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Story-Telling Through the Design of a Permanent Mission Trip Training and Housing Facility

Betty L. Rowe
Virginia Commonwealth University

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Story-Telling Through the Design of a Permanent Mission Trip Training and Housing Facility

Betty Lynn Rowe, MFA Interior Environments
Virginia Commonwealth University  2014
After completing my undergraduate degree in Studio Art, with a concentration in drawing and painting, at Longwood University in 2011, I decided to push my creativity further in the direction of interior design. A few short months later, I started an internship with a residential firm. A year later, I enrolled as a Masters of Fine Arts Candidate in Interior Environments at Virginia Commonwealth University. Embracing my love for learning led me on a month long study abroad trip to Florence, Italy in Summer 2013. The following winter I started an internship with a commercial firm. Now, here I am, preparing to graduate and ready to start my next adventure.

“Whatever I have, wherever I am, I can make it through anything in the One who makes me who I am.”

–Philippians 4:13
Acknowledgment
This book is the result of picking myself up and finding a way to see through the
tears and heartache I have felt over the past eight months. First of all, I am thankful
for my grandma for being one of the most strong-willed people I have ever met, and
for her heartbreakingly, beautiful passing on January 10, 2014. In her final hours,
I was honored to witness the most beautiful experience I have ever seen. As I held
her hand and shared my goodbyes, Grandma’s frail hand slipped slowly from mine.
With no struggle at all, she reached forward as if she were trying to grab something.
As I struggled to find the words and fight back the tears, I asked if she was in pain.
She softly whispered “No, I’m reaching!” With tear filled eyes, I asked what she was
reaching for... and as softly as she could, she answered “It’s Pap Paw!” Pap Paw
was her husband, a man I heard so much about, but unfortunately was never able
to meet; was standing there with arms open wide, ready to finally sweep his bride
away, yet again. As she closed her eyes to rest, I asked if they were going dancing...
As a smile crept upon her face she said, in the faintest whisper, “dancing, dancing,
dancing!” Grandma, may you rest in peace and dance the nights away.

Secondly I give thanks to my cousin Nathan Rowe, who left this world way too soon,
just a month and a half later. Nathan was the biggest bully I have ever met, but at
the same time had the biggest, softest heart. When all of our family was together, I
was definitely the target for all his teasing and jokes. But the second he and I were
the only ones in the room, he would hug me and always tell me he loved me and
how proud he was of me. He encouraged me and pushed me to give my best more
than anyone else. He was hard on me, but usually it was with good intentions. The
morning of Grandma’s passing, Nathan made me go to my internship interview. Three
days later, he was the first person I told about the job offer. He was proud and I knew
it. Nathan, what I would give for just one more day, one more moment with you!

And finally, I give thanks to the rest of my family. We may not have it together, but
all together we have it all. You all have made this pain just a little bit easier. Thanks for
holding my hand, wiping my tears and giving me the strength to pick up and carry on.

... I love you big!
This mixed-assembly space is designed as a permanent mission trip training and housing facility. Predominately the space will be used by middle school and high school youth. By creating a modern experience, teens are given a better opportunity to engage in a space they can relate to. It becomes a space where young people feel encouraged to share their feelings, beliefs and desires as they journey into a closer, more intimate relationship with a higher being.

The space is intended to serve a transient population. A large portion of the first floor is devoted to communal gathering which provides a space dedicated to praise and worship as well as an adjacent space for dining. The space also features lounge areas, a welcome center, restrooms and locker rooms, and spaces for lodging.

This project is an exploration of story-telling and how it can both impact and encourage a space. The idea behind the project is to help teenagers focus on something they cannot see or touch. Design strategies including connections, interactions, processions and transitions become very influential to the space.
10  Manifesto
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Manifesto
I believe Design tells a story. Design reveals its history, its discoveries and implies a future. Design is influenced by what is around us, in its exposure to time, culture and trends. Design happens because of us and becomes the responses of human behavior and our perception to environments around us. It becomes an art of movement. A movement based on motion and change which leads to constant reinvention.

Design is never complete.

Design is multi-faceted. It is the art of taking risks, not being afraid to think outside of the box and experiment, and becomes a way to accept the failures as a challenge. It must embrace the idea of exploring both the possible and impossible. It is about constant improvement.

Design is never complete.

I believe Design requires flexibility and adaptability. It must reflect the changes of culture, changes of seasons, changes of trends, and changes of necessity. Design comes from taking initiative to apply your knowledge and understanding to a new experience or exposure to make an effective change, or to create something new. It’s constantly evolving.

Design is never complete.
Thesis Statement
What design elements connect a group of teenagers to focus on their relationships with a higher being?
The project is located at 2201 Old Brick Road in Glen Allen, Virginia, the far West End of Richmond, Virginia. The site location provides immediate access to two major interstates, I-64 and I-288, with a short commute to intercity Richmond.

