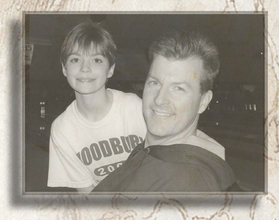
ALEXANDER

TRANSFORMATIONAL HEALING THROUGH ATMOSPHERIC ARCHITECTURE

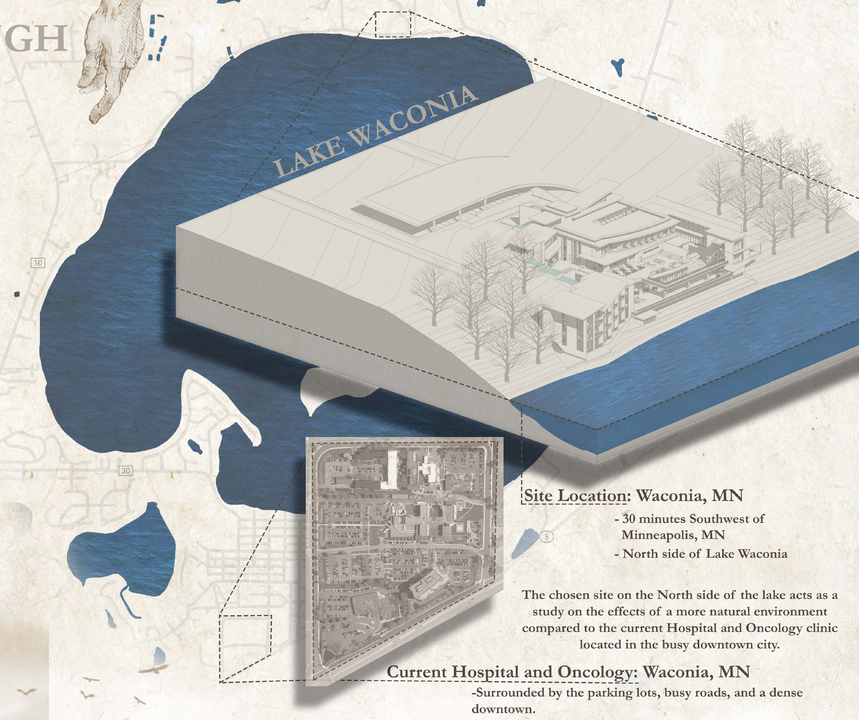
CANCER TREATMENT AND RESEARCH CENTER

This thesis explores the role of the environment on the treatment and potential healing of those afflicted with cancer – a disease that will affect the individual lives and families of an estimated 1.9 million people in the United States in 2022. Although recent studies in neuro and cognitive science show how the inner and outer worlds are interdependent and co-emergent, architecture, especially in the realm of healthcare, has become focused on functionality, efficiency, and aesthetics due to the rise and development of Positivism which separates mind and body, subjective and objective realms. While such developments inevitably benefit the medical treatment of cancer patients, this thesis questions the emotional and cognitive benefits of spaces that cannot be reduced to rational formulas and control. There is a prevalent disconnect between the architecture, patient, and doctor that affects the patient's mood and their ability to achieve equilibrium within themselves. Research, along with architectural designs, aims to examine how the language of healthcare architecture might create a more attuned atmosphere that can aid in the treatment and healing of a patient through environments that consider the emotional and cognitive aspects of the whole human being.



In 2010, My father Alex was diagnosed with stage four parotid gland cancer. I was only 10 years old when the cycle of doctor's appointments, home visits, hospital stays, and surgeries began. These healthcare buildings were placed in busy towns where they were surrounded by asphalt parking lots and other buildings as close as the city would allow. Two years later in July of 2012, cancer took my father's life. Looking back at the journey my family went through, the healthcare facilities we experienced were extremely functional, only catering to delivering the necessary treatment and neglecting the mental and physical challenges of dealing with cancer.

