



Simple Nurture

WEAVING MOTHERHOOD AND COMMUNITY





Simple Nurture

Weaving Motherhood and Community

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

By

Anne Argenziano

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

Dr. Stephen Wischer

Dr. Ganapathy Mahalingam

May 2021
Fargo, North Dakota



TABLE OF **C**ONTENTS

2 Table of Contents
4 List of Figures
8 Proposal
10 Abstract
12 Narrative
14 Project Typology
16 Precedent Research
38 Major Project Elements
40 User Client Description
44 Site
46 Project Emphasis
48 Goals
50 Plan for Proceeding
54 Research Document
56 Literature Review
72 Research
82 Project Justification
84 Context
92 Site
106 Site Analysis
110 Performance Criteria
114 Process Documentation
130 Project Solution
136 Final Board
147 Performance Analysis
154 Critique of Research
158 Final Presentation
170 Appendix
178 Design Experience
180 Personal Identification



LIST OF FIGURES

12 Figure 01 | Library inside cafe
 12 Figure 02| Childcare Space inside Hestia Daycare
 12 Figure 03| Study Space within educational building
 12 Figure 04| Argenziano Family Photo
 16 Figure 05 | Surry Hills Community Center Exterior displaying environmental atrium
 16 Figure 06| Surry Hills Community Center Exterior displaying louvers
 17 Figure 07 | Surry Hills Section and Green Design Elements
 19 Figure 08 | Surry Hills Community Center Programmatic Layout
 20 Figure 09 | Massing and Hierarchy of Surry Hills Community Center
 21 Figure 10 | Surry Hills Environmental Element Massing
 21 Figure 11 | Surry Hills Conceptual Design
 23 Figure 12 | Surry Hills Outdoor Play Space
 24 Figure 13 | Jeremiah Program Exterior
 25 Figure 14 | Jeremiah Program Logo
 26 Figure 15 | Jeremiah Program Programmin
 28 Figure 16 | Hestia Indoor-Outdoor Space
 29 Figure 17 | Hestia Programming
 30 Figure 18 | Hestia Interior | © Musch, J. (2012)
 30 Figure 19 | Hestia Interior | © Musch, J. (2012).
 32 Figure 20 | Hestia Daylighting
 32 Figure 21 | Hestia Hierarchy
 33 Figure 22 | Hesita Front Entry | © Musch, J. (2012)
 37 Figure 23 | Space Interaction Matrix
 40 Figure 24 | Daily User Schedule
 41 Figure 25 | Relationship between users and uses
 42 Figure 26 | Child Care Cost
 42 Figure 27 | Home Value
 43 Figure 28 | Region Map of Site
 43 Figure 29 | Site Surroundings
 51 Figure 30 | Schedule for Proceeding
 74 Figure 31 | Number of Children Chart
 75 Figure 32 | Married Mothers Graph
 75 Figure 33 | Working Mothers Graph
 75 Figure 34 | Stay-at-Home Graph
 76 Figure 35 | Community Chart
 77 Figure 36 | Childcare Chart
 77 Figure 37 | Resource Use Chart
 77 Figure 38 | Support Group Chart
 84 Figure 39 | Spring Spreads One Green Lap of Flowers | John William Waterhouse



86	Figure 40 Pelican in her Piety (1880)
91	Figure 41 Site Location
92	Figure 42 Sarpy County Age Demographic
93	Figure 44 Sarpy County Mother Age
93	Figure 43 Sarpy County Demographics
94	Figure 45 Site Overhead
95	Figure 46 View from North of Site
95	Figure 48 View from North West of Site
95	Figure 47 View from South West of Site
96	Table 1 Lot Information
96	Figure 49 Zoning
97	Table 2 Setbacks
97	Figure 50 Site Setbacks
98	Figure 51 Vehicular Traffic
99	Figure 52 Bus Route
101	Figure 53 Walking and Biking Map
102	Figure 54 Topography Map
102	Figure 55 Site Section A
102	Figure 56 Site Section B
103	Figure 57 Soil Composition
105	Figure 58 Annual Precipitation
105	Figure 60 Annual Temperature
105	Figure 59 Annual Humidity
105	Figure 61 Annual Daylight
106	Figure 62 Site Analysis
107	Figure 63 Sun Angles
107	Figure 64 Wind Rose
110	Table 3 Space Allocation
111	Figure 65 Space Interaction Diagram
113	Figure 66 Sketchbook Notes
114	Figure 67 Artefact Close-Up
115	Figure 68 Artefact Installation
116	Figure 69 Artefact Process
116	Figure 70 Artefact Process
117	Figure 71 Artefact Installation
120	Figure 72 Process Sketch
121	Figure 74 Process Sketch
121	Figure 73 Process Sketch
122	Figure 75 Process Sketch
123	Figure 76 Process Sketch
123	Figure 77 Process Sketch
124	Figure 78 Mass Model
124	Figure 79 Mass Model
125	Figure 80 Mass Model
126	Figure 81 Light Study Model

127	Figure 82 Mass Model
127	Figure 83 Mass Model
127	Figure 84 Mass Model
130	Figure 85 Goddess Danu Figurine
131	Figure 86 Study for Pentimenti
131	Figure 88 Reproduction Drawing I
131	Figure 89 Electra
131	Figure 87 Reproduction Drawing II
131	Figure 90 Reproduction Drawing IV
132	Figure 91 Form Inspiration Process
133	Figure 92 Form Sketching
133	Figure 93 Form Model
133	Figure 94 Form Model
136	Figure 95 First Floor Plan Axonometric
138	Figure 96 Second Floor Plan Axonometric
141	Figure 97 Section Cut
142	Figure 98 Meeting Amphitheater
142	Figure 99 Childcare Center
143	Figure 100 Library
143	Figure 101 Café
146	Figure 102 Site Surroundings
148	Figure 103 Summer Solstice Sun Path
149	Figure 105 Winter Solstice Sun Path
149	Figure 104 Equinox Sun Path
153	Figure 106 Jenny Saville Art Compilation
158	Figure 107 The Pelican in Her Piety
161	Figure 108 Artefact Installation
163	Figure 109 Exploded Axonometric Plans
164	Figure 110 Café
165	Figure 111 Childcare
166	Figure 112 Meeting Amphitheater
167	Figure 113 Library
177	Figure 114 Personal Photo



PROPOSAL



ABSTRACT

There are community centers in nearly every city that are used to some extent. Some are good and some are bad. In most cases, the existence of a community is a prerequisite for the construction of a community center. This proposal wishes to break that norm and use the existence of a community center to create a community.

Among minority demographics (in this case, the demographics of women and children), there are many injustices- from domestic to social to medical. This thesis proposes the creation of a community center that will foster relationships among a group of women in Papillion, Nebraska, in order to empower them and offer easy access to resources.

The research will highlight the key architectural elements that contribute to creating a sense of comfort within a space, the resources which are most helpful to women, and the existing projects that already solved some of these key issues.



NARRATIVE

The motivation for this project comes from my personal experience as an aunt. For the majority of my life I have been a default babysitter. I learned to swaddle an infant at nine years old. In the coming years I plan on becoming a mother, and I feel that I am well prepared. But many women out there are not. And even the women that are prepared still need help.

This project focuses on the isolation many women feel when becoming mothers. Looking at the relationships between women throughout history, we find clues as to how strong communities of women guide cultures. With the advent of the modern nuclear family, communities of women no longer exist in the traditional sense. My thesis explores the creation of spaces that encourage mothers to come together as a community raising the next generation.

Simple Nurture is about going beyond the physical description of architecture into the emotional. A community space is one that should feel like a second home. The architecture incorporates a physical and metaphorical weaving of programs within the building to combine spaces of varying degrees of privacy in order to encourage a new form of community for modern mothers raising the upcoming generations.

“We need to feel at home, and this need for dwelling is always a living with others.”
(Perez-Gomez, 2017)

The premise of architecture and its relationship to the connections between individuals is discussed by Alberto Perez-Gomez in his essay *Architecture and the City: the Space of Participation*.

“Thus, in the best cases, architecture has provides spaces of encounter and participation where the Other is recognized and respected, spaces that enable human freedom, often – seemingly paradoxically – by revealing the limits associated with particular human actions. This intersubjective and emotional space of face-to-face communication is crucial for human self-understanding.”
(Perez-Gomez, 2017)

Using qualitative research and case studies, I will research the needs of mothers and study the spaces that have been the most successful at hosting communities. I will also look into social organizations and the physical tools they have found to be useful in creating safe, comfortable spaces for children and young parents. Through interviews with programs and mothers, I will find what resources would assist mothers in leading fulfilling lives and staying physically and emotionally healthy.

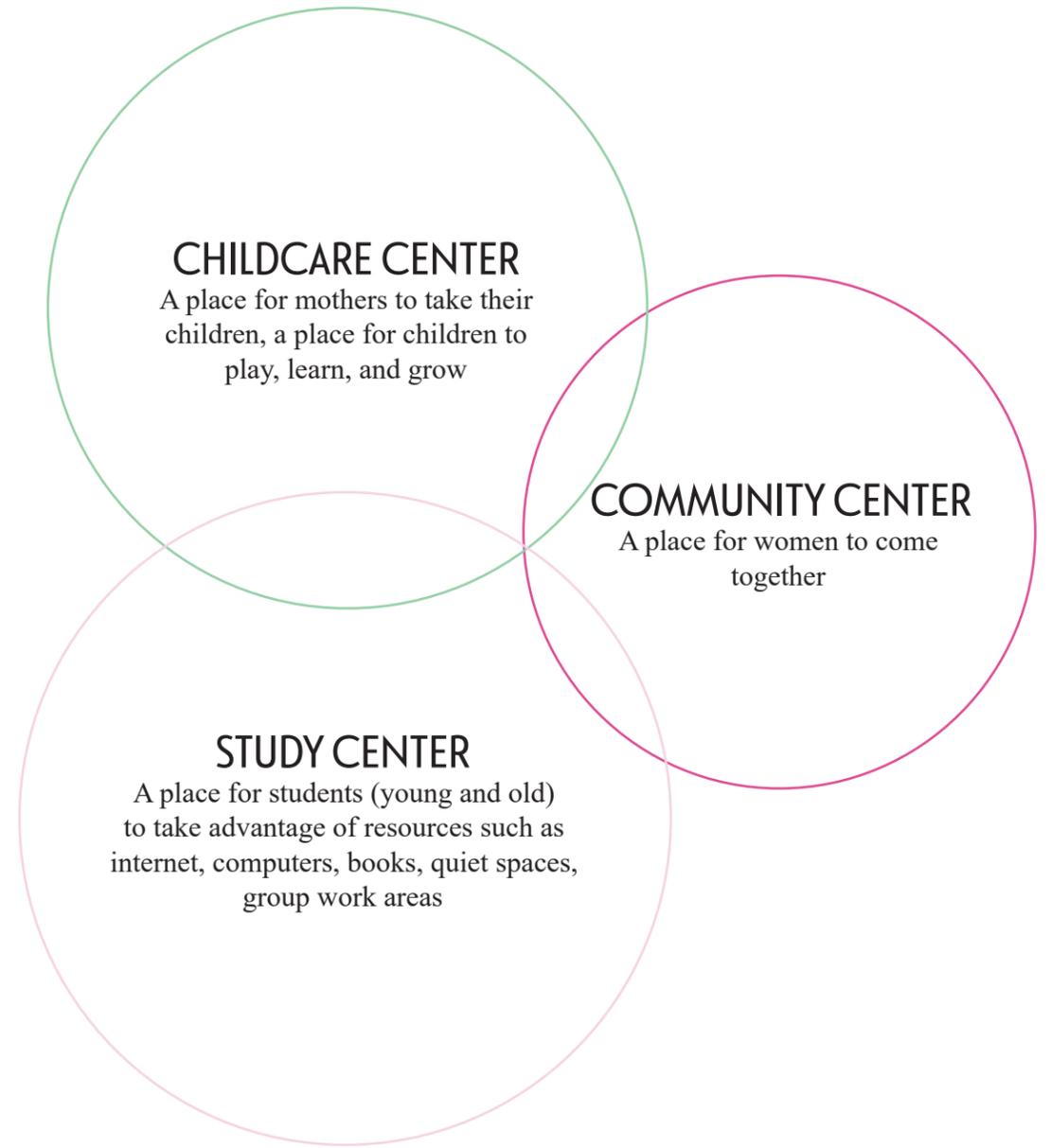
Premise
Weaving motherhood and community within architecture.



PROJECT TYPOLOGY



Figure 01 | Library inside cafe
Figure 02| Childcare Space inside Hestia Daycare, Musch, J.
Figure 03| Study Space within educational building
Figure 04| Argenziano Family Photo





PRECEDENT RESEARCH

Surry Hills Library Neighborhood Center

405 Crown Street
Surry Hills, Australia



Figure 05 | Surry Hills Community Center Exterior displaying environmental atrium, Gollings, J. & Chung, A.



Figure 06 | Surry Hills Community Center Exterior displaying louvers, Gollings, J. & Chung, A.

FJMT Studio

Surry Hills Neighborhood Center, located in a city just outside of Sydney, Australia, is a hybrid typology building that includes community center, childcare center, and library. The four-story, 2500 square meter building contains on two levels a library, on one level a neighborhood center, meeting rooms, and offices, and on the final level, a childcare center that can host up to 26 children (ArchDaily, 2010). Many of these program elements I plan to take inspiration from, such as the study space/internet access, the child care center, meeting spaces, community space, a reading room, and potentially a café.

The community is made up of individuals with diverse backgrounds: income, age, and cultural. The project is focused on sustainability, accessibility, and transparency (FJMT, 2016). The space is welcoming to community members from all demographics. Similar to the premise of Simple Nurture, Surry Hills Community Center built up stronger community relations.

This project is unique not only due to its intuitive combination of typologies, but also due to its environmental strategies. These strategies include a green roof, rainwater collection, photovoltaic panels, geothermal heat, a thermal labyrinth, as well outside air intake and thoughtful use of low VOC materials (FJMT, 2016). This use of green elements is an important case study, especially in a project such as this that deals with children and strong interpersonal relationships. Children should be raised seeing environmentally friendly design. Strong interpersonal relationships are a representation of humans' relationship with the world. The building should not only support the users, but also the environment. Some of the strategies used by Surry Hills Neighborhood Center are new concepts to me, and have led to deeper investigation of viable green design strategies for Simple Nurture.

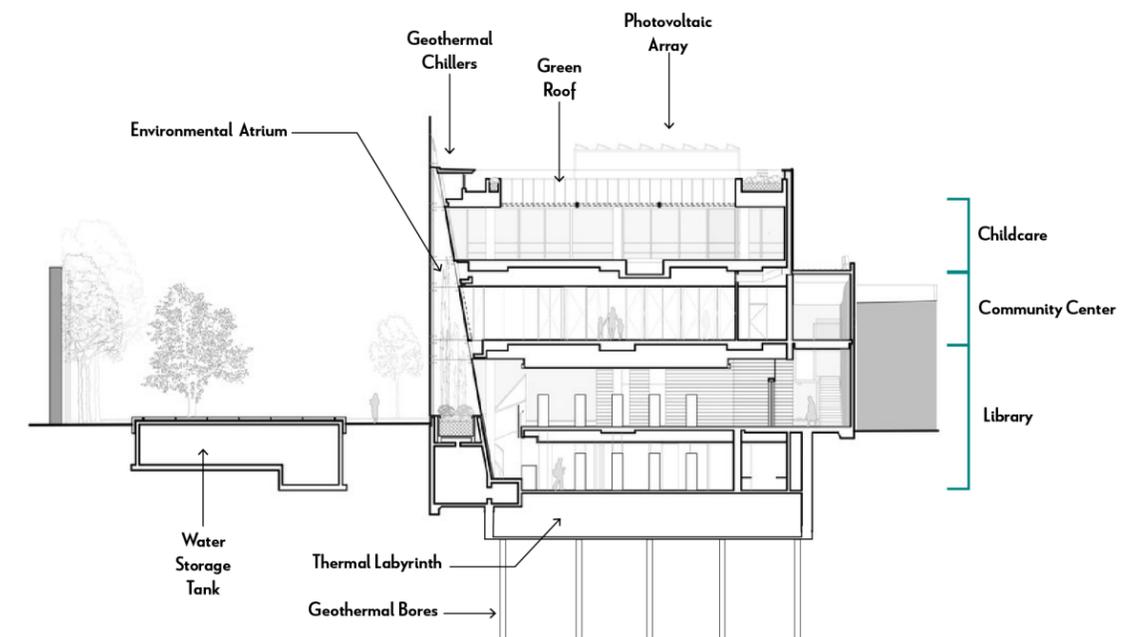
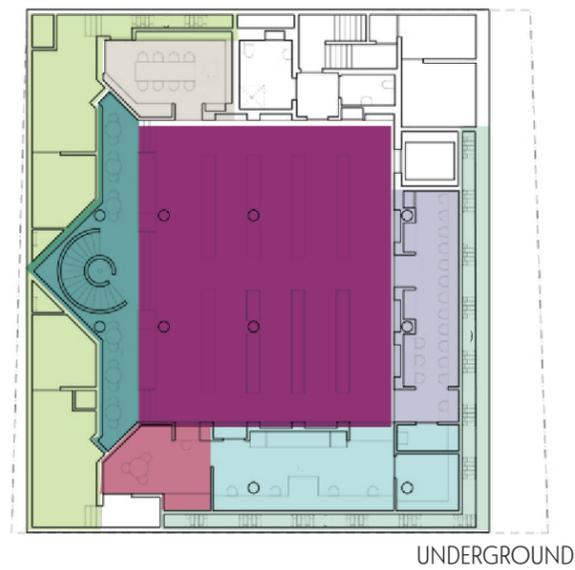
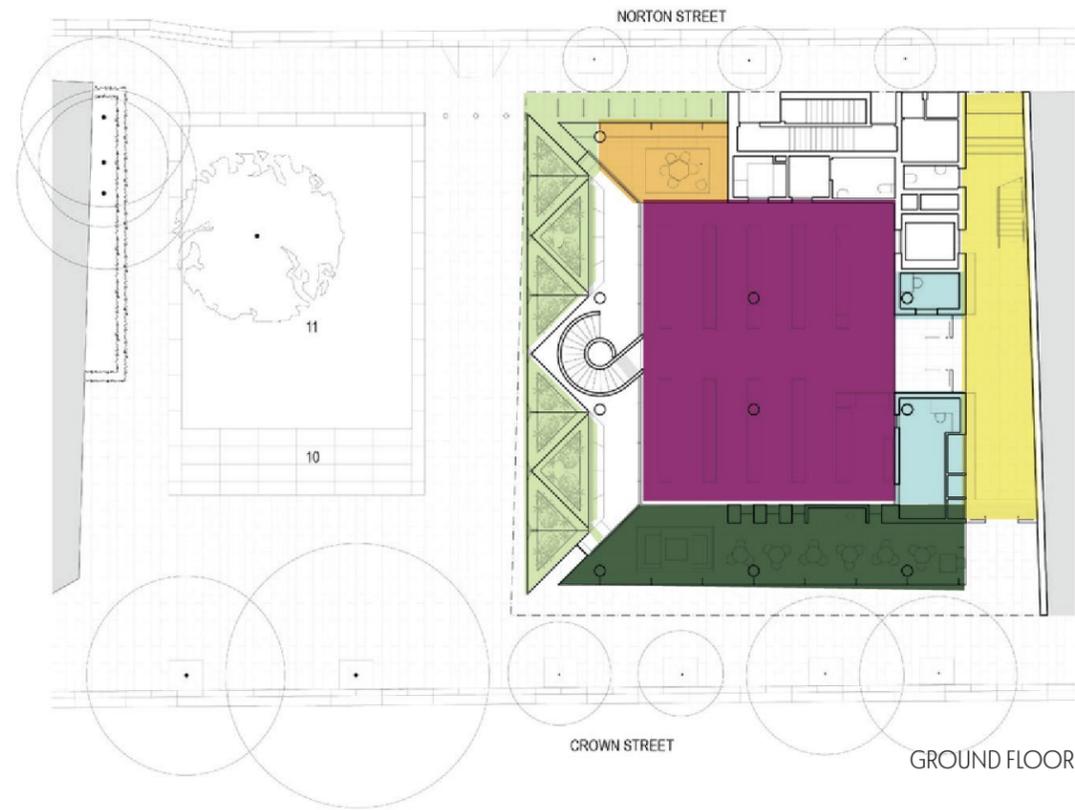


Figure 07 | Surry Hills Section and Green Design Elements



- Library Collection
- Cot Room
- Meeting Room
- Children Space
- Lobby
- Green Design Elements
- Play Space
- Neighborhood Center
- Reading Room and Cafe
- Function Room
- Magazine and Newspaper Reading
- Administration
- Local History Study Room
- Toilet/ Diaper Rooms
- Kitchen
- Storage
- IT and Internet Access
- Language Laboratory

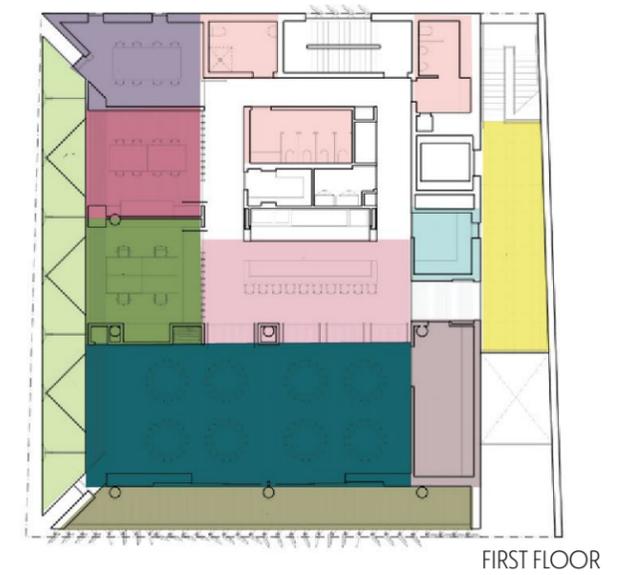
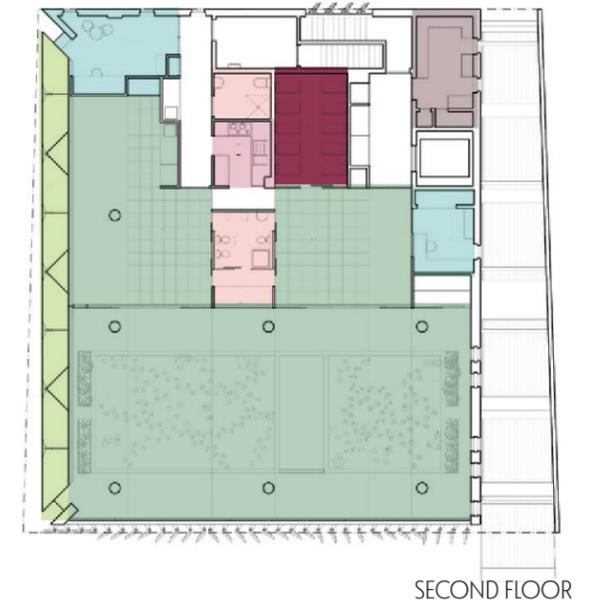


Figure 08 | Surry Hills Community Center Programmatic Layout

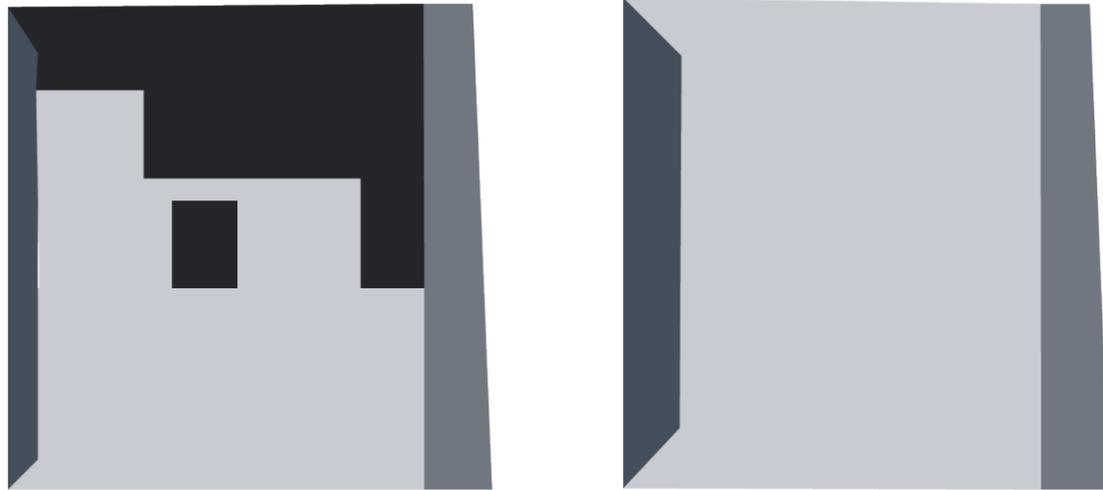


Figure 09 | Massing and Hierarchy of Surry Hills Community Center

Figure 12 shows the massing of Surry Hills Community Center. It is seen that the lower levels contain a larger amount of green elements -- a larger portion of the space is taken up by the atrium. Even lower, the water storage tank, thermal labyrinth, and geothermal pipes are all situated underground. The upper floors have more space dedicated to the community uses.

Figures 10 and 12 show FJMT's massing sketches for shaping the building and incorporating the green elements.

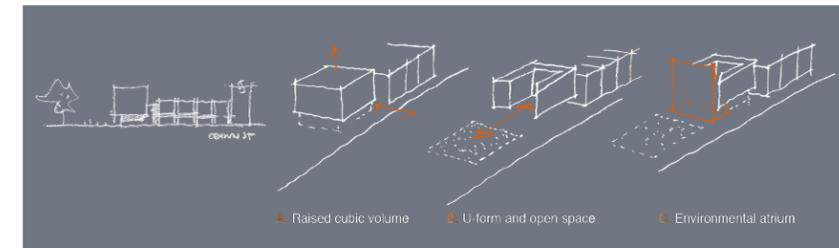


Figure 10 | Surry Hills Environmental Element

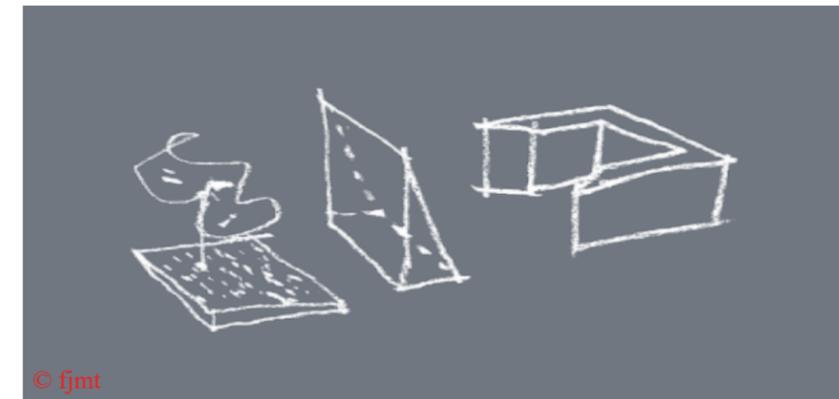
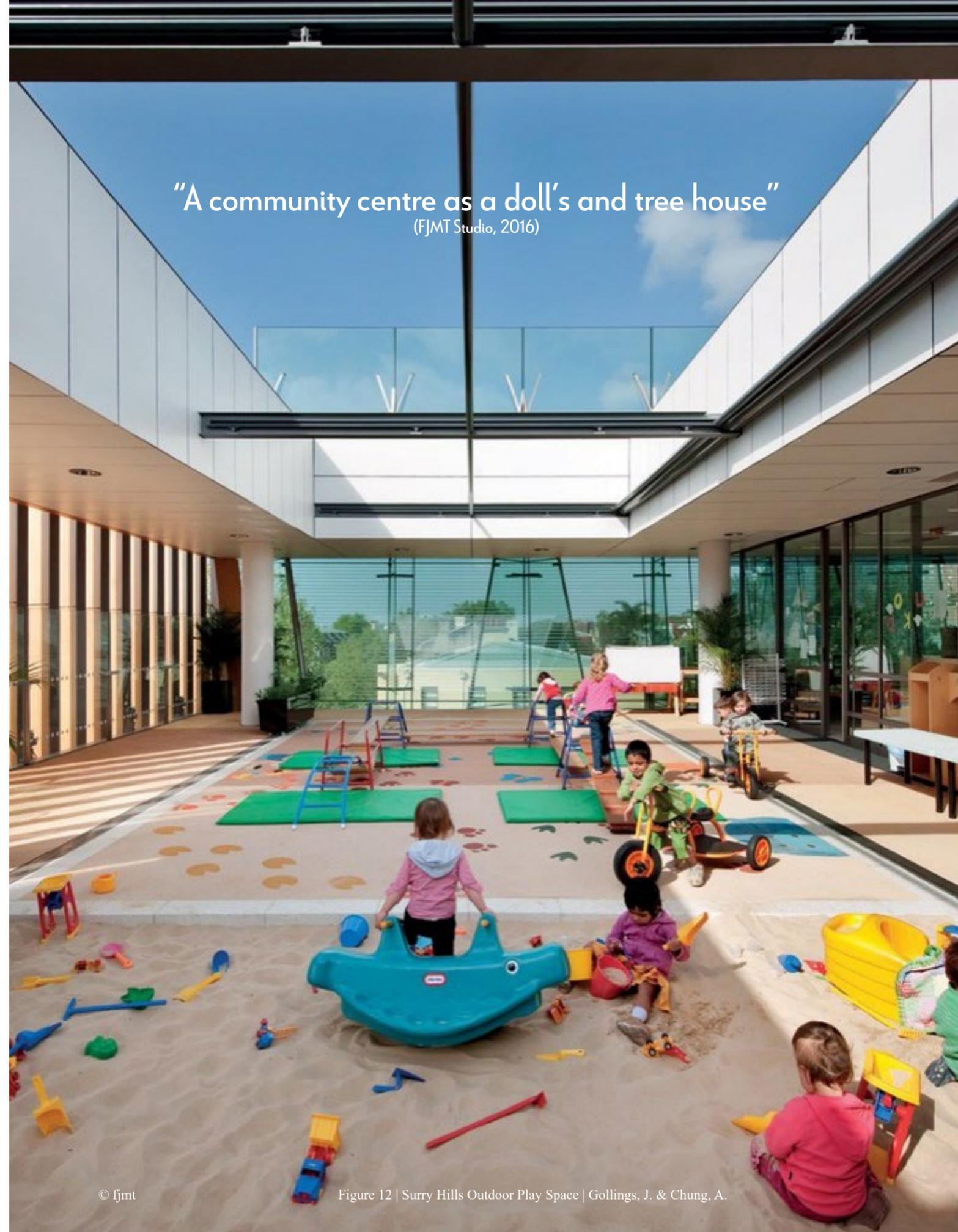


Figure 11 | Surry Hills Conceptual Design

Figure 13 drew my attention to Surry Hills Community Center as it displays a well-designed space for children. There is a strong integration of the outdoors. This space was designed for use by children, instead of being a space that children were added to as an afterthought. The entirety of the second floor at Surry Hills is a cohesive child-friendly space that invites children and leaves parents feeling at ease.

This case study is important to my project because it has multiple typologies, which align with those of Simple Nurture. It caters to a diverse community and it succeeded at bringing people from the community together. Additionally it has strong green design elements. Studying this project has led to the adoption of green design strategies.

“A community centre as a doll’s and tree house”
(FJMT Studio, 2016)



Jeremiah Program

3104 Fiechtner Dr,
Fargo, ND 58103



Figure 13 | Jeremiah Program Exterior

ROERS Construction

The Jeremiah Program building is a child development center and apartment complex that is home to twenty young families. The Jeremiah Program helps young mothers by providing affordable housing, childcare, and resources while they work their way through college. The program is based on a Five Pillar Program (Pederson & Nelson, 2020).

- Support for a Career-Track, College Education
- Safe & Affordable Housing
- Quality Early Childhood Education
- Empowerment & Life Skills Training
- Supportive Community

Through a facility, the Jeremiah Program gives low-income women with children a new start. The facility provides resources that these people would be unable to receive anywhere else.

This building is a strong case study as it fits both the social and building aspects of my project. The social element is the caring for young mothers and providing them with the resources they need to get started with life while raising children. The building contains programmatic elements that will be found in my project: Childcare spaces, classrooms, a small library, kitchen, meeting spaces. It also provides a space to find outside resources the women cannot receive at the program.

Additionally it has apartments. While the apartments are not a physical element I will incorporate into the design of Simple Nurture, the apartments at the Jeremiah program have assisted in the creation of community among the mothers staying at the program (Pederson & Nelson, 2020). They realize they each have needs that they cannot fill alone, and that they have each other to rely on.