This proposal addresses the needs for a mission trip training and housing facility for the Richmond area. This facility will occupy all four floors of the building, this project’s scope spans the first and second floor. The space provides a centralized location for middle school and high school students, from Christian denominations, to join together to develop and strengthen their relationships with God, while taking on the challenge of service to help people in need. The project will provide housing and training for staff and volunteers. The project will link the group service experience with individual, spiritual growth.

The space provides large, communal gathering opportunities through structured praise and worship, and group dining, while also encouraging time for less structured games and activities. Upper floors are designed for lodging, modeled after college dormitories.
Storytelling
"I am the church! You are the church! We are the church together! All who follow Jesus, all around the world! Yes! We’re the church together!
The church is not a building, the church is not a steeple, the church is not a resting place, the church is the people!
I am the church! You are the church! We are the church together! All who follow Jesus, all around the world! Yes! We’re the church together!
We’re many kinds of people, with many kinds of faces, all colors and all ages, too, from all times and places..." - We Are the Church Hymn
Site Analysis

This 57,000 square foot facility opened in December 2012 as part of West Broad Village, which serves the Richmond area as being the first suburban community to significantly embrace the idea of new urbanism. The neighborhood of West Broad Village serves as a mixed use assemblage community, offering the residents places to live, work, dine and find entertainment, which reflects my project goal. The Village not only provides a mix of activities, but also a mix of building types and architectural styles. It is a clear statement that the area grew over time. This urbanized neighborhood proves to be the ideal location for the project as it provides a democratized location. The space, is modernized and serves as a place that teenagers are familiar with and one they can relate to.
Target Market Site Map:

- Green: site
- Black: heavy circulation and traffic
- Purple: churches
- Orange: schools
Exterior Elevations
Interior Sections
Light Type and Source:

- **Direct natural light: winter sun**
- **Direct natural light: summer sun**
- **Indirect daylight: reflection off of structures and landscapes**

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**Location:** ACAC Fitness Center
2201 Old Brick Road
Glen Allen, VA 23060

**Summer Solstice (Longest Day of the Year):** June 21, 2013
- Sun rises @ 5:49 AM → Altitude: 0.01, Azimuth: 59.3
- Sun sets @ 8:34 PM → Altitude: 0.4, Azimuth: 300.2

**Winter Solstice (Shortest Day of the Year):** December 21, 2013
- Sun rises @ 7:21 AM → Altitude: -1.0, Azimuth: 119.2
- Sun sets @ 4:50 PM → Altitude: 0.5, Azimuth: 239.8

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Straight lines represent azimuth angles.
Concentric circles represent angles of altitude.
Existing Building Conditions

ACAC Fitness Center
Located at: 2201 Old Brick Road Glen Allen, Virginia 23060
Constructed in 2011 by Antunovich Associates
Total square footage: 57,000
A four-story fitness center with a mezzanine level
Features outdoor pools and recreation fields on the rooftop
Construction Type: II-B

Mixed Use:
First Floor: Assembly Occupancy A-3
Second Floor: Residential R-1

Occupancy:

Height Limitation: 3 Stories, 64 ft
Area Limitation:
First Floor: 17,747 sq ft
Second Floor: 16,975 sq ft

Fire Suppression System: Sprinkler Systems

Structural Fire Rating: 1 Hour

Means of Egress: 4
Number of Stairs: 3
Number of Exit Signs: 3 per floor

Accessibility: 100%

Occupancy Load:

Number of Bathrooms: 2 per floor

Number of Elevators: 1
Number of Ramps: 0
Existing Conditions First
Floor Legend:

- **Red**: Egress
- **Green**: Restrooms
- **Brown**: Vertical circulation
- **Blue**: Glass

[Diagram of a floor plan with annotations for egress, restrooms, vertical circulation, and glass areas.]
Existing Conditions Second Floor Legend:

- **Red**: Egress
- **Green**: Restrooms
- **Brown**: Vertical circulation
- **Blue**: Glass
Case Studies and Precedent

“Don’t let anyone look down on you because you are young, but set an example for the believers in speech, in life, in love, in faith and in purity.” - 1 Timothy 4:12
Josep Maria Bocabella, President and Founder of the Spiritual Association of Devotees to Saint Joseph promoted the construction of La Sagrada Familia as a way to redirect the glorification of the patriarchal figure of the church and overall the Catholic faith. Bocabella looked to the architect, Francesc de Paula del Villar Antonio, who offered his services for free. The first stone of this neo-Gothic building was laid on Saint Joseph’s Day in 1882. Due to differences among artisans and their expertise, Del Villar resigned within a year. Joan Martorell, a historicist architect already involved in the project appointed Antoni Gaudi the role of lead architect. La Sagrada Familia would not only become an iconographic symbol to Barcelona, his career, and become one of the greatest buildings in the 20th century.

