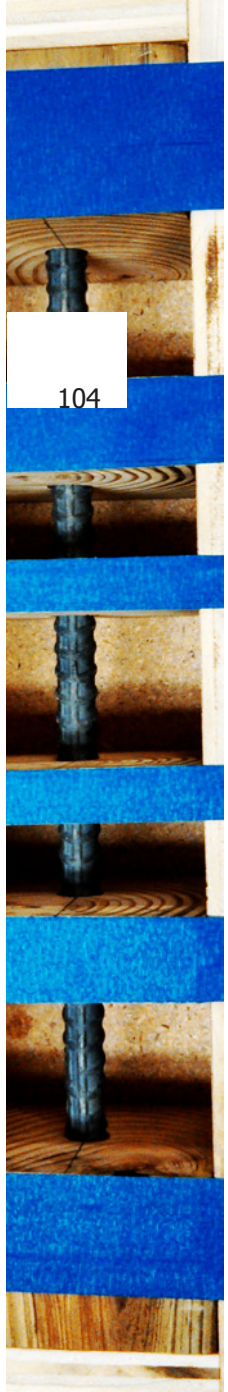
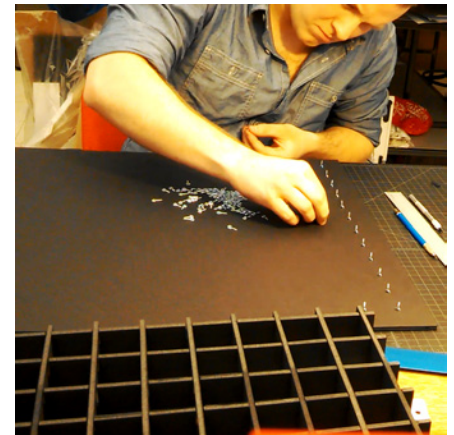
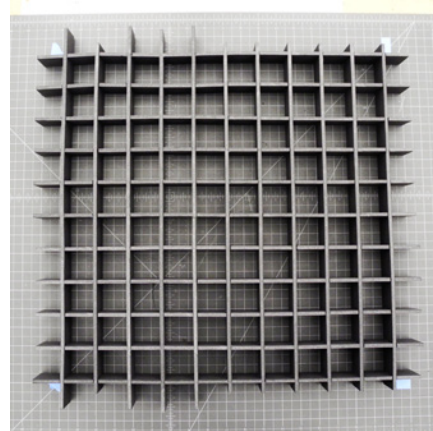
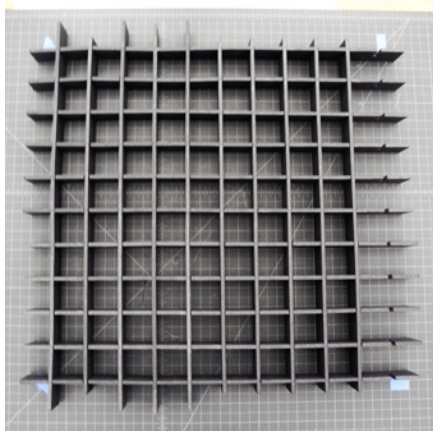




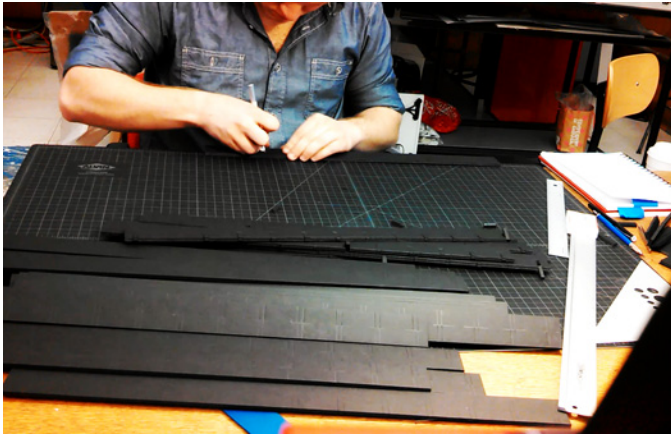
GRID CONCRETE FORM



Video Still of prepping the base with eyelets to suspend blocks from for installation #4