Jeremiah Program

Figure 14 | Jeremiah Program Logo



The ground floor contains offices, classrooms, a small library, and the child care center. The child care center divides the children into several age groups. The women can also come to the first floor to use community spaces and the kitchen. The outdoor playground has three different surfaces for children to play on. A large sandbox is in one corner and a playset is in another. An umbrella provides necessary shade on sunny days. In the summer, the kids and teachers plant a garden in this space (Pederson & Nelson, 2020).

The second and third floors are apartments for mothers and their children. The elevator and stairways require a scanned ID to access to ensure the security of the families.

In my interview with Lonnie Pederson, I learned that the amount of storage within the facility is sub-optimal. When dealing with children and events, more storage is ideal.

Architecturally, the building is typical for a Fargo, North Dakota apartment building. Built by ROERS Construction, one would not be able to distinguish this project from any other housing complex in the city.

This case study contributed both to the social and programmatic aspects of my thesis. More storage is better. The types of spaces required for mothers in need of resources. The elements important to taking care of multiple age groups of children.

A special thanks to David Schultz of Shultz & Associates Architects for providing floor plans



Figure 15 | Jeremiah Program Programming | © Schultz&Associates

- Security Checkpoints
- Community Resources
- Children Spaces
- Outdoor Play
- Apartments
- Offices
- Services
- Storage

Hestia Daycare Center

Uiterwaardenstraat 542, 1079 AZ
Amsterdam, Netherlands



Figure 16 | Hestia Indoor-Outdoor Space | © Musch, J. (2012)

NEXT Architects

Named after the goddess of the hearth and agriculture, Hestia is a childcare center that encourages children to interact with the building around them (Khudairi, 2014). NEXT Architects designed the Amsterdam-based project to imitate the flow of a city (ArchDaily, 2012). The 500 square meter building is grid based, and the spaces flow together (Khudairi, 2014). A lack of defined boundaries between rooms invites children to explore the spaces. Natural daylight and large doors in the exterior walls blur the division between indoor and outdoor.

The programming includes a series of open spaces with domed skylights to let in a flood of natural light. Notably, there is kitchen with accommodations for a child's small size. The daycare includes rooms for playing, art, reading, sitting and sleeping. There are separate toilet rooms sized for children as well as those for adults. Of course, there are also staff rooms and maintenance rooms.



Figure 17 | Hestia Programming

This case is similar to the other case studies in that it is a child care center, which both of the other projects contain within their facilities. But that is roughly where the similarities end. Hestia is a single story building, which makes sense as the other two have multiple typologies. The single typology of Hestia allows all activities to take place on a single level. The Netherlands experiences relatively mild weather compared to Fargo and Australia. The indoor-outdoor elements of Hestia are unique to its location, as well as to the culture of northern Europe.



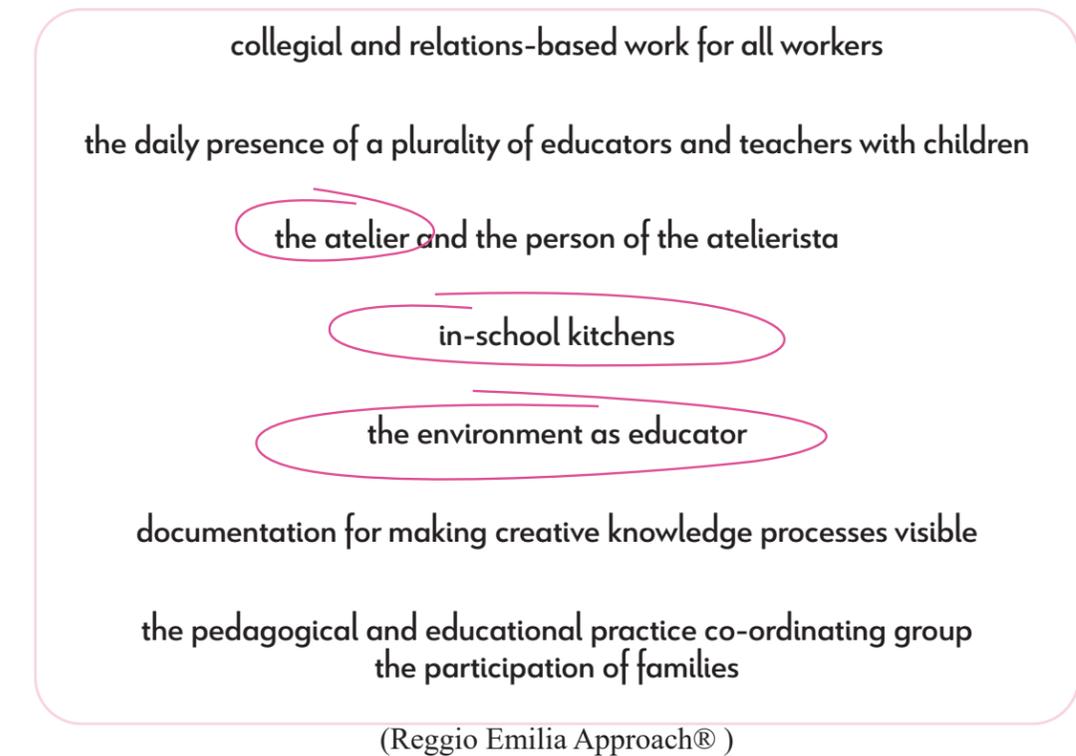
Figure 18 | Hestia Interior | © Musch, J. (2012)



Figure 19 | Hestia Interior | © Musch, J. (2012)

Hestia is interesting because of the strong interaction the building has with its young inhabitants. The transparency between rooms, the elements of accessibility for shorter individuals, the openings sized for kids all encourage children to explore the space around them. The building truly lives to its description as a city with natural light, open “streets” between rooms, high-ceilinged areas and low-ceilinged areas. The bright colors and natural materials give the interior both a clean and childlike atmosphere.

Not only is this project architectural, but it also includes social elements. Hestia Daycare is based on the Reggio Emilia Approach® of education, so the design follows the principles of that approach (ArchDaily, 2012).



The elements directly related to the design of the daycare are those which are circled. Because of the combination of social elements and design in this project, it is the perfect case study for moving forward with Simple Nurture.

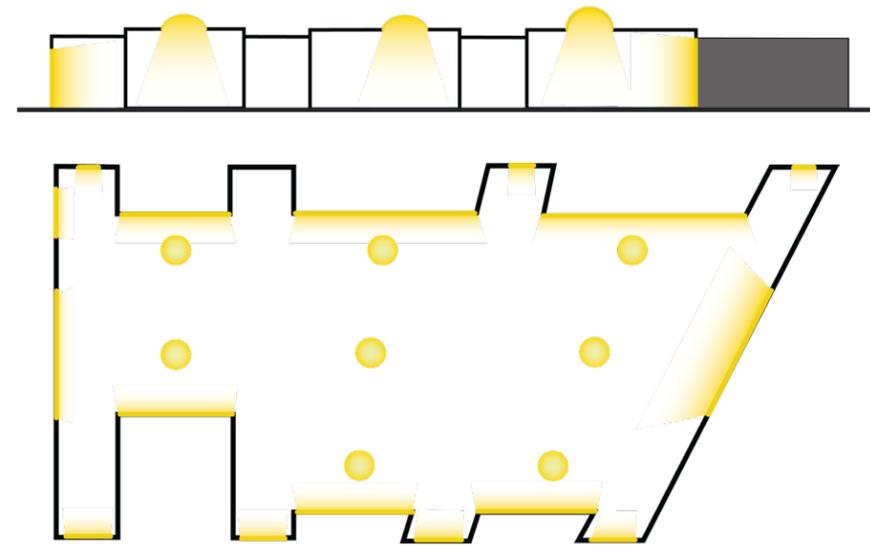


Figure 20 | Hestia Daylighting



Figure 21 | Hestia Hierarchy

The analysis of the building shows the arrangement of openings that allow for adequate natural lighting within the building. It shows wide open spaces that interact strongly with each other. These interactions allow for ease of circulation for children. The combination of light, openings, and large interacting spaces create the illusion that the interior is larger than it truly is.

The plans display a sense of visual balance that comes with the slight asymmetry. The angled elements offset what would be a bland grid and weight the building evenly on both sides.

NO WAY. THE HUNDRED IS THERE

(Reggio Emilia Approach®)

The child
is made of one hundred.
The child has
a hundred languages
a hundred hands
a hundred thoughts
a hundred ways of thinking
of playing, of speaking.
A hundred always a hundred
ways of listening
of marveling of loving
a hundred joys
for singing and understanding
a hundred worlds
to discover
a hundred worlds
to invent
a hundred worlds
to dream.
The child has
a hundred languages
(and a hundred hundred hundred more)
but they steal ninety-nine.

The school and the culture
separate the head from the body.
They tell the child:
to think without hands
to do without head
to listen and not to speak
to understand without joy
to love and to marvel
only at Easter and Christmas.
They tell the child:
to discover the world already there
and of the hundred
they steal ninety-nine.
They tell the child:
that work and play
reality and fantasy
science and imagination
sky and earth
reason and dream
are things
that do not belong together.
And thus they tell the child
that the hundred is not there.
The child says:
No way. The hundred is there.

Loris Malaguzzi (translated by Lella Gandini)



Figure 22 | Hesita Front Entry | © Musch, J. (2012)



PRECEDENT RESEARCH OVERVIEW

In brief reiteration, the case studies of Hestia, Surry Hills Community Center, and the Jeremiah Program building were examples of different typologies related to the design proposal.

Each project included the element of childcare. The Jeremiah Program and Hestia focused more on child development, whereas Surry Hills Community Center offered childcare as well as having the library and community center. The Jeremiah Program and Surry Hills both explored elements of community and access to resources.

Of the three, Surry Hills Community Center is the most directly related to my project as it is the most similar in typologies and explored in-depth the concepts of green design and integration of spaces.

When it comes to the social aspect of my research, most of which is still forthcoming, Hestia and the Jeremiah Program have a lot to offer.

In particular, the Reggio Emilia Approach® of education is a great source of information about child development. Not only that, but it directly relates to the design of the spaces children inhabit. Future case studies will include other projects that were built for educators following the Reggio Emilia Approach®.

While the Jeremiah Program also is a great resource to learn about designing for child development, it is more importantly about the nurturing of mothers. Unfortunately, the Jeremiah Program is more of a typical modern American residential building, while both Hestia and Surry Hills Community Center are both examples of beautiful architecture. The natural wood interiors of Hestia create a clean look, and the glass of the double-skin façade of Surry Hills is sleek and modern. Both of these projects tackle the issue of interior natural light with grace.

The locations of each building played a key role in their programming. Being in North Dakota, the Jeremiah Program had limited outdoor space. The Netherlands experience relatively mild weather year-round so Hestia was able to incorporate indoor-outdoor spaces. Indoor-outdoor spaces for children are also more widespread across northern

Europe than in the United States. The use of such a space would not be plausible in Fargo, ND (my original chosen site), where winters are long and frigid, but may be a viable option in Omaha, Nebraska (the current site), as Nebraska experiences mild winters. Australia experiences much higher temperatures than either of the other location, which made passive cooling systems an efficient use of resources.

From the three, I plan to come away with the concepts of green elements, natural lighting, a more thoroughly developed program, kid-friendly spaces, and an alluring community center.



MAJOR PROJECT ELEMENTS

Community Space- for women to come together, gatherings, events

Child Care Center- affordable, reliable childcare for children from the community

Study Space- workspaces for students from elementary to college - access to internet, computers, seating, group work spaces, etc.

Outdoor Playground- for kids in the childcare center, for students after school, for the public on the off hours

Resource Room- a room filled with access to resources- brochures, phone numbers, etc; a place to have outside resources brought in -therapists, teachers, etc

Nursing Room- a room for mothers to come with young children for privacy and comfort

Storage- plenty of storage for events, childcare

Meeting Rooms-for specific gatherings, meetings

Offices- for working remotely, for people working within the building, for the community

Library- for the children in childcare, students

Kitchen- for childcare, for groups with meals, cooking classes

Garden- for the community, garden space for individuals, garden for the childcare

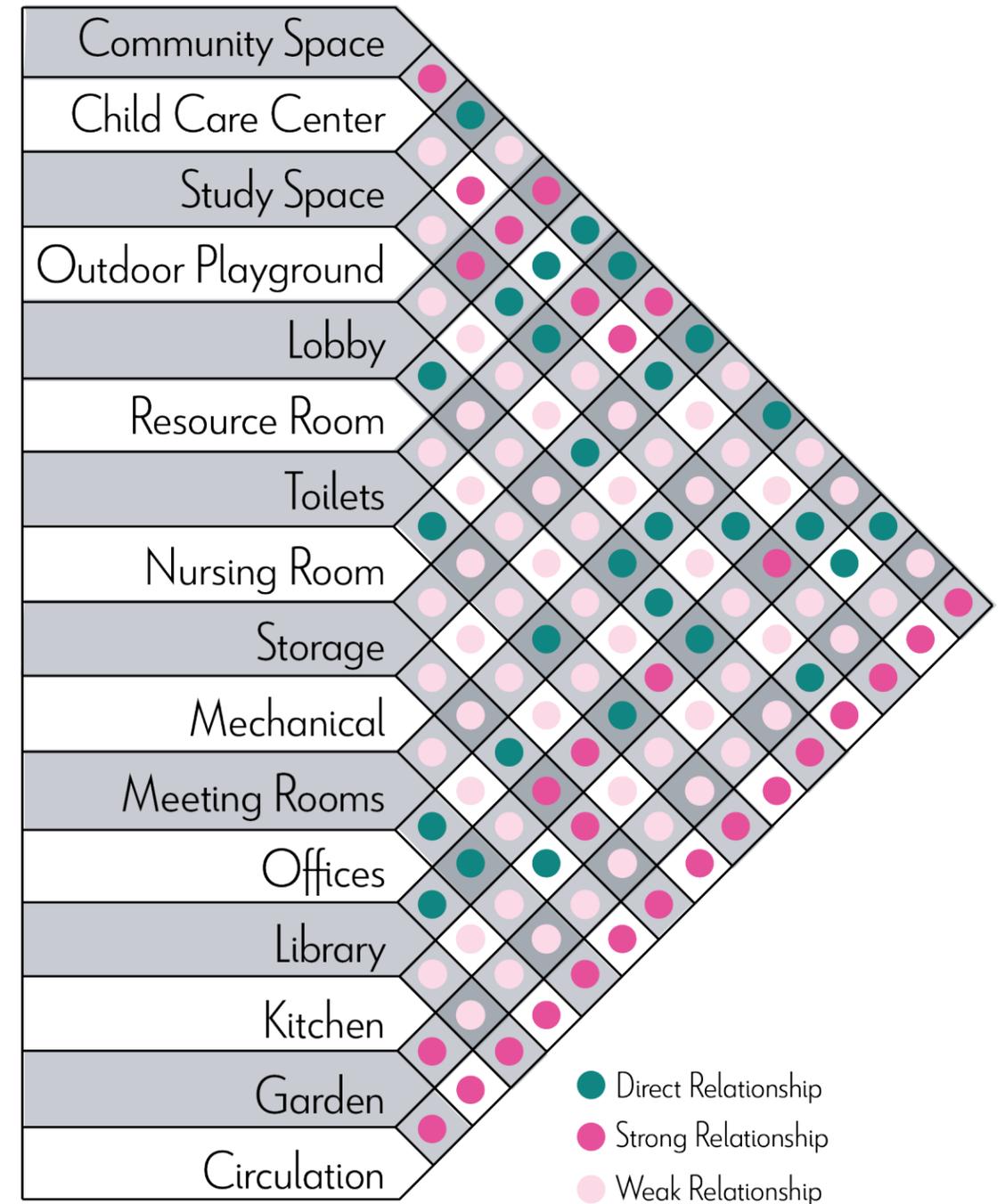


Figure 23 | Space Interaction Matrix



USER-CLIENT DESCRIPTION

Ownership/ Users

This project will be owned by the government and used by the community.

Users will be from different socioeconomic backgrounds, but focusing on the middle income- people who are financially stable. This is the group that is more difficult to form a community with. They are busy with their lives, but they still need others. The surrounding community is Papillion/ La Vista, but the center is open to people from all around the region.

Cultural Demographic

It is unlikely that there will be a wide range of cultural backgrounds, as the vast majority of the residents in the Omaha area Caucasian (United States Census Bureau). This would remain true in any region of the Midwest.

Medical/Mental Health Considerations

Within any community there are bound to be individuals with mental health and medical problems. Children may have ADD, ADHD, among other minor disorders. It is expected that many members will experience anxiety and depression, especially new mothers with postpartum depression. There will also need to be accessibility features. The demographics in particular are toddlers, pregnant women, and elderly. This space needs to not only be accessible, but allow small people and those with limited mobility to fully use everything. As children are a main user of the building, it is ideal that they would have autonomy.

This project exists to make lives easier. Making this building accessible is a small step towards the betterment of lives.



Figure 24 | Daily User Schedule

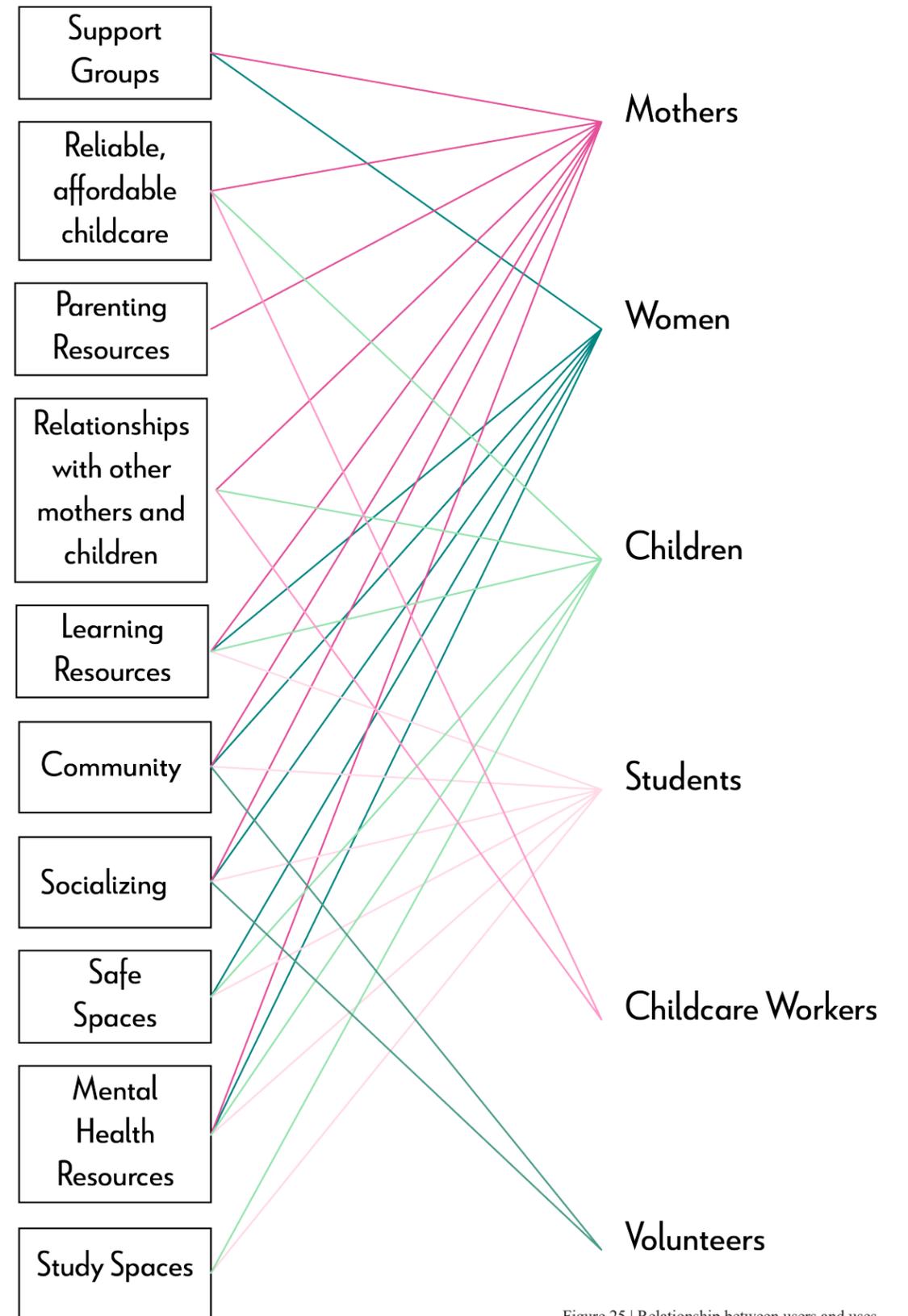


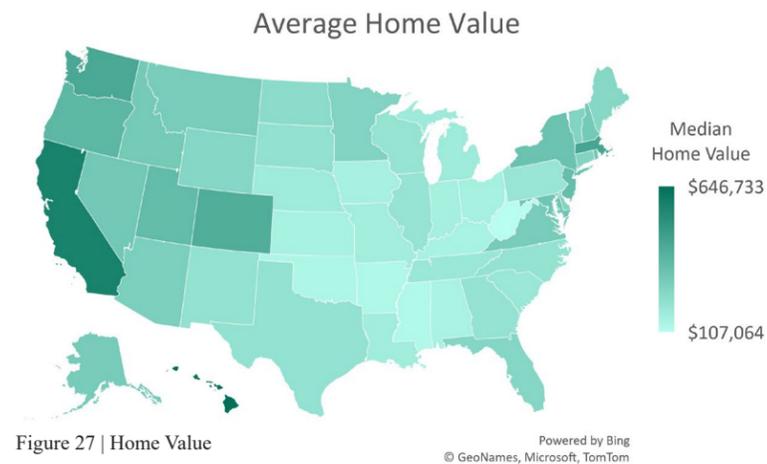
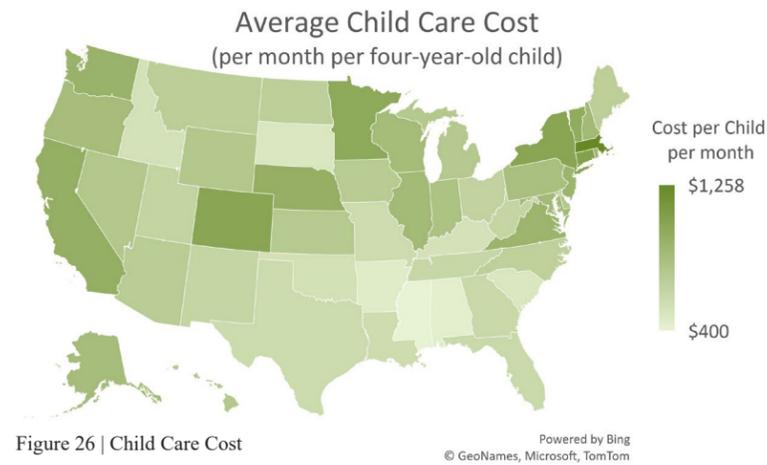
Figure 25 | Relationship between users and uses



SITE

My methodology for choosing a site involved looking into childcare rates and average home value by state. As this project is involved in creating community among stable mothers, I wanted to choose a location that has lower home prices, and a higher likelihood of home-owning parents. As well as that, I wanted the area to have high costs for childcare. As this center will include a daycare program, providing a reasonably priced service will draw mothers to this one location.

The maps below represent the cost of child care by state and the average home value by state respectively. Nebraska was a good choice personally as it is a midwestern state with similar values and weather as North Dakota. The average cost of childcare for a four year child each month is \$952 (ProCare Solutions, 2020), \$172 more than the national average. The average home value is \$180,397 (Fontinelle, 2020). That is \$115,000 less than the national average as of June 2020.



The site is located at the corner of Giles Road and Jersey Street in Papillion in Nebraska (a suburb south of Omaha). It is adjacent to Hickory Hill Elementary School and on the edge of the Hickory Hill community. It is one mile from the Papillion-La Vista Senior High School and 0.6 mile from La Vista Middle School (Google Maps). This site is accessible for young people. The site is 3.09 acres- plenty of space for a spacious indoor facility as well as a large outdoor play area, garden area, and community gathering space (LoopNet, 2020).

I wanted the site to be near schools and on the border of residential and commercial zones. This site is zoned for commercial, which, according to Omaha, Nebraska-Code of Ordinances (2020) will allow daycare facilities, and permits will allow the community gathering aspect of the program.



Figure 28 | Region Map of Site



Figure 29 | Site Surroundings



PROJECT EMPHASIS

Rethinking The Design Of Community Centers

Design with the users in mind, not simply with the use in mind. The design solution will have an emphasis on children's space. For a place that appeals to a child will often appeal to an adult. Incorporating the element of fiction satisfies the desire of a fantasy. A child does not feel that she belongs in an adult-oriented space. But a space designed for children as well as adults fulfills the child's need to interact with her surroundings as well as the adult's want and/or need to feel at ease.

Integrating Sustainable Design Into A Much-Used Building

With climate change being an important issue facing the world today, incorporating sustainable design into a building used by children will expose them to climate consciousness.

Accessibility

Design for a wide range of ages and mobility. The proposed building will be used by people from infancy to old age. I want the children to be able to interact with the building in a similar way the adults can. Similarly, those with mobility issues should also be able to use a space in the way it was intended to be used.



GOALS

Theoretical

- Use architecture to create community among members of a small selection of demographics

Physical

- Create a space that allows for children to be cared for easily but also allows autonomy.
- Create spaces that are usable by all age groups, from infant to elderly.

Social

- Foster a community for women and their families
- Allow young mothers to continue their education
- Better the mental health of mothers and children
- Provide accessible child care
- Lower abortion rates

Academic

- Get my degree

Professional

- Create a project that will look good on my professional portfolio

Personal

- Plan my wedding, get my degree, and maintain a semblance of good physical and mental health



PLAN FOR PROCEEDING

I plan to visit the site in Papillion, Nebraska and spend some time with the surrounding areas and amenities. I will conduct interviews with women- my own family members, military wives, Catholic women’s groups, and other mothers in my life. These interviews will hopefully result in a list of wants and needs that most women have and would make their lives easier overall. Other research will come from readings and philosophical studies to look deeper into the subjects of community and motherhood.

Documentation will occur continuously as I work. Sources, notes, photos, and documents will all be organized in one place on OneNote. I will draw inspiration from Pinterest as well as more case studies of day care facilities, meeting spaces, playgrounds, and study spaces. The products of the research and design will be produced using hand drawing, Revit, Lumion, Indesign, Photoshop, Illustrator, and Rhino.

Upon completion, my thesis document will be submitted to the NDSU Repository for NDSU students to access digitally. Additionally, it will be printed in hardcover book format.

The **theoretical premise** will be researched through interviews with women and case studies

The **project typology** will be researched through case studies- both in readings and in site visits. These visits will be not just for typological review, but also for finding the best study space for myself.

The **historical context** regarding the site will be researched through census data, interviews with locals in Papillion, and books. The history of the treatment of mothers will be researched through readings. The history of the typology will be researched through readings.

Site analysis will take place over winter break 2020. Additionally, Google Earth will be utilized, as well as GIS data.

Programmatic Requirements will be researched through case studies, interviews, and national codes.

- Documentation**
 - Sketchbook Notes
 - OneNote
 - Revit file after Revit file that I refuse to erase
- Development**
 - Hand Drawing
 - Revit
 - Rhino
 - Illustrator
- Representation**
 - Revit
 - Lumion
 - Photoshop
 - Illustrator

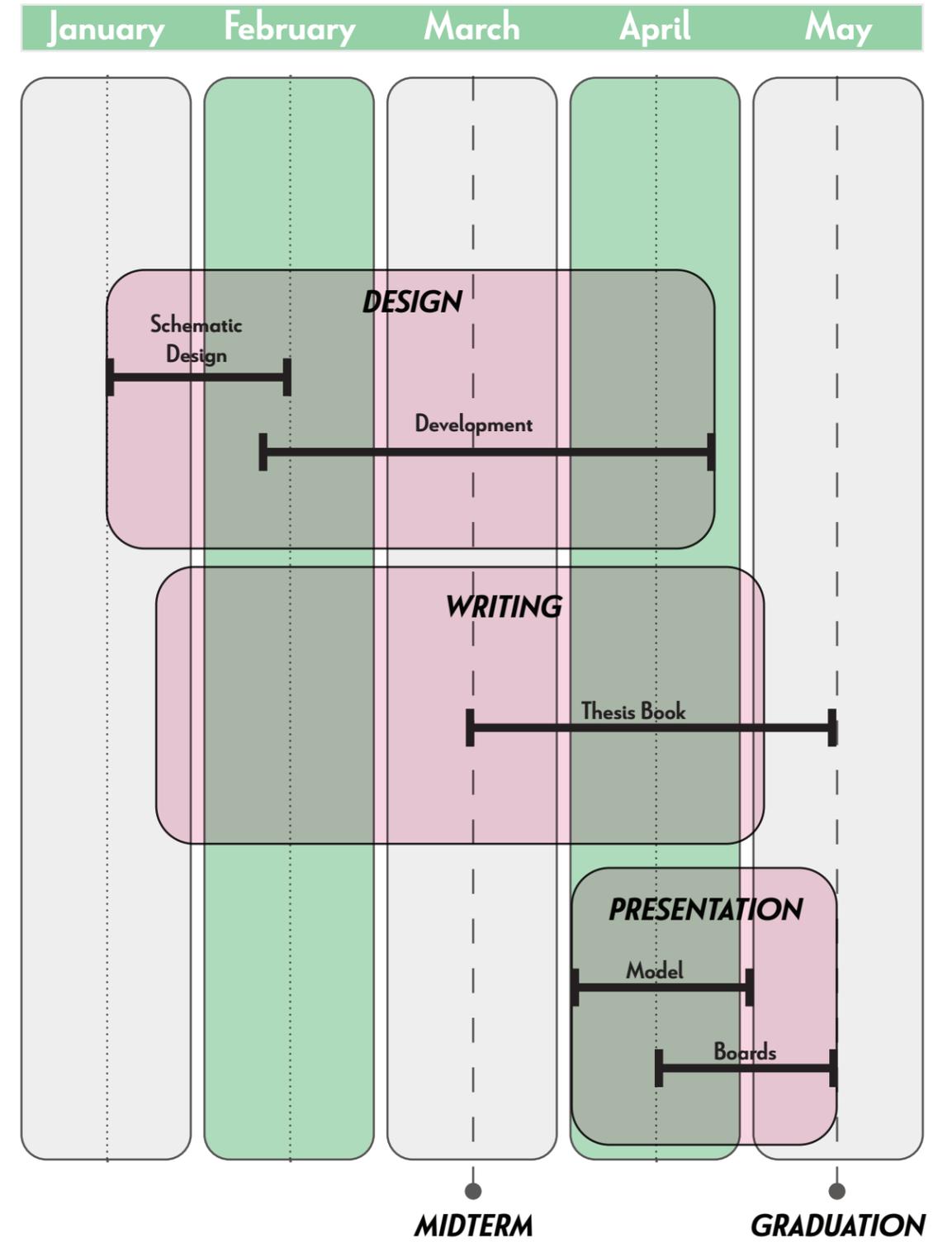
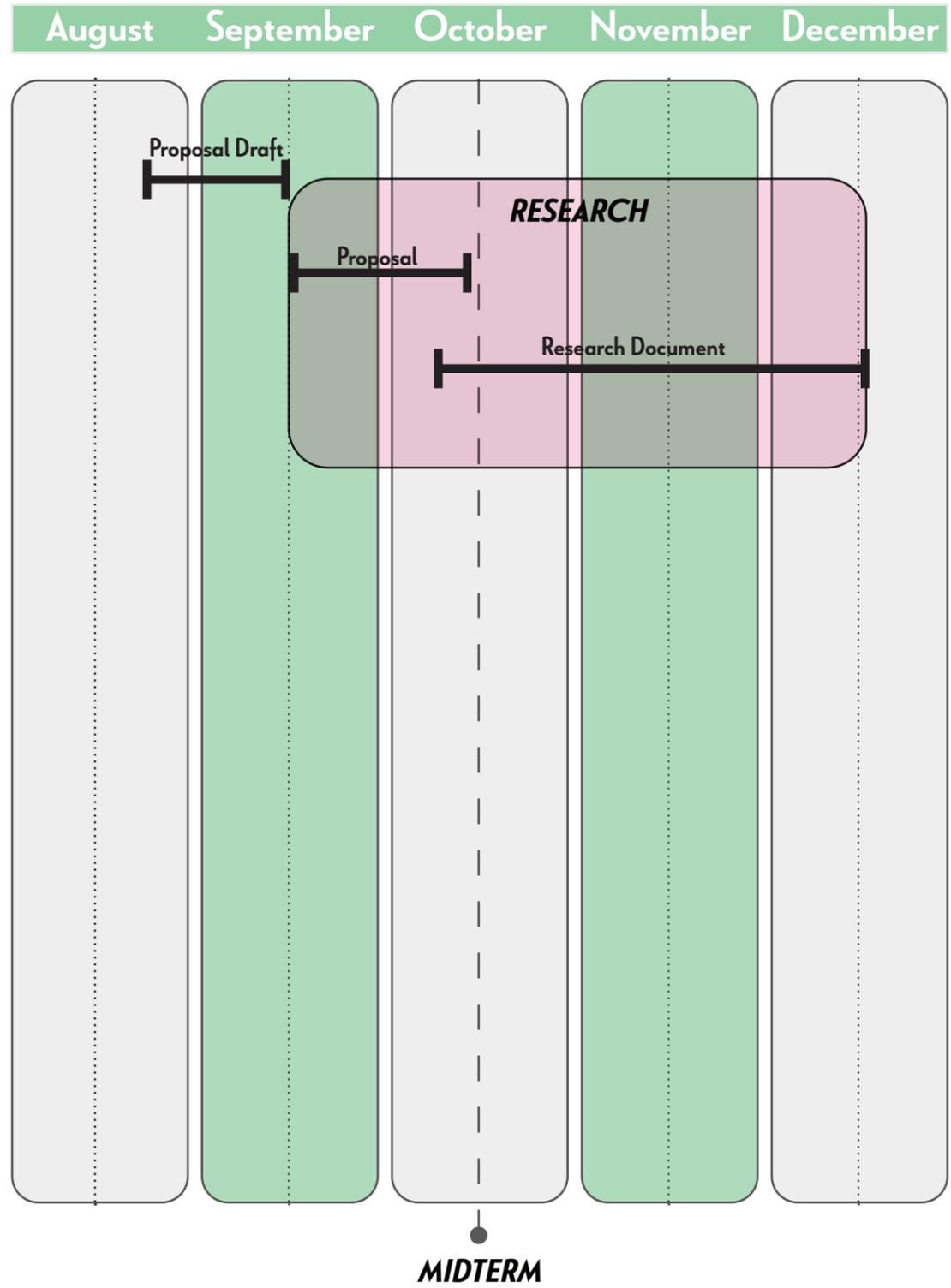


Figure 30 | Schedule for Proceeding



RESEARCH DOCUMENT

The book “Making Space: Women and the Man Made Environment” is an analysis of the relationship women have with the built environment as designed by men. The book is authored by a feminist design group called “Matrix”. The women of Matrix are feminist designers who work in various fields.

