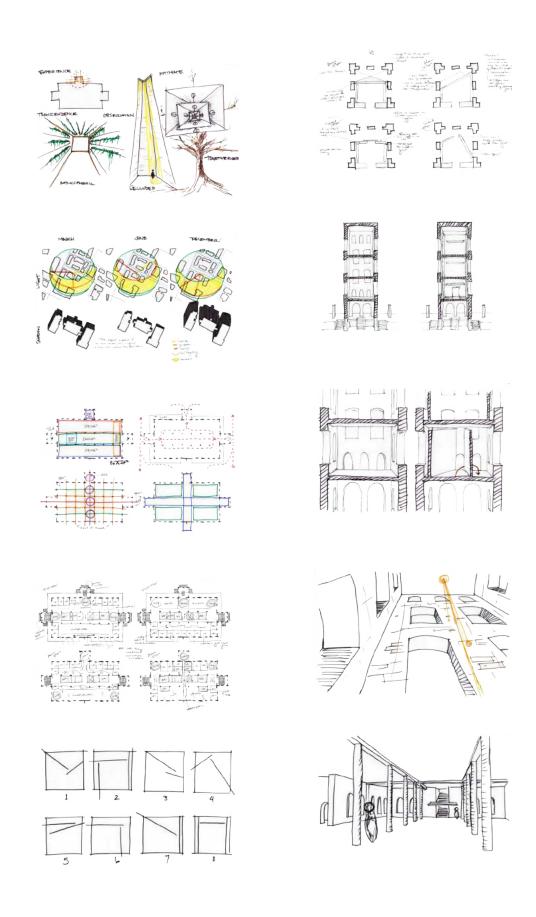
contemplative spaces in an upper school: a theoretical union of art + science, translated into a central sacred + secular space of contextual experiences + purposes

a directed studies interior design project by john colón



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## what is interior design?

It is essential to understand the relationship between the natural and built environment as it relates to the human experience, behavior, and performance before taking on a project of designing a space. A question I keep asking myself is, how do I affect these human factors through the finest details? Approaching projects through both the arts and sciences means understanding the natural world, artificial world, and human experience - implementing subjectivity, objectivity, and practicality. I'm reaching for a solution to contemporary complexity in all its forms.

### what is directed studies?

Following approval by Wentworth Institute of Technology's Interior Design Department of my project proposal highlighting a building type, building program, and personal learning objectives, I was permitted to pursue the design of an individually created project. Along with my advisor, Jennifer Sarabia, NCDIQ, I developed innovative design solutions through self-directed initiatives that required novel approaches in conceptual thinking and organizational strategies. Other factors considered involved human-centered design, design process, communication, design elements and principles, products and materials, environmental systems and comfort, construction, and regulations and guidelines.

"The most beautiful thing we can experience is the mysterious. It is the source of all true art and science." - Albert Einstein

"Everything we have around us has been designed. Design ability is, in fact, one of the three fundamental dimensions of human intelligence. Design, science, and art form an 'and' not an 'or' relationship to create the incredible human cognitive ability.

- Nigel Cross

"Therefore, whether you eat or drink, or whatever you do, do all to the glory of God" (1 Cor. 10:31)









#### Education / Spirituality

Adaptive Reuse of Building Shell (Upper School: STEAM Education)

> 90 Smith St Boston, MA

## Sacred / Secular



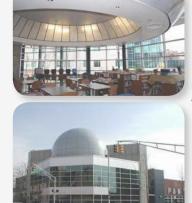
Existing Design Strategies

Chapel in Valleaceron; Church of the Light; Capilla del Retiro

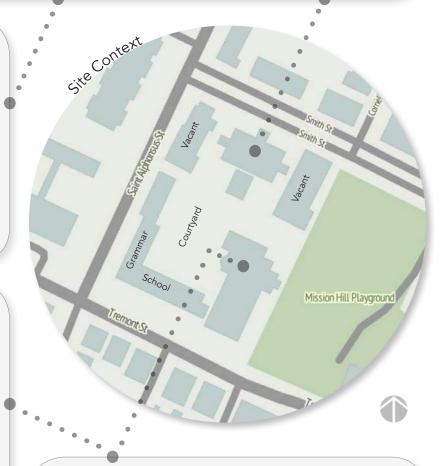
#### Secular

Central Focus to Science High School

PANTHER Acedemy (STEM Education) Paterson, NJ



Multi-use Planeterium as Exterior / Educational Focus







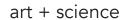