“...the cimborios and bell towers connect the terrestrial with the celestial...”
- Dos de Arte Ediciones

1 The Expiatory Temple of the Sagrada Familia: The Creation which Antoni Gaudi Dedicated His Entire Life To
The main doorway to the Resurrection Facade—sculpted by Josep Maria Subirachs. The surface is adorned in the words from the Lord’s Prayer in fifty languages. The doors represent a physical connection of different people, from different backgrounds coming together who share and worship the same God.

“..."This facade represents an explosion of life on the celebration of the birth of the Messiah."  
Divided into thirds, this facade has three porticos, representational to the three members of the Holy Family, with each one personifying a theological virtue: Mary is Faith, Joseph is Hope, and Jesus symbolizing Charity.

This crucifixion is the iconic, central sculptural arrangement of the Passion Facade. It's melodramatic expression deliberately reveals emotion and content. The inclusion of a skull at the foot of the cross gives literal and physical meaning to death. While the moon, off to the right, symbolizes the darkness of night.
This south-west facing facade is most dramatically affected by the natural sunlight. The setting sun creates striking shadows that enhance the provocative journey.

Facing south-east this facade has the best location on the temple site. It receives sunlight for much of the day.

This north-east facing facade receives the first light of dawn and is blanketed with a comforting glow. The placement of this facade gives life to an optimistic view: a foreshadowing.
Case Study: Bauhaus  Dessau, Germany

In April 1919, Walter Gropius, founder and director, merged the existing art academy and school of arts and crafts to form the Staatliches Bauhaus Weimar. “The main principle of the Bauhaus is the idea of a new unity; a gathering of art, styles, and appearances that forms an indivisible unit. A unit that is complete within its self and that generates it meaning only through animated life”. - Walter Gropius²

Unique to the 1920s, the building’s use of new, industrially manufactured building materials: reinforced concrete, large glass curtain walls, and skeletal construction methods still to this day, give the building a contemporary look today.
BAUHAUS GROUND PLAN FIRST FLOOR 1926
Case Study: Group Workcamps

Typically a week long mission trip, geared toward helping christian youth groups work hard to help those in need, while focusing on their inward relationship with God.

A typical camp day consists of both giving and receiving through volunteer serving, “God-sightings,” daily devotions, and praise and worship programs.

High energy and action packed.
EXPERIENCES:

A VOLUNTEER (TRANIENT)  

WORSHIPS  

SERVES  

ENGAGES  

GIVES SOMETHING BACK  

A RESIDENT  

A COMMUNITY  

PEOPLE THROUGHOUT THE NATION  

ENGAGES  

COMMUNITY  

THEIR GROUP  

GOD  

WHAT YOU PUT IN  

WHAT YOU GET OUT  

IDEAL LIGHTING DIAGRAM:

LOUNGING  

LODGING  

WORSHIP  

DINING  

STAFF OFFICE  

RESTROOMS  

CONTROLLED/GENERAL  

NATURAL/DAY LIGHT  

TASK  

DIMMABLE.
Program and Schematic Design

“For where two or three are gathered together in My name, there I am in the midst of them” - Matthew 18:20
<table>
<thead>
<tr>
<th>AREAS OF FOCUS</th>
<th>OCCUPANCY</th>
<th>SQUARE FOOTAGE PER PERSON</th>
<th>TOTAL SQUARE FOOTAGE</th>
<th>MINIMUM %</th>
<th>MAXIMUM %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Praise and Worship</td>
<td>300-400</td>
<td>12-24.83 FT/PERSON</td>
<td>4,800-9,600</td>
<td>0.4</td>
<td>0.48</td>
</tr>
<tr>
<td>Band/Instrument Area</td>
<td>5-10</td>
<td>2025-58 FT/PERSON</td>
<td>100-250</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dining</td>
<td>300t+</td>
<td>10-15.50 FT/PERSON</td>
<td>3,000-4,500</td>
<td>0.25</td>
<td>0.2045</td>
</tr>
<tr>
<td>Lodging Rooms</td>
<td>10-80</td>
<td>160.50 FT/PERSON</td>
<td>1,600-4,800</td>
<td>0.13</td>
<td>0.22</td>
</tr>
<tr>
<td>Locker Rooms/Restrooms</td>
<td>20t</td>
<td>100-120 FT/PERSON</td>
<td>2,000-2,400</td>
<td>0.17</td>
<td>0.11</td>
</tr>
<tr>
<td>Staff Offices/Meaning Space</td>
<td>10t</td>
<td>50-90.50 FT/PERSON</td>
<td>500-700</td>
<td>0.04</td>
<td>0.082</td>
</tr>
</tbody>
</table>

MINIMUM PERCENTAGE

MAXIMUM PERCENTAGE

Program
Praise and Worship (300-400)
- Projector Screen
- Projector Table/ Stand
- Computer
- Speakers
- Microphones
- Technology Hookup
- Lighting
- Seating
- Band/ Musical Instruments
- Extension Cords/ Sockets
- Clear sight lines to speaker
- Climate Control
- Camera
- Cross

Dining (300+)
- Tables
- Seating
- Circulation
- Appliances (ovens, stoves, fridges, sinks...etc)
- Food Storage (warmers/ coolers...etc)
- Plumbing
- Climate Control

Lodging Rooms (10-30)
- Floor space for air mattresses
- Floor space for luggage/ belongings
- Seating (lounging)
- Counter/ table/ vanity
- Sink/ Plumbing
- Extension cords/ sockets
- Acoustical privacy
- Circulation
- Lighting

Locker Rooms/ Rest rooms (20+)
- Showers
- Toilets
- Sinks
- Changing rooms (privacy- door, curtain...etc)
- Storage Space for belongings
- Mirrors
- Counter/ table/vanity
- Plumbing
- Appliance Hookup
- Climate control

Staff Offices/ Meeting Space (10+)
- Computers/ Printers
- Intercom System
- Extension cords/ sockets
- Writing Space
- Seating
- Storage
- Marker Board
- Acoustical Privacy
- Clear Sight Lines: face-to-face
Charcoal Studies

Using basic geometry to discover primary spatial allocations
Creating divisions of space and hierarchy through the use of layers and contrast
Layering Findings from the Charcoal Studies

Finding overlaps and transitions to create room boundaries within each floor
First Iteration:

Using the findings from the charcoal studies for primary spatial allocation helped to subdivide the open floor plan.

Rotating the main axis on a 45 degree angle, provided a way to better engage the users of the space by pulling them further into the facility causing more fluid (rather than forced) turns and subtle pauses.
Second Floor Plan: with furniture parti overlay

First Floor Plan: with furniture parti overlay
Second Iteration:

Layering a parti diagram on the open floor plan created more interesting spatial allocations.

Applying the 45 degree rotated, main axis throughout each floor, made for a consistent flow between spaces.

Designing lounging areas adjacent to each of the lodging rooms created individual “living room” type settings, customizable with moveable furniture settings.
Second Floor Plan: with furniture parti overlay

Second Floor Plan

First Floor Plan: with furniture parti overlay

First Floor Plan
First Floor Plan: with furniture parti overlay

Final Iteration:

Understanding that the rotated axis in the previous iteration was imposing and forcing itself into the layout of the space, rather than influencing it, the parti diagram was reoriented.

The parti diagram runs in parallel directions to the column grid.
Second Floor Plan: with furniture parti overlay
Finding Spaces Within Spaces

Using the overlap of the parti diagram with the floor plan, divisions and separations of spaces are found.

Spaces within the open floor plan are distinguished by changes in ceiling heights, floor materials, and wall thickness.
Second Floor Watercolor Space Planning Diagram: Not to Scale
First Floor Ceiling Height and Lighting Diagram:
Not to Scale
Second Floor Ceiling Height and Lighting Diagram:
Not to Scale
First Floor Zoning Plan

1: Main Entrance
2: Lounging
3-4: Dining
5: Welcome Desk/Staff
6: Secondary Entrance
7: Kitchen
8: Kitchen Office
9: Male Restroom
10: Female Restroom
11: Praise And Worship
Second Floor Zoning Plan

12-19: Lodging units
20-28: Second floor lounging
29: Janitor closet/ storage
30: Locker rooms/ restrooms
31: Staff meeting/ office
32: Kitchenette
Dining:
To serve 300+ people
To provide: flexibility, accessibility
Total square footage: 2,122.53 sq. ft.
(Max occupancy: 354)

Lounging:
To act as a space for spillover dining
To provide: flexibility, comfort, break out opportunities, interaction
Total square footage: 1,822.34 sq. ft.
(Max occupancy: 73)
Second Floor Project Scope

**Lodging:**
To house 8-16 people
To provide: sleeping space for large groups, storage, lounging

Total square footage: 5,343.3735 sq. ft.
(Max occupancy: 107)

**Lodging lounge:**
To create a gathering place
To provide: comfort, accessibility, flexibility

Total square footage: 3,031.84 sq. tt.
(Max occupancy: 122)
Final Presentation Boards


All other photographs are the work of Betty Rowe