Within this literature review, I will cover the information discussed in each chapter. I will be skipping Chapter 3: “Homes fit for heroines: housing in the twenties”, as it explains house design in the early 20th century. These homes were responding to a changing social climate and many families expected to have house servants. As this is no longer in the memorable past, this is not an issue I need to cover in this review. I will also skip Chapters Seven and Eight, “Working with women” and “Private kitchens, public cooking”. Each of these chapters contain great information that is irrelevant to my topic.

Ch 1: Introduction

When it comes to the design of the built environment, most architects, developers, and planners are men. These professionals typically do not ask the end-users what they would like in their space, which means that women’s voices largely go unvoiced and unheard. As the designers are men, they don’t even realize that their designs make a woman’s day harder. The women in these professions are such a minority that it is a difficult fight for them to establish their own credibility and change the norms.

The divide between work and leisure differs for men and women. Men have a clear division, as once they walk out the door they enter the world of work, and when they return home at night, they return to leisure. Meanwhile women (at the time of publication) are expected to work around the house. The woman has no division between her workplace and her space of leisure.

This is further exacerbated by typical city planning. The city is laid out for the working man, with clear zones for residences, offices, and retail. To get from one zone to another often requires a vehicle. With different family types, with or without two parents, one or both having a job or not, this layout is not universally accessible.

The biological division between men and women has created gender stereotypes that do not accurately represent the differences between the sexes. These social divisions have led to oppression and objectification. In many scenarios, it has led to socially acceptable violence against women.

The fact that men and women are brought up differently means that each gender has different needs for the built environment. Yet rarely are these needs recognized. In fact, the man-made environment is viewed by most to be a “neutral” setting despite its bias towards male use. For example, spaces use symbolic associations. The private setting is associated with home, warmth, stability, and comfort. The public setting is associated with competitive, aggressive, and stimulating. These settings are appropriate for the working man, but are inappropriate for a mother, who works in the private setting and must take her children with her on errands in the public setting.

This short paragraph from page nine well encompasses the entirety of the social and architectural problem I am tackling in my thesis:

“Buildings do not control our lives. They reflect the dominant values in our society, political and architectural views, people’s demands and the constraints of finance, but we can live in them in different ways from those originally intended. Buildings only affect us insofar as they contain ideas about women, about our ‘proper place’, about what is private and what is public activity, about which things should be kept separate and which put together.”

Chapter 2: Women, architects, and feminism

We are faced with the problem of where it is appropriate for a woman to be. Despite places being “open” to the demographic of women and women with children, we are constantly aware of the unspoken criticism of others. Children in libraries, women alone in bars. Even if they are “allowed” there is still stigma.

Within houses, men have their own separate room. A den or a study for the man of the house to be alone. Women have their “own” rooms, but those rooms are ones such as the kitchen. A private room meant to serve the entire family.

The rest of the chapter discusses women in the field of architecture and the difficulties they have being taken seriously, the struggles of getting into the field. The difficulty of combining a career and family. “Childminding...is the biggest problem, for which society offers little to no help.”

There is an expectation for women who decide to pursue a career. They are expected to treat it as a vocation, in a way not expected for men. They must not lose any aspect of their femininity, and in order to have value, they must be more talented than their male coworkers. This does not lead to higher positions. Instead, the women should just be grateful they have a job. The women who do exceedingly well are in a way accepted as a man.

Leading into the next chapter, this quote is fitting:

“A house may be awkwardly arranged, so that it creates extra work; the distance to

facilities may be excessive and the route to them may expose us to danger; once there, we may not be able to use certain facilities because they are inaccessible to wheelchairs or pushchairs.” (page 11)

Chapter 4: Women and the public space

As mentioned in Chapter One, the city is typically zoned in a way that makes it inaccessible for women with children. The idea of a man earning a “family wage” so that his wife can tend to their children led to a new style of home and city design. Zoning separated the uses within a city based on the stereotypical ideas about a man’s use of the environment. This had a heavy impact on women’s mobility.

“So women tend to lead a more ‘local’ existence, not just because of domestic roles and responsibilities but also because of an inequality between the genders in access to resources.” (page 40)

The book refers to the fact that not all families have access to two vehicles. The working husband takes the car to work, and the wife is stuck at home with the kids. She cannot easily take kids and groceries on public transportation. The separation between zones creates such a distance that doesn’t allow women to walk from home to where they must run their errands. Once women are where they need to be, they face the problem of accessibility. They must be able to take their children, push strollers, carry children, bags. Additionally they must navigate the height difference over curbs and onto buses. This isn’t limited to women with children. This also discriminates against the elderly and disabled individuals, who often have female caregivers.

The sheer amount of physical space between the idyllic residential neighborhoods of the post-World War II world and the places where errands are to be run is a burden on women in the home. Not only was the vast amount of space poorly designed for the end user, but the walkways from point A to point B are often designed in ways that misunderstand how users interact with the built world. A meandering path may seem leisurely, but it points out to women and retired individuals that designers believe they walk without a purpose. Instead of the sidewalk getting them to their destination, it slows their journey.

Then there is the idea of why people interact with a space. Many designers enjoy the idea that pedestrians are drawn along a path by intriguing sights, which may work for a tourist or a child, but daily users are actually trying to get from point A to point B. Hidden spaces alongside paths are designed to feel provocative, but instead are dangerous locations which can hide lurking dangers.

Lastly, freedom of mobility is not simply the physical mobility of getting from one place to another. It also means being safe while being outside of the home. Due to the previously discussed difference in male and female upbringing, men see women as “other”, and therefore different. As a result, men disrespecting women is a phase to be

expected. It is not uncommon for women to be judged based off of their location. Men talk about the sexual activity of women as if it is any of their business. The idea of there being a “women’s place” perpetuates the idea that rape is okay, that women ask to be treated as sexual objects, and that being in a certain place okays certain actions by men. This can be helped with altered zoning, better public transportation systems, a better understanding of the way women use space, updated accessibility, safer design, and a general shift in the mindset of the male population.

“Thus women must appear sexually attractive to the gaze of men outside the home without attracting men sexually...” (page 51)

Chapter 5: House design and women’s roles

I will briefly summarize this chapter, which talks about traditional house design and how it relates to women’s roles in the family. In generations past, servants would work in the house with rooms assigned to their jobs. These tasks eventually were handed off to the housewife, and the hidden rooms were given to her to work alone for the entire household, while the rooms dedicated to the man, such as the library (a status symbol) were displayed prominently near the front of the house.

Anthony Ashley Cooper, 7th Earl of Shaftesbury, a politician and social reformer in the 19th century, said:

“The moral effects of the...system are very bad, but in the female they are infinitely worse not alone upon themselves but upon their families, upon society and I may add upon the country itself. It is bad enough that you corrupt the man, but if you corrupt the woman you poison the waters of life at the very fountain.” (page 61)

Chapter 6: Housing the family

In the post-World War II world, we have the idyllic view of the nuclear family. The kind we see in the 1950s sitcom: The working husband, the tidy wife who has the entire home in perfect condition, and a son and a daughter. In the time since the war, housekeeping technology has come far. One would think that with the advent of tools such as a vacuum cleaner, a washing machine, and a dish washer, that the amount of housework would decrease. It has turned out, though, that housework expands to fill the time. The housewife is continually busy, and the working wife is often expected to complete the housework on top of her 9-5 job.

This chapter discusses the way the house is planned. The flow of rooms is designed to make the job of the “housewife” easier. The window above the kitchen sink faces the backyard so one can keep an eye on her playing children while finishing the dishes. The path from the kitchen to the outdoor bin doesn’t pass through the living space.

Every member in the home is given a space for privacy except for the wife. She has the

kitchen and the master bedroom, and in both spaces she has a “job” she is expected to complete. Arranging the home in a way that expects the woman to complete all tasks on her own ignores the social needs of the woman.

Ch 9: House and home

The final chapter, house and home, talks about individual women’s experiences raising children. The chapter begins by discussing how the birth of a child creates an isolating environment for a woman. The psychological need to bond intimately with the child and the physical needs of the child compound each other in taking up a mother’s time and energy.

“The world shrinks too for the mother, forced to adapt herself to the baby’s pace.” (120)

The public world is difficult to navigate for a mother with small children. One mother discussed in her writing the pains of travelling with a baby. She talked about having to breastfeed and change diapers for a newborn, dealing with tantrums for a toddler, and the struggles of going out in public while in the midst of toilet-training. The amount of supplies needed for a trip out creates a large load, and makes it nearly impossible to use public transit.

Not only is the public world difficult for the mother, but the design of the house may also exacerbate her woes. Steep steps and narrow hallways make moving children and their objects difficult and tedious. A lack of central heating means chilly night feedings. Carpeted floors are difficult to clean. No bathtub means finding an alternate way to bathe an infant. The layout of rooms is also important. If the child’s room is too far away, the parents cannot hear her cries at night. And when the baby becomes mobile, the steps pose a new problem- now being a danger to the child.

Then there is the need for appliances, such as a freezer for storing milk and pureed foods and a washing machine for the constant stream of soiled clothing. These are common appliances, but parents who rent often don’t have constant access to a large freezer or a washer.

It was mentioned earlier in the book the amount of chores that must be done around the house, but with a child, the chores become more numerous, and parents have less time in which to do them.

The authors noted their preferences for homes: central heating, single-level living, and spare bedrooms. Additionally, large rooms for kids to play that can be easily cleaned and outdoor space for fresh air, toddler biking, and naps. The concept of communal spaces was also listed. These communal spaces included a kitchen, dining room, a library, studies, nurseries, and laundry.

Communal spaces are important to mothers as a way to socialize as public facilities

seemingly do not tolerate children, and thus exclude many women.

“This society does not properly cater for the needs of women with small children.” (page 135)

The closing of the book states that while the nuclear family may make sense economically for a capitalist society, it is not a healthy way for a woman to live.

The disdain public spaces have for children is something that my project will respond to. Libraries and cafés do not appreciate loud and disruptive children within their venues, but Simple Nurture welcomes the children and their mothers. In doing so, it allows mothers to have a social life outside of the home. Incorporating facilities for child care, cooking, and laundry will allow women to reduce their overall at-home workload while lessening their feeling of isolation.

Matrix. (1984). *Making space: Women and the man made environment*. Pluto Press Limited.

The essay *Architecture and the City: the Space of Participation* by Perez-Gomez delves into the past two centuries of architecture and how we view our relationship with the built environment today. He references ancient Greek architectural and political elements in their relation to modern spaces. My main takeaway from this essay is that public space is a changing entity that we need to learn to embrace. The focus modern society has on privacy is damaging to our relationships with others as well as with ourselves.

Vitruvius described the origins of architecture as a clearing in the forest that “makes possible language and culture.” This means that architecture and culture are inseparable entities.

The ancient Greek use of the word *chōra* defines it as a space or central clearing. Plato associated the word *chōra* with the womb. In his use of the term he references the innate connection between gathering and the mother. This is a strong starting point for the connection between the social and architectural aspects of my thesis.

Starting in the nineteenth century, American professor Richard Sennett said that “it is private space and the expression of private feeling that are valorized” (p13). This is in stark contrast to historical cities which depended on the existence of the public realm. For the Greeks, the public spaces were the locations of political discourse and public entertainment.

Cities have changed drastically, becoming large and unwieldy, taking over the countryside. Perez-Gomez goes as far as to describe cities as “hostile and unmanageable entities.” With so many people in such close proximity, it makes sense that families would decide to migrate to the outskirts of town to suburbia. This idea of suburbia is related to the idea in the book “*Making Space*” that zoning has caused problems for the modern family in that it separates the places where we live and work. Suburbia is located so far from the city that it is inaccessible without a vehicle and the city is so tight that families do not fit.

I would like to look back at the meaning of architecture from centuries past. Gomez stated near the beginning of this writing, “While the definition of architecture has shifted historically, I would like to argue in this essay that its main interests have always related to the configuration of meaningful, resonant public space.”

I note that Gomez uses the word “public” in his definition of architecture and not “private”. He does not define architecture as

the privately owned companies or office buildings or government buildings. He instead talks about the early works of architecture: public spaces like the agora, which was the space for public speech and the debate of political issues by citizens of Greece. This was the space for commerce and the communication of information. He spoke also of the polis, a public space where dialogue and exchange occurred. Within these spaces a mood is conveyed, and there is a harmony within. The goal of this thesis, as it relates to this concept, is to create a sense of harmony between woman and man and between adult and child.

If Perez-Gomez was right that the primary function of architecture is to open up a space for communication within a community, then I think this a history worth resurrecting. The piece of architecture I am to design is about opening communication between mothers and families, and it will work to make a statement about society and creating a new social order.

The ancient forums enabled “communities of like-minded people to debate, participate and find a voice in their respective political constellations” (p16). In the modern United States, the empowered demographic is the white male. Changing the demographic of the users changes the social order within the space. If a public space were to be filled with women and children, the voices would say something previously unheard. We would see women meeting, making decisions, women being heard, children being heard and taken seriously. We would see these minorities being taken seriously.

I referenced in the review of “*Making Space*” that women are considered “other” to men, who don’t have the same understanding of woman as they do of men. Other is the one you don’t know. Perez-Gomez described successful public space as “space of encounter and participation where the Other is recognized and respected, spaces that enable human freedom.” (p13)

The end product of my thesis is a place to think about one’s relationships and the world differently. It is a place that should inspire users to learn how to understand and respect the Other.

I believe Gomez was wise in saying, “We interact more with machines than with other human beings, and this results in narcissism, alienation, and the incapacity to grasp a sense of purpose for our actions” (p14). This has only become more true in the past months of quarantine. We entertain ourselves with machines, communicate with machines. We teach children with machines and they play games with machines. What does this say about who our children will grow up to be? We are faced with the problem of being separated from others, and we do not know yet what the repercussions will be. How will we respond to the Other when this is all over? I cannot deny that our relationships with devices and social media have negatively impacted our narcissistic tendencies. Despite the good technology has done for us as a civilization, it is public spaces that are truly necessary to bring us back together.

In-person communication and seeing one another as they speak is important in our understanding of others. It is especially important for young children, who are still learning how to interact and form bonds.

The physical world differs from the computer world in that we are forced to face the concept of our own mortality. It is understandable why people would retreat to the internet. It is a truth humans face, and our mortality is represented in our own children. The visualization of generations we see in new life emphasizes the fact that life is passing. I feel this relates strongly to Luce Irigaray's poem "And the One Doesn't Stir without the Other", in which she talks about the self-sacrificing relationship between a mother and daughter. Irigaray suggested that mothers give themselves up for their daughters, dying so that their child may have life. But this isn't the point of motherhood. Life begets life. Our mortality is inescapable, but mothers are allowed to live. Gomez talked about the public Greek theatre in which "a catharsis took place, a purification that allowed each citizen to discover a sense of purpose and belonging..." (p17).

What does it take to experience catharsis? How can that be freeing for mothers who feel stuck? I imagine it would be freeing and would reinvigorate women who feel they have lost their identities. And it would form bonds between women.

Gomez says that "We need to feel at home, and this need for dwelling is always a living with others" (p14). The difficulty with community is the feeling of home. Belonging is a difficult concept. Bonds form over common ground: Parenthood; Struggles; Region; Past; Plans. These are all things that one can absorb into her identity without being aware of the pain it causes herself to experience. This becomes a forgotten condition that requires catharsis.

Cities are full of forgotten conditions. There are the abandoned industrial sites, there are subway tunnels. We forget that these places exist, even when they are places we use. When riding on the subway, it can be easy to forget that it is under the city. A part of being human is forgetting the things that surround us. We get used to things in order to survive. This can be as simple as getting used to a bad smell, or as complex as getting used to systemic discrimination. We need to be hyperaware of our living conditions if we want to change anything.

We need to realize we are not merely an embodied consciousness. We can respond to the world around us. We are allowed to experience and enjoy the world around us. But we need to be reminded, which is why multisensory architecture as a necessity. Being able to interact with our environment can wake us up from the constants of the world we live in. Interacting with something different can change a person's view on their world. This doesn't need to be something large, like overthrowing the social condition. It can be as simple as realizing she can make her home a more comfortable place for herself, or realizing she has a place she can come that she enjoys.

Today public space has to be "designed". Gomez is upset with this concept, and

responded to it with, "We cannot conceive of public space as simply a "designated area" in the city" (p14). This is related to the idea from Making Space that women and children are excluded from many so-called "public spaces" Public space is everywhere, yet we act as if it isn't. We design as if it isn't. We designate space for people to "go" to experience things when life happens where you are.

Altogether, my thesis will respond to this essay in that it will be a place for women to understand that what they are going through doesn't need to be done alone. It will be a place for community to develop organically. I realize that Perez-Gomez is right in that "Such places, moreover, cannot merely be the result of the egocentric imagination of an architect" (p18). That is something that we as designers like to forget. This project is not about me. It's about the user. And Richard Sennett pointed out "that spaces come to life when they are used for purposes other than those for which they were conceived" (p18). In the end, I am only important in that I make this space happen. In designing, I must keep in mind the program, but still leave it open enough to allow it to be a space of participation.

Pérez-Gómez, A. (2017). Architecture and the city: The space of participation. *Studies in History & Theory of Architecture*, 5, 13-18. Retrieved from https://sita.uauim.ro/f/sita/art/01_Perez-Gomez.pdf

Irigaray, L., & Wenzel, H. (1981). And the one doesn't stir without the other. *Signs*, 7(1), 60-67. Retrieved from <http://www.jstor.org/stable/3173507>

In ancient Greece, philosophers were expected to journey to expand their knowledge. They were expected to spend time on the road, thinking, experiencing other cultures and learning the ways of other cities. This journey of thinking was known as Theoria. Upon their return home, the philosopher was to tell the city leaders what they had learned and how they could better their city.

Today, everyone is interconnected by the strings of the internet. It no longer takes a journey to learn about other cultures, yet we still manage to be stuck in our own ways. For the sake of my argument, I suggest that the city is the family. And the theoros is the mother.

The children of the family are the future leaders of the world. The mother is a wise figure who passes on knowledge and nurtures physical, emotional, and mental growth. But if the mother allows her mental health to stagnate, her children are limited in their own growth.

Before delving into the analogy, I will lay out the basic premise of Theoria. The theoretic journey is comprised of three parts. In the first part, the theoros (the pilgrim) detaches herself from her everyday life. In the second part, she is in a liminal phase: she is not the same as she was before, but she is not yet what she will be after her theoria. This part includes the journey to and the activities at the site. In the third and final part, the theoros returns to her home city and mundane life.

The Theoric journey can be translated to fit my thesis subject and modern life. In the first part, the mother decides she needs to escape the daily routine. In the second part, the mother allows herself to learn new things and spend time with others. In the third part, the mother returns home with a new outlook on her life.

It is the second part of the journey that my thesis will directly address: The “site” that is the location of the enlightenment. It is anticlimactic for this site to be called a women’s community center. As I am likening it to Ancient Greece, let me call it the Agora, the public space, or maybe the Chora, the clearing. As Plato likened the chora to the womb, I believe that is a fitting name for this space meant for mothers to gather.

The experience of a mother going to this women’s community center can be compared to the analogy of the cave, as discussed in Spectacles of Truth in Classical Greek Philosophy.

In my research I repeatedly encounter the word “isolation” in relation to the experience of motherhood. It is common for women to feel detached from the world around them when their energy is turned towards raising a young human. In my interpretation of the analogy of the cave, the mother decides to escape her isolation. In this case, daily life is the cave. She leaves the cave and enters the open world- the Chora. While she is there, she opens herself to new ideas and experiences. She allows herself to enjoy herself. She learns how to take care of herself while also taking care of her family. It is impossible for the woman to participate in every opportunity available in one journey. She must return home, to daily life, to the cave, knowing that there is more to her life. And with every journey out of the cave she has access to more resources, more help, and more friendships.

Even in Ancient Greece, Theoria was sometimes considered dangerous. The philosopher could return home “corrupted” by foreign ideas. This is to say that there may be backlash. People may believe that this idea of giving mothers resources and knowledge may disrupt the status quo and wreck the social order. These are the people who haven’t realized that the social order needs to be changed.

Plato believed that if there was an ideal city, then it must be ruled by philosophers. The ideal city is the family. “Only the philosopher is truly free, since his discipline is radically opposed to servile and mercantile activities: this individual will never exchange his wisdom for material or symbolic capital.” Motherhood is about passing down wisdom in the form of generations of knowledge and experience. The mother is anything but banausoi, the servile man. As they do not earn a wage doing motherly work, the mother acts in the way that the philosophers were said to have worked. “Having gazed upon the good itself, they will use it as a pattern for setting in order the city, the citizens, and themselves...” The citizens of “the city” are her children, and for them she works and gives freely.

The point of theoria is that the wanderer leaves and then returns to normal life. What is wrong with the world that I believe it is necessary for women to leave daily life?

A part of being human is forgetting the things that surround us. We get used to things in order to survive. This can be as simple as getting used to a bad smell, or as complex as getting used to systemic discrimination.

Think of the first time a child sees color at a few months old. This sensation is a pure experience. Having never seen color before, the child has no memory with which to compare this experience. As a person creates new experiences, she begins to draw from memories of previous encounters. The association of ideas brings past experiences into play during the present, and can make new experiences be representations rather than sensations. This means that we need to be careful about what our children experience when they are young. We are capable, as a species, of normalizing anything.

Because of this, we need to be hyperaware of our living conditions if we want to

change anything. We can respond to the world around us. We are allowed to experience and enjoy the world around us. We need to realize we are not merely an embodied consciousness. It is easy to forget that there is more to us than just the being that looks out of our eyes. It is easy to lose touch with reality.

So women must be able to leave daily life and daily expectations in order to be reminded that there is more. This mild shock to the system allows her to teach her children to not simply accept the world as it is. In the way that stagnated water is freshened, we must shake up our surroundings, physically and mentally. This is why multisensory architecture is a necessity. Being able to interact with our environment can wake us up from the constants of the world we live in. Interacting with something different can change a person's view on their world. This doesn't need to be something large, like overthrowing the social condition. It can be as simple as a woman realizing she can make her home a more comfortable place for herself, or learning that she has a place she can visit that she enjoys.

This space, this Chora, is a dwelling. It is a place for community to develop. Alberto Perez-Gomez says that "We need to feel at home, and this need for dwelling is always a living with others." The difficulty with community is the feeling of home. Belonging is a difficult concept.

So I will turn to Martin Heidegger. He discussed the concept of dwelling in *Building Dwelling Thinking*. In the way that other philosophers discuss Greek language, Heidegger discusses the etymology of German, High German, and Old English words in relation to dwelling and building.

He speaks of *Bauen*- building.

He speaks of *Buan*- to dwell, to remain, to stay in a place.

He also speaks of the variations on the words *buri*, *buren*, *beuren*, and *beuron*, which all suggest dwelling. Therefore, according to Heidegger, the word *barren* also means to cherish and protect, to preserve and care for. Despite the definition of *barren* being "infertile," history and etymology suggest that it may also be related to the act of mothering. Even those who are *barren* can still mother. And a building, though it is not a house, can be a home.

"Building as dwelling unfold into the building that cultivates growing things." Within the Chora we will see people cultivating new life and new experiences, as well as cultivating knowledge.

It is important to remember that as humans we are dwellers. And that leads to the next set of important words as explained by Heidegger.

Wunian -to remain, to stay in a place, to be at peace, to be brought to peace, to remain

in peace

Friede- the free

Dase frye- preserved from harm and danger

Heidegger clarifies that "to free" means to spare. When we spare someone or something, it means we do not harm them. Not only do we not harm them, but we allow it to continue to exist in its own way.

I find it beautiful, what Heidegger said: "The fundamental character of dwelling is this sparing and preserving."

When we think about dwelling and the home, we may imagine the family at the hearth, functioning as a unit. We dwell on earth, and there is nothing we can do to actually force the world to act the way we want it to. We have impacted the climate, but on the whole, we do not actively try to change nature. Day and night, the changing of the seasons, we expect them to be as they will. We create the built environment, in which we preserve ourselves. But we do not preserve others. We require others to build outside of themselves a similar façade in order to fit in.

We dwell within mother nature, and we try to respect it. But we also dwell among other humans, so why do we not try to respect them in the same way? In this particular instance, we dwell because of our mother, and our initial dwelling was within our mother. Why do we try so hard to control our mothers?

What is needed is a bridge. A bridge brings together not only the two sides of the river, but also the people on either side. The bridge opens new possibilities and is a place for gathering together. Despite crossing the river, the bridge does not block the stream. It allows multiple flows simultaneously: the water below and the people above. The bridge creates a site that draws in the people who cross.

My building, this Chora is the bridge. It creates the location. The site it sits on is not important alone, it is the project on the site that makes it important. This is not to suggest that the site is irrelevant. A bridge in the wrong place is useless. But a site without a bridge is just as useless.

I feel it is necessary to explain that the bridge is more than the building. It is about the people within. To be precise, the building is about more than the building. The building is simply the vessel within which change is encouraged to happen.

In *Building Dwelling Thinking*, Heidegger says, "It placed the farm on the wind-sheltered mountain slope, looking south, among the meadows close to the spring. It gave it the wide overhanging shingle roof whose proper slope bears up under the burden of snow, and which, reaching deep down, shields the chambers against the storms of the

But I enjoy this description as it succinctly describes how this dwelling responds to its natural site in the way that best benefits its inhabitants.

Altogether, my thesis project will respond to the world as a site in that it will be a place for women to understand that what they are going through doesn't need to be done alone. It will be a place for community to develop organically.

From ancient Greece to middle German to modern America, community, learning, and dwelling have always been important. How we treat these topics has changed continually throughout human history, and it's time we come to terms with some basic truths. Children are our future, and they can only thrive if their mothers are taken care of. With a modern interpretation of theoria and a deeper understanding of dwelling, we can create a space that will better the lives of not only modern women, but the lives of the coming generations.

Building Dwelling Thinking | Martin Heidegger

Spectacles of Truth in Classical Greek Philosophy | Andrea Wilson Nightingale

Phenomenology of Perception | Maurice Merleau-Ponty

Architecture and the City: The Space of Participation | Alberto Perez-Gomez



RESEARCH

This project, in part, is trying to tackle the problem of deep-seated sexism. It is a push for equal opportunities for men and women. This project is a place for mothers to not be treated as second-class citizens and to feel recognized by others. I have repeatedly found in my research that women feel isolated after they become mothers. From these studies, I have found the problems which I must respond to in order to create a successful space for community bonding.

Proceeding with the project, I will have to take into consideration the philosophical, theoretical, and physical aspects of the topic. Providing a comfortable and comforting space is a matter of the mind and the body.

There are many subjects I knew I had to tackle, but I wasn't sure which ones were of the most concern to real parents today. To engage a larger group of women, I conducted a survey through Google forms between November 20, 2020 and December 15, 2020. I received 135 responses from mothers in various stages of life. By no means is my survey group an all-inclusive section of the population. The women who responded are mostly western tradition, mainly Caucasian, American, and mostly Christian. Fortunately, the area of my site in Papillion, Nebraska, has a population with a similar demographic. The midwestern city is near a military base, has a large Christian population, and is mostly Caucasian. Therefore, I believe my survey will still prove relevant to my project location.

The survey asked questions about resources commonly used and resources that are wanted. The full list of questions is found on page 64 and representational graphs display the results.

Many of the mothers left helpful comments, as shown in the list of useful resources and the responses to the final question about mother's own thoughts (page 68).

These mothers have been married from anywhere between 2 years and over 40 years, encompassing multiple generations. Of the unmarried mothers, 71.4% received help from their child's father and 28.6% did not.

With the current pandemic, many respondents were forced

With the current pandemic, many respondents were forced into homeschooling whether that was their intention or not. Many homeschooling parents suggested a need for more access to educational resources and extracurricular activities. The cost of homeschooling was mentioned by many parents. But of all the responses to the question about homeschooling, the ones I can be the most helpful to are the ones requesting space for homeschooled families to come together.

The large subjects brought up by concerned mothers were, among others, a) that there are more resources that mothers would like to have access to, b) that becoming a mother can put a strain on a woman's career, c) that taking care of children is expensive, d) that mental health suffers after having children, and e) that communities are necessary for both mothers and their children.

Many mothers brought up the issue of post-partum depression. It is a common mental health issue among mothers, yet there is a stigma around the illness. All around, mental health is a tricky subject to tackle, but proper interior design can begin to help alleviate symptoms. Alberto Perez-Gomez said that we must not forget that we are more than an embodied consciousness and that multi-sensory architecture is a necessity.

In summary, mothers need community and architecture plays a role in providing the space and atmosphere for women to come together. Having the proper spaces in one place will make it easier for women to gather without worrying about childcare, will allow women to do chores together, to take care of their own needs, and learn from each other. By no means do I believe such a building will directly solve these complex issues, but I believe that by making resources available and easy to access, the burdened may be lightened. Should this experimental project prove successful, then future projects will build upon the strategies I implemented.

Survey Questions

- How many children do you have?
- Are you married?
- Does your child's father contribute to his or her upbringing?
- Do you work outside of the home?
- Why do you stay at home?
- Have you taken advantage of outside resources?
- Have you been a member of a mother's support group?
- What have been the most useful resources?
- What resources do you wish you would have had access to/ would have taken advantage of?
- Do you homeschool your children?
- Are there resources you would like to have access to assist with homeschooling?
- Who makes up your community?
- Is there anyone else you would like to have in your community?
- Do you have access to adequate childcare?
- Have you gone to therapy at all since having children?
- Do you plan to have more children?
- Do you have anything else you think you'd like to add?

HOW MANY KIDS DO YOU HAVE?

