recoveringLIFE(in)ARCHITECTURE

thesis project for those suffering from addiction

DAVID PATNODE
How can the design of a rehabilitation center assist in the care that each patient experiences and requires individually?
Typology
Recovery & Rehabilitation Center

Claim
People who acquire the disease of addiction need a positive and nurturing environment in order for them to thrive in the lifelong process of recovery.

Project Justification
The concept that, “it will be built; they will come” is true, but the need for great, effective treatment centers is real. The need for rehabilitation centers grows every year in a variety of places around the United States dealing with different drugs, societal issues, and stigmas that exist with addiction. One of the most important steps in recovery is a proper introduction to society after recovery has taken place for a patient. This offers hope for the addict, the family, community and society as a whole.

Unifying Idea
Restoration is an important concept from an architectural or a recovery and rehabilitation point of view. The betterment of a person in regard to health, wellness, and awareness is important to maintaining life and longevity. The center will stand as a link for the residents in the surrounding community for help and hope, and the tools to maintain a healthy and valuable life.
DIRECTION of RESEARCH

abstract

ADDICTION

RECOVERY

architectural design

solutions

CONCLUSION (today)
rocky, aggregate soil foundations; located along Mesabi iron range; cooler “lake effect” weather

high human and wildlife activity; grasses, moss & fungi, coniferous treescape

vacant site: ~10 acres of land, >250’ shoreline of Lake Superior
Location: North of Two Harbors, MN - Flood Bay

Character: Set in a rich coniferous, deciduous, and hardwood tree forest that is plentiful with rivers and bogs that surround Lake Superior.

The site holds roughly ten acres of land which lies between two residential properties, MN hwy 61 and the shore of Lake Superior. The building site completely hidden from the road and neighboring buildings.
views

panoramic view of site shoreline
process

ACCESS

> public vs. private
> views
> to/from neighbors
> nature & water
> sunshine

linear

sequences

relationships...

...connections
SPATIAL DESIGN

Intake/ Registration
Administration
Medical Care/Detox
Living
Learning
Service
Wellness
process

spatial overlay

viewpoint
elevation
materiality
harmony within site & landscape
initial design decisions

- small and intimate spaces that are easily understood
- opportunities for smaller gatherings of people and space
- incorporate tactile sensory elements in design
- create stabilization and harmony
- maintain private spaces for residents that aren’t isolating
- biological relationships
- safety and security (other needs)
- patients reflection and personalization

- different people require different therapy
- addiction and treatment = spectrum of matters
- universal design method
- positivity and nurturing

information obtained from community resource professionals from Prairie St. John’s - Fargo, ND and Hazelden - Plymouth, MN.
part of my thesis project research included case study typology visits that displayed different types of care and recovery and different setting, site, and context.

Prairie St. John’s - Fargo, ND
Hazelden Recovery Center - Plymouth, MN

MASLOW’s Hierarchy of Needs

- physiological
- safety
- belonging
- esteem
- self-actualization

- breathing, food, water, sex, sleep, excretion
- security: body, job, home, health...
- family, friends, intimacy
- self-esteem, respect, achievement
- morality, creativity, acceptance

sense of home & community
sequential spaces + normative theory
vernacular integration
common & mixed areas
natural/outdoor environments
meditative spaces
gender integration
TYPES OF ADDICTION

BEHAVIORAL

CHEMICAL/SUBSTANCE

- mental disorders
- spectrum disorders
- biological mechanisms

personality theory
Cloninger’s Tri-Dimensional Theory
withdrawl & drives
positive vs. negative affect
model of impulsivity

“schools of thought & research” (psychology)

CASE STUDY + process
CASE STUDY + process

DAVID SALMELA
koehler retreat - silver bay, MN

framing views
materials
vernacular & site integration

fischer, thomas, salmela, david
SALMELA ARCHITECT 2005
CASE STUDY + process

DAVID SALMELA
albrecht residence - red wing, MN

fischer. thomas, salmela. david
SALMELA ARCHITECT 2005
midterms + process

sense of home & community

sequential spaces + normative theory

vernacular integration

common & mixed areas

natural/outdoor environments

meditative spaces

gender integration

continuing to create flex-use indoor/outdoor spaces that promote health and recovery.

power of the natural surroundings > sense of place

meditation cantilever space

space for self-reflection, individuality, thought, spirituality, and balance.
site configuration

community outdoor areas

lakefront residential facade
housing concept details

capacity: < 26 patients/residents

shared loft living spaces:
2 levels:
- 1 bedroom = 2 ppl, 1ba.
- shared lower level living space w/kitchen
- shared 2nd level living/flex space

changes in spatial organization
- bring materials to surface
- focus on environment and senses
- linear forms vs. organic
- building details & sustainability
DESIGN DEVELOPMENT

organization
details
spaces & plans
section-perspective
healing environments
justification
sunshine & daylighting
SUMMER SOLSTICE (<sunrise - <sunset)

access to the sun is vital for healing in several aspects. (heliotherapy) Helios is the ancient Greek therapy of using the sun for its many benefits

HEALING & Cleansing

mind
body
soul

Felicetti/Marcus
Univ. of Sydney, Australia
Yoga
sunshade

horizontal/vertical louvers system

awnings & overhang/ bay windows

details moving forward:
water collection & engagement
courtyard spaces (dead spaces within spaces)
sun collection
wind power

structure
light & heavy timber framing
organization

1. housing
2. community living room
3. private therapy rooms
4. reflection
5. courtyard
6. main kitchen
7. dining
8. community learning spaces
9. offices
10. group therapy room
11. exam rooms
12. reception
13. detox
14. flex/living/learning
15. outdoor garden access
floor plans + SECOND FLOOR
scale: 1:30

organization

1. housing
2. fitness
3. meditation
4. shared community space
5. outdoor roof access
6. exam/clinic
7. detox/recovery
8. offices
9. restrooms
10. mechanical
shared loft living spaces

1. bedroom
2. living
3. kitchen/dining
4. bathroom
5. closet
6. outdoor access
section-perspective
healing ENVIRONMENT
group & community therapy space
PRIVACY

strengthens trust and sense of security; calm, ease and ability to self-reflect.

COMMUNITY

opportunities for friendship and shared experience in a healthy, positive, and nurturing environment

ENVIRONMENT

consultation/therapy spaces

the “Lake Room” (community/living room)
ENVIRONMENT

REFLECTION
meditation cantilever space

self-awareness and spirituality

COMFORT & TRANQUILITY
shared bedroom space - lake-facing

eases tension, anxiety, stress healthier environments for groups and individuals
SENSE OF HOME
safety & security
belonging
physiological

shared living & kitchen space

ENVIRONMENT
airflow in loft units
JUSTIFICATION

PROBLEM STATEMENT

How can the design of a rehabilitation center assist in the care that each patient experiences and requires individually?

Creating environments and spaces (with certain researched characteristics) where progress and an individual and meaningful experience can take place during the long and complex process of recovery for one suffering from the disease of addiction.