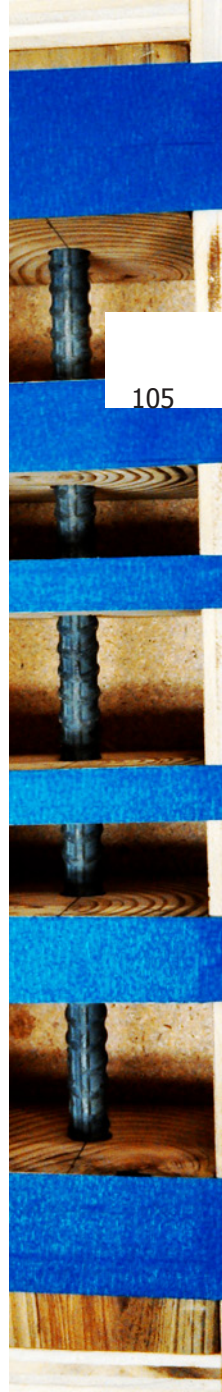
THE PERFECT POUR



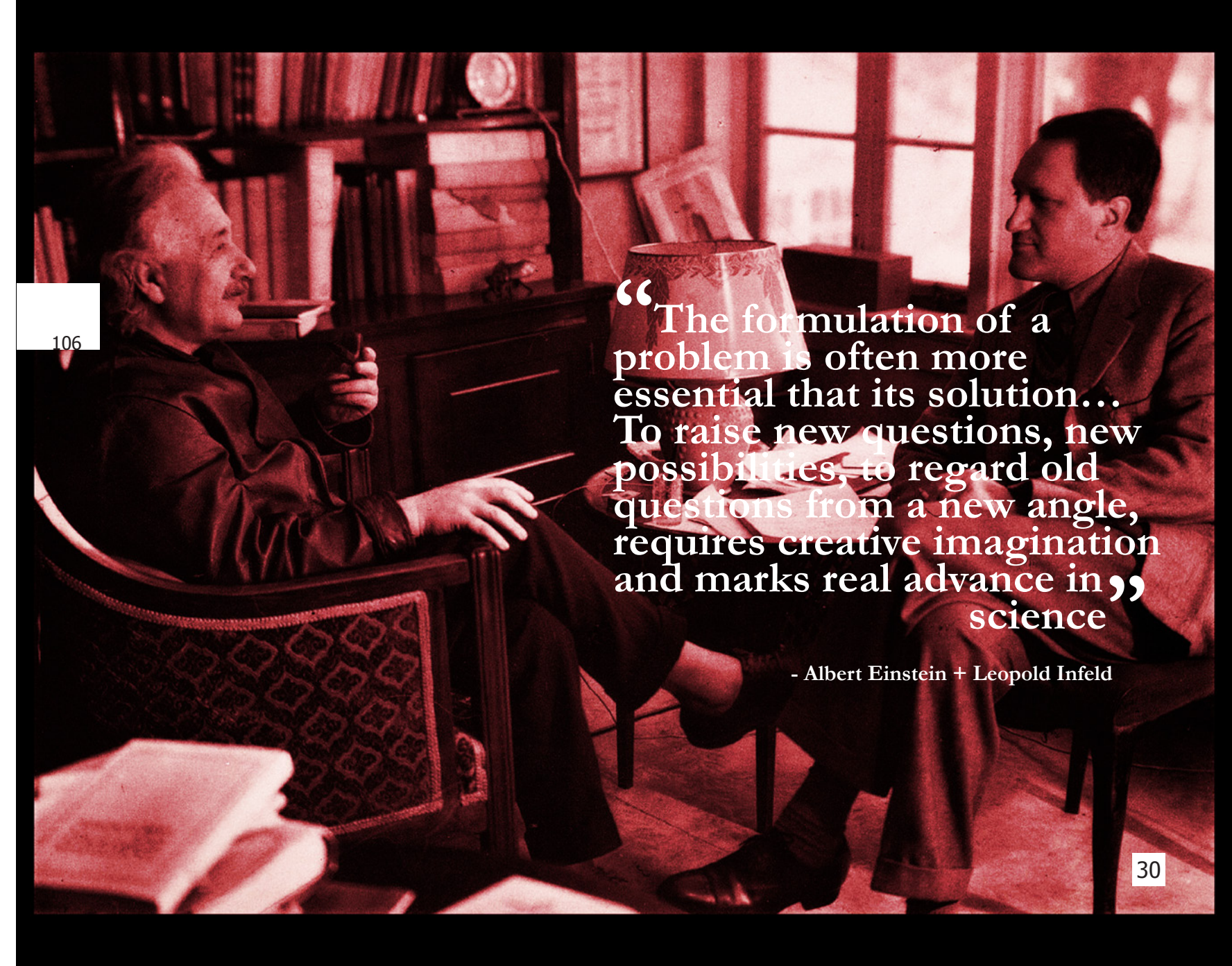
▲ Top: Video still of preparing strips to assemble the grid form from.
Bottom: Video still pouring concrete into molds. ▼



▲ Top: Video still of vibrating the mold to get the concrete into every tight corner.



105



“The formulation of a problem is often more essential than its solution... To raise new questions, new possibilities, to regard old questions from a new angle, requires creative imagination and marks real advance in science”

- Albert Einstein + Leopold Infeld

RESEARCH

The research for this journey was conducted in a non-traditional way and point within the timeline of this experience. As architects, we tend to have relatively good taste, or are at least can judge good taste. In a way, this is how I was thinking when the research portion would normally take place. One, I was still unsure of what I wanted to investigate and two, I felt as though I had legitimate designs or frustrations to flush out before being influenced by a lengthy research block. Due to this approach, I was able to explore all of my creative aspirations without ideas of someone else placed upon my thinking, allowing the work to be a true representation of who I am becoming as an architect. With the research not coming into play early on, the need for understanding became greater with every passing day. The lack of understanding would begin to hurt the creative process, so for a brief period, research was conducted in an attempt to understand the processes that I had participated in for the first three quarters of this journey. Much like the rest of this journey, the research was not forced upon it; rather it was introduced

in chunks through the many conversations about what had been accomplished thus far. This allowed for the research to back up what was being done, not becoming a crutch on which to rely on for every decision being made. All of the research conducted was also one hundred percent relevant to the thesis. It is important to understand that I am not squeezing or justifying this thesis into a fixed box of ideas, rather the research is helping to organize the work and compliment the explorations completed throughout this journey. To understand it in simple terms, the journey has been the transition from feeling to understanding. Taking this emotional attachment to the field of architecture and design, and being able to understand and explain my own personal creative process as well as others.

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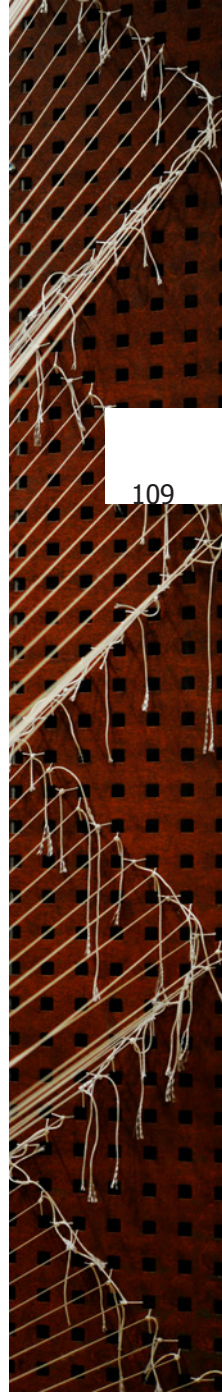
31

Sawyer's Eight Stages of the Creative Process, and How they Correspond to Other Process Models

	Wallas (1926)	Creative Problem Solving (Isaksen, Dorval, & Treffinger, 200)	IDEAL cycle (Bransford & Stein, 1984)	Robert Sternberg (2006)
Find the Problem		Framing Problems	Identify problems, define goals	Redefine problems
Acquire Knowledge	Preparation	Exploring data	Learn	Know the domain
Gather related information			Look	
Incubation	Incubation	Constructing Opportunities	Explore possible strategies	Take time off
Generate Ideas	Insight	Generating ideas		Generate ideas
Combine Ideas		Developing Solutions		Cross-fertilize ideas
Select the best ideas	Verification			Judging Ideas
Externalize ideas	Elaboration	Building acceptance	Act and anticipate outcomes	sell the idea, persevere

Me

Possibility thinking (Burnard, Craft, & Grainger, 2006)	UK QCA (QCA, 2005)	Synectics (Gordon, 1961)	Mumford's group (Scott et al. 2004)	IDEO (Kelley, 2001)
Posing questions	Questioning and challenging		Problem finding	
		Groundwork	Information gathering	
Immersion	Envisaging what might be	Immersion		Observation
Play	Keeping options open		Concept Search	
Being Imaginative	Exploring Ideas	Divergent exploration	Idea generation	Brainstorming
	Making connections and exploring relationships		Conceptual combination	
	Reflecting Critically on ideas	Selection	Idea evaluation	
Self-determination		articulate solution, developmen transformation, implementation	Implementation planning and action monitoring	Rapid prototyping, refining, implementaion



THE CREATIVE PROCESSES

There are probably endless ways that the creative process can be described to help understand creativity and how individuals act upon their creative impulses. Shown in the chart on the previous page, there are as few as three steps as defined by IDEO and as many as seven represented by Robert Sternberg and Mumford's group. Even with three and seven as the extremes, the process is highly malleable and is no way, linear. Each step can happen simultaneously and can happen more than once throughout the duration of a single project. Often times, the insight for one project comes while working on a different project. These occurrences are the result of associating one project's issues, solutions, ideas, etc. with the others. This may explain the insight that many creatives have during lectures and conversations with others like them, placing an incredible amount of value on collaboration and studio culture within architecture school. Many professors will often admit that you will learn more from your classmates than from him or her.

My individual process seems to align almost directly with the five step process listed

as Possibility Thinking introduced by Burnard, Craft, and Grainger. The fact of not having a concrete topic at the beginning of this journey, but armed with a list of questions starts to explain my relationship with the creative process. Each one of their steps begins to shine a light onto specific points within this journey. Some are more and some are less clear.

The five steps, posing questions; immersion, play, being imaginative, and self-determination provide a very structured and easily understandable outline for the process as a whole. While this specific process does align very closely to mine, there are steps that this one does not include that I would consider part of my process in addition to the five proposed by Possibility Thinking. For instance some form of incubation from previous projects and ideas, that I do not think 'play' covers completely. I have outlined how I believe the five steps begin to organize this journey into a coherent whole, but also realizing that this is only scratching the surface, as these creative processes are much deeper and more complex than five simple steps.

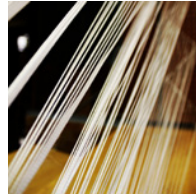
Why do I want to do this?

Posing Questions

Why makes architecture sing to me?

Does there always have to be an answer?

Immersion



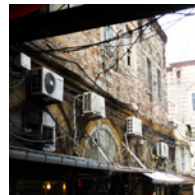
Play



Being Imaginative



Self - Determination





THE CREATIVE THEORISTS

There are two general theories that begin to explain the creative process as a whole and how a creative individual reacts to a question or problem. Those two theorists are the Idealist and the Action.⁵ Simply stated, ■ the Idealist believes that once you have the creative idea the creative process has ended and whether that idea is brought to fruition or not has no bearing on the result. On the other hand, the Action Theorists believe that the initial thought, what the Idealist believes is the solution, is simply the first stepping stone in the larger creative process. Action theorists claim that execution of the work is paramount to understanding creative ideas at play. As mentioned in *Made Objects and Elements*, working with materials through making and process provide valuable insight on the project that would have been lost if there was physical interaction with materials.

Reflecting on this journey and particularly the second half, I transitioned from an Action Theorists to Idealist in a dramatic switch from thinking – making – doing, to just simply thinking. The installations became the only outlet for the action theorists within this

time period. One particular project highlighted in *Elements under Free Association* was the idea for an abandoned mechanic's shop to be rehabbed into a bike and coffee shop. The two functions, while contradictory by one requiring a static involvement and the other an active involvement, are both relevant when discussing its location in midtown. There is a growing bike culture and a large student and creative population to support more coffee shops, but the idea itself was for a lack of a better word, boring. There was no creative thought required to know that bikes and coffee go together in a university setting. As I reverted to an idealist nature, I also began to overlook underlying themes in this project. There was an idea of the population reverting back to a more analog transportation system, and using a mechanic's shop to perpetuate that rise in bicycle transportation. Essentially, challenging car culture through a by-product of that very same culture.

This theme was not apparent to me until discussions about the motivations and influences behind it. While I did transitioned, quite quickly I might add, into an idealist for a

short time, it was able to have very negative effect on the advancement of this journey beyond a theoretical and personal state. One very important lesson to take away from this, never stop playing or doing whatever it is that challenges and expresses the true nature of your own creative impulses, because if you do, the practical side will consume the imaginative spirit of an action theorist.

Left: The original photograph of the building
Right: The "hermit shell" approach of taking an existing building and shoving some new function into it. The approach was very literal and had little creative thought.



PROBLEM FINDING

Another portion of this research piece was looking at the idea of problem solving and the concept of problem finding. Much of architecture is considered problem solving, but what we all fail to realize, is the infrequency of an actual problems being available from the beginning. Problem solving can only be employed during well-defined problems. The ends and goals are already laid out and clear from the very beginning.⁶ Well-
■ defined problems are problems which carry no ambiguity. Well-defined problems only require convergent thinking.⁷ Convergent thinking
■ does not require much creative energy since a well-defined problem already has an answer. So for these types of problems, convergent thinking and typical problem solving will do just fine.

However, architects are rarely presented with well-defined problems, but more often are presented with ill-defined problems. Ill-defined problems, according to Rowe, are where the ends and means are unknown at the beginning of the problem solving exercise.⁸ ■
These types of problems require divergent thinking, and can be described as taking the

shape of a balloon. The first step is divergent thinking to generate ideas and the second step is convergent thinking to narrow down ideas into one solution.

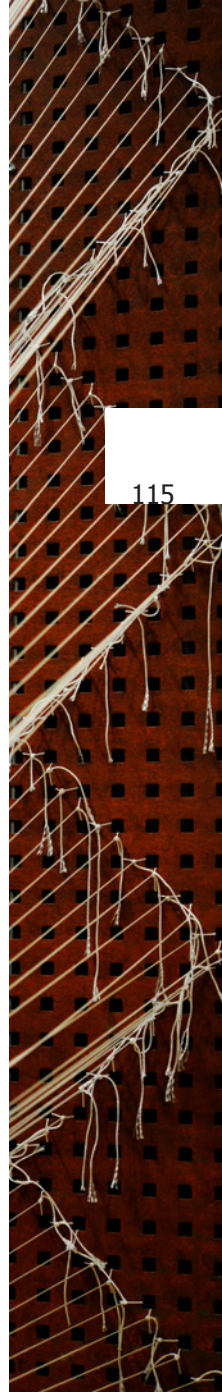
Rowe presents an additional type of
■ problem he calls, the wicked problem.⁹ These problems exist when there is no explicit termination of the problem-solving activity. Along with ill-defined, wicked problems require a different approach to finding a solution. One way of looking at it is, instead of problem solving, think of it as problem finding. Part of the creative proves becomes dedicated to finding the problem, so there can be a solution proposed. Without a problem, the correct answer will be never come to fruition.

A study was conducted on this idea of problem finding and was done in a painting studio at the School of the Art Institute in Chicago. The lead researcher was Miahly Csikszentmihalyi and his question was: "How do creative works come into being?" The experiment included 31 students in an experimental painting studio. The studio was set up with two tables, one empty, and the filled with 27 objects to use for a still life

sketch. The students were directed to pick up as many or few objects as they wish, sketch a composition and submit their drawing. There was no time limit for selecting objects or the actual sketching. After the experiment concluded, Csikszentmihalyi discovered two types of artists. The first type were the ones that spent only a couple of minutes picking and arranging the composition and the rest of their time sketching. The second type spent upwards of 10 minutes searching for an arrangement and often after a half hour, would rearrange, add, or subtract items to the arrangement. Once their composition was ready, they would only sketch for five or ten minutes before submitting their drawing.

Once this was complete, an exhibition was held to determine the most creative 'answers' to the prompt. The sketches were anonymous and the jury was made up of 5 professors from SAIC. In the end, the general consensus was that the sketches produced by the second type of artist, the ones who spent the majority of the time "finding" the problem, were considered more creative. Csikszentmihalyi followed up with the artists

from this studio five years after they had graduated. The only ones still practicing art, was the second type of artist, who used the ■ problem-finding style to create their sketches.⁹



GESTALT PRINCIPLES

The final research component of this thesis was the understanding and employment of the Gestalt theory. Gestalt means when parts identified individually have different characteristics to the whole. The typical application of the gestalt theory is in visual perception of which that was one use in this journey. The other use was in understanding the parts of a whole and how they are identified. The basic understanding of the gestalt blatantly describes this thesis in simple terms. Being made up of many fragments that on their own carry specific meaning but when combined, lend themselves a much larger picture.

Installation #4 was one of the physical representations of the gestalt theory. The many fragments that make up the swarms of blocks shows the individual relationship in the larger context.

Each individual piece has its own place but
assembles a much large picture. ►





Free Association

Imagination

Art

Process

Poetry

Facebook

Criticism

Making

Body in space

Grid

Element

BRICOLAGE + BRICOLEUR

Bricolage is a theme that has emerged that could ideally explain much of what has happened this year. There are two directions that bricolage can be described or done. One direction is that of studio art through a sort of commentary on past art movements. The other direction is of everyday model activism.¹⁰ The idea of shantytown architecture is revealed as a space of resistance. Shantytowns and other forms of public assemblage become the externalized experience of bricolage, while the studio practice of making in a relatively closed and controlled environment is the internalized experience. I began to explore the idea of bricolage and the bricoleur as to understand the sense of being in between movements in architecture. The idea of the bricoleur was originally exposed in the mid-1970s as someone who was neither modern nor post-modern. Irene Scalbert in his "Architect as the Bricoleur" would describe it as "In our time, buoyed by the rise of ecology, the architect is more Robinson Crusoe than scholar, salvaging what he can from the shipwreck of culture and make the most of nature. He works as if for himself and with the means that are at hand." ■

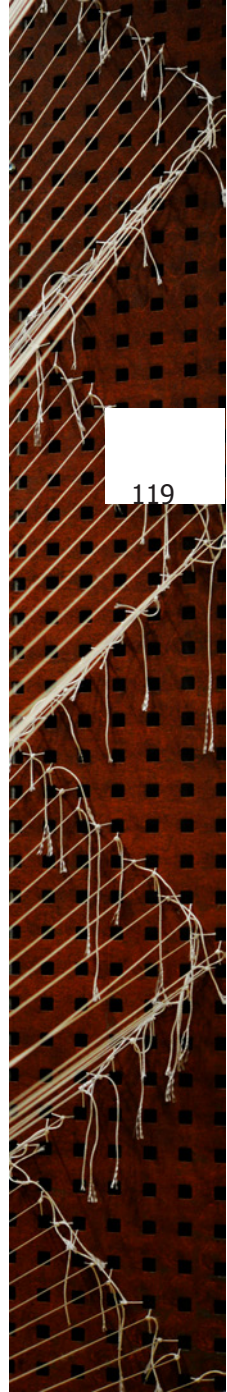
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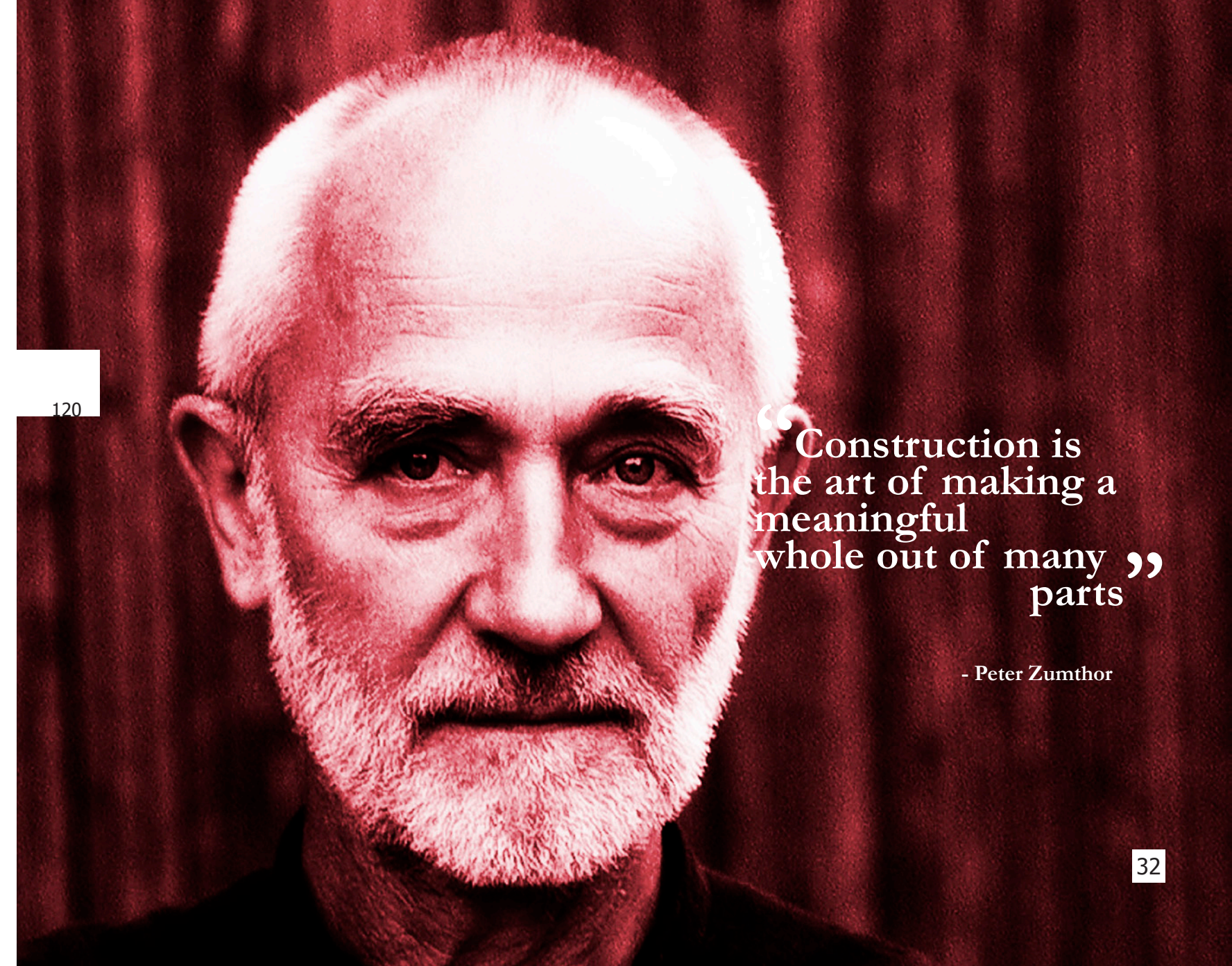
Bruce Nauman in his studio series where he decided that anything that happens in his studio whether it be sitting, sleeping or painting, is considered art. ▶

Interior assemblage of a favela ▼



33





“Construction is
the art of making a
meaningful
whole out of many”
parts

- Peter Zumthor

THESIS PAPER

This has been an introspective investigation into the creative process as well as one of self-discovery. This was accomplished in various ways, mainly through reacting naturally to creative impulses and sparks of creative energy. As "Possibility Thinking" would describe it, through posing questions, immersion, playing, being imaginative and having a sense of self-determination.

The creative process begins and is dependent on the individual. It is imperative for the individual to know how their creative process is structured and the most efficient ways to access the creative ideas and thoughts residing within them. An architect who knows what he does and is confident in his ability to create original atmospheres is Peter Zumthor. With his designs based in the human experience the Swiss architect writes "there was a time I experienced architecture without thinking about it. Sometimes I can almost feel a particular door handle in my hand, a piece of metal shaped like the back of a spoon."¹² ■ With his architecture being tied so closely to the human experience he is highly sought

after. However, he does not accept every commission as he does not view his work as a commodity. He will not accept the commission if someone is specifically looking for a one-off 'Zumthor' building, rather he accepts the ones who come to him searching for an atmosphere they feel he can deliver.

His architecture is highly successful at delivering these atmospheres as he sticks to the basics. His material palettes are often quite simple, but assembled in a manner that makes them more valuable as an assembly, than on their own. Poetry is done in a very similar way. It is the assembly of simple, everyday words and phrases. The narrative that is created provides for the emotional response to its reader. Because of the commonness of the words, the poetry invites interpretation in as many ways, as there are people, which read the poem. While many of Zumthor's buildings seem to exude calmness and quality, they are allowed to be interpreted as the user wishes.

As architects and natural critics, architecture presents itself in a very different light than the laymen who use it on a daily





basis. When entering a new structure for the first time, we already have preconceived ideas of what to expect, the proper way to feel, and the physical make-up of the building. Some may say that architects cannot experience architecture properly because our perception of it has been tainted since beginning our formal education. This tainted perspective on architecture inhibits architects from discovering the richness in architecture that wasn't solely meant for architects to experience. So, to relieve ourselves from this tainted perspective, we must approach architecture in the built environment and each new project in a manner that allows these subtle nuances to be exposed to us as well. The best analogy I've developed thus far as a way to approach architecture is the way we may approach the arrival and acquaintance into a new city. Much like past cities, I would image the new has roads, buildings, people, infrastructure, all characteristics you would expect when going to a city. Just like entering a new building, you expect it not to fall down, to keep you sheltered from the elements, and

to be aesthetically pleasing, if not to you, at least to others. However, this is ALL you can expect. Once we begin to analyze and seek out specifics of what we know, we begin to taint our experience once again. We must allow for the city to speak to us. If we can accomplish this, we allow the raw experience of this specific place to sink deep within us. The experience that the laymen has, of which the city, or architecture, should be designed and built for. It is important to develop this understanding of experience over preconceived expectation, as this will be passed through to clients looking for their own unique experience.

The creative process in general is incredibly complex and rarely, if it ever, follows in a linear fashion. To develop and understand a creative process, the individual must document, reflect and discuss intentions and moves made. These moves or intentions do not have to follow a specific path because neither does the creative process. However, the documentation will lend perspective back upon the things created, allowing for the individual to transition from an emotional

response, to one of understanding and knowledge for what he's created and how he has done that. Documentation also has the possibility to become something on its own. The actual processes undertaken to create something have their own intrinsic value. As is with conceptual art, the art is not necessarily done, or will ever be done in the traditional sense. The value of the art is within the act of creation itself.


As mentioned, the creative process begins with the individual. So for this thesis or as I would prefer to call it, a journey, I would unknowingly focus and develop and understand my own creative process along with gaining knowledge to where this could and will be applicable. This personal approach to this journey is roughly represented by three themes. The first of these themes is making, as in the making of something physical. Making was a way of expressing my thoughts and pent-up creative desires to myself and in the future, to a larger audience. If I am honest, there were very few if any plans when beginning to make these objects. There was

simply an idea that was acted on very quickly, in the hope to kick start this entire journey into one that would produce some sort of revelation.

To take a page from Zumthor's experience. He began as a craftsman, a cabinet maker to be exact. From a very early point in his career, he understood assembly and the ability to put things together and have them stay together. A sense of quality and honesty was displayed, which comes across in his architecture today. His buildings, from a surface level appear simple and they are exactly that. I am sure there is a system of complex understanding of building details and material properties but this does not complicate the actual structure, rather it adds to the quality the overall experience of Zumthor's architecture. It is the simple assemblage of a small number of materials into an incredible building.

In addition to satisfying a need to make, making became a way to experience material in its most pure state. The making of physical objects allows you to experience them for





what they are. There is a certain commitment required in making a physical object. The mind and hands sync during the making process, focused on the making of the object.

The physical making of something is the reaction of a certain way of thinking. Within in the creative process, there are two differing views on how creative ideas come about "Idealists theorists argue that once you have the creative idea, your creative process is done. It doesn't matter whether or not you ever execute your idea, or whether anyone else sees it; your creative work is done once your idea is fully formed in your head." This is the prevailing belief in western culture.¹ The second is the action theorists. "In contrast, [action theorists] argue that the execution of the creative work is essential to the creative process. Action theorists point out that in real life, creative ideas often happen while you're working with your materials." As a maker, the action theorists idea applies as I learn and take with me while working with materials. The second theme of the three themes is criticism of the creative process. Through

criticism, I am able to reflect as on observer of the built environment and the approach of my peers.

On Concept

Originally I believed the standard way of education was the action theorist. As we work our designs we learn and adapt for the next iteration. However, through discussions, I've realized that the idea of the "concept" is the idealist platform. So, even as the design changes, the concept remains the same. This way of approaching design problems limits the freedom that is built into the creative process. Anything that does not directly relate back to the concept becomes 'arbitrary,' a word that would create fear within myself and others. To challenge this word, if the arbitrary idea is born from the same process as non-arbitrary ideas, how does it become arbitrary in nature? This idea carries just as much weight as the appropriate or 'right' idea. Now, I am not saying all of these ideas are great design decisions, just that they should not be written off before they are explored. On the same lines

as exploring arbitrary ideas, we can eliminate the concept as this overarching decision making machine because it eliminates many ideas that could have just as much relevance as any proposed earlier, or in the future. The design could develop naturally and fluidly and if the concept doesn't fit, allow it to morph as well. Or, we could drop the concept as this ideal thing, and use it as a point of reference for when the design stalls out. Much like I did with making physical objects when my process become mediocre.

On Thesis


One of my biggest fears with this journey was to define an endpoint too early and constrain my thinking and research to meet at that defined point. The problem with defining an endpoint in a process like an architectural thesis, is that if the endpoint is defined too early, the journey to that point is a path full of justifying the end result. My idea of a thesis is to explore a truly inspiring idea or topic and let my mind wander naturally. There are so many points of departure that a prescribed

path forbids you to look at, let alone explore. An eerily similar perspective as the idealist concept previously mentioned.

On Precedents

Another critique I had on the design process is the over reliance on precedent studies. I believe precedent studies are important because they inform the architecture of what has been done, how similar problems have been solved as well introducing new and innovative materials and programs. The issue I have is the idea that a precedent study is almost always copied in some capacity. As architects, we have inherently good taste, its one reason why it is so common to have the urge to improve every project we've worked on. This good taste generally means that we have our own ideas, good ideas that mean something to the creative process. So, my biggest issue with precedents is that they are generally introduced at the very beginning stages, once again, tainting the creative process. It hurts the natural ability for the architect to express creative and original ideas. The initial stages





should nurture those beginning ideas. When they make it to paper, introduce precedent research as a way to further the ideas of the individual, not those of the starchitect.

The final criticism I have on the entire creative process is the forcing of experience on the users. I hear too often, "this space will make the user feel happy" and "in this space people will sit and talk." The majority of architecture should not tell the user what or how to feel; rather it should invite the user to experience the space as they wish to experience it. Therefore, as the moods of the users differ, the experiences in the space shall vary just as much. This provides for a richer, more genuine experience of space.

The third and final theme I have looked into is the physical body's presence in a space. The experience of architecture is one that is hard to define or even design for. It seems as though sometimes the least designed spaces become the most popular. What is important is that humans do experience architecture on many different levels. Instead of users subscribing to a designed experience in every

piece of architecture they encounter on a daily basis, they should once again be able to interpret the space and have an individual experience. Therefore, the user begins to add an entirely new element into the architecture. One project that loses quality when not interacted with is the Williams Natatorium at Cranbrook in Bloomfield Hills, Michigan. Designed by Tod Williams and Billie Tsien Architects, the building features large oculi in the roof that when opened, expose the interior to the exterior and all its elements. The building also has large floor to ceiling panels that once again expose the interior to the exterior. The addition of these two elements allow for the swimmers to experience much more than the typical hot, humid air of a natatorium. As for the importance of the user, the water and air do not mix, unless the swimmer breaks the surface of the water. The swimmer is suspended between these two elements with their front or back exposed to the wind, cold, snow and rain. Without the user, the building is simply a box with holes.

The research component of this

journey can also be broken into roughly three pieces. The first piece is the overview and understanding of the various creative processes that have been developed over the years. A table developed by R. Keith Sawyer has compiled ten of these creative processes, even though there are probably endless ways it can be illustrated. Sawyer was the longest with 8 steps and IDEO's the shortest with 3 steps. Even with the different number of steps, they often fall into roughly four categories proposed by Peter Rowe. Rowe's categories are preparation, incubation, insight, and verification. Reviewing Sawyer's chart, it is easy to see that each author of a process has essentially used the same if not similar words to describe each step. It is important to note that though these steps are displayed in a rigid linear order, they tend to rarely happen in this strict manner. For instance, in my personal process, incubation is constantly happening, even between projects as I reflect and decide what could be done better next time. The mismatched order also can explain the case where an individual may connect the dots

during a lecture or conversation, or even while working on another project simultaneously. The unconscious mind is always active in developing ideas and the conversations about other projects can be the trigger for the conscious mind to tap into that unconscious incubation.

The second piece of research that lends an additional perspective on this journey is the understanding the difference between problem solving and problem finding. Much of architecture is considered problem solving, but what we all fail to realize, is the infrequency of an actual problems being available from the beginning. Problem solving can only be employed during well-defined problems. The ends and goals are already laid out and

- clear from the very beginning.⁸ Well-defined problems are problems which carry no ambiguity. Well-defined problems only require
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A study was conducted on this idea of problem finding and was done in a painting studio at the School of the Art Institute in Chicago. The lead researcher was Mihaly Csikszentmihalyi and his question was: "How do creative works come into being?" The experiment included 31 students in an experimental painting studio. The studio was set up with two tables, one empty, and the other filled with 27 objects to use for a still life sketch. The students were directed to pick up as many or few objects as they wish, sketch a composition and submit their drawing. There was no time limit for selecting objects or the actual sketching. After the experiment concluded, Csikszentmihalyi discovered two types of artists. The first type were the ones that spent only a couple of minutes picking and arranging the composition and the rest of their time sketching. The second type spent upwards of 10 minutes searching for an arrangement and often after a half hour, would rearrange, add, or subtract items to the arrangement. Once their composition was ready, they would only sketch for five or ten

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of the gestalt blatantly describes this thesis in simple terms. Being made up of many fragments that on their own carry specific meaning but when combined, lend themselves a much larger picture.

Reflecting on this entire process, there has been a natural sorting of all these investigations and explorations. They have begun to align between two major themes. The first of these themes is the act of assemblage. Between many of the elements and physical objects made, at the most basic level there is an assemblage. In poetry, it is the combining of simple words to create an emotional reaction. In Art, it is the combining of materials, paint, concrete, stone, canvas, etc. to provoke emotion through a physical object to be seen. In architecture and rooted in the human experience, Peter Zumthor can take simple materials, combine them to increase their intensity and presence, and produce architecture that allows people to experience powerful atmospheres through making the user an integral part to the experience. Again, throughout all of these studies, there





has been a combining of previous ideas with developing ones. If we zoom out and take a look at all of this on the macro scale, we begin to understand that this entire journey was one very complex assemblage that comes together through many small fragments. These small fragments have begun falling into their natural places to form an understanding of the creative process and the ideas that have fueled this creative endeavor.

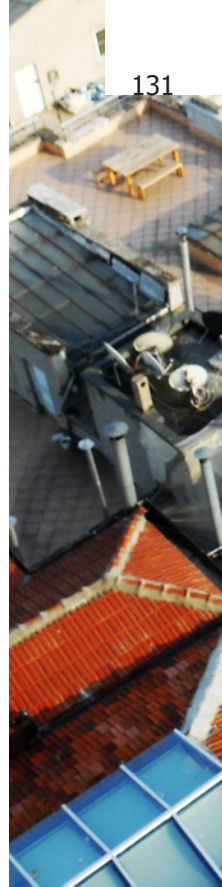
The second theme is that of criticism or commentary on not only architecture but society a whole. As a critical observer of the built environment, architecture will always be looked at in a critical manner. This is not necessarily to be harsh, rather it is an attempt to bring architecture into a more prominent role in our society. There is a lot to learn and grow from, if you are able to critique not only other's work, but more importantly, your own work. Critique and reflection on the work done can only lead to better outcomes in the future. With the emergence of these two themes that have sorted out this year, the most comprehensive theme, that of bricolage

and the bricoleur, have fundamentally tied everything together. The two central themes to bricolage are studio practice and everyday ■ activism.¹⁰ Through studio work, the bricoleur tends to work on more intrinsically motivated projects. Projects that he finds engaging and rewarding, a self-determinate way of looking at the creative process. Even while the studio work is slightly more secluded and not as accessible to the outside, it still plays an important role in the critique of art and what can be considered art. One examples of a studio bricoleur would be Bruce Nauman. At one point he developed a theory that whatever he happens to be doing in his studio, could be considered art. His activities would range from simply drinking coffee, to taking walks back and forth in the studio as well as actually creating his own form of art.

I believe the other theme is best represented through one of bricolage's most defining characteristics, is that of the tension ■ between constraints, and possibilities.¹⁰ There are important characteristics of the bricoleur that provide clarity and bring even

more understanding into this entire journey. An additional characteristic of the bricoleur is that he speaks not only with his materials, but through his materials.¹⁰ Making and doing ■ is not simply a hobby, but rather a way of communicating.

This journey has been an introspective investigation into the design process as well as one of self-discovery. This was accomplished in a variety of ways but mainly through reacting naturally to my own creative impulses. The creative process is highly depended on the individual to get started and to guide the process along the way. As someone who has taken this time to understand my own design process, understand the true motivations behind what I do, and explore those honestly and thoughtfully, I believe I have accomplished much more than following a predetermined path. I have posed questions, immersed myself in the process, have played, have been and still am imaginative and most importantly have been self-determinate to provide the motivation to challenge myself.

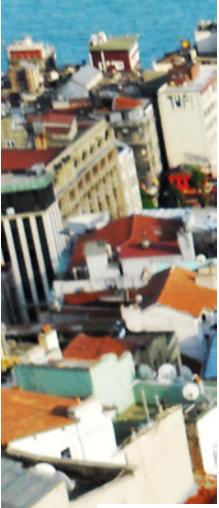


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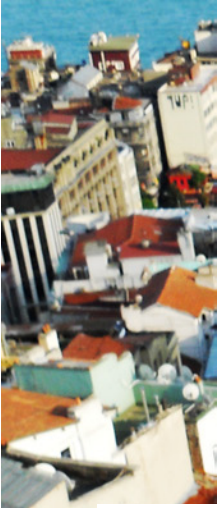
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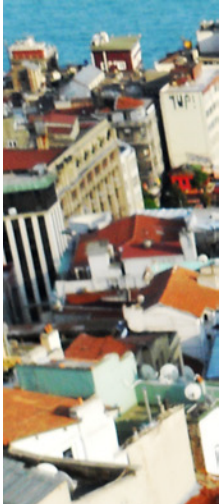


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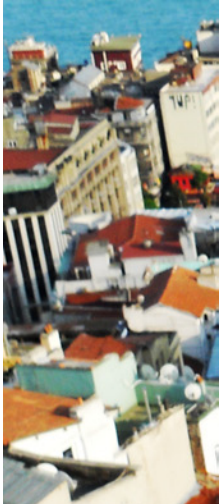
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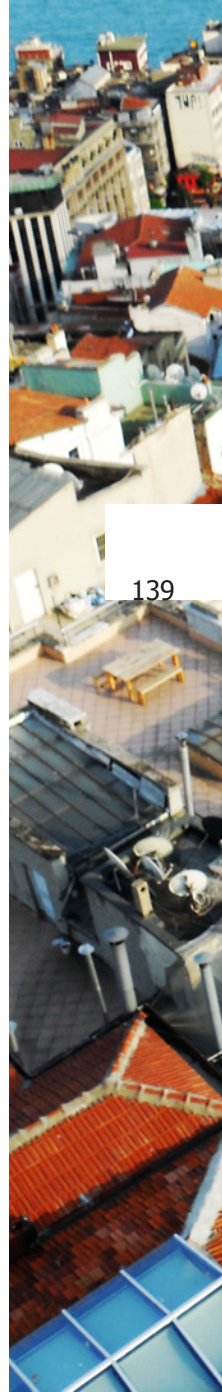
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