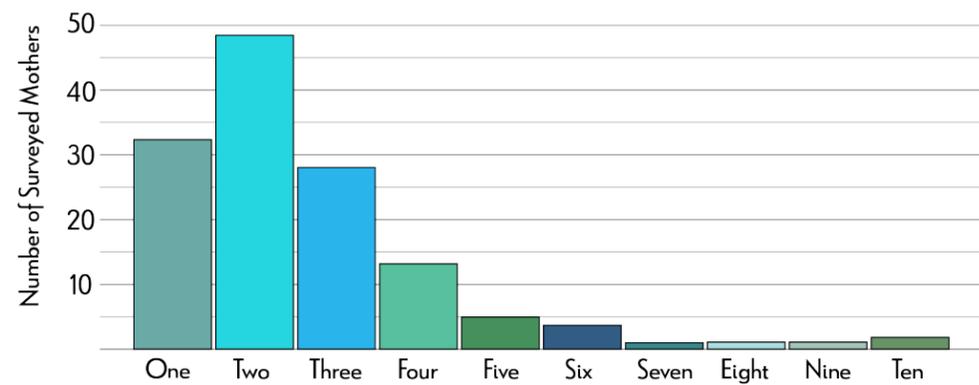
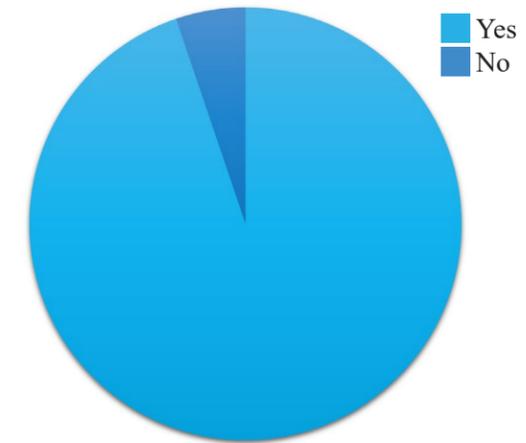
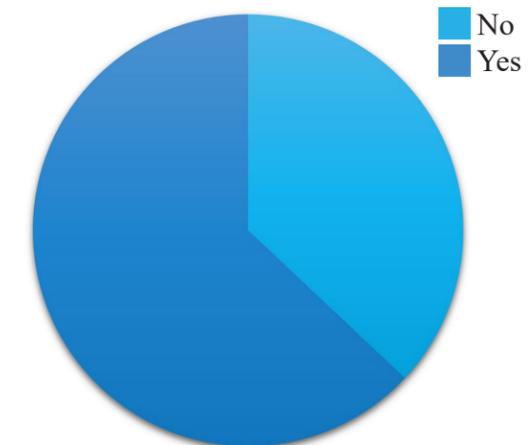


Figure 31 | Number of Children Chart

ARE YOU MARRIED?



DO YOU WORK OUTSIDE OF THE HOME?



WHY DO YOU STAY HOME?

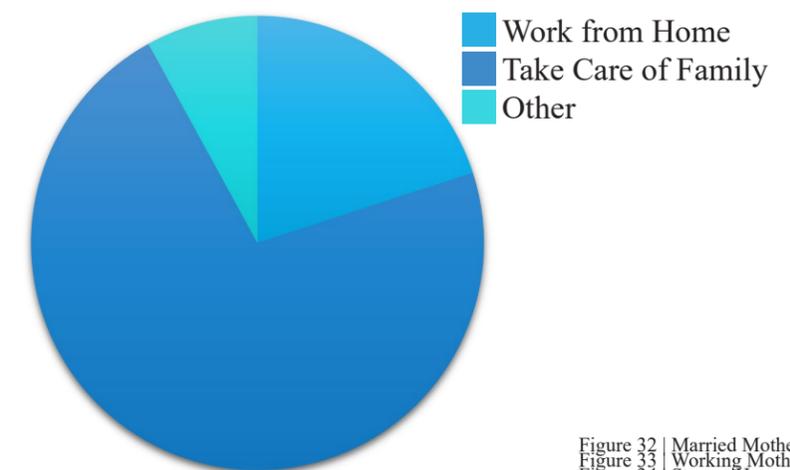


Figure 32 | Married Mothers Graph
 Figure 33 | Working Mothers Graph
 Figure 34 | Stay-at-Home Graph

Resources

There are resources for mothers, but they can be hard to access. The resources that were the most useful to the mothers I surveyed are listed.

- Women, Infants, and Children (WIC) - Provides mothers and children with proper nutrition
- Early Childhood Family Education (ECFE)- Parent education program to help parents with early learning
- Morale, Welfare, and Recreation (MWR) - provides discounted entertainment tickets for active military and veteran military families
- Army Community Services (ACS) - helps military families
- Catholic Women of the Chapel (CWOC) -an organization that connects Catholic Military women across the world
- Soldier and Family Readiness Groups -Supports military spouses
- Healthy Babies program
- Parent Day Out
- Public School
- Daycare Assistance
- Daycare
- Library
- Public parks and splash pads
- Zoo
- Youth Programs
- Mother's Groups
- Church
- Government Subsidies
- Food stamps

WHO MAKES UP YOUR COMMUNITY?

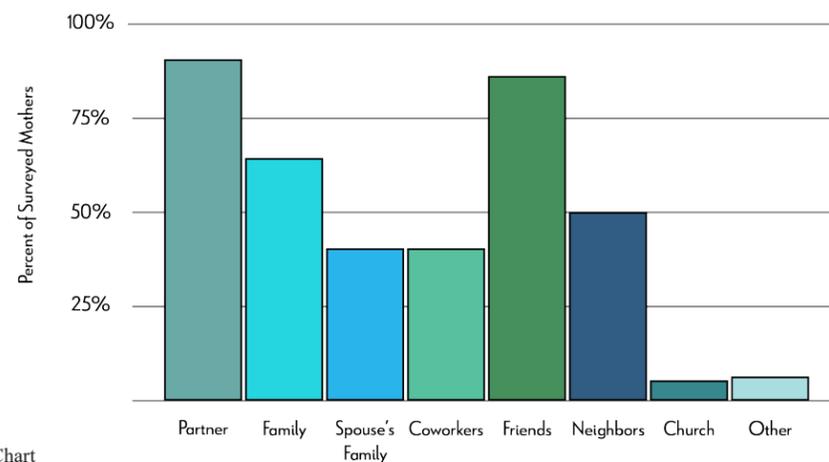
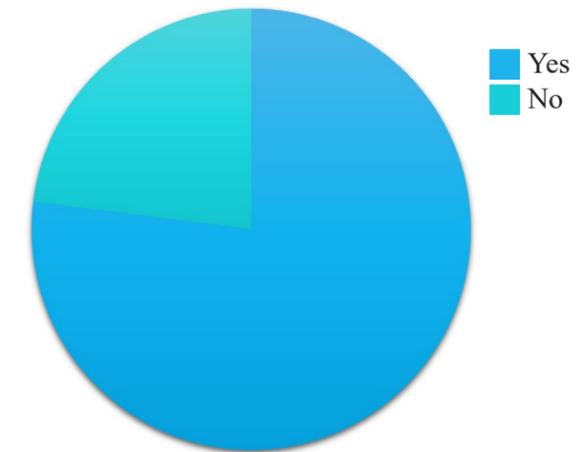
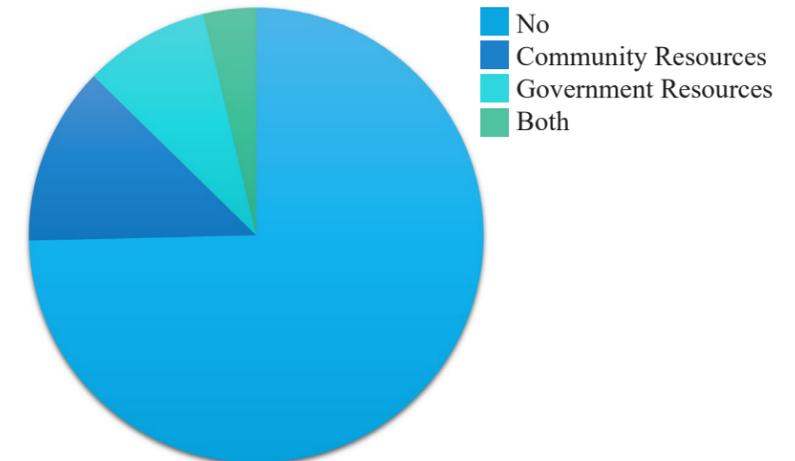


Figure 35 | Community Chart

DO YOU HAVE ACCESS TO ADEQUATE CHILDCARE?



HAVE YOU USED OUTSIDE RESOURCES?



HAVE YOU GONE TO MOTHER'S SUPPORT GROUPS?

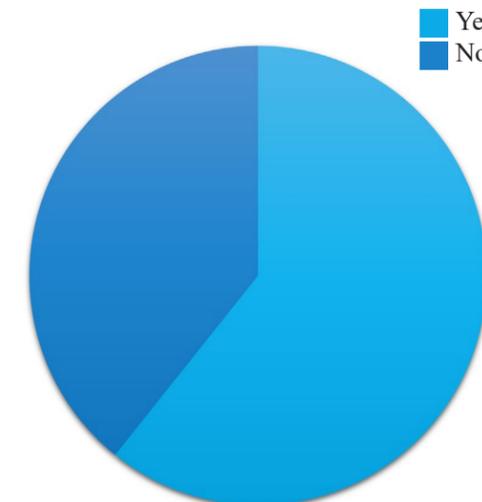


Figure 36 | Childcare Chart
Figure 37 | Resource Use Chart
Figure 38 | Support Group Chart

Testimonies

Mothers left their own thoughts at the end of their surveys. These pages show their thoughts.

I did have a babysitter for my daughter for a few years and then I just would have them in preschool a few times a week for a few hours and that would give me time for meetings and time to work, but I definitely did not have much help as my husband is also an architect.

With the pandemic, it seems mothers are being hit the hardest. Will there be a loss of women in the workforce going forward from this because of the lack of support?

We as mothers need a strong support group, that includes family, friends, and professionals to help normalize post-partum depression. Also to remind moms that there is no perfect mother.

When I was working and/or going to school, it was hard to find daycare.

My husband is an active duty service member- our community changes roughly every three years when we PCS along with some of the resources that we use and are available to us. I used to be a teacher for two years before my husband joined the military. The main reasons why we have decided to put my career on hold is due to wanting to raise our family and job stability like a teaching position can be difficult to attain if they know you will be moving within 1-3 years.

I once interviewed at IA Houston- and the acting Principal said most of his staff were single women in their 30's completely dedicated to their profession with no interest in having children. I found this sad. The profession does take a lot of energy and time. I know of several moms who are doing both successfully but only about 3 that are not completely frazzled while doing it all.

Having a network of like-minded moms has greatly improved my mental health.

Since COVID, I've considered quitting my job at least weekly so that I could better support my children. I haven't pulled the trigger though.

Childcare is a huge burden, and my biggest expense. I literally had to start my own company to be able to afford enough to pay for childcare in order to work... endless cycle. Between childcare and the cost of Healthcare, it's more than half my salary. COVID has further complicated this with reduced hours and options, reduced public school and more burden on the parent to provide.

Childcare is available but expensive. So I work for myself from home.



PROJECT JUSTIFICATION

This project is important to me personally because I am the youngest of seven children, and the aunt to 19 nieces and nephews. I have spent the majority of my life babysitting family members, and I have watched my siblings and friends become parents. I am going to be getting married soon and plan to have children within the next few years. I see the way that mothers struggle to balance motherhood with social lives, work, and self-care.

We live in a world today where having children is almost controversial. Our generation is more likely to go childless than previous generations. People less likely to be financially stable now than in previous generations and do not always have the resources to support children. There are a lot of single parents out there. Within American society, there are many pressures on the working mother. The workplace typically gives inadequate maternity and paternity leave, and doesn't allow proper adjustment for new mothers.

This project is important because it opens up a new possibility for mothers with small children. It gives them the chance to have a social life, to get help with parenting, to learn new things, and to take time for themselves.

Children are our future. To prepare for them, we must have adequate care for their mothers

The development of a mother's community center is in agreement with Alberto Perez-Gomez's statement, "We need to feel at home, and this need for dwelling is always a living with others."

This project is suitable as my thesis as it tackles a social issue close to my heart and it also explores the relationship between architecture and community. As architecture is, at its heart, a social endeavor, the relationship between architecture and community is an important area of study for a professional about to enter the field.

This project will make people in the profession view the importance of architecture in a new light. Seeing architecture as a social venture rather than merely functional or visual venture is important to what architecture becomes in the coming years.

Any project is simply an option. But I believe it's important enough for me to do. Any project could be left for someone else. But I believe someone needs to do it.



CONTEXT

My topic is motherhood and femininity. It is about making voices heard. It is about protecting those who don't realize they need to be protected. Our mothers create us: they form us physically and they shape the way we see the world. Without mothers, our world would be uninhabitable.

Patriarchy is defined as *"a system of society of government in which the father or eldest male is head of the family and descent is traced through the male line"*

Eighteen weeks after conception, females begin to face the effects of the patriarchy, as this is when expectant mothers can first learn the gender of their child. In some cultures, female infants are routinely aborted, as sons carry on the family name, and are thus more valuable. (It is estimated that about 100 million females were aborted across Asia in the 1990s due to single-child laws).

In childhood, the young girl is discouraged from acting as a child. A young girl should not be loud, should not get dirty, should be kind. Young boys figure out early on that girls are not the same as them. They are not to be played with, they are something different, something shameful. For a young boy, to be called a girl is an insult. For a young girl, to be called a boy is a compliment.

As she grows older, the teenage girl begins notice the attention men give her. They receive remarks from adult men and are expected to deal with daily bouts of sexual harassment from teenage boys.

The young adult woman has been trained how to act according to where she is. She lives on the rape schedule: she never walks alone in the dark, she carries pepper spray or a knife or her keys between her fingers. The young woman knows she must hold her tongue. She knows she cannot dress in a certain way, or she will draw the wrong kind of attention, yet she feels the pressure to dress in a way that appeals to the male gaze.

The young woman is a barter chip. She is the virgin who belongs to her father until he gives her to another man. At this point, her value comes from being a wife.

“Patriarchy is founded upon the theft and violation of the daughter’s virginity and the use of her virginity for commerce between men...”

The woman never truly belongs to herself. Her worth is defined by the men in her life.

“Women are thus reduced to their biological capacity to satisfy men’s erotic, social and procreative needs”

Soon the wife becomes a mother, and her value begins to be derived from that relationship. As a mother, she is expected to give her child the name of their father, essentially erasing herself and her own name from history.



Figure 39 | Spring Spreads One Green Lap of Flowers | John William Waterhouse

“In denying women such a genealogy, patriarchal culture and religion denies them their relationship with the divine, a relation which...is the absolute condition for the constitution of women’s own identity.”

The pregnant mother begins to face a new set of challenges. Childbirth is truly the reason I chose to tackle this subject. As most of our doctors are men, there is an unacceptable amount of disrespect and abuse towards pregnant and birthing mothers. In some cases, it is unavoidable for women to come into contact with these corrupted doctors. It has long been the practice for hospital

births to be orchestrated in a way that is easiest for the doctor, but is unnecessarily difficult for the mother. While there are other childbirth options for new mothers, they are not always readily available, or they may not know where to find the right resources.

But childbirth is only the beginning of the woman’s journey as a mother. The mother who stays home with her children risks losing her identity and faces the isolation that comes with being responsible for a new life. A mother who works not only must fulfill her duties as an employee, but also those of a house wife- cooking, cleaning, child rearing. She must work the second shift, while often the father only works for his employer. (The second shift is the household and childcare duties that must be done

after a day’s work.)

As the mother ages, and her children leave the home, she becomes gradually more dependent on her offspring. Unfortunately, in modern times, her children give her to the care of a nursing home. Though she toiled for years for them, they do not return the kindness.

It is difficult for many mothers to ask for help. They feel they should be able to complete their duties on their own. But, “women must love one another both as mothers, with a maternal love, and as daughters, with a filial love.” This is the premise of my thesis: Creating a community center that is a place to take care of others and to let others take care of you.

The injustice towards women is not a new story. There are stories throughout the entirety of human history.

The story I will tell begins with Persephone in a field full of goddesses, playing among the flowers. She saw the narcissus, with one hundred radiant blooms, approached it, and plucked one. Having set the Narcissus as a trap, Hades sprang from the ground and captured Persephone, taking her to the underworld to become his wife. She screamed, but it went unheard.

Her mother Demeter, goddess of agriculture and fertility, devastated at the loss of her daughter, took all life from the land. She would have killed every last human had Zeus not stepped in and brought Persephone back to the surface. But before Persephone returned to her mother from the underworld, Hades approached her and said,

“Go now, Persephone, to your dark-robed mother, go, and feel kindly in your heart towards me: be not so exceedingly cast down; for I shall be no unfitting husband for you among the deathless gods, that am own brother to father Zeus. And while you are here, you shall rule all that lives and moves and shall have the greatest rights among the deathless gods: those who defraud you and do not appease your power with offerings, reverently performing rites and paying fit gifts, shall be punished forevermore.”

Hades gave her a pomegranate seed, which she ate unknowingly. When she reunited with her mother, Demeter asked if she had eaten the food of the underworld. Upon learning of the pomegranate seed, Demeter despaired, knowing her daughter would be bound to the underworld for a third of the year.

Through the myth, we know that Persephone grew to love her husband. It began with him stealing her, stealing her voice (both physically, by taking her away unwillingly, and metaphorically, through the scream that went unheard). But as time goes on, we begin instead to see Demeter stealing the voice of her daughter. Despite only spending four months of the year with her husband, all of the myths of Persephone take place in the underworld, where she displays great power. The images of Persephone in the

Without Persephone, Demeter is essentially useless as the goddess of agriculture and fertility. The world she rules over dies as she mourns. When Persephone is with Demeter, the daughter does not maintain her role as a queen. This is somewhat similar to what Luce Irigaray, Belgian feminist and philosopher, says in her poem “And the One Doesn’t Stir without the Other.” In this poem, Irigaray takes on the role of a daughter who sees her mother as an empty husk who gives herself completely to her

child. She sees in herself her own mother and the future that awaits her. So much so, that she uses the joint pronoun you/me in reference to herself and her mother. She sees a lineage of women giving up their voices for their husbands and children.

“I look like you, you look like me. I look at myself in you, you look at yourself in me. You’re already big, I’m still little. But I came out of you, and here in front of your very eyes, I am another living you.”

Irigaray continues to go on, telling the story of herself/ the daughter turning to her father, a person who is his own self, to imitate him. She tells the story of the daughter leaving the mother so that the mother doesn’t die by giving her entire self to her daughter. For one doesn’t stir without the other- the daughter would not be alive without the mother, and the daughter gives meaning to the mother’s life. But in doing so, the mother neglects herself and loses her voice. The daughter wants to give her mother her voice back. She wants to see a possible future where she does not also lose her own voice.

The last verse of the poem ends:

“And the one doesn’t stir without the other. But we do not move together. When the one of us comes into the world, the other goes underground. When the one carries life, the other dies. And what I wanted from you, Mother, was this: that in giving me life, you still remain alive.”

We see this concept illustrated in the image of the mother pelican. In times of famine, the mother pelican



Figure 40 | Pelican in her Piety (1880)

opens a wound in her belly to feed her children her own blood. She kills herself so that her children will live.

Elisabeth Badinter, a French feminist and philosopher, argued against traditional

motherhood, making the claim that motherhood is antifeminist and takes away a woman’s individuality and speech. “A new trend has women embracing an extreme version of mothering that impedes their true self-fulfillment and forces them back home” and “full-time motherhood is intrinsically alienating and in direct conflict with a woman’s identity.” Similarly, Simone de Beauvoir, another Frenchwoman and a social theorist, compared maternity with slavery.

While motherhood is indeed alienating, Badinter and Beauvoir make some bold claims.

Badinter cries out against breastfeeding and says, “There is no greater antithesis to the couple as lovers than the couple as parents.” Which seems to imply that Elisabeth Badinter believes that a woman’s breasts belong “not to her child, not to herself, but to [her husband.]”

To assume that parenthood directly defies the relationship of lovers seems to misinterpret the cause of parenthood. Historically, the greatest virtue is that of being a mother. The oldest statues in the world are those of goddesses of fertility. Disrespecting the women who choose to be mothers is similar to disrespecting life. While parenthood is not a glamorous job, it is an essential one. It requires a giving of one’s self, such as Luce Irigaray suggested. But it does not mean that mothers need to lose themselves in the process.

Elinor Marris (a graduate student at the University of Kent in Brussels) wrote in an analysis, “All her life, Beauvoir fought for women’s rights – such as abortion, economic independence, and contraception – that would give them a social position equal to men.” But Luce Irigaray had a much different view than both Beauvoir and Badinter.

She “believes that women who deny that they are different from men and deprive themselves of their femininity to gain equality are wrong because rather than gaining true equality as free individuals, they absorb a masculine identity whose parameters are defined by men. Because ‘women merely ‘equal’ to men would be ‘like them’, therefore not women, they must create their own language that allows them to exist alongside and equal to men while remaining authentic women.”

Attacking motherhood does not allow women’s voices to be heard. Instead it turns women’s voices into men’s voices. If we want to fix the social order, womanhood, and maternity, need to be raised up. Fertility, once more, needs to be considered a gift.

With the creation of a mother’s community center, a family of women can come together as support, empowering each other, hearing one another’s voices when no one else will.

In *Making Space*, a group of female architects who call themselves Matrix says: “Campaigns for community facilities have made clear women’s real need to break out of the isolation and individualization of housework and childcare.”

I am proposing, with my thesis, a community space for women to come together. Within this space they will have their voice heard. They will have access to resources. This would become a space for women of all ages to come together, and for children of all ages to come together.

With this project I want to begin a new story where women can always expect to have their voices be heard. I want to create a space such as the one Alberto Perez Gomez describes in *Architecture and the City: the Space of Participation*. “Thus, in the best cases, architecture has provided spaces of encounter and participation where the Other is recognized and respected, spaces that enable human freedom, often – seemingly paradoxically- by revealing the limits associated with particular human actions. This intersubjective and emotional space of face-to-face communication is crucial for human self-understanding”

As this is a place for a minority (women and children), the Other is an incredibly important person. It is only by recognizing her that we learn to value each other as human.



SITE

To choose my site, I compared child care rates with home value. I want to focus on families who own homes, but may still struggle with childcare. I ended up choosing Nebraska, because they are in the higher range of child care costs, but in the lower range of home values. Within Nebraska, I chose the Omaha area because it's easy for me to access. Also its large. Additionally, it is only 230 miles away from the geographical center of the contiguous 48 states, so it's a nice average of the US.

Within the region, I chose a residential neighborhood called Hickory Hill in Papillion (about 7 miles south of Omaha). The site is directly adjacent to Hickory Hill Elementary School on one side and a small strip mall on the other. The proximity of these elements are important as Matrix notes that often women do not have transportation at their disposal.

“So women tend to lead a more ‘local’ existence, not just because of domestic roles and responsibilities, but also because of an inequality between the genders in access to resources.”
(Matrix, 1984).

Matrix takes note that city planning is arranged around the man's workday, with a distinct separation between work and home life. While the statistics used in the book have changed in recent years, as more woman are in the work force and are more likely to have their own vehicle, a site that is easily accessible without loading children into a car is ideal. It is also important that the site be accessible to the children on their own.

I chose the middle income demographic because I am not looking to create a home for impoverished single mothers to come to find safe haven. There are plenty of those in every major city. There are also many groups of mothers who meet with each other. MOPS (mothers of preschoolers), for example is an international organization. But this would be a place that encourages new community. It isn't so much “this is an organization you should join” but instead a family you become.

Residential

Elementary School



Figure 41 | Site Location

Commercial

Demographics

Husband and Wife Households make up 81% of all households in Sarpy county, with the average household containing 3.3 people. Families take up 73% of households. Forty percent of residents are single people.

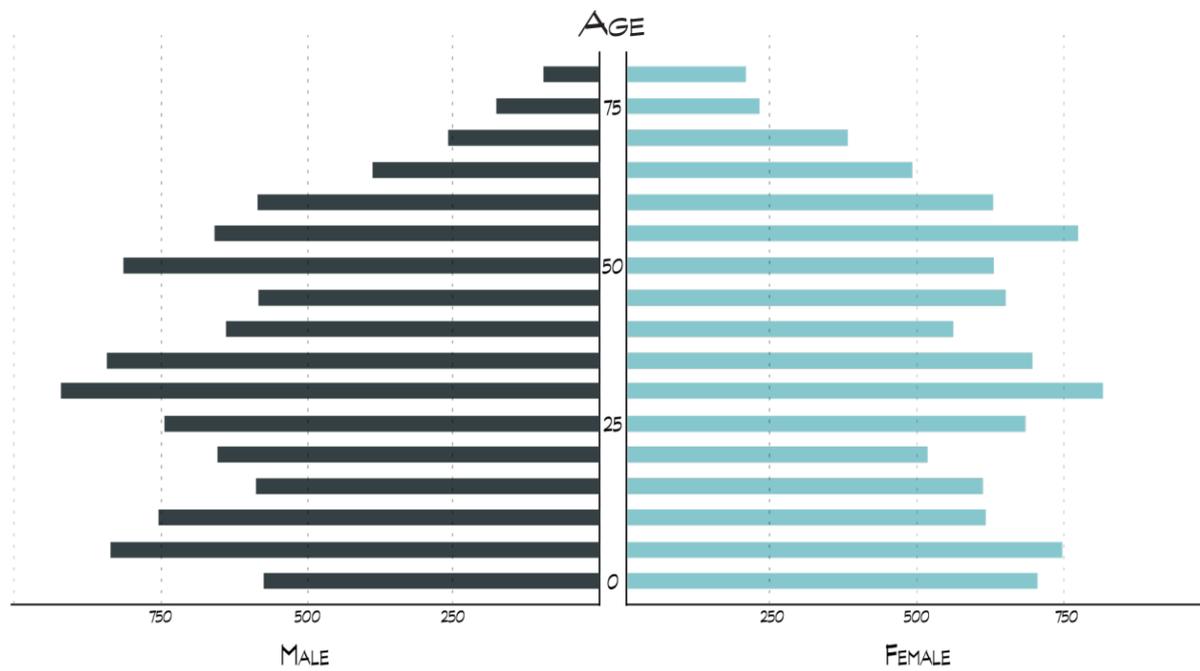


Figure 42 | Sarpy County Age Demographic

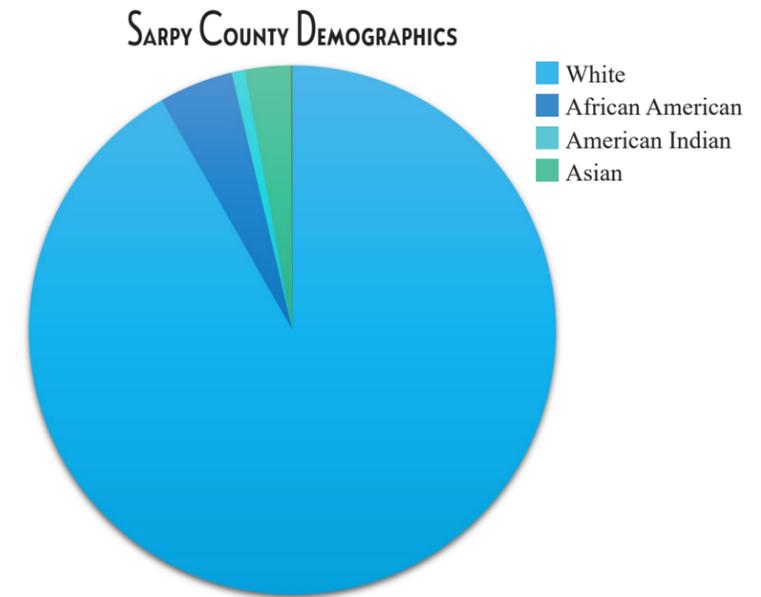


Figure 43 | Sarpy County Demographics

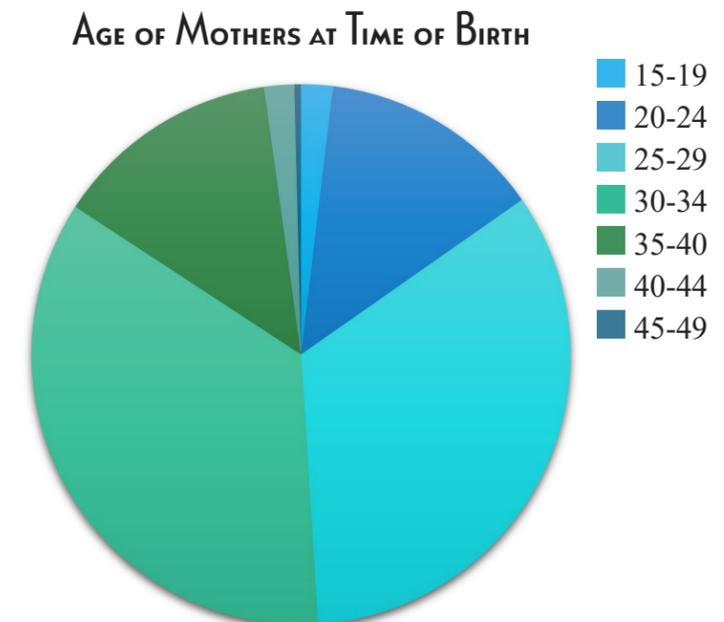


Figure 44 | Sarpy County Mother Age

Views

The views from the site are nothing spectacular. To the west can be seen the elementary school and its playground. To the north is Giles Road and the residential neighborhood on the opposite site. To the south can be seen the back yards of some residences within the Hickory Hill neighborhood. On the eastern side can be seen the strip mall. I have yet to go to the site, but plan to visit in the coming months. These images come from GoogleMaps and Google StreetView.

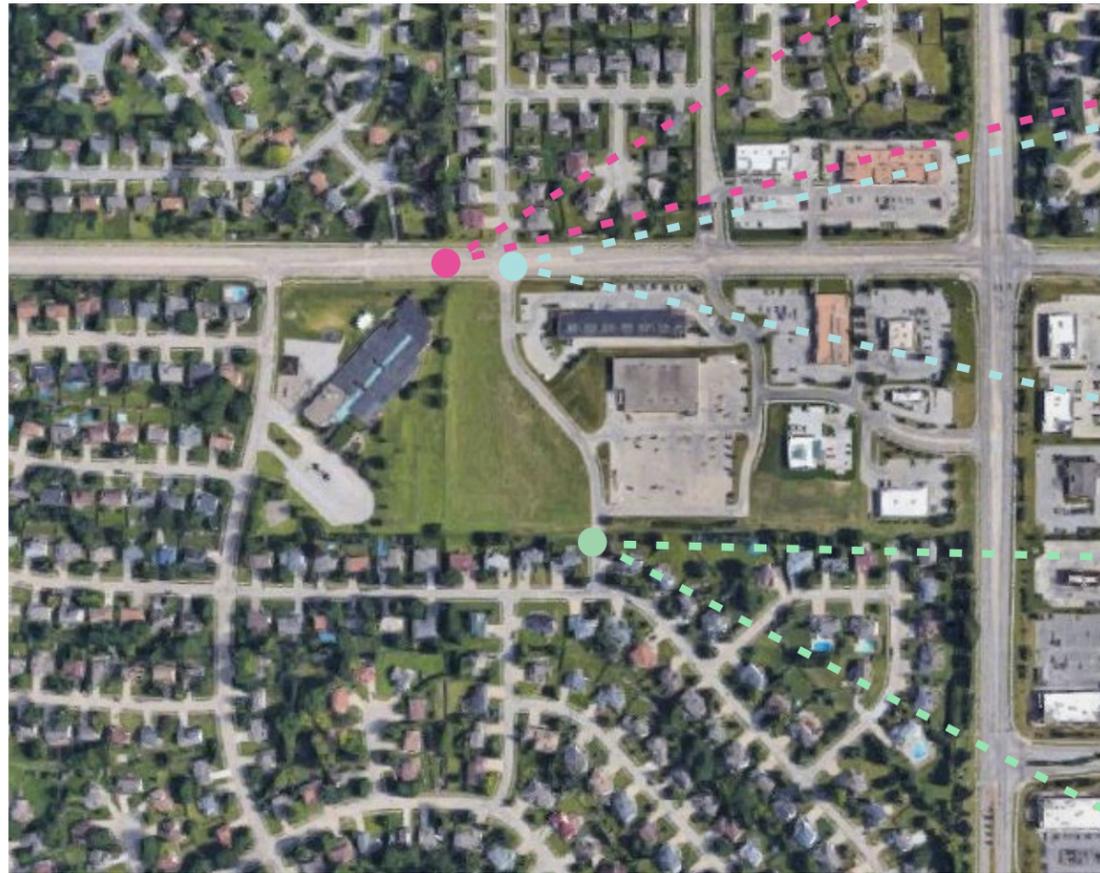


Figure 45 | Site Overhead



Figure 46 | View from North of Site



Figure 48 | View from North West of Site



Figure 47 | View from South West of Site

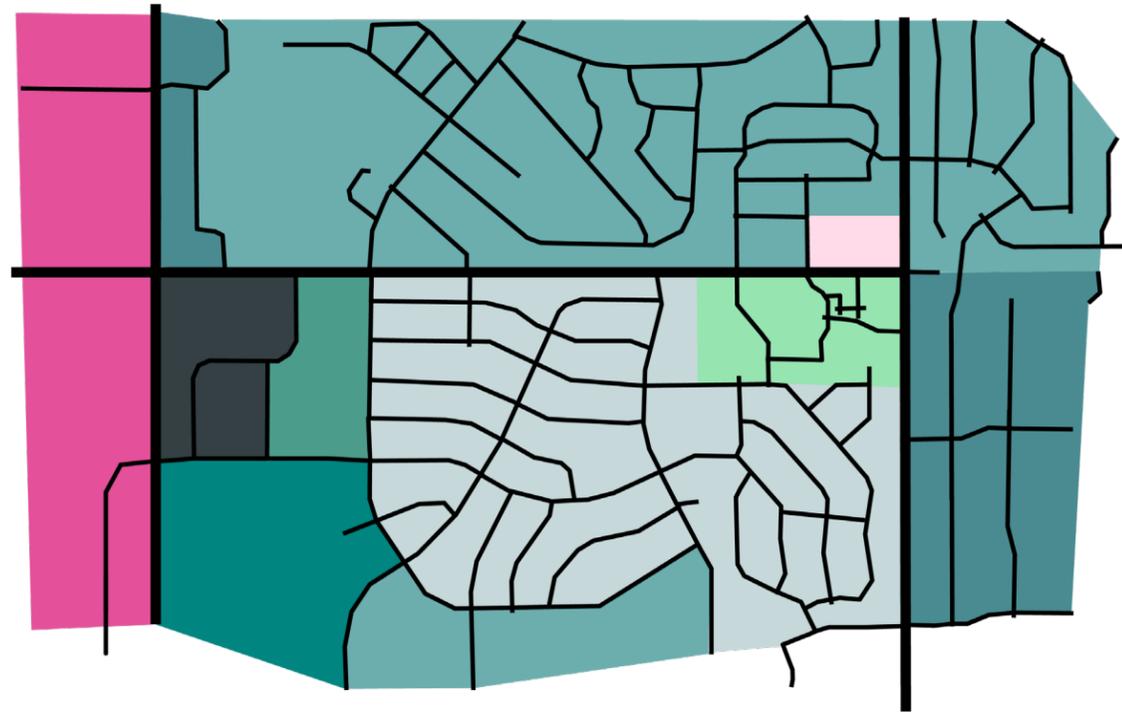


Figure 49 | Zoning



Table 1 | Lot Information

Owner	Hickory Hill Associates LLC 10855 W Dodge Rd Ste 270 Omaha, NE 68154
Legal	Lot 1 Hickory Hill Plaza
Subdivision	Hickory Hill Plaza (40089)
Tax District	27001
Size	3.1 acres
Land Value	\$807,600
Specials	None
City	City of Papillion

School District	Papillion-La Vista
Fire District	Papillion Fire
Law	Papillion Police
Electricity	OPPD
Wastewater	Papillion

The surrounding sites are zoned R-2, so the height of this building is restricted to 45 feet. If the Residential Zoning was further than 100 feet away from the site, the height limit would be 60'.

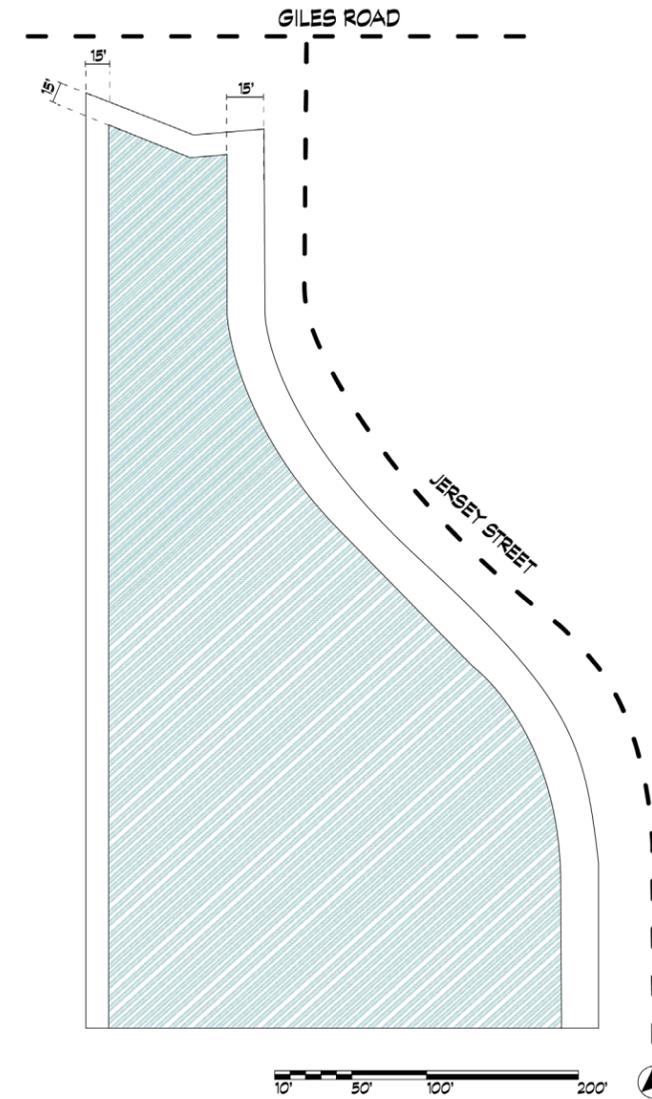


Figure 50 | Site Setbacks

Table 2 | Setbacks

Setbacks	
Building Coverage Max	60% (80,760 sq ft)
Impervious Coverage Max	85% (114,410 sq ft)
Floor Area Ratio	1.0
Front Yard	25 feet minimum
Street Side Yard	15 feet
Interior Side Yard	15 feet
Rear Yard	15 feet

Vehicular / Bike/ Pedestrian Traffic

The area is predominantly residential, with small areas of commercial zoning in the adjacent lots. Giles Road has the majority of the traffic, but it remains low-volume. The other surrounding roadways are low speed residential streets.

This means that biking and walking are viable options around the area. Biking on the roadway can take place on many of the surrounding streets. Parks with long biking and walking paths are nearby.

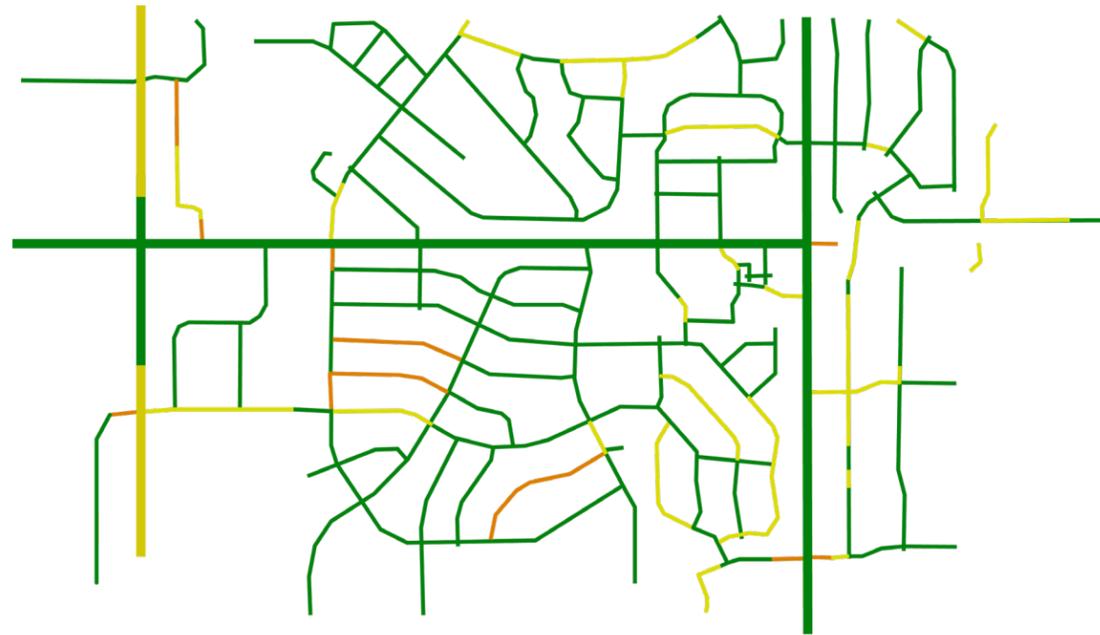


Figure 51 | Vehicular Traffic

Public Transportation

As Papillion is a suburb of Omaha, it does not benefit from the public transit of the larger city. A single bus route comes to the suburb and the park and ride stop is several blocks away from the Hickory Hill site.

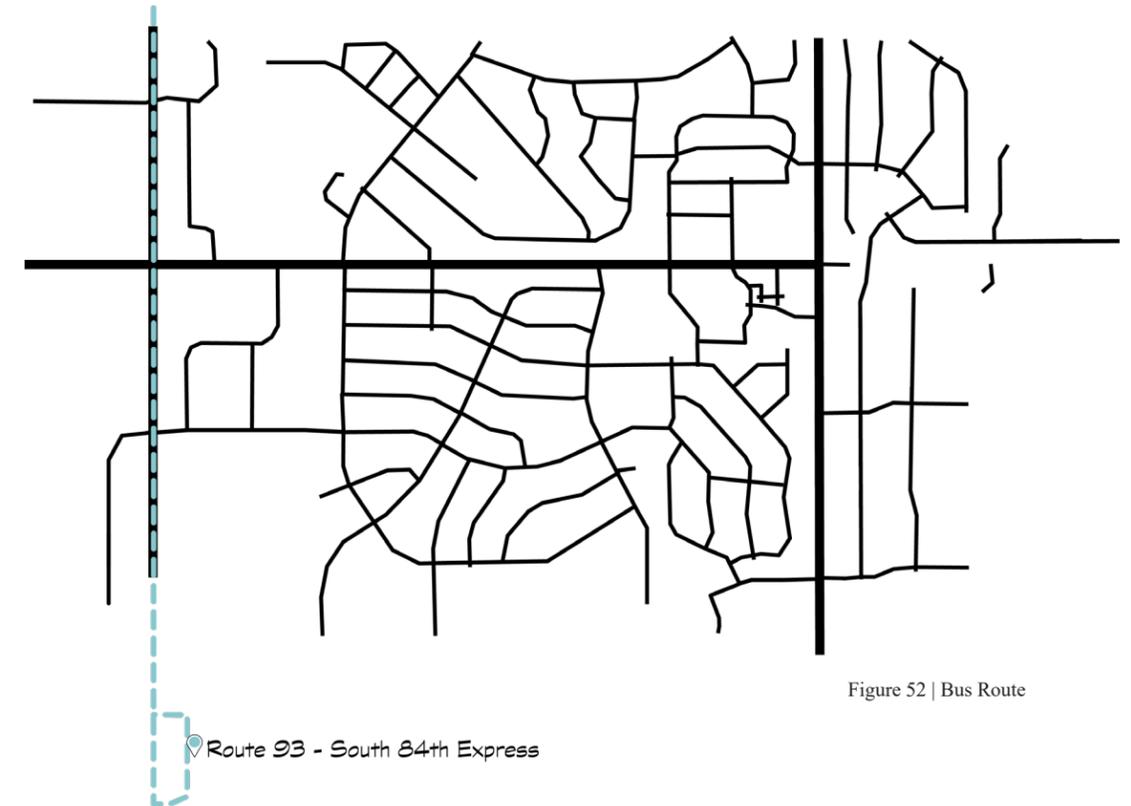
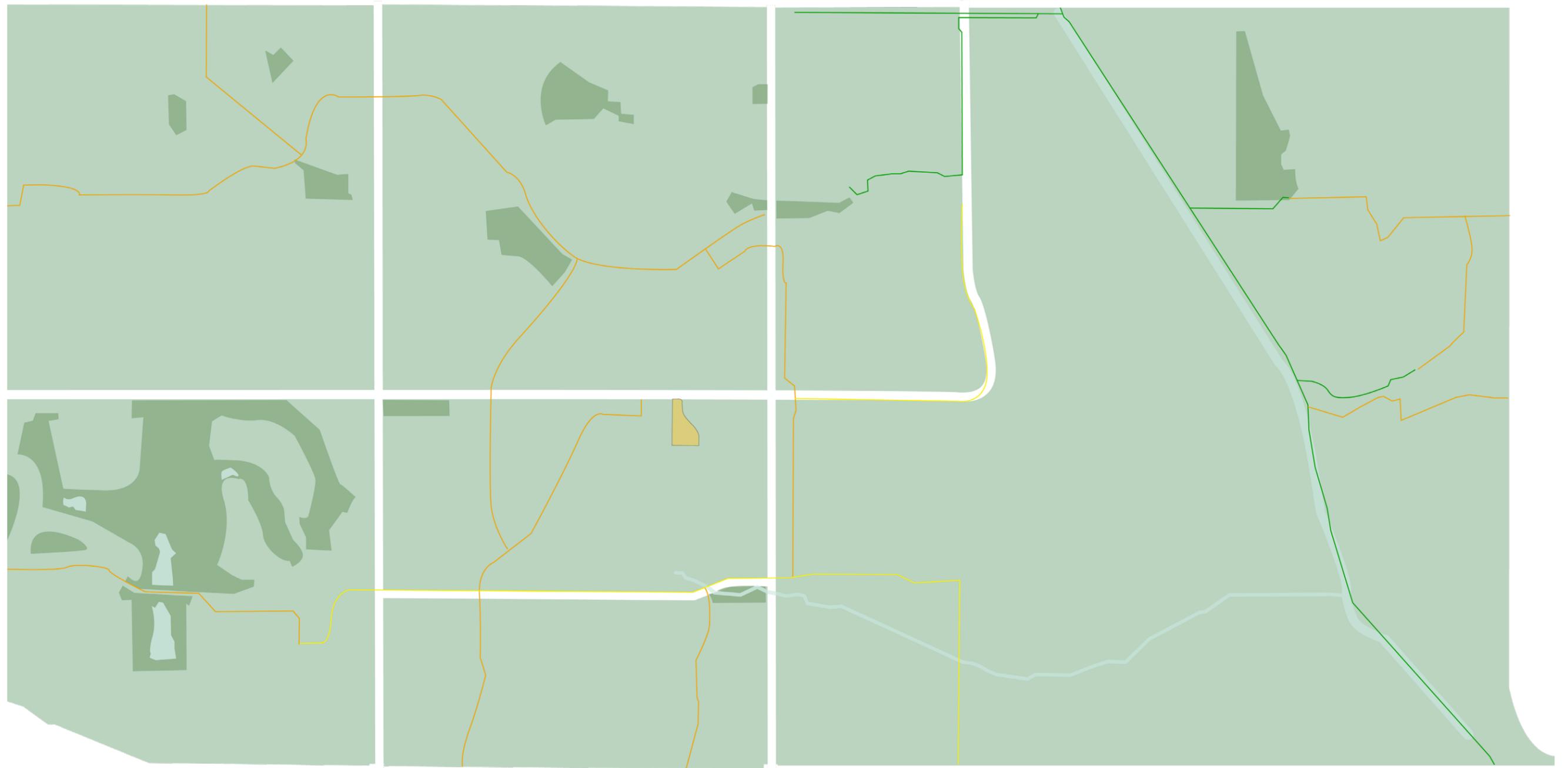


Figure 52 | Bus Route



- Park
- Water
- Site

Bike Paths

- Experienced Rider Street
- Continuous Low Volume Street
- Trail Network



Figure 53 | Walking and Biking Map

The site is relatively flat from east to west except for the barrier between this site and the school lot next door. From north to south, the elevation has a 16' elevation change, with the majority of the interior of the site being near level.

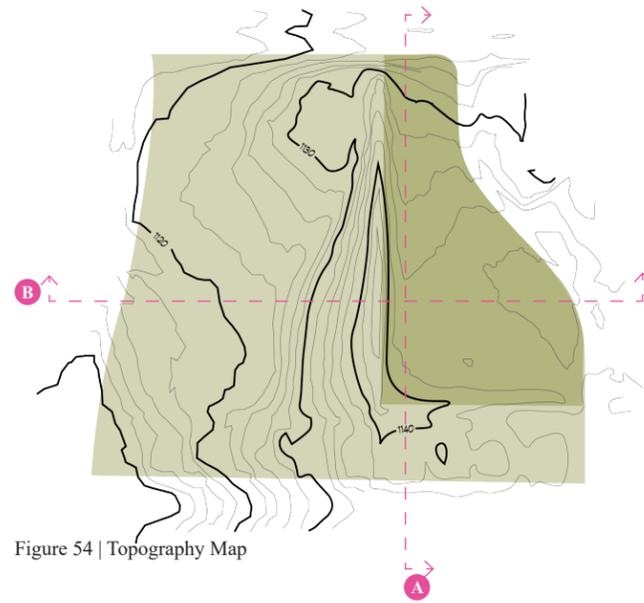


Figure 54 | Topography Map

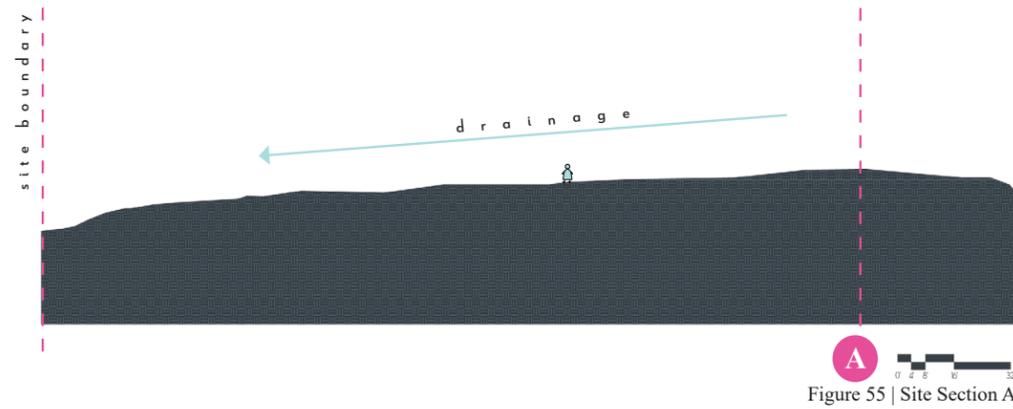


Figure 55 | Site Section A

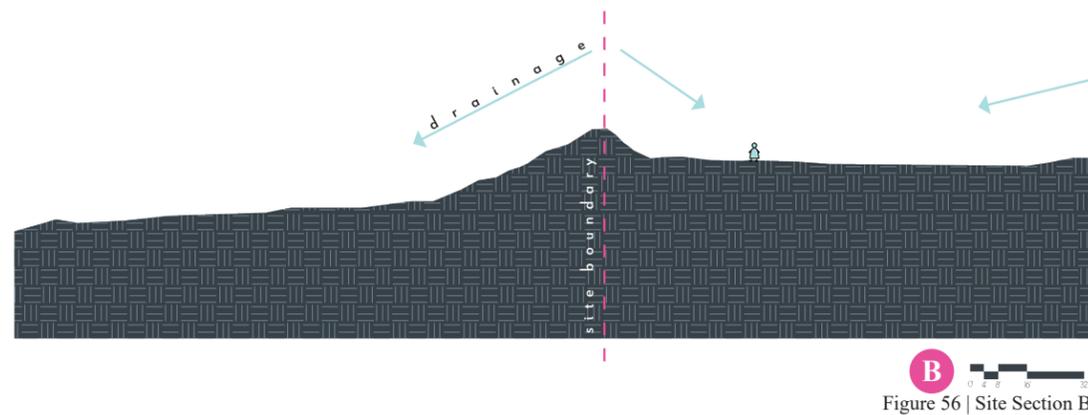


Figure 56 | Site Section B

“The project site is within an area of Nebraska which typically consists of low to moderately plastic, wind-deposited, silts and lean clays (Peoria Loess and Loveland Formation) overlying glacial till at greater depths. During most construction activities at this site, the loessal soils will be the primary soils encountered. Occasionally, high plastic (fat) clays can be encountered in this region, but these soil types were not documented during this exploration. Very moist alluvial soils may be encountered within low-lying areas along the south edge of the site.” (Olsson Sites, 2016)

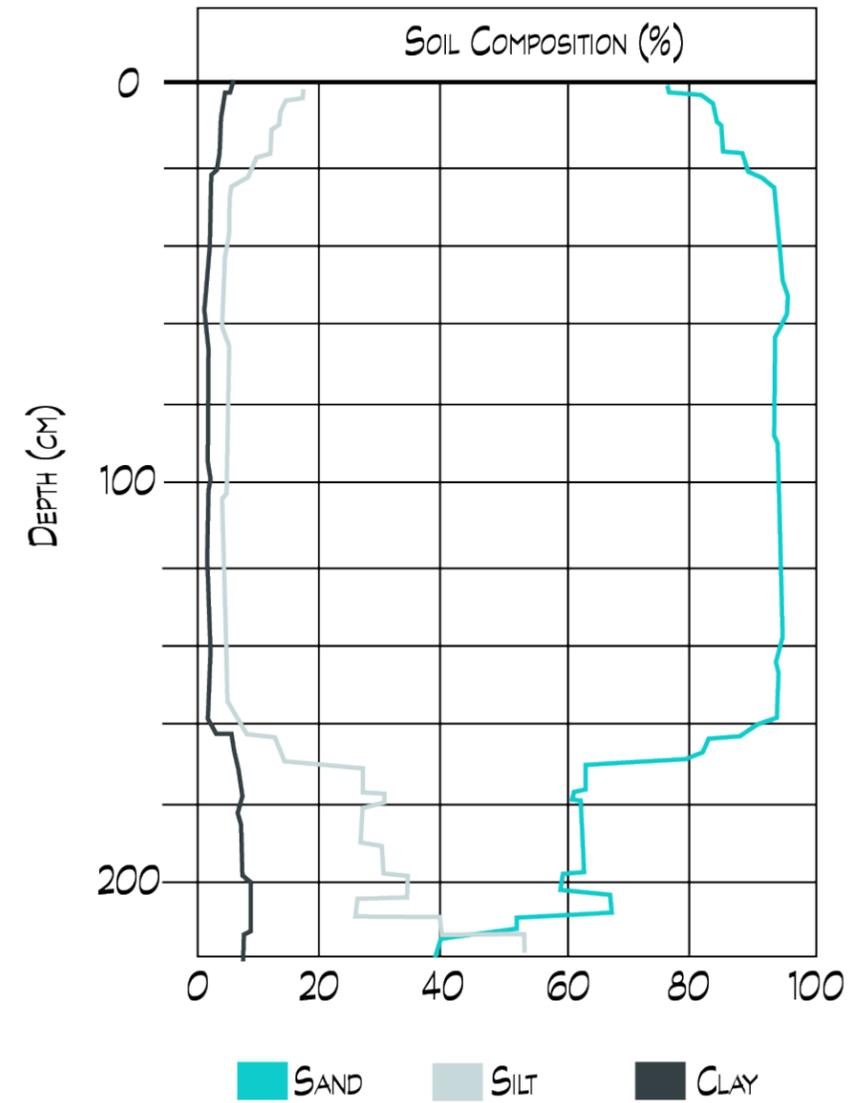


Figure 57 | Soil Composition

Climate Data

The climate in Nebraska is seasonal, with cold winters and hot summers. These large temperature swings come with changes in precipitation and winds. The summer winds are predominantly from the northwest and the winter winds from the southeast. Yearly rainfall is typically 31 inches and snowfall is also 31 inches.

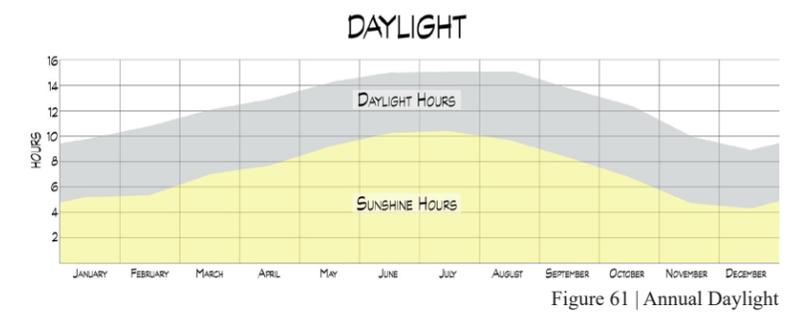
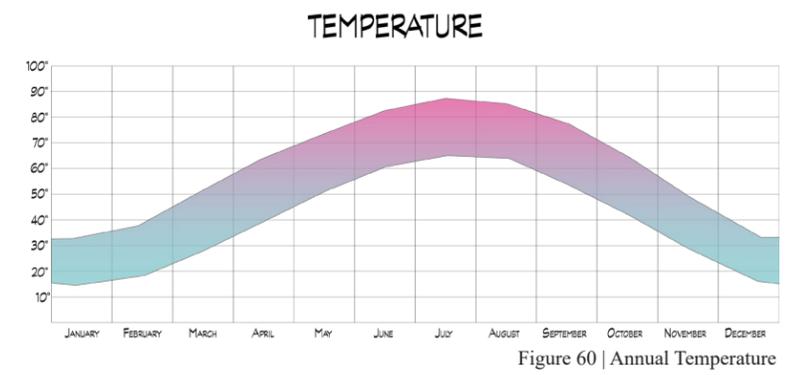
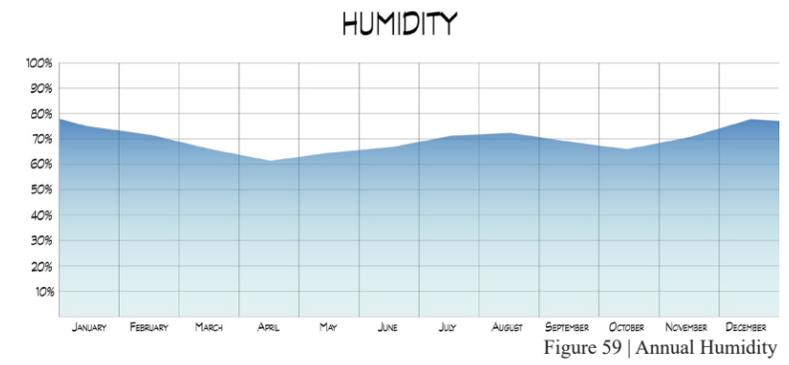
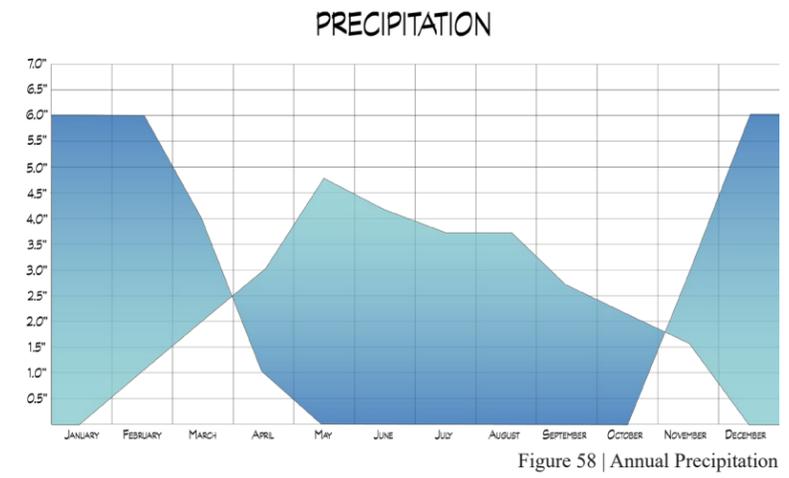




Figure 62 | Site Analysis

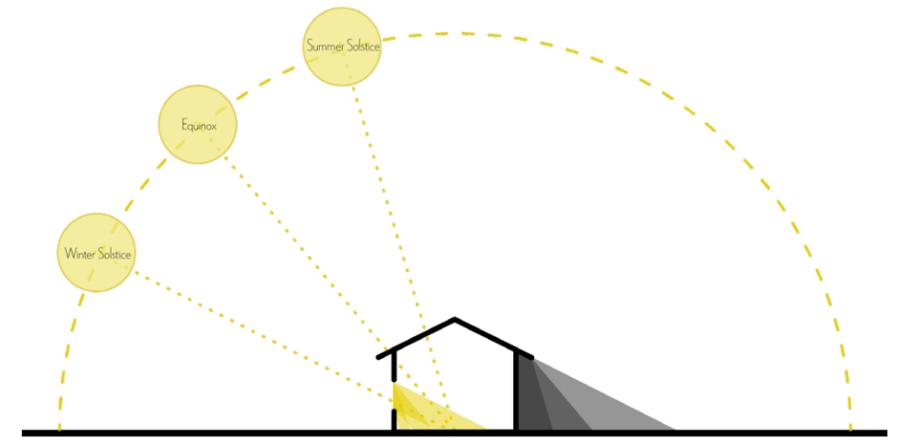


Figure 63 | Sun Angles

WIND ROSE

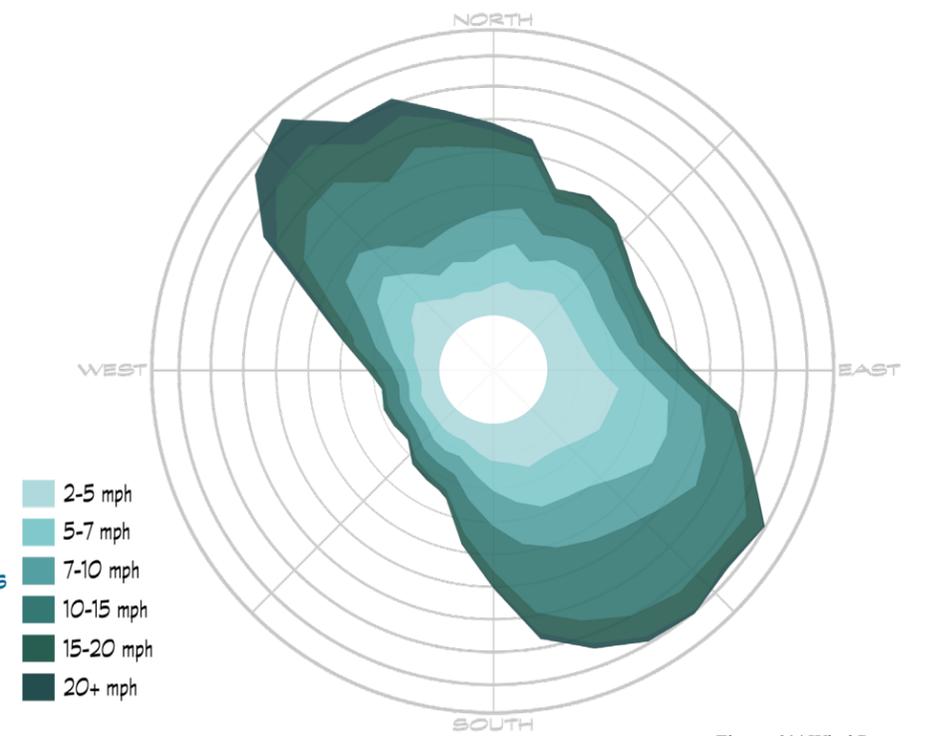


Figure 64 | Wind Rose



PERFORMANCE CRITERIA

Performance Criteria

Each of the performance criteria are strongly interconnected. The psychological impact is related to lighting, color choice, materials, and environmental performance. The environmental performance is related to lighting. The Space Allocation depends on environmental performance, lighting, ADA standards, and the needs of the occupants.

Each criteria will be compared to case studies and will involve consultation with codes, specifications, and existing studies. General performance analysis will be done through 3D modeling software and analysis programs, surveys, sketches, physical models, and personal studies.

Psychological Impact

Psychological Impact is arguably the most important aspect of this project as this is a space for young minds to grow and for women to feel safe and comfortable. This heading contains many aspects, including light quality, color choice, and materials.

Color theory will be considered for overall color schemes within the project. Materials will be chosen based off of whether or not they carry potential health risks, and then off of general aesthetic, cost, and effectiveness.

Lighting will be measured in 3D digital models as well as scaled physical models with lighting simulations. If an occupied room cannot support a houseplant, then it does not receive enough natural light.

The aspects of the psychological impact will be measured based on each criteria. There will be light metering, VOC and pollutant analyses, and surveys of the occupants for feedback.

Environmental Performance

Environmental performance will be impacted by many of the elements of the psychological impact, code compliance, space allocation, and cost. The use of natural lighting will lessen the use of artificial lights and will impact heating and cooling costs. Using the proper materials will lessen the environmental impact. Following WELL building standards will affect ventilation and lighting. The size of the building

will play a large role in performance. Finally, the budget will affect the choices that contribute to environmental performance.

I plan to incorporate appropriate sustainable design techniques that fit the project, budget, and climate. Case studies of buildings in the region that use such techniques will inform what does and does not work in the central Midwest. Cost analysis and a comparison of income and taxes in the area will decide how much can be budgeted for environmental performance.

Small scale solutions will be incorporated, like proper insulation, reduced thermal bridging, insulated glass, and air exchange units.

Code Compliance

I will research WELL building standards and follow the guidelines in the design in my project. As this is a place for children to come together, it is important to reduce the transmission of illness. It is also important that their growing bodies receive clean air, proper exercise, nutritious food, and clean water. All of these are criteria of the WELL Building Standard.

It is crucial for this building to be ADA compliant, as a main project goal is complete accessibility for all age groups and abilities. As I continue to design this project, I will continually reference the Americans with Disabilities Act in order to ensure that all people can fully interact with their surroundings within the spaces.

Additionally, I will speak with mothers and read testimonies of mothers to learn what spaces have proven difficult for them to navigate with small children, prams, diaper bags, and/or while pregnant.

Analysis will occur through a comparison between all doors, steps, slopes, hallways, counters, etc. and the ADA guidelines. If they meet or exceed the guidelines, then I shall consider the criteria to be met.

Space Allocation

The layout of spaces will be planned on paper and in design software. Interaction matrices will analyze the required relationships between spaces. Safety and access will determine interaction between spaces and entries/exits and between one room and other. Lighting requirements will also play a large role in where rooms are placed.

Space allocation is affected by the current COVID pandemic, as mothers and children are struggling with isolation. A building of this type should have enough space for occupants to maintain a safe social distance.

Comparisons to projects of similar typologies will allow educated decisions for spaces

stories tall. The maximum building coverage on the site is 80,760 square feet, therefore the maximum square footage of the building is 242,280 square feet. Assuming the cost per square foot is \$150, the maximum cost of construction would be \$36.4 million.

Buildings with similar typologies, such as Surry Hills Community Center, have square footages around 27,000 square feet. I anticipate my project being of smaller stature than this. Therefore, construction costs should come to a rough estimate of \$4 million.

This preliminary cost will be additionally affected by material choice, amenities, and potential sustainable design tactics.

Table 3 | Space Allocation

	Minimum Sq Ft	Maximum Sq Ft	Percentage
Indoor Space			
Circulation	7800	94489	39%
Community Space	2400	29074	12%
Child Care Center	2000	24228	10%
Mechanical	1600	19382	8%
Meeting Rooms	1200	14537	6%
Study Space	1200	14537	6%
Offices	1000	12144	5%
Kitchen	800	9690	4%
Lobby	600	7268	3%
Toilets	400	4846	2%
Library	400	4846	2%
Resource Room	200	2423	1%
Nursing Room	200	2423	1%
Storage	200	2423	1%
Total Indoor Space	20,000	242,280	
Outdoor Space			
Playground	600	5900	
Garden	450	1800	

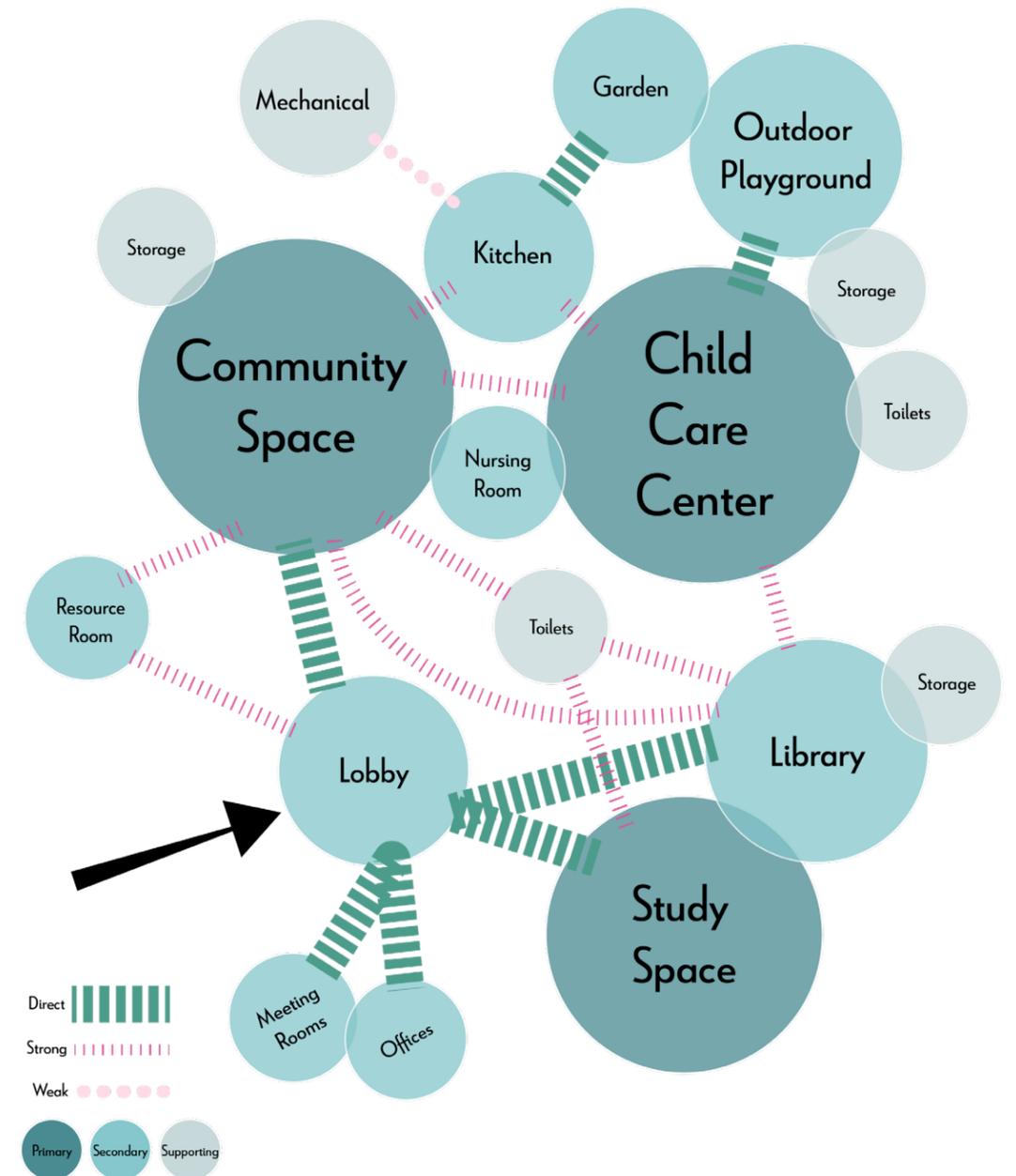
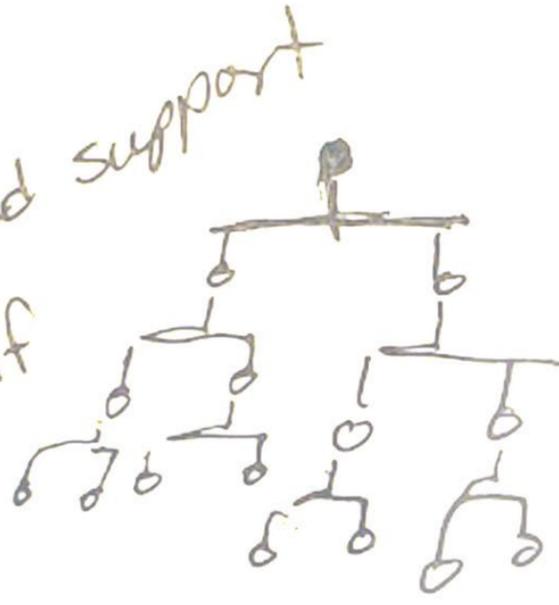


Figure 65 | Space Interaction Diagram

tiny babies - the mother, a mobile, So generative oblique eye
 hair ↓ braid you need support Opening a dista
 or you lose yourself



Presentations - us Layers
 mothers I know
 Writing +
 Drawing +
 Model +

ARTIFACT

Cognitive AND effective
 Poetic
 Bridges to other shores
 Doors



IMAGINE
 Constellations
 Architecture, images
 Sites of non
 linkina

To Use
 Woven
 Participa
 What co
 Transparency
 For
 Map s
 G

PROCESS DOCUMENTATION

Artefact | Development of the artefact began in October 2020 and focused on creating a bridge between the theoretical, social, emotional and physical aspects of the architecture.

Drawings | Hand sketching is my first line of action when beginning a new design. The concepts I committed to paper were woven shapes inspired by the form of the artefact.

Models | Mass models took the form of sketched images and evolved in three dimensions as material properties suggested new forms.

Figure 66 | Sketchbook Notes

ARTEFACT

Ernst Junger said “anyone who offers a commentary on his own work demeans himself” (Gadamer, 1986). This artefact presents itself best when it is left to the audience to be deciphered.

There is an advent meditation about the time that Mary spent with her cousin Elizabeth during their pregnancies that reads:

“While there was certainly no guarantee that anyone would understand, Elizabeth certainly reminded Mary that the face of the one in her womb was more precious than any hardship she would face once she returned.

Mary needed Elizabeth. Elizabeth needed Mary. Together for three months, they shared community” (Toups, 2008).

2000 years have passed since Mary and Elizabeth spent those months together. On a human scale, this is a long time. But let's think about what separates us from them. If we imagine a mother in 0 AD who had a daughter at 25 years old. And that daughter had a daughter at 25 years old. Continuing on, generation after generation. Then we would have a space of 80 generations between now and then. A mere 80 mothers.

The idea of 80 mothers was the guiding principle behind my artifact. I wanted to illustrate the relationship between generations from the past to the future. I decided to choose a symbol that represented all women, and stumbled upon the Celtic motherhood knot. You can see in it a mother encircling her child in her arms. As it is triangular in shape, with one point on the top and two on the bottom, it lent itself well to the idea of a mother with two daughters. You will see that the artifact displays each knot holding hands with the adjacent knot, to instead of each mother begetting two daughters continuously, each mother is shown with 1.5 daughters. It is not 80 generations, but instead 18, with 207 women.

If you take out one woman the entire system begins to become unbalanced. But as they are holding hands, they do not collapse. Women need each other. They keep each other in balance. If they were separate, the balance would be precarious, and it would take little for them all to fall to pieces.



Figure 68| Artefact Installation



Figure 69 | Artefact Process
Figure 70 | Artefact Process

I used both modern and traditional fabrication techniques to connect generations: the knots are lasercut hardboard and they are connected with crocheted yarn. This demonstrates the net that is the community of mothers. A literal thread ties them together.

This item can be viewed as a garment: a veil, a cape, a dress. It could be seen as a structural element: a column, a vault. Or it could be seen as something else altogether. A quilt. A net. A hug.

No matter what this item is to the viewer, its identity is rooted in motherhood. Old traditions and new. Hands held. Community. Warmth.

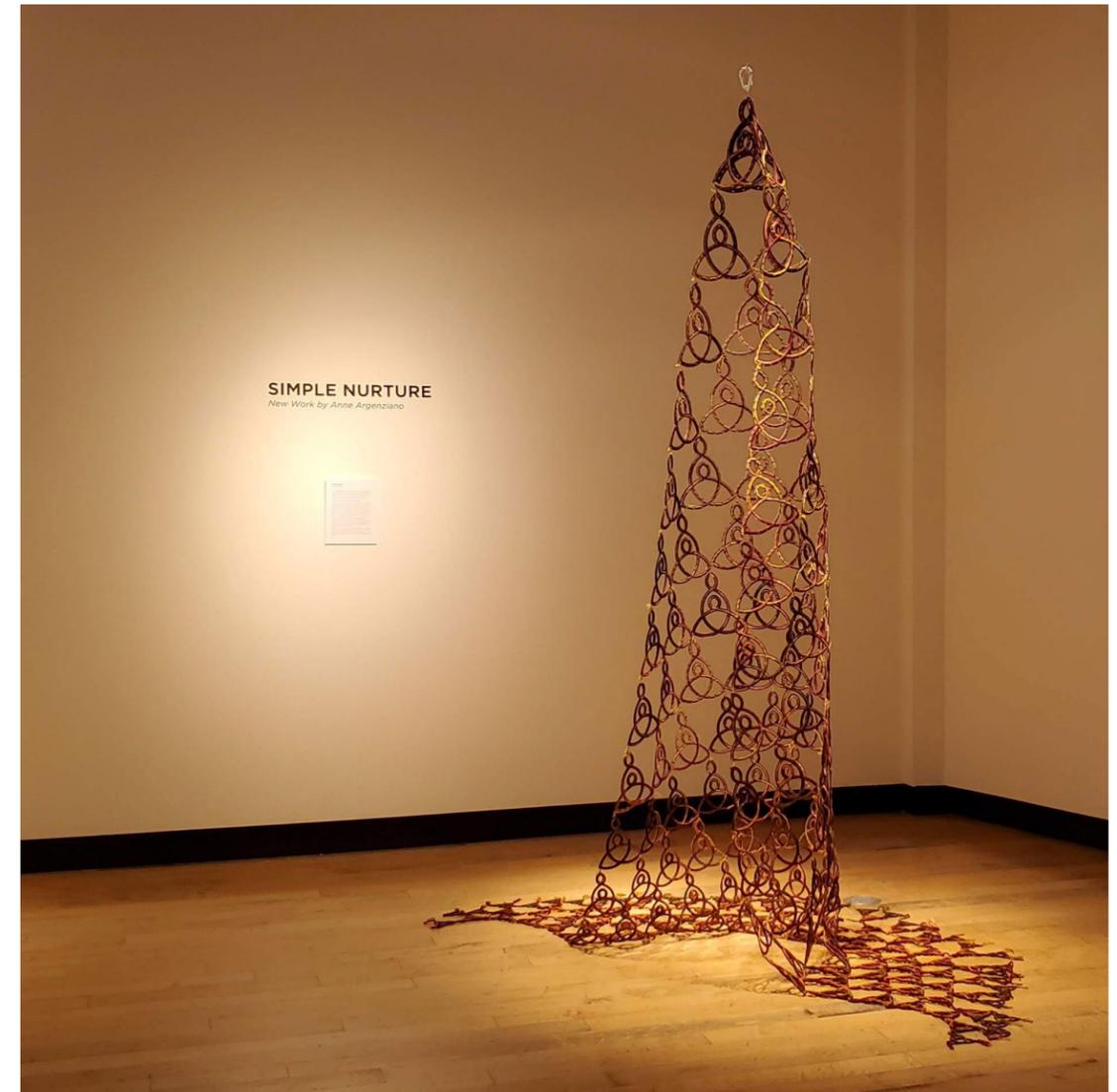


Figure 71 | Artefact Installation

a mobile

SPACE LAYOUT

There came a point in the design process when I realized that I had calculated my square footage requirements completely wrong. In my original calculations, I had been thinking of the community spaces as a series of rooms, rather than the building as a collective. I reevaluated the planned rooms, created a new organizational structure, and drew up a new list of square footage estimations.

Additionally, I incorporated new spaces and removed others. For a space that could easily be used by the entire surrounding neighborhood, a café was included into the programming. The concept of the rentable office space was reimagined into a coworking space with a less formal structure. The community spaces were broken down by use and demographic, as were the childcare spaces. These numbers guided the final design, through they were not the final tally of spaces or dimensions.

Space Allocation

Indoor Space	Square Footage	% of Area
Circulation	20000	32%
Offices	2400	4%
Meeting Rooms	2000	3%
Community Space	19000	31%
Mechanical	3200	5%
Kitchen	800	1%
Child Care Center	7000	11%
Lobby	600	1%
Toilets	400	1%
Library/study space	6000	10%
Nursing Room	200	0%
Storage	400	1%
Total	62,000	

Presentations
Artifact
writing +
Drawing +
Model +
ARTIFACT
CAPACITY
US
Activities



Community Spaces	Sub-spaces	# People	Square Footage
Rentable/ Event	Medium	50	950
	Ballroom	150-300	6000
Breakout Rooms		25	
	1		300
	2		500
	3		500
Resource Room		5 to 10	500
Classrooms		10 to 35	
	1		525
	Small gym/classroom kitchen		1225
Homeschool Spaces			500
	Classroom-young	10 to 20	900
	Classroom- Middle	10 to 20	1200
	Classroom- Older	10 to 20	1500
	Classroom- large group	20 to 40	2400
Playground/indoor play			2000
Total			19000

Childcare Spaces	Sub-Spaces	# People	Square Footage
Infants	Napping, diaper change	5	500
Infants	Napping, diaper change	5	500
Toddlers- age range	Napping, diaper change, potty	15	1200
Toddlers- age range	Napping, potty	15	1200
Pre-K	Napping, Potty	20	1600
Play Space			1600
Total			6600

a mobile

SKETCHES

Presentations
Artifact
writing +
Drawing +
Model +

ARTIFACT
CAPACITY

us
T
ation
ities
ista



Figure 72 | Process Sketch

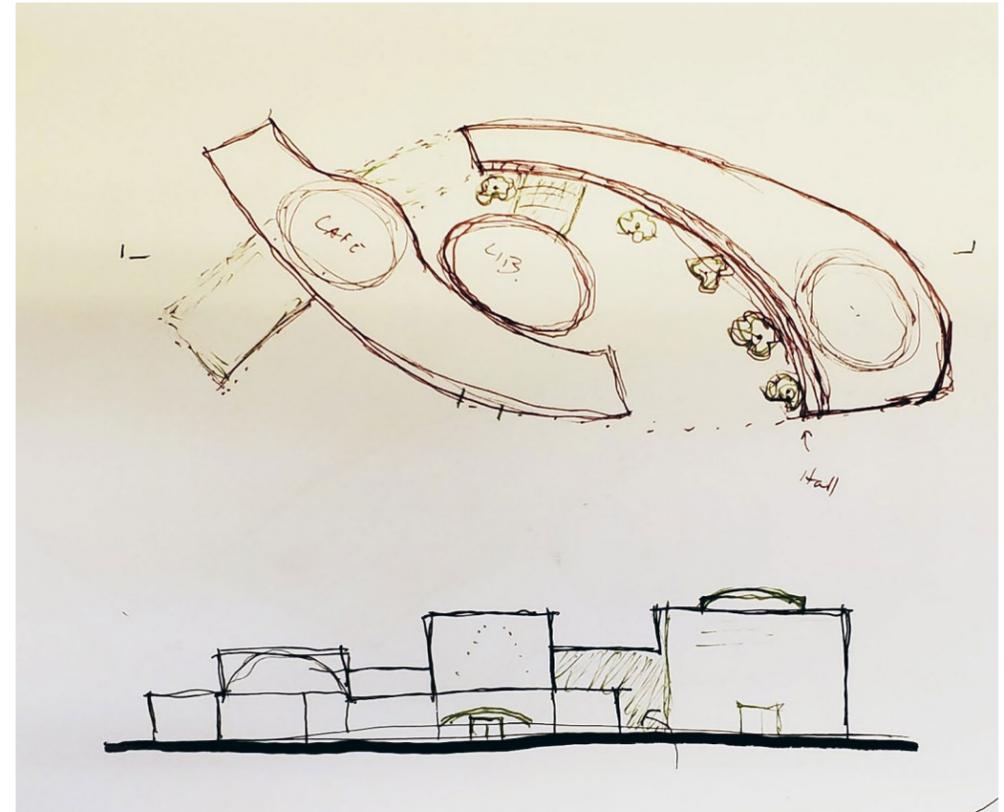


Figure 73 | Process Sketch



Figure 74 | Process Sketch

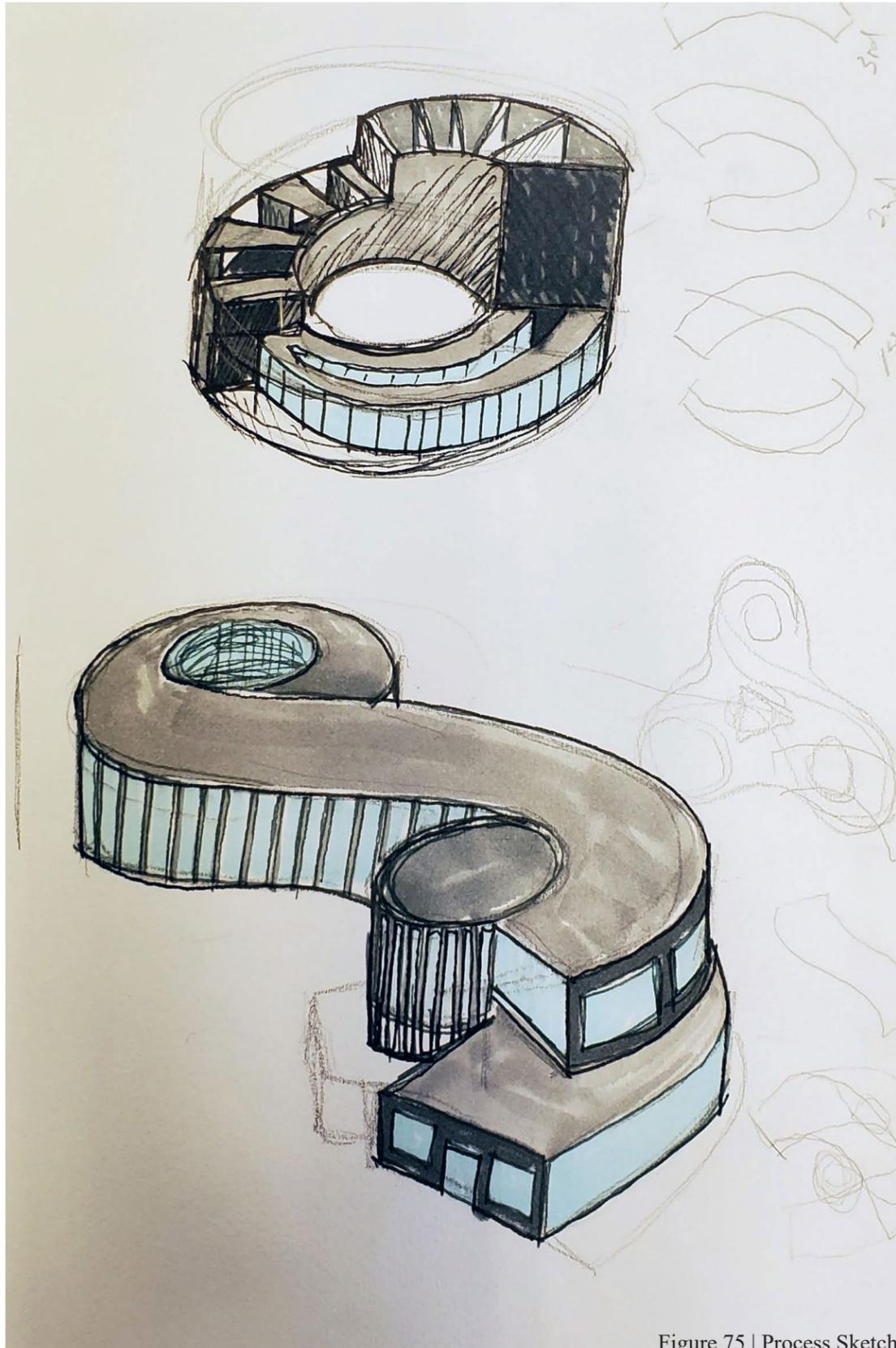


Figure 75 | Process Sketch

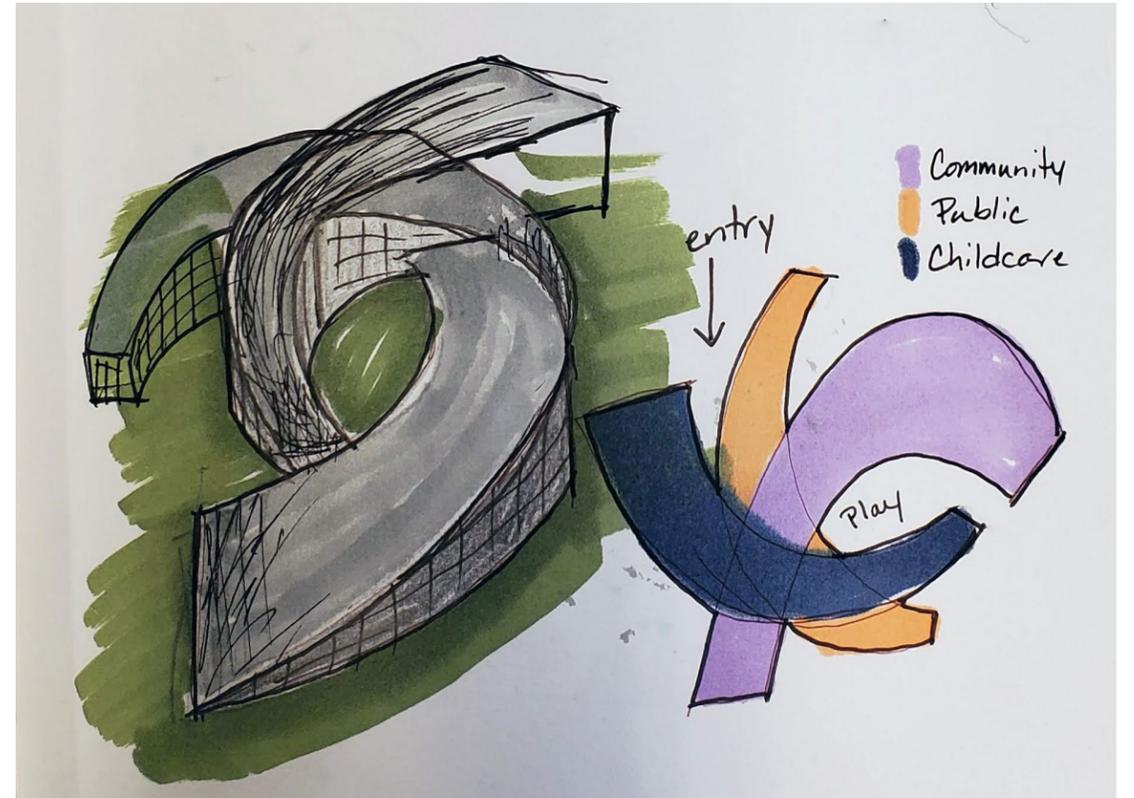


Figure 76 | Process Sketch

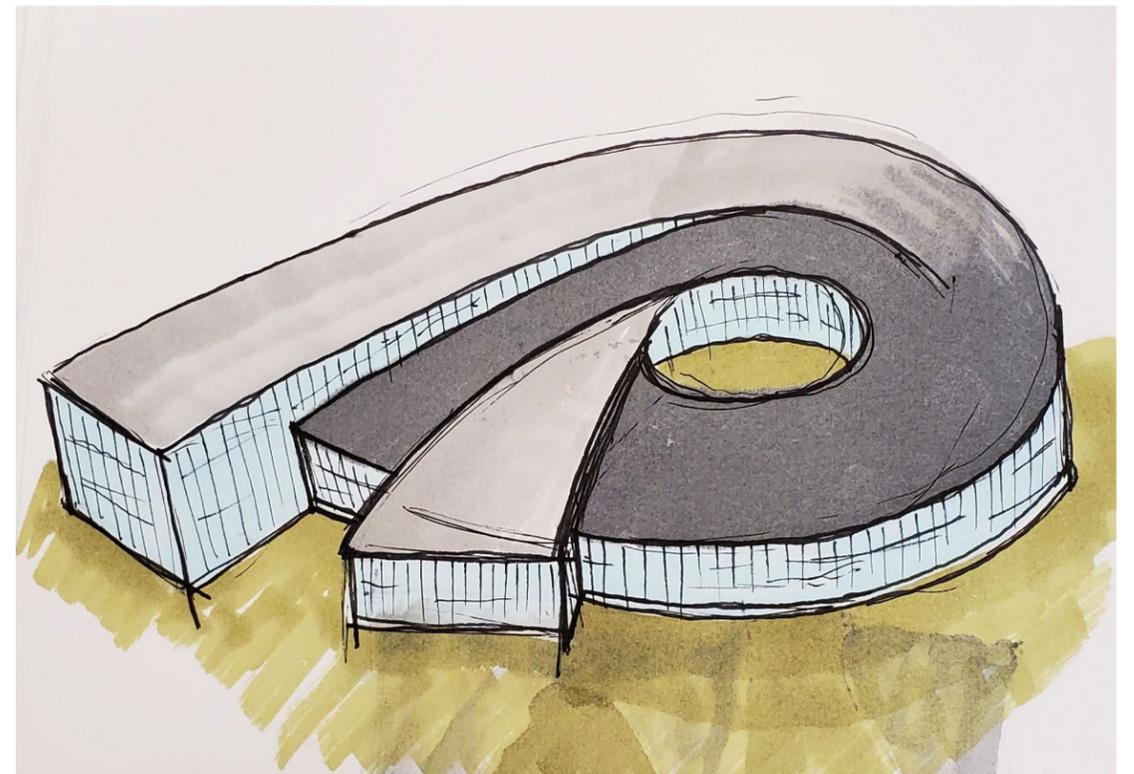


Figure 77 | Process Sketch

a mobile

MASS MODELS

Theory -
Presentations
Artifact
writing +
Drawing +
Model +

ARTIFACT
CAPACITY



Figure 78 | Mass Model



Figure 79 | Mass Model



Figure 80 | Mass Model

a mobile

Presentations
Artifact
writing +
Drawing +
Model +

ARTIFACT
CAPACITY

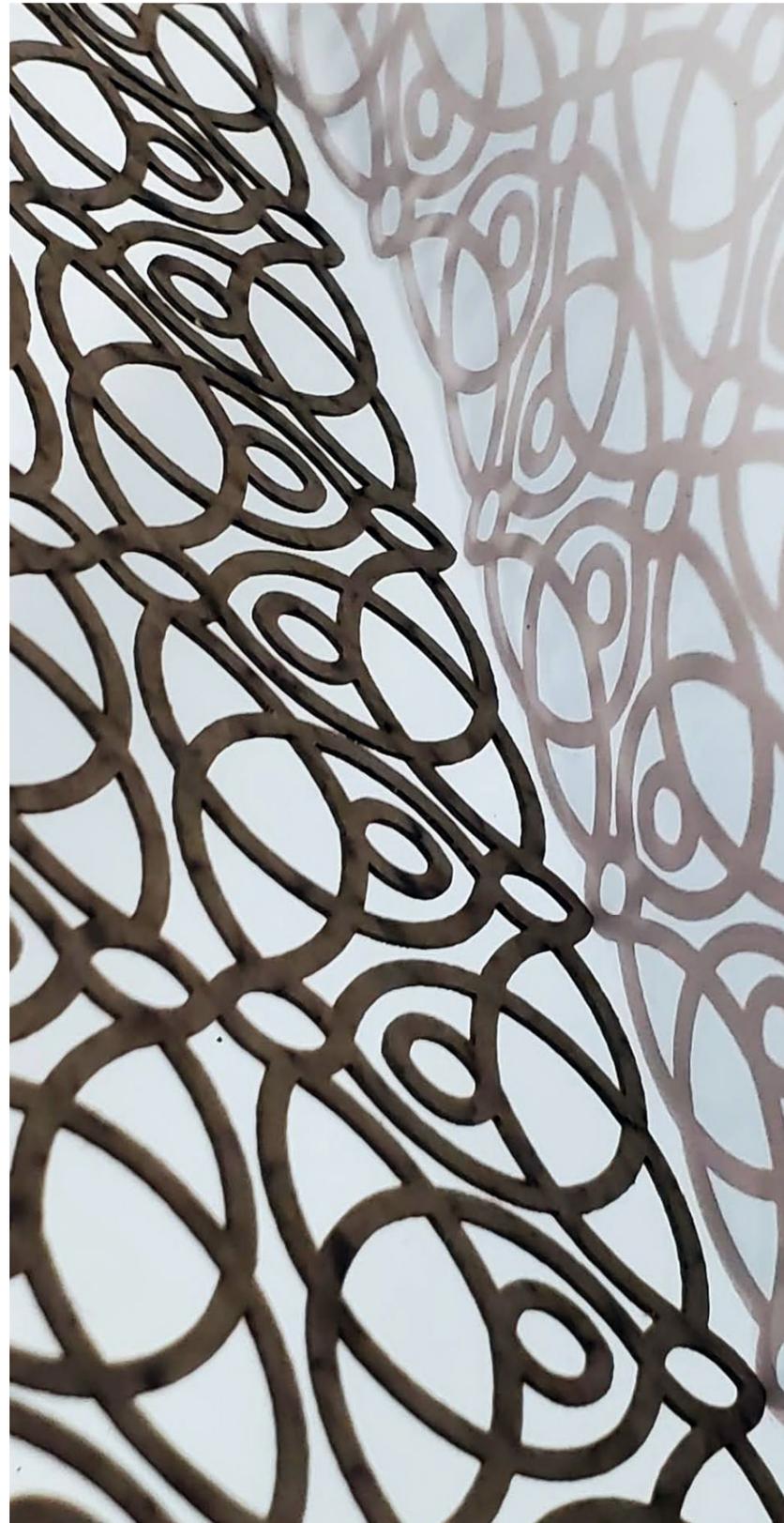


Figure 81 | Light Study Model



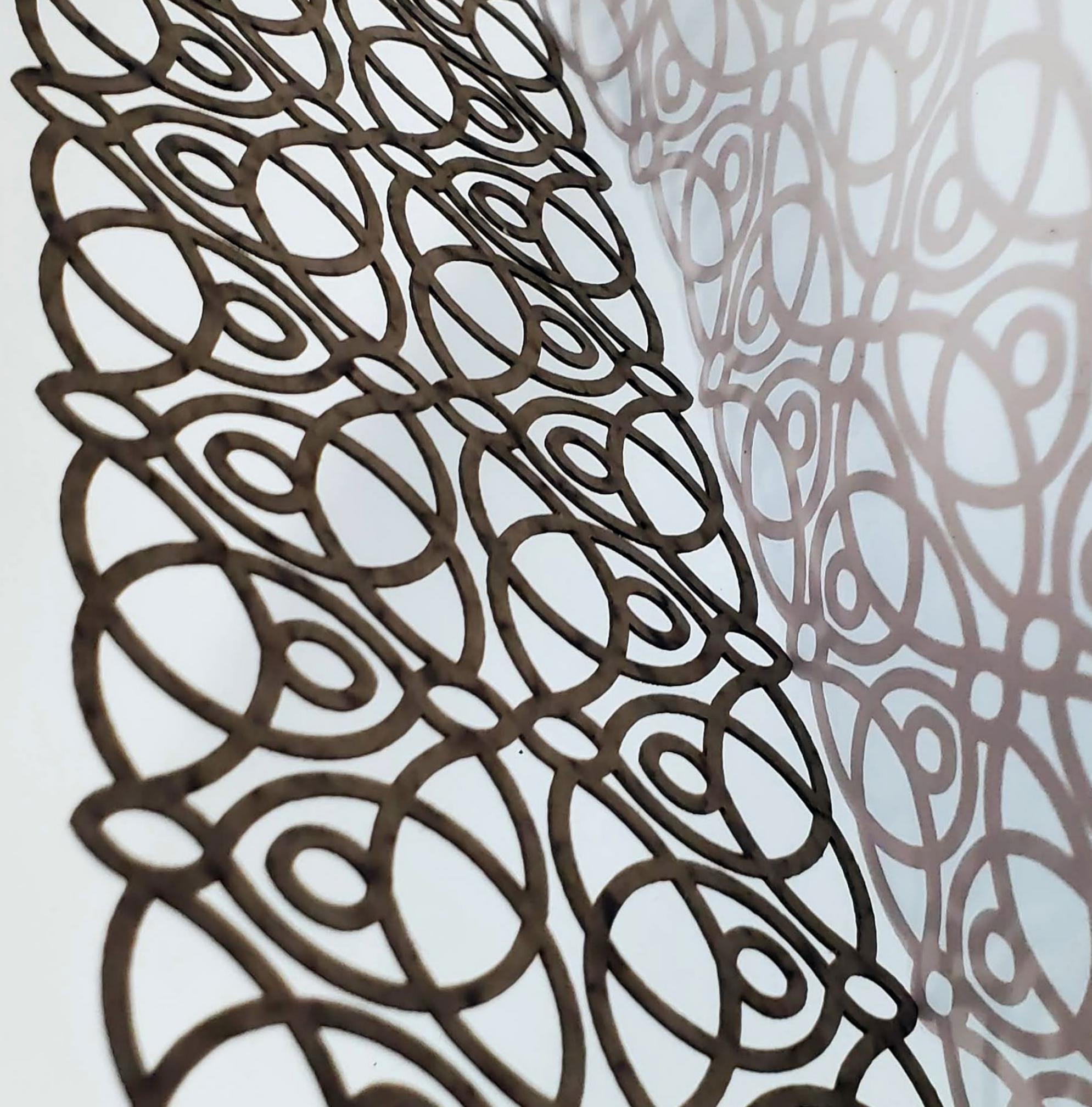
Figure 82 | Mass Model



Figure 83 | Mass Model



Figure 84 | Mass Model



PROJECT SOLUTION

“Buildings do not control our lives. They reflect the dominant values in our society, political and architectural views, people’s demands and the constraints of finance, but we can live in them in different ways from those originally intended. Buildings only affect us insofar as they contain ideas about women, about our ‘proper place’, about what is private and what is public activity, about which things should be kept separate and which put together.”

Making Space: Women and the Man-Made Environment

Taking inspiration from the idea of separation and the woven aspect of the artifact, I decided the architecture needed to incorporate an idea of weaving- both literally and metaphorically.

Overall, the spaces within the building can be split into three broad groups: public, private, and intermediate. Within these levels of privacy are different demographics using the building in different ways. There are the people simply getting coffee, children napping, women meeting for a weekly class, and others.

These three interlocking circles are the purest form of the three strands of a braid. I worked with the symbol of the Celtic motherhood knot in my artifact, not knowing that it is relatively new compared to the ancient Celtic fertility spiral. You can see how it is similar to the motherhood knot. And you can see how it is similar to the form of the building.

The interlocking circles create a shell, open to interior forms. In allowing the interior spaces to take shapes of their own, the building turns into a form of a toddler’s toy- fitting 3 dimensional shapes into a hollow block. Where the exterior form is the mother, the interior is the child.

The most striking of the interior spaces is the green space at the center of the largest circle. It serves multiple purposes- interior lighting, green space for mental health, and a safe space for children to play “outside” away from traffic and strangers.



Figure 85 | Goddess Danu Figurine

The Celtic goddess Danu is the symbol of motherhood and fertility. Within the bowl of this statue can be seen the Celtic Fertility Spiral, which is one of the oldest pagan symbols.

Danu showed up in my research for a project creating a placenta bowl. I had already used the Celtic motherhood knot for my artefact- the knots representing women of past and future generations. The spiral proved to be a more viable option for form-giving - the simple geometries maintained the resonance of the three strands of a braid while representing the layers of intimacy within the building.



Figure 86 | Study for Pentimenti



Figure 88 | Reproduction Drawing I



Figure 89 | Electra



Figure 87 | Reproduction Drawing II



Figure 90 | Reproduction Drawing IV

I was introduced to the art of Jenny Saville by the book "Mother is a Verb" by Sarah Knott. Saville's work depicting motherhood and pregnancy uses implied motion to show the chaos of childrearing, yet she also manages to display the sense of love a mother feels for her children.

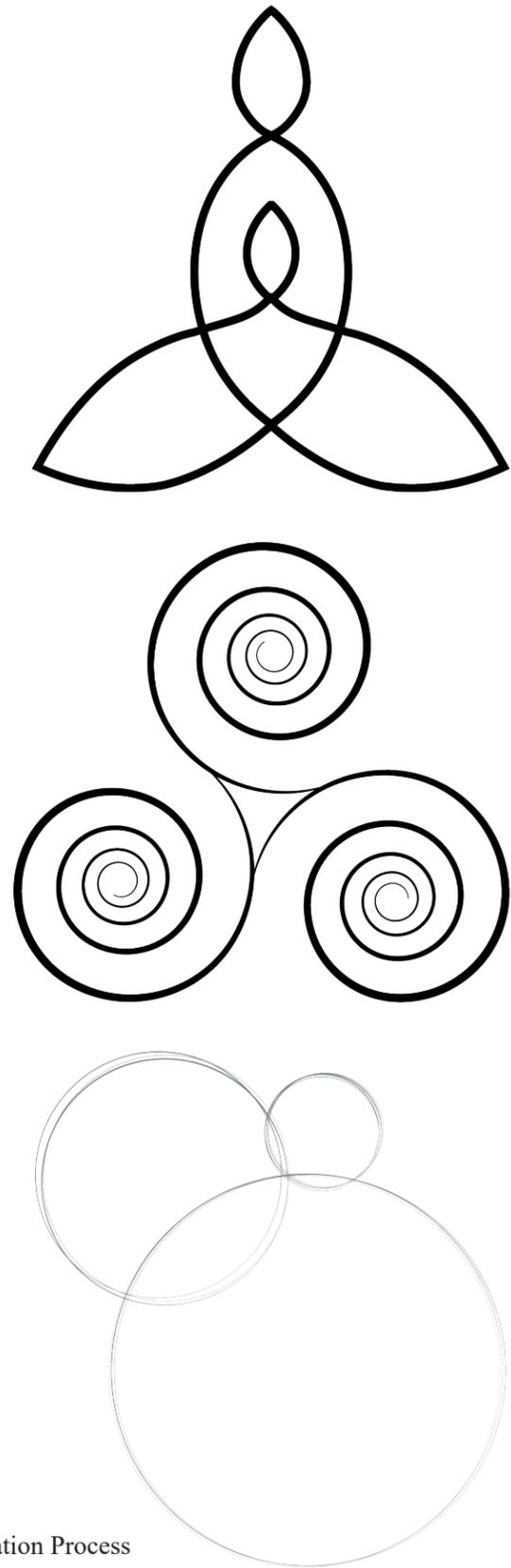


Figure 91 | Form Inspiration Process

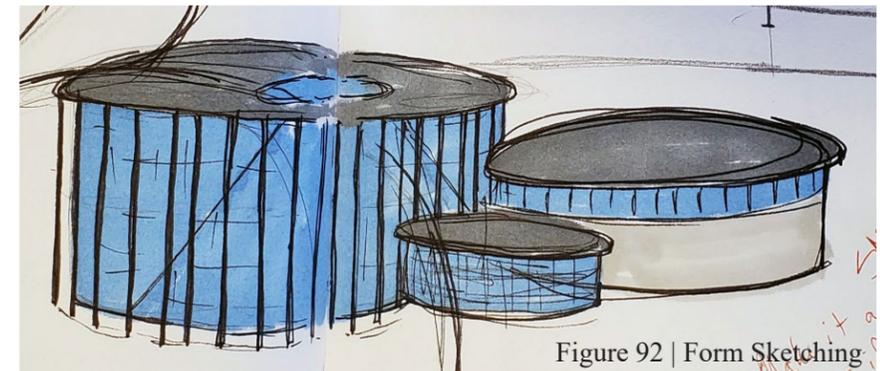


Figure 92 | Form Sketching

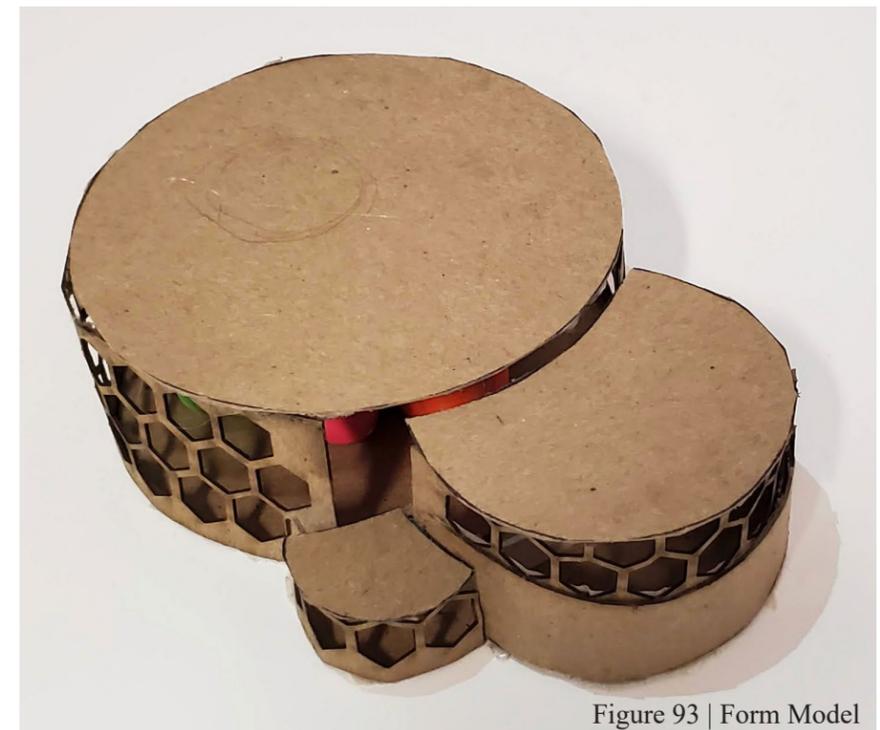


Figure 93 | Form Model



Figure 94 | Form Model

FIRST FLOOR

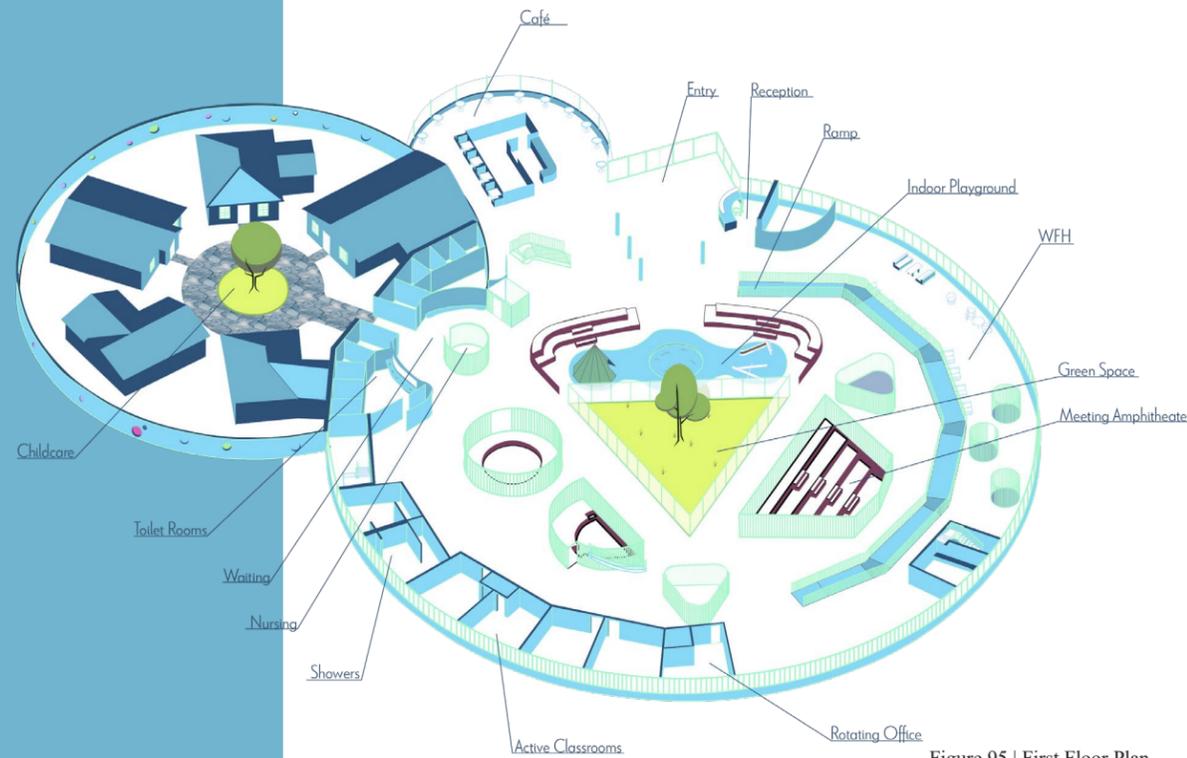


Figure 95 | First Floor Plan Axonometric

Reception: Located immediately next to main entry, office entry, and ramp to second floor. The front desk additionally has a clear view of the main space and café, for security and administrative purposes

Café: public space, has easy access from front entry and faces the street for people-watching views

Entry: Set back from path and parking lot creating extra distance between cars and children walking, also emphasizing the relationship between this building and non-vehicular access

Ramp: A low-grade ramp provides a long, ambulatory walk from first floor to second. The walkway encircles much of the space, providing views of all of the first floor. Main stair, elevator, and fire stair provide secondary forms of vertical circulation.

Indoor playground- cold winter days, safe space for mothers to bring kids

Green Space: The triangular plot of indoor landscaping brings in light and greenery to the interior of the wide building. Greenery and light promote good mental health and productivity. Access from the indoor playground provides a safe “outdoor” space for young children to play.

Childcare Space: Reliable childcare, imitating a modern cul-de-sac, the idea of a community taken literally, each building is for a different age group

Work From “Home”: Spaces available for those who do not work in an office, but do not find their homes to be productive locations. This area is laid out similar to a coworking office. Mothers can work in this space with their children within the same building. Nursing mothers can breastfeed throughout the day while being “at work”

Meeting Amphitheaters: An extension of the Work from Home areas. These meeting locations allow groups of people to come together in a room that has high visibility into and out.

Rotating Offices: Various impermanent resources can use these offices for short periods of time. For example- lactation specialists, therapists, and other professionals who specialize with one-on-one meeting.

Active Classrooms and Showers: Active classrooms are specialized for small gymnasium classes, but may be used for other group meetings. Showers adjacent to these spaces are for gym use and also may be of use to mothers with messy children.

Nursing Room: This small room provides an intimate and private space for mothers who need to nurse their children.

Waiting Area: Located in the intermediary space between the “mothers” area and the childcare space, this seating area is a place for parents to collect their children and their bearings.

Toilet Rooms: Each stall is sized for family use, with changing tables in every stall for privacy and ease of access. Sinks are sized for both adults and children. Two private family restrooms are located on either side of the childcare entry.

SECOND FLOOR

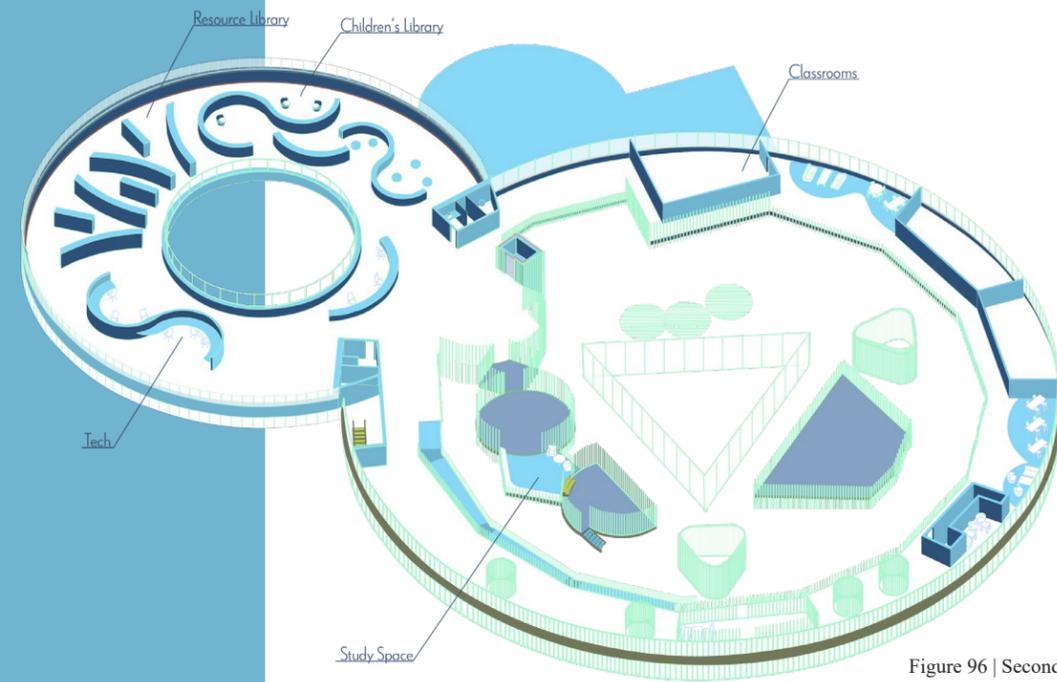


Figure 96 | Second Floor
Plan Axonometric

The second story of the building is focused on learning, containing a library and study spaces for students of all ages.

Children's Library: Curvilinear bookshelves create interactive spaces for small children. Floor seating and an area for storytime encourage reading.

Resource Library: In contrast to the playful children's library, the more linear resource library contains books for parents and students.

Computer Lab: A small computer lab provides computer and internet access for students and people in the community who may not have access to these resources at home.

Reception Desk: Checkout and reference desk

Classrooms: These classrooms will contain specialized equipment that homeschooled families may not typically have access to. These spaces are also useful for group learning when homeschool communities come together.

Study Spaces: Students of all ages can come together to do homework and hang out in group and individual study spaces throughout the entire second floor.

SECTION CUT

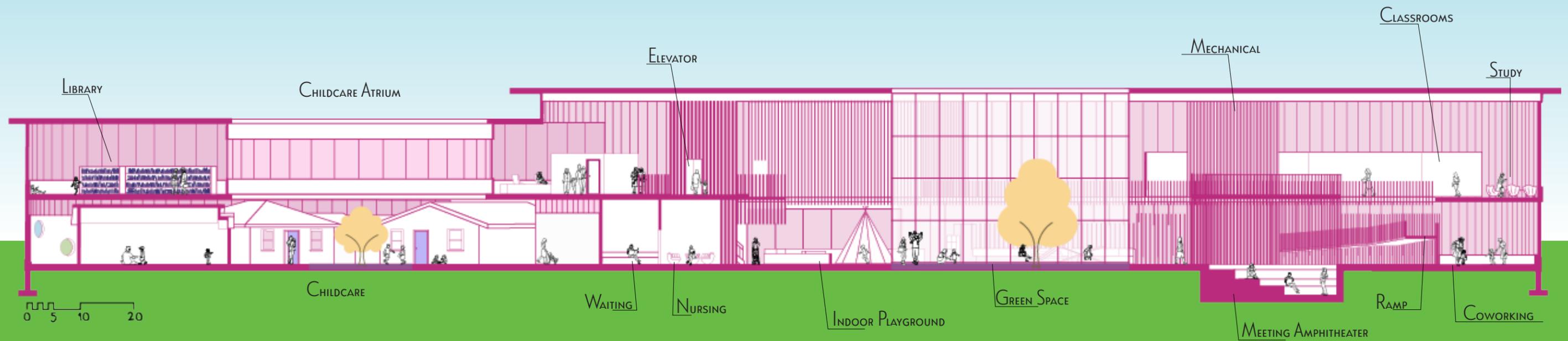


Figure 97 | Section Cut



Figure 98 | Meeting Amphitheater

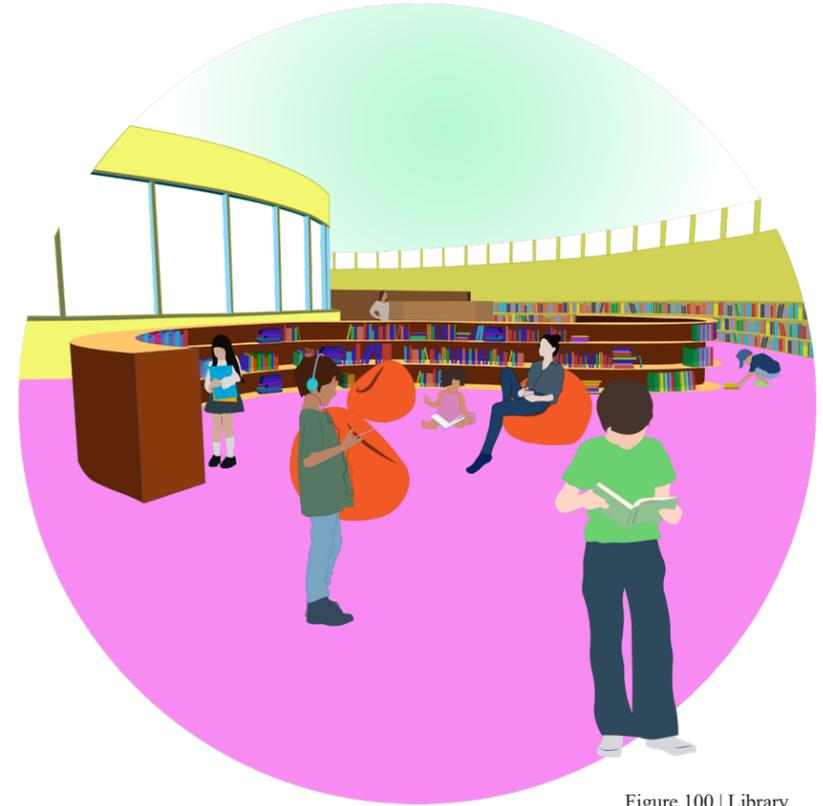


Figure 100 | Library



Figure 99 | Childcare Center



Figure 101 |



PERFORMANCE ANALYSIS



Figure 102 | Site Surroundings

SITE RESPONSE

The driveway to the parking lot is located across the street from the entry to the strip mall across the street. The Parking lot is further from the building than typical buildings, creating a car-free space. This promotes the safety of children walking and playing around the building and highlights the building's emphasis on non-vehicular access. The location of the surrounding schools and their corresponding distances encourage students to walk to the center after classes finish.

DAYLIGHTING

The main space receives the most direct light throughout the day for most of the year, allowing for natural light throughout the interior space. The childcare center and library receive mainly indirect northern light and evening light, which is fitting for these spaces. The café receives morning light, perfect for early morning coffee drinkers. The location of the café is focused on the view of the street and direct access off the main entry of the building- daylighting did not influence the location of this space.

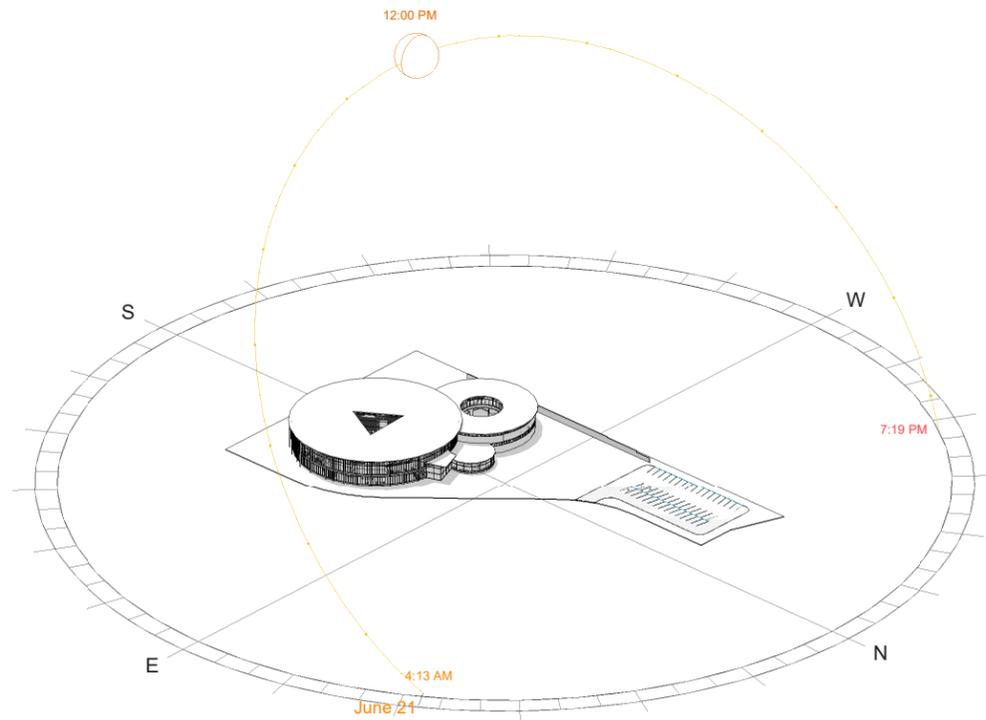


Figure 103 | Summer Solstice Sun Path

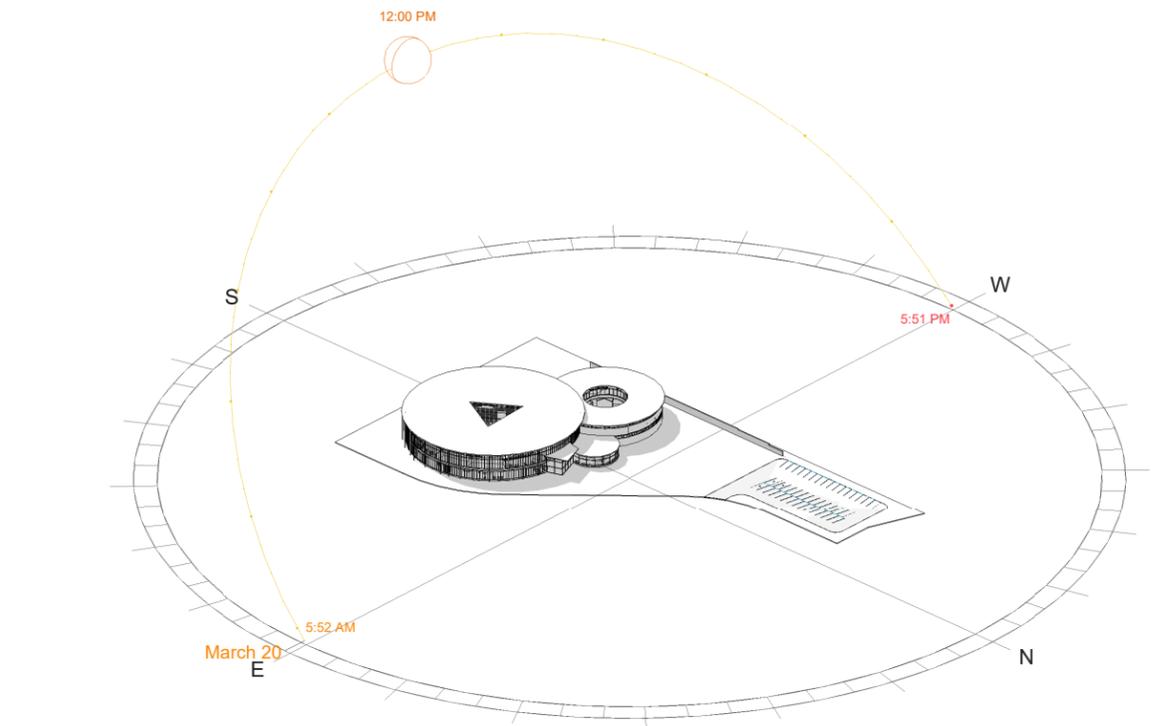


Figure 104 | Equinox Sun Path

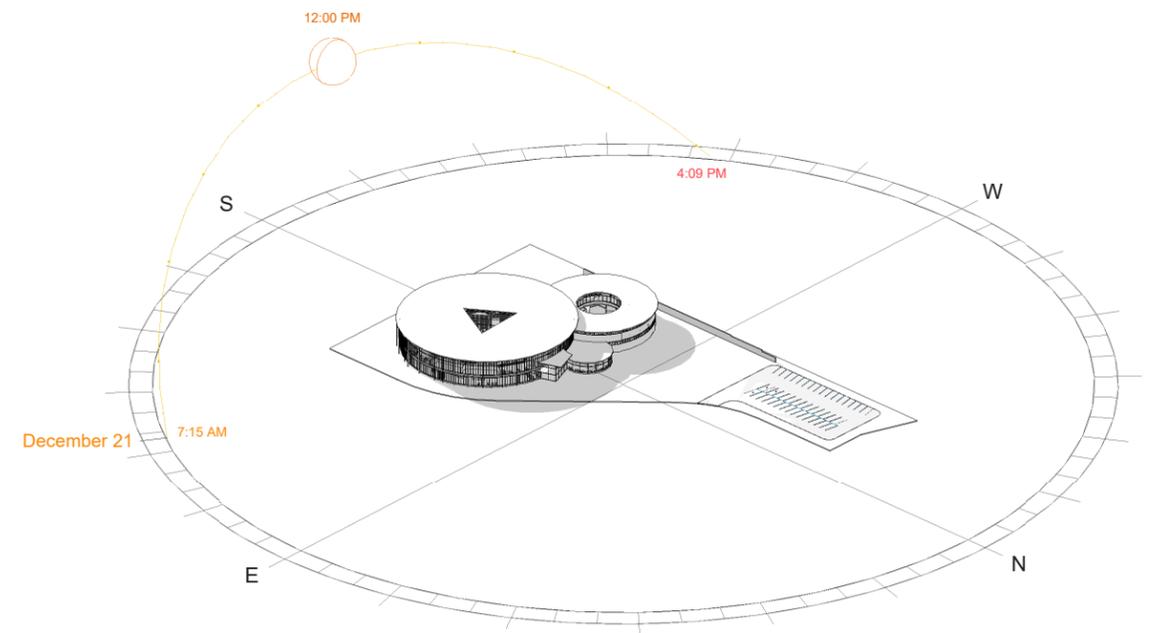


Figure 105 | Winter Solstice Sun Path



RESPONSE TO GOALS

PROPOSED GOALS

Theoretical

- Use architecture to create community among members of a small selection of demographics

Physical

- Create a space that allows for children to be cared for easily but also allows autonomy.
- Create spaces that are usable by all age groups, from infant to elderly.

Social

- Foster a community for women and their families
- Allow young mothers to continue their education
- Better the mental health of mothers and children
- Provide accessible child care
- Lower abortion rates

Academic

- Get my degree

Professional

- Create a project that will look good on my professional portfolio

Personal

- Plan my wedding, get my degree, and maintain a semblance of good physical and mental health

ACHIEVED GOALS

Theoretical

Use architecture to create community among members of a small selection of demographics

Physical

The building provides spaces for children and mothers both separate and together, as well as other demographics who wish to use the space. The layout of these spaces interweaves user groups, encouraging interaction.

Social

The social goals of this project can only be guessed at as architecture can only foster relationships and cannot directly influence people's views and beliefs.

Academic

My degree is done got

Professional

As I prepare to enter the workforce, focusing on graphics, this project has strengthened my portfolio.

Personal

I have done what I could to accomplish my personal goals. It remains to be seen if I was successful.



CRITIQUE OF RESEARCH

In my research I read a number of texts: philosophical, historical, critiques, essays, all listed on the following page. As a result, and as was my purpose, the research created a project that focused less on the architectural aspect of the building and more on the social aspect and response to user needs.

My study of the nuclear family came too late in the research process. Though I knew it was the driving factor behind the issues this project aimed to tackle, I did not find useful resources addressing the problems of the nuclear family until the end of the design phase.

From the end of November 20, 2020 to December 15, 2020 I conducted an online survey through Google Forms. I received responses from 135 mothers of various ages and backgrounds. The downfall to this study was the lack of variety in the polled demographics as these women were anonymous family members, friends, and connections of family and friends.

Due to the unforeseen circumstances of the past year, I was unable to make a site visit. A visit to Papillion, Nebraska would have given me insights into the potential building users. I researched demographics and statistics within the region, but in a project focused on the individual, generic, emotionless numbers do not answer every question.

Figure 106 | Jenny Saville Art Compilation

TEXTS

AND THE ONE DOESN'T STIR WITHOUT THE OTHER | LUCE IRIGARAY

ARCHITECTURE AND THE CITY: THE SPACE OF PARTICIPATION | ALBERTO PEREZ-GOMEZ

BUILDING DWELLING THINKING | MARTIN HEIDEGGER

CRITICALLY CONTRAST BEAUVOIR'S AND IRIGARAY'S VISIONS OF FEMALE AUTHENTICITY
AND MOTHERHOOD | ELINOR MARRIS

DIVINE DAUGHTERS OF DIVINE MOTHERS: LUCE IRIGARAY'S SEARCH FOR WOMEN'S
OWN DIVINITY | CAROLYN SHARP

FROM SILENCE TO BREATH: AN IRIGARAYAN STUDY OF THE REPRESENTATION OF
MOTHERHOOD IN MODERN DRAMA | YAN LIU

HYMN TO DEMETER

MAKING SPACE: WOMEN AND THE MAN MADE ENVIRONMENT | MATRIX

MOTHER IS A VERB | SARAH KNOTT

SPECTACLES OF TRUTH IN CLASSICAL GREEK PHILOSOPHY: THEORIA IN ITS CULTURAL
CONTEXT | ANDREA NIGHTINGALE

THE EYES OF THE SKIN | JUHANI PALLASMAA



FINAL PRESENTATION

My project is Simple Nurture: Weaving Motherhood and Community. In my research I focused on how motherhood has been depicted throughout history and the problems facing women as they transition into motherhood. Throughout the majority of human history, child rearing has been a communal experience, so my focus has been on the need of community and how architecture plays a role in providing the space and atmosphere for women to come together. The development of a mother's community center is in agreement with architectural historian Alberto Pérez-Gómez's statement, "We need to feel at home, and this need for dwelling is always a living with others" (Pérez-Gómez, 2017).

We live in a world today where having children is almost controversial. Younger generations are more likely to go childless than previous generations. For those who do choose to have children, there come many stigmas. Yet, historically, fertility was one of the greatest virtues. We see the most ancient art depicting goddesses of fertility—here we see the statue of Venus of Willendorf and the pagan goddess Danu.

Persephone-Tension Between Woman and Child

The story I will tell is ancient. It begins with Persephone in a field full of goddesses, playing among the flowers. She saw the narcissus, with 100 radiant blooms, approached it, and plucked one. Having set the Narcissus as a trap, Hades sprang from the ground and captured Persephone, taking her to the underworld to become his wife. She screamed, but was unheard.

Her mother Demeter, goddess of agriculture and fertility, was devastated at the loss of her daughter. In her anguish she took all life from the land. She would have killed every last human had Zeus not intervened and brought Persephone back from her captor. But before Persephone returned to her mother from the underworld, Hades approached her and said,

"Go now, Persephone, to your dark-robed mother, go, and feel kindly in your heart towards me: be not so exceedingly cast down; for I shall be no unfitting husband

here, you shall rule all that lives and moves and shall have the greatest rights among the deathless gods: those who defraud you and do not appease your power with offerings, reverently performing rites and paying fit gifts, shall be punished forevermore.” (Hymn to Demeter, 1914).

Hades gave Persephone a pomegranate seed, which she ate. When she reunited with her mother, Demeter asked if she had eaten the food of the underworld. Upon learning of the pomegranate seed, Demeter despaired, knowing her daughter would be bound to the underworld for a third of the year.

Through the myth, we know that Persephone grew to love her husband. It began with him stealing her and stealing her voice. But as time goes on, we begin instead to see Demeter stealing the voice of her daughter. Despite only spending four months of the year with her husband, the vast majority of Persephone’s myths take place in the underworld, where she has great power. The images of Persephone in the underworld show her in her royal garments. But the images of Persephone as a daughter show Demeter as a queen and Persephone as merely a girl, and not the true Queen of the Underworld that she is.

Without Persephone, Demeter is essentially useless as the goddess of agriculture and fertility. The world she rules over dies in her mourning. Yet while Persephone is with Demeter, the daughter does not maintain her role as a queen.

This mother-daughter relationship is reminiscent of the poem “And the One Doesn’t Stir Without the Other” by Belgian feminist philosopher Luce Irigaray. In this poem, Irigaray takes on the role of a daughter watching her mother give everything she is to her daughter, until she is merely a shell of who she was. The daughter sees in herself her own mother and the future that awaits her. So much so, that she uses a joint pronoun when talking about herself/her mother. She sees a lineage of women giving up their voices for their husbands and children. She says:



Figure 107 | The Pelican in Her Piety

“I look like you, you look like me. I look at myself in you, you look at yourself in me. You’re already big, I’m still little. But I came out of you, and here in front of your very eyes, I am another living you.” (Irigaray, 1981)

Irigaray continues to go on, telling the story of the daughter turning to her father, a person who is his own self, to imitate him -- Leaving the mother so that the mother doesn’t die by giving her entire self to her daughter. For One doesn’t Stir without the other- the daughter would not be alive without the mother and the daughter gives meaning to the mother’s life. But in doing so, the mother neglects herself and loses her voice. The daughter wants to give her mother her voice back. She wants to see a possible future where she does not also lose her own voice.

The last verse of the poem ends:

“And the one doesn’t stir without the other. But we do not move together. When the one of us comes into the world, the other goes underground. When the one carries life, the other dies. And what I wanted from you, Mother, was this: that in giving me life, you still remain alive.” (Irigaray, 1981)

The image to the left is that of a mother pelican, opening a wound in her belly to feed her children her own blood when food is scarce. She kills herself so that her children will live.

Feminist Philosophy: Tension Between Woman and Woman

Over the past century, feminist philosophers have gone through waves of embracing or rejecting motherhood.

Elisabeth Badinter, for one, is a French feminist and philosopher who has argued against traditional motherhood. She made the claim that motherhood is antifeminist and takes away a woman’s individuality and speech. She suggested that “full-time motherhood is intrinsically alienating and in direct conflict with a woman’s identity” (Alduy, 2012) Similarly, Simone de Beauvoir, another Frenchwoman and a social theorist, compared maternity with slavery.

There is a social difference between women who are not mothers and women who are. Luce Irigaray actually suggests in her essay “Women on the Market” that there are three social roles for women: Mother, virgin, and prostitute (Irigaray 1985). Badinter seems to suggest that the ideal social role for women is “prostitute”. In fact, Badinter goes as far as to say, “There is no greater antithesis to the couple as lovers than the couple as parents.” (Alduy, 2012)

For someone to assume that parenthood directly defies the relationship of lovers seems to imply sex does not lead to pregnancy. Embracing sex and sexuality but despising childbearing is pornographic and anti-woman.



Attacking motherhood does not allow women's voices to be heard. Instead it turns women's voices into men's voices, when we need women to support each other.

Phallocentrism and the Nuclear Family- Tensions Between Man and Woman

But unfortunately we live in a phallocentric society.

The opening line of Irigaray's "women on the market" reads: "The society we know, our own culture, is based upon the exchange of women." (Irigaray 1985)

There has always been some sort of discrimination against women and some scorn cast upon mothers, but it wasn't until the advent of the nuclear family that women became isolated in their own homes. Sarah Knott, in her book *Mother is a Verb*, said that "In most societies before the twentieth century, there must have been crowds and crowds of little children. Infants were visible to all: quite the contrast with our present day, where those who are not mothering are typically sequestered from those who are"

As I briefly mentioned earlier, motherhood is traditionally a communal act. The text on the slides comes from descriptions of different cultures throughout history. Among the Cherokee, there was no concept of orphans, because if a mother died in childbirth, the community took care of the infant. The concept of other mothering is that of handing off a child to different people at different times – in some cases, the child would name different carers different versions of the title "mother". Childbirth occurred with the help of the entire community of women. Chores occurred amongst the entire community. (Knott, 2019)

Hence, this sense of isolation is new and unnatural.

Artefact

Through my artifact I displayed the traditional idea of a mothering community. The artefact is a representation of women over many generations holding each other up. These generations of mothers passed on their knowledge and experiences. Individual nameless women are represented by wooden Celtic knots, each tied to the next by a string, representing shared cultures, passions, and needs.

The first mother, at the top, holds all of the women together. The things she taught her daughter have been taught to every subsequent daughter.



Figure 108 | Artefact Installation

These women are all woven together with a "single thread". What women did in the past, they still do today. Our ancestors are never truly gone. We continue their legacy and together we as women hold hands: supporting each other and lifting each other up. If you take out one woman the entire system begins to become unbalanced. But as the women of the artefact are holding hands, they do not collapse. Women need each other. They keep each other in balance. If they were separate, the balance would be precarious, and it would take little for them to fall to pieces.

Despite not remembering every mother in our own genealogies, we use their knowledge and teaching to guide our lives today. As said by author and public figure Hank Green,

"Our lives are so contingent upon the work that is done by the people who are not remembered and aren't around and I like to remember them even if it is sort of in aggregate."

Hank Green, *Dear Hank and John* episode 285: A Pill Meant for Horses

Architecture

Let me begin by sharing this quote from the book *Making Space: Women and the Man Made Environment* by feminist design group Matrix: “Buildings do not control our lives. They reflect the dominant values in our society, political and architectural views, people’s demands and the constraints of finance, but we can live in them in different ways from those originally intended. Buildings only affect us inasmuch as they contain ideas about women, about our ‘proper place’, about what is private and what is public activity, about which things should be kept separate and which put together.” (Matrix 1984).

Choosing a site was an important part of this project. I compared child care rates with home value nationwide. I want to focus on families who own homes, but may still struggle with childcare. I ended up choosing Nebraska, because they are in the higher range of child care costs, but in the lower range of home values. Within the region, I chose a residential neighborhood called Hickory Hill in Papillion (about 7 miles south of Omaha). The site is directly adjacent to Hickory Hill Elementary School allowing young children to easily travel to the center. A few blocks away are both the middle school and the high school. Nearby is also a small commercial zone, including restaurants and grocery stores. The proximity of these elements are important as Matrix notes the difficulty of getting from one place to another with children.

“So women tend to lead a more ‘local’ existence, not just because of domestic roles and responsibilities, but also because of an inequality between the genders in access to resources.”

Jos Boys (Matrix, 1984)

Matrix takes note that city planning is arranged around the man’s workday, with a distinct separation between work and home life.

Taking inspiration from this idea of separation and the woven aspect of the artifact, I decided the architecture needed to incorporate an idea of weaving- both literally and metaphorically.

Overall, the spaces within the building can be split into three broad groups: public, private, and intermediate. Within these levels of privacy are different demographics using the building in different ways. There are the people simply getting coffee, children napping, women meeting for a weekly class, and others.

These three interlocking circles are the purest form of the three strands of a braid. I worked with the symbol of the Celtic motherhood knot in my artifact, not knowing that it is relatively new compared to the ancient Celtic fertility spiral. You can see how it is similar to the motherhood knot. And you can see how it is similar to the form of the building.

The interlocking circles create a shell, open to interior forms. In allowing the interior spaces to take shapes of their own, the building turns into a form of a toddler’s toy-fitting 3 dimensional shapes into a hollow block. Where the exterior form is the mother, the interior is the child.

The most striking of the interior spaces is the green space at the center of the largest circle. It serves multiple purposes- interior lighting, green space for mental health, and a safe space for children to play “outside” away from traffic and strangers.

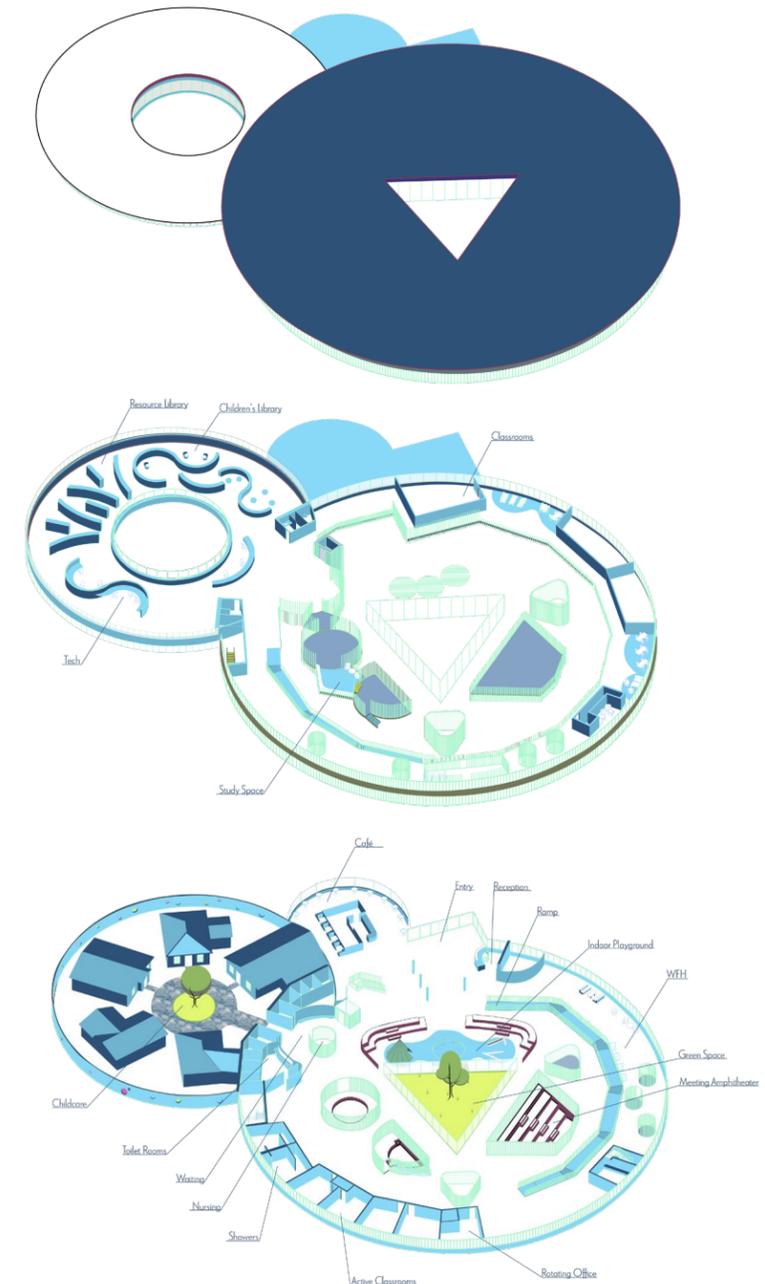


Figure 109 | Exploded Axonometric Plans

The Cafe

You walk in to the building. To your left is the receptionist. To your right is a small café. It is bustling, but quiet- teenagers are sitting in booths studying, mothers are chatting over tea with infants napping in carriers. Ahead of you is a small soft-surface area filled with kids throwing sand and shrieking. Their mothers watch over them, happy that they aren't making a mess at home.

Our so-called “public” spaces have unspoken rules about the presence of children and unaccompanied women. We don't like to see children in libraries or restaurants, where they may be a disturbance to us.

My goal was to create a space where women and children are not only allowed, but are encouraged. A public space like this would allow mothers to have a social life outside of the home.

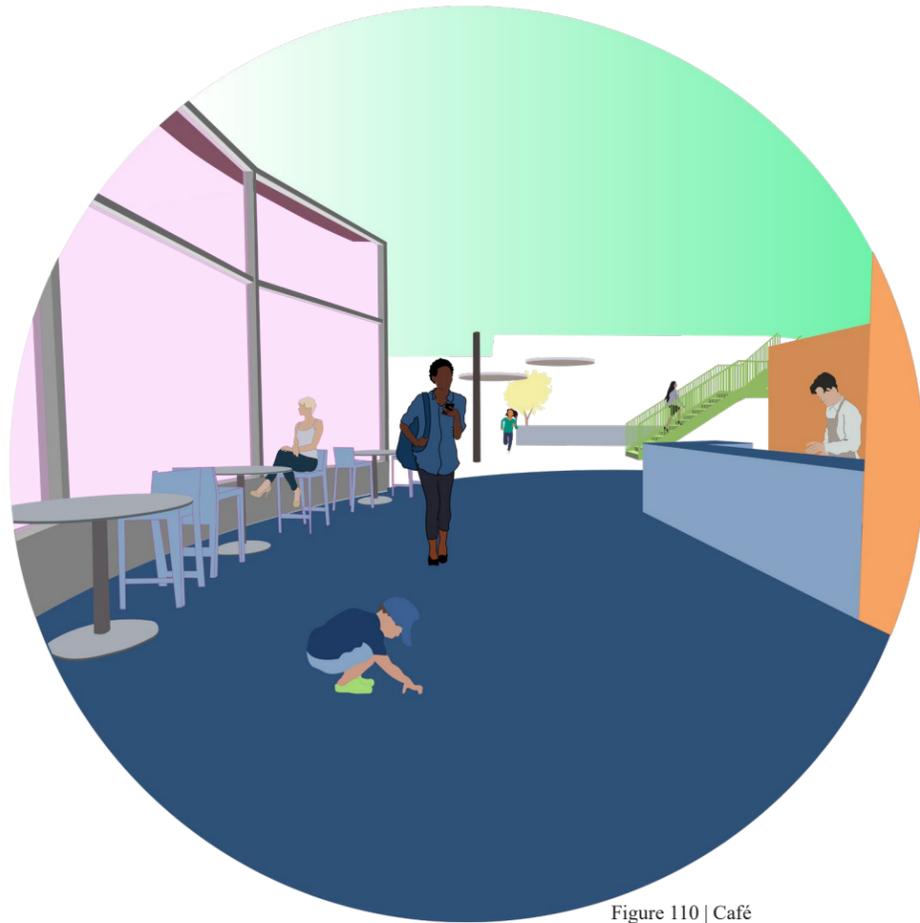


Figure 110 | Café

The Childcare Center

As you near the entry to the childcare center, you greet the other parents sitting with each other in the waiting area. You walk into the center with your child and smile at the miniature cul-de-sac that looks like it jumped out of a children's drawing. As kids wheel around the circle on toddler bikes, your child runs off to play with her friends in the toddler building.

Having reliable and affordable childcare is a luxury. In my interviews of women in November 2020, many responded with their negative experiences finding places for their children. Many of these women felt it would be easier to simply stay at home, since working did not provide enough income to pay for childcare or the provider wasn't reliable.



Figure 111 | Childcare

The Meeting Amphitheater

On your way to your meeting you pass a Pilates class happening in studio 2, and remember that you plan to come back for yoga tonight. You enter the slatted meeting amphitheater, and walk down to the second step before sitting.

The ancient Greek Agora was the space for public speech, commerce, politics, and communication. Perez-Gomez explained in *The Space of Participation* that these ancient forums enabled “communities of like-minded people to debate, participate and find a voice in their respective political constellations” (Pérez-Gómez, 2017). Living in a phallogocentric society, challenging the demographic of users changes the social order of a space. If a space were to be filled with women and children, we would hear their voices say something previously unheard. We would see women meeting and making decisions, we would see women and children being heard and taken seriously.

With the past year of being out of the office, people have learned the benefits and struggles of working from home. These meeting and coworking spaces in the same building as a childcare center are an effort to allow women to work out of the office, close to their children, but unbothered.



Figure 112 | Meeting Amphitheater

The Library

You pick your child up from the daycare center after your meetings, and decide to take the ramp up to the second floor. What a relief to not have to load your sleepy child in her bulky stroller into the elevator! At the top of the ramp you head to the library to pick out some new books to read this week at bedtime. A group of children sit in a circle around a young woman reading “Green Eggs and Ham.” You empathize with the poor girl and steer clear of the Dr. Seuss section.

An important form giver for this project was accessibility. Being accessible by all age groups and all mobilities, from toddlers to elderly, peak physical fitness to wheelchair bound, is massively important as this is a space of dignity for all.

The second story of the building is focused on learning. The library contains a children’s library, a parenting library, and a tech space. Classrooms and breakout spaces contain resources for homeschooling families and after school activities. Study spaces around the mezzanine allow students of all ages to come together.

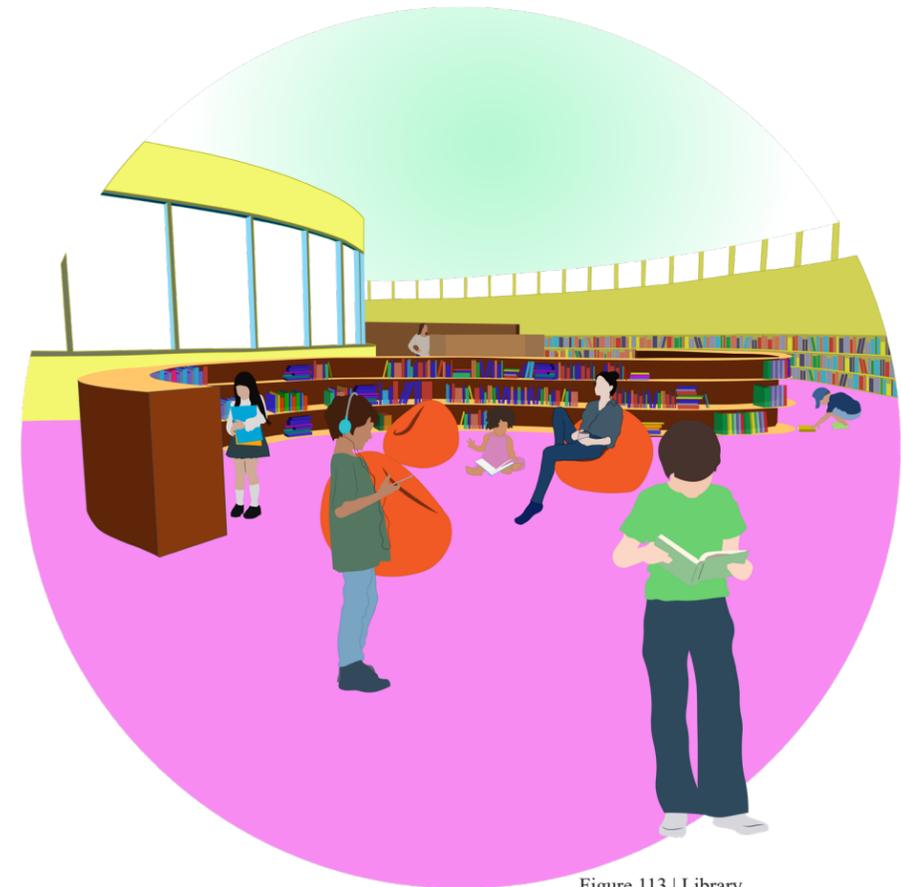


Figure 113 | Library



APPENDIX

References

- Alduy, C. (2012, August 25). The philosopher, the mother, and the baby. Arcade: literature, the humanities & the world, Stanford university. <https://arcade.stanford.edu/blogs/philosopher-mother-and-baby>
- Anonymous. (1914). Hymn to Demeter. (Evelyn-White, H.G., Trans.). Retrieved from <http://www.perseus.tufts.edu/hopper/text?doc=Perseus%3Atext%3A1999.01.0138%3Ahymn%3D2>
- ArchDaily. (2010, April 25). Surry hills library and community centre/FJMT. <https://www.archdaily.com/57339/surry-hills-library-and-community-centre-fjmt>
- ArchDaily. (2012, November 20). Hestia/ NEXT architects. <https://www.archdaily.com/295545/hestia-next-architects>
- Code of Ordinances. (2020, September 1). Omaha, Nebraska- Code of Ordinances. https://library.municode.com/ne/omaha/codes/code_of_ordinances?nodeId=OMMUCOCHGEORVOII_CH55ZO_ARTVIIIICODI_S55-342GEPU
- Data USA. (n.d.). Omaha, NE. <https://datausa.io/profile/geo/omaha-ne/#economy>
- Fontinelle, A. (2020, August 4). Average house price by state in 2020. The Motley Fool. <https://www.fool.com/the-ascent/research/average-house-price-state/>
- Francis-Jones Morehen Thorp Pty Ltd. (2016, September 21). Surry hills neighbourhood centre. FJMT Studio. <https://fjmtstudio.com/projects/surry-hills-library/>
- Gadamer, H. G. (1986). The relevance of the beautiful and other essays. Cambridge University Press.
- Google Maps. (n.d.) Jersey St & Giles Rd Papillion, NE 68046. Retrieved from <https://www.google.com/maps/place/Jersey+St+%26+Giles+Rd,+Papillion,+NE+68046/>
- Green, H. & Green, J. (Hosts). (2021, April 12). A Pill Meant for Horses (No. 285). [Audio podcast episode]. In Dear Hank and John. Complexly.
- Heidegger, M. (1993). Basic readings: Building dwelling thinking. Retrieved from http://designtheory.fiu.edu/readings/heidegger_bdt.pdf
- Irigaray, L. (1985). Women on the Market. (C. Porter, Trans, & C. Burke, Trans.) Publisher. (Original work published 1978).
- Irigaray, L., & Wenzel, H. (1981). And the one doesn't stir without the other. Signs, 7(1), 60-67. Retrieved from <http://www.jstor.org/stable/3173507>
- Jeremiah Program. (2019, December 23). Our Campus. <https://jeremiahprogram.org/fargo-moorhead/>
- Khudairi, S. (2014, February 22). NEXT architects creates a sensory daycare that mimics the city. DesignBoom. <https://www.designboom.com/architecture/next-architects-creates-a-sensory-daycare-that-mimics-the-city-02-22-2014/>
- Knott, S. (2019). Mother is a verb: An unconventional history. Sarah Crichton Books.
- LoopNet. (2020, October 1). S 72nd st – hickory hills. <https://www.loopnet.com/Listing/S-72nd-St-Papillion-NE/3873950/>
- Marris, E. (19 May, 2016). Critically contrast Beauvoir's and Irigaray's visions of female authenticity and motherhood. Elinor Marris. <https://elinormarris.wordpress.com/2016/05/19/critically-contrast-beauvoirs-and-irigarays-visions-of-female-authenticity-and-motherhood/>
- Matrix. (1984). Making space: Women and the man made environment. Pluto Press Limited.
- Merleau-Ponty, M. (9 June, 2013). Phenomenology of perception. (Landes, D.A., Trans.). Routledge. (Original work published 1945).
- Nightingale, A. W. (12 August, 2004). Spectacles of Truth in Classical Greek Philosophy. Cambridge University Press.
- North Dakota Department of Health. (2020). Women, Infants & Children (WIC) Program. <https://www.health.nd.gov/prevention/wic/what-wic>
- Olsson Associates. (23 December, 2016). Report of geotechnical exploration. Retrieved from http://www.oci-inc.com/BiddersBoard/sorensen/Geotech_Report_2016_12_23.pdf
- Pallasmaa, J. (2005). The eyes of the skin: Architecture and the senses. John Wiley & Sons. Retrieved from https://arts.berkeley.edu/wp-content/uploads/2016/01/Pallasmaa_The-Eyes-of-the-Skin.pdf
- Pederson, L., & Nelson, K. (2020, September 16). Personal interview [Interview].

Pérez-Gómez, A. (2017). Architecture and the city: The space of participation. *Studies in History & Theory of Architecture*, 5, 13-18. Retrieved from https://sita.uauim.ro/f/sita/art/01_Perez-Gomez.pdf

ProCare Solutions. (2020, June 24). Child care costs by state 2020. <https://www.procaresoftware.com/child-care-costs-by-state-2020/>

Reggio Emilia Approach®. (n.d.). Reggio emilia approach. <https://www.reggiochildren.it/en/reggio-emilia-approach/>

Sharp, C. (1 May, 2002). Divine daughters of divine mothers: Luce Irigaray's search for women's own divinity. *Feminist Theology* 10 (30) pp 70-76. <https://doi.org/10.1177/096673500200003007>

Toups, M. (2008). Theotokos preparing for Christmas with the mother of God, an Advent retreat. Institute for Priestly Formation.

TownCharts. (2020). Sarpy County, Nebraska Demographics Data. Retrieved from <https://www.towncharts.com/Nebraska/Demographics/Sarpy-County-NE-Demographics-data.html>

Photo References

- Saville, J. (2009-2010). Reproduction drawing I (after the Leonardo cartoon) [pencil on paper]. Gagosian. <https://www.artsy.net/artwork/jenny-saville-reproduction-drawing-i-after-the-leonardo-cartoon-1>
- Saville, J. (2009-2010). Reproduction drawing II (after the Leonardo cartoon) [charcoal on paper]. Gagosian. <https://www.artsy.net/artwork/jenny-saville-reproduction-drawing-ii-after-the-leonardo-cartoon>
- Saville, J. (2012-2019). Electra. Gagosian. <https://gagosian.com/news/museum-exhibitions/jenny-saville-portraying-pregnancy-foundling-museum-london/>
- [Photograph of goddess Danu figurine]. (n.d.). <https://www.amazon.com/Triple-Goddess-Figurine-Feminine-Strength/dp/B016FIUIO8>
- Alanis, A. (2014, February 5). Mothers with Infants. [Photograph]. Retrieved from <https://redtri.com/seattle/moms-club/>
- Burne-Jones, E. (1880), Pelican in her piety. [Pastel on paper]. William Morris Gallery. <https://www.wmgallery.org.uk/collection/themes/highlights/object/pelican-in-her-piety-a136-c-1880>
- Café and Library Space. (n.d.). [Photograph]. Retrieved from <https://www.fulltimenomad.com/wp-content/uploads/2016/04/slide-1-image-1.jpg>
- Chung, A., & Gollings, J. (2010). Surry Hills Library and Community Centre/ FJMT. Retrieved from <https://www.archdaily.com/57339/surry-hills-library-and-community-centre-fjmt>
- Google Maps. (n.d.) Jersey St & Giles Rd Papillion, NE 68046. [Screenshot]. Retrieved from <https://www.google.com/maps/place/Jersey+St+%26+Giles+Rd,+Papillion,+NE+68046/>
- Musch, J. (2012). Hestia/ NEXT Architects. [Photograph]. Retrieved from <https://www.archdaily.com/295545/hestia-next-architects>
- Saville, J. (2010). Reproduction drawing IV (after the Leonardo cartoon) [pencil on paper]. Gagosian. <https://www.artsy.net/artwork/jenny-saville-reproduction-drawing-iv-after-the-leonardo-cartoon>
- Saville, J. (2011). Study for Pentimenti I [graphite and pastel on paper]. Gagosian. <https://gagosian.com/quarterly/2020/07/09/five-preoccupations-jenny-saville/>
- Schultz, D. (n.d.) Jeremiah program: main level floor plan. [Construction Document]. Schultz & Associates Architects.
- Schultz, D. (n.d.) Jeremiah program: second and third level floor plan. [Construction Document]. Schultz & Associates Architects.
- Studio Leon Thier. (n.d.) The International School The Hague. [Photograph]. Retrieved from <http://studioleonthier.nl/projecten/the-international-school-the-hague>
- Waterhouse, J. W. (1910). Spring spreads one green lap of flowers [Oil on canvas]. USEUM. <http://www.john-william-waterhouse.com/spring-spreads-one-green-lap-of-flowers/>
- Waterhouse, J. W. (1910). Spring spreads one green lap of flowers. [oil on canvas]. <http://www.artnet.com/artists/john-william-waterhouse>



DESIGN EXPERIENCE

Second Year

Fall 2017 | Cindy Urness

Tea House

The Folly of Man

Boat House

Minneapolis Rowing Club

Spring 2018 | Daryl Booker

Bird House

Just a Dash of Whimsy

Small Dwelling

Benno Residence

Mixed Use

Skyline

Third Year

Fall 2018 | Mark Barnhouse

Wood Project: Entomology Laboratory

Brick Project: Industrial Design Firm

Incandescence

Spring 2019 | Regin Schwaen

Steel Project: Flexible Fabrication Space

Flex

Concrete Project: Native American

Cultural Center

VOID

Fourth Year

Fall 2019 | Cindy Urness

Capstone: Miami Mixed-Use High Rise

Hex

Spring 2020 | Paul Gleye

Study Abroad Experience

Fifth Year

Fall 2020 | Stephen Wischer

Artefact Development

Spring 2021 | Stephen Wischer

Thesis Development



Figure 114 | Personal Photo

PERSONAL IDENTIFICATION

Anne Christine Argenziano

Hometown | Reynolds, ND



Portfolio | anneargenziano.myportfolio.com

“YOU’VE GOT TO BUMBLE FORWARD INTO
THE UNKNOWN.”

— *Frank Gehry* —