MAN'S PERCEPTION
OF THE BUILT ENVIRONMENT

THESIS CONCLUSIONS

Undergraduate Thesis
Ball State University
College of Architecture and Planning

By:
Kristopher G. Floyd

Committee Members:
Alfredo Missair
Dr. Bruce Meyer
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  * First Floor Plan
  * Second Floor Plan
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CONCLUSION

An alternative birth center provided me with many different perspectives to approach my goals. With this project I wanted to design a facility that broke from the non-humanistic qualities that most institutions provide. I wanted to make better my skills of predicting how people respond to the environment in which they live. Then to use these common sense ideas to make good architecture. My chosen building type allowed me the opportunity to respond at many different levels to mans' perception of space. I wanted to respond to the perceptions of the mother, father, new born, other siblings and visitors.

There has been much discontent with the preprescribed methods of childbirth dictated by hospitals. This facility provides the comfort of home and the security of modern technology. I designed the facility with the concept of the LDR (labor, delivery, and recovery rooms). The LDR eliminates the need for transporting the mother from room to room during the birth process. After this the family is taken to their private room.
These rooms are much like a small home with a sleeping space, sitting space, dining area, and large bath with a changing area. These sub-spaces are created with manipulations of the ceiling plane and floor pattern. The sleeping area is adjacent to the sitting space so that the mother may remain comfortable while being a part of the conversation. A dining area is provided so that the family may share their meals during this time of adjustment. For recuperation and adjustments sake there is a nursery where each child has its own nook to be admired from. In the celebration of life everyone's eyes are on this tiny creation. The nurseries are the focal points of my design. They radiate from the nurses' stations and are focused in on by the family's room. Off of the nurseries are nursing rooms for mothers and nurses to feed the babies. The corridor between the patient rooms and nurseries has undulating walls so that it becomes an extended hall with many gathering spaces along it.
I believe these are all quite beautiful ideas. The solution to the problem in many ways is successful, but falls short of my expectations. I would like to have developed my ideas more fully. Also, explored more deeply the final result of the spaces I have created.
FINAL PRESENTATION
- First Floor Plan
- Second Floor Plan
- Third & Fourth Floor Plan
- Patient Room Plan
- Elevation & Section
FIRST FLOOR PLAN
THIRD & FOURTH FLOOR PLAN
APPENDIX I

Thesis Proposal
MAN'S PERCEPTION OF THE BUILT ENVIRONMENT

Committee Members:
Alfredo Missair
Dr. Bruce Meyer

Department of Architecture & Planning
Ball State University

Proposal by
Kristopher G. Floyd

[Signature]
PROBLEM STATEMENT

Both man and his environment participate in molding each other. Man is in a position of actually manipulating the total world in which he lives. As designers of most of the built environment we have a responsibility to use our abilities to create spaces that can bring a level of pleasure to man's daily existance. I realize there are many ways to define space and for purposes of this research I have chosen to define space as the multi-dimensional habitable environment perceived through the five senses: sight, sound, touch, smell, and taste. It is through these sensory modes of experiences that I will pursue my exploration into what constitutes human understanding of the built environment.

I believe many buildings are built without successfully taking into consideration how people perceive the environment around them. It is important to know that there are opportunistic designers who do take advantage of human perception. They are using it to "control" perceptual responses not "evoke" perceptual responses. A tangential example is the use of red light and green paper to make a piece of meat appear more appetizing. Light in this example is not used in a way that becomes a meaningful experience in the human life but is merely a gimmick to sell a product.

In that psychologists maintain that perception is sensation given meaning; I believe that perception, through all senses, is a key to architecture that has meaning. This meaning for the participant of a space is a range of emotive and behavioral reactions including: curiosity, excitement, peace, coziness, comfortableness, pleasure and warmth, but also negatively, hostility, aggression, fatigue and disorientation.

An alternative birth center, my proposed building type, will allow my inquiry to explore the impact of the surrounding environment on mother, father, baby, other children- both visiting the baby and the pediatrician, visitors, doctors, nurses and staff.
OBJECTIVES

"The goal is to achieve a higher level of design, by exploration of how people perceive habitable space. A study of how manipulations of space can be used to "evolve" responses will be documented in a large series of writings with graphic representations. This will aid in developing these ideas and will record them into a useable form.

"The building type I have chosen will allow me to explore these alternatives thoroughly with a diverse range of participants.

SITE ANALYSIS

I have chosen, in Indianapolis, a one-quarter section of a city block located in the northwest corner of the intersection of East St. and Vermont St. The project is to be an active participant in the recent commercial and residential growth in the downtown area. The site is in a position of transition between the new commercial and smaller scale residential renovations (i.e. the Lockerbie neighborhood). I-65 and I-70 provide convenient access from around and outside of the city. The land is currently a parking lot.

CLIMATE (Hammond Ambassador World Atlas, 1985)

"Elevation: 808'

"Average Annual Temperatures:
- High 75.7° (July) Low 28.5° (January)

"Average Annual Precipitation: Rain 40" Snow 21.3"

GRAPHIC DIAGRAM

At this time a site plan with the estimated building program is unavailable. I simply do not have the information to make a knowledgeable estimation of any square footages. I will have this information after I meet with the people at St. Vincent’s Family Life Center, a comparable facility. What should be a very informative tour has been arranged.
PROGRAM SCOPE

"They handled me like a watermelon, stuck a needle in my arm without asking me if I wanted any medication or telling me what it was for. The delivery room...seemed like a butcher shop and I was in the middle of it like a trussed-up turkey. Once out of the delivery room and into bed this Valkyrie right out of Wagnerian Opera came in and punched my stomach back down." (McCall P.82)

The need for a break from the traditional hospital setting has grown from this type of discontent with the prescribed method of birth by the medical profession. Little or no flexibility is offered in the birthing process. Many expectant parents have opted for total freedom with a home birth. This option puts the lives of the baby and the mother in jeopardy if complications should arise. An alternative birth center provides parents the flexibility to experience the birth process in such a way that accommodates their needs along with the security of medical care at hand. Other services the center will provide are prenatal family care and pediatric care.

PROGRAM CRITERIA

* early labor lounge
* 3 traditional labor rooms
* 2 traditional delivery rooms
* nursery
* 12 private rooms
* 4 classrooms
* gym equipped for mothers
* 8 doctor's offices
* administrative offices
* 8 labor, delivery, recovery rooms - bath and shower
* adjacent privacy room
* intensive care nursery
* family lounge
* 10 examination rooms
* child care
* nurses station
* main waiting area
HISTORICAL PRECEDENTS

As for alternative birth centers I have been unable to find any documented precedents. The Family Life Center, at this point is my only existing source of information on the actual building type.

There are many examples that can be analyzed as to how the designers have manipulated space to evoke responses. Le Corbusier's Notre-Dame-du-Haut (Ronchamp) uses light, volume, mass, color and texture to evoke it's powerful emotional responses.

![Image of Notre-Dame-du-Haut (Ronchamp) interior](Ching. 187)

Frank Lloyd Wright, one of the few architects who apparently understood human perception of space, used many sensory stimuli to award a perceptual reaction. In his, "Fallingwater" he allows the sun's light to fall on surfaces within the room, bringing life to its colors and articulating its textures. This animates the space. Wright understood these manipulations and could create a festive atmosphere within the room or instill within it a somber mood. (Ching, 181)
STATE OF RESEARCH

The book The Hidden Dimension (Hall, 1966) is a primary source of information. It delves into many topics such as: proxemics, culture, behavior, anthropology and perception. These all have great impact on man's interaction with space.

A French philosopher, Gaston Bachelard, has written The Poetics of Space (Bachelard, 1969), which explores the philosophical significance of many kinds of space. He examines space at all scales-rooms, forests, shells, corners and closets. This book gives views into why man perceives space.

Looking into buildings of this type I have obtained literature from St. Vincent's Family Life Center, which have given me the philosophy their facility is based on and the many services an alternative birth center can provide. The tour of the center will give a greater feel for the need it fulfills.

The article "Childbirth in America" (McCall, 1986) talks about the discontent with the procedures of hospital births and points out the origin of such facilities.
BIBLIOGRAPHY


APPENDIX II

Program
MUTUAN LOOM (SD)

- IN USE AFTER CHILDREN'S LUNCH
- BED
- LIVING ROOM
- DINNING ROOM
- T.V.
- W.C. ON 1ST FLOOR
- A VAN IN THE WITHIN SPACE
- FREE FURNITURE
- DRIVE
- KIDS A WASHING MACHINE MEET
- MUST BE ADJACENT TO NURSERY

- KITCHEN
- LAUNDRY
- TOOL
- CHF. KL

- RAIL AND LADDER
- KITCHEN
- STAIRS
- KIDS
- 40 X 40 ft  8000 sq ft
- Should have a feeling of freedom
- Should not be confining
- View from bed
- Window
  - Time of day
  - Flowers, rain, show, city, landscape
- T.V.
  - Black
  - Should be able to see T.V. without
    adjusting mirror to window
- Floor
  - Carpeting or rug
  - Home-like
  - Noise control
- Walls
  - Texture - play of light
  - Color
PRIVATE ROOMS

- CEILING
  - SPACE EXPANSION
  - LIGHTING
    - NATURAL
    - ARTIFICIAL

- LIGHTING
  - NATURAL
  - CONTROLLABLE
    - VARIATIONS IN QUALITY & INTENSITY
    - COUPE OFF FOR DAY SLEEP

- CHEMISTRY
  - THIS CAN GIVE A CERTAIN PERMANENT HONEY FEELING TO THE ROOMS, ESPECIALLY IF BUILT IN.
  - CORDINSS FOR
    - T.V.
    - LOUNGE (WHEL.)
    - DEER STAND
    - CHELSEA
    - POSSIBLY HIDE AWAY BED
      FOR OVER-NIGHT GUEST
• A sitting area can allow for a comfortable cafe space.
  • Should be adjacent to the view
  • And accessible to good light
  • Can become a physical or visual extension of the house.

Other considerations:
• Bath
  • Easily accessible for new mother
  • How can the bath be an integral part in the formation of the main space without being just another door in the wall?
  • Transition by a changing room?
• retaining privacy is important
  • Visual
  • Acoustically

• Entrance
  • Another level of privacy from hall but retaining (not necessarily a physical but a psychological or visual connection to the nursery).
• 400 90.41
  1200.61.4.

• Lighting, sound
  suited to aid in the new sounds, befitting to the new harsh environment
to the previous gory, smooth, water-hued atmosphere

• Viewing for family and visitors
  siblings like to look too!
- Violation: Hall
- 4 Room: Hall
- Full: Room
- Parent: Violation
- Hall

- Hall Lighting

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- 1971 60 ft.
- 1990 60 ft.
MANE: HEAD,
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- INSECT

80 100 H.
ANY JOURNAL

- 226 500.00
TéERMO NTAL LABOR (2)
- FOR PRELIMINARY PREPARE A. ETC.
- PREPARE ROOM
- A HOSPITAL BAG
- UMBILICAL CORD
- Assault to review
- Neonatal risk
- BORN TERMINAL LABOR
- 300 MIN
- 400 MIN

- THE TRANSITION FROM ROOM TO ROOM IS VITAL TO THE MOTHER WHO IS IN LABOR. IT SHOULD BE SMOOTH, EASY.
LITHIUM (3-9)

- Picture
- Movie

- Near MRI/CT
- Near Ultrasound
- Near Radiology
- 10.60 ft. 350.60 ft.
LADY
• 300 GRS FT.
• FAMILY ROOM
- Between special care nursery & premature
- Convenient access from nursing station
R.C. 1969

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WALK OUT & WORKOUT

CHAIR

HOT TUB

MEETING

APARTMENT

TOILET

TOILET

WORK OUT, 1000 SQ. FT.

LOCKERS

SHOWERS

TOWELS, 425 SQ. FT.

OIL HULL, 400 SQ. FT

STORAGE, 400 SQ. FT
CHIEF TANK

FOR THE TANK

4000 SQ FT.
CHARTER (2)

FOR THE NEXT EIGHT WEEKS

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- Geschäftsstelle: [illegible]
- Adresse: [illegible]
- Postleitzahl: [illegible]

* [illegible]

- Kellergeschoss
- Erdgeschoss
- Geschoss

- Manufaktur
- Geschäftsräume
- Geschäftsstelle
- Service
- Direktien
LABORATORY

- TEST LAMINATING AREA

* DELIVERY

- RESULTS
- TEST SUPPLIES
- DETER READING AREA

- 250 SQ FT.
HOME KEEPING

- Daily cleaning, W.H., V., H.L.
- Tidy up the TV area, TV room
- Dust all furniture
- Out all clean the oven
- 100 HQ. F.
MAINTENANCE

- YELLOW
- GREY
- BLACK
- 100 HP
- 500 HP
- 1000 HP
- 500 HP
- 100 HP
EMERGENCY BATTERED
EMERGENCY GENERATOR