This thesis proposal design creates an environment that reduces levels of pain and stress. The design focuses on the use of views, natural light, and sound, and is separated from busy cities, reducing the surrounding infrastructure and noise. Studies show that a more nature-focused environment can boost the immune system in ways that assist one's own body and the treatments administered to them in the overall process of healing.



Site Location: Waconia, MN

- 30 minutes Southwest of Minneapolis, MN
- North side of Lake Waconia

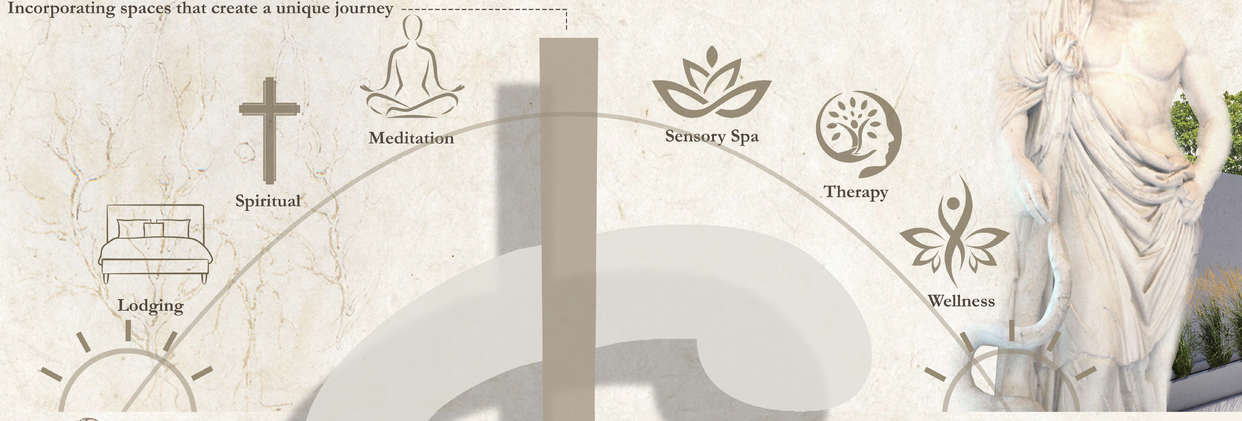
The chosen site on the North side of the lake acts as a study on the effects of a more natural environment compared to the current Hospital and Oncology clinic located in the busy downtown city.

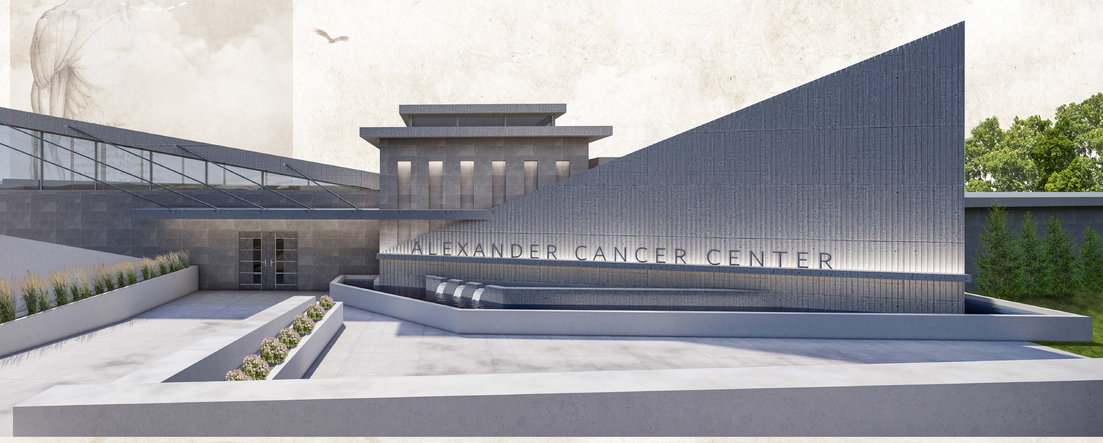
Current Hospital and Oncology: Waconia, MN

-Surrounded by the parking lots, busy roads, and a dense downtown.

Drawing influence from both recent and ancient studies that show the co-dependence between inner and outer worlds, including the participation opened up in the cathartic experience of the theatre, the Hero's journey, and various clues from Le Corbusier's artistic and architectural practice, we look to deeply resonate experiences that reconnect us to the cycles of our bodies and the larger world. Using these ideas as inspiration for the design of architectural spaces, this cancer center creates a unique journey that focuses on the patient's experience by creating a sense of place on the site. The goal is to establish a holistic approach to healing that cultivates a gateway to emotional and physical equilibrium necessary for the feeling of hope.

Incorporating spaces that create a unique journey

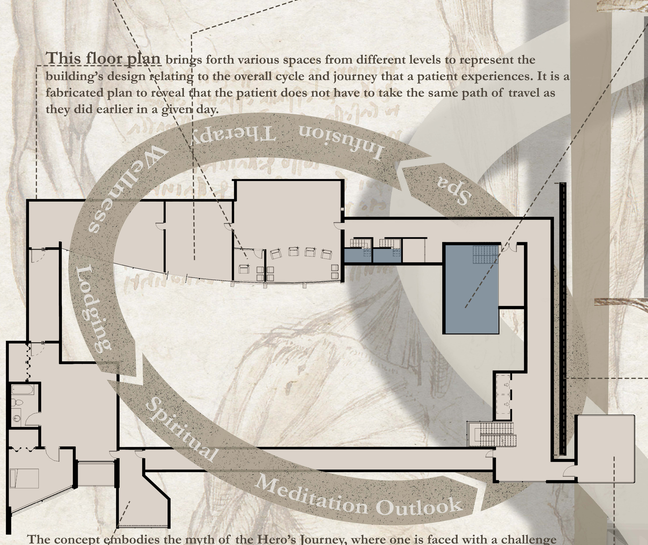




Infusion Room- The patient receives chemo treatments with views of nature and the lake. A space is provided on the walls to hang up artwork, writings, and other inspirational mediums.

Therapy/Wellness- Patients are able to express themselves through conversation with others, writing, and artwork.

This floor plan brings forth various spaces from different levels to represent the building's design relating to the overall cycle and journey that a patient experiences. It is a fabricated plan to reveal that the patient does not have to take the same path of travel as they did earlier in a given day.



The concept embodies the myth of the Hero's Journey, where one is faced with a challenge they must try to conquer. In this case, it's one's battle with cancer.

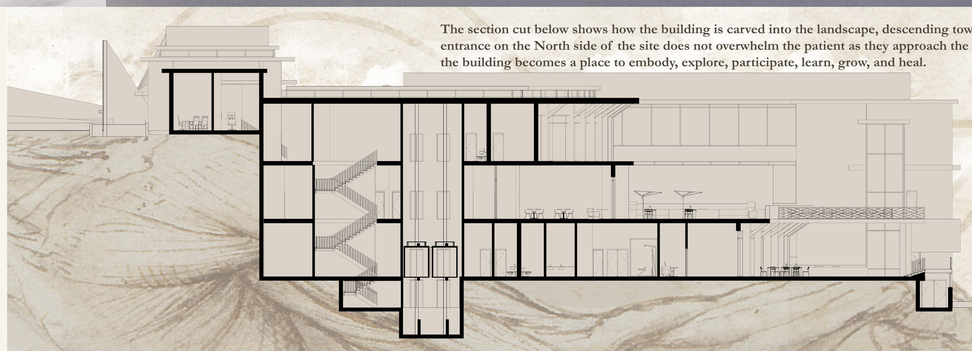
Sensory Spa- Multiple pools and other rooms let the patient discover and explore what best fits their needs of relaxation and rejuvenation in the sensory-driven spaces.

Meditation Outlook- This cantilevered meditation space creates a place for a patient to clear their mind and enhance their physical and emotional well-being. A concrete wall completely separates this space from the rest of the built site, creating a special moment between human and nature that allows one to visualize their journey in achieving bodily equilibrium.

Spiritual Room- A place created for patients to express themselves in a spiritual way. Framed by an interior garden and diffused light that gives way to a space of contemplation and reflection.

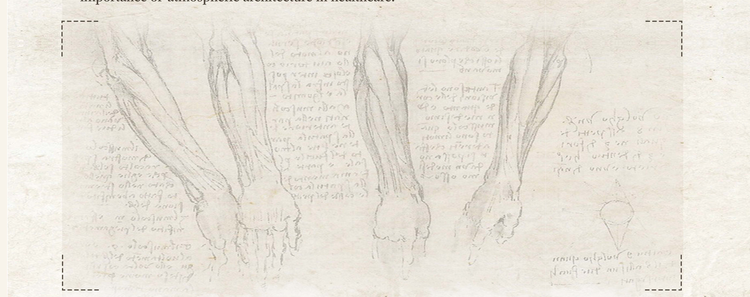
Meditation Outlook view

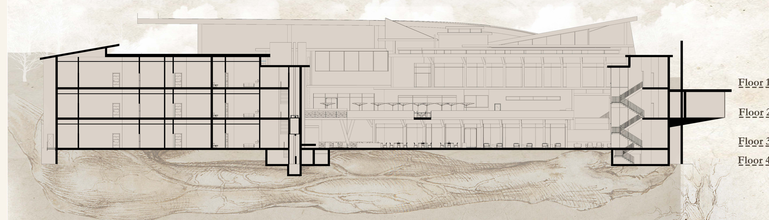
The section cut below shows how the building is carved into the landscape, descending towards the lake. The entrance on the North side of the site does not overwhelm the patient as they approach the building. Once inside, the building becomes a place to embody, explore, participate, learn, grow, and heal.



The German word Behandlung means 'treating' people and 'handling' them with care. "Within it, one literally hears the word 'hand', the skilled and practiced hand that can recognize problems simply through feeling and touching the affected parts of the patient's body. 'Treatment' in this sense is something which goes far beyond mere progress in modern techniques (Gadamer 99)." In this sense, I believe architecture follows a similar manner.

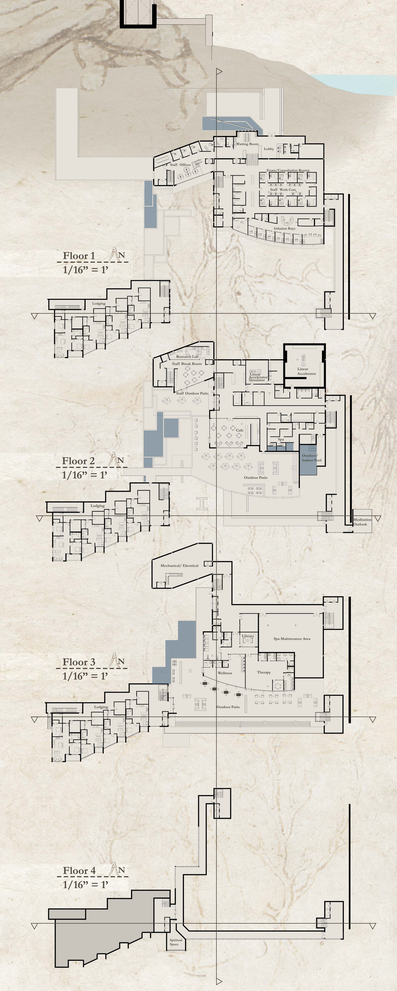
By placing one's finger in the powdered pigment and stamping it in the region below, a connection starts to emerge between the body, the architectural representation, and the understanding of the importance of atmospheric architecture in healthcare.





Section Cut
1/32" = 1'

Shading by hand brings my own physical touch to this design and presentation board. Just as it takes a doctor's hand to guide a patient's health, it is important for architecture to have the physical nature of the architect's hand within the design, its process, and the display.



The South side of the building prioritizes natural light and views of nature. The most intimate spaces (meditation, spiritual, and lodging) are closest to the water and limit scenic distraction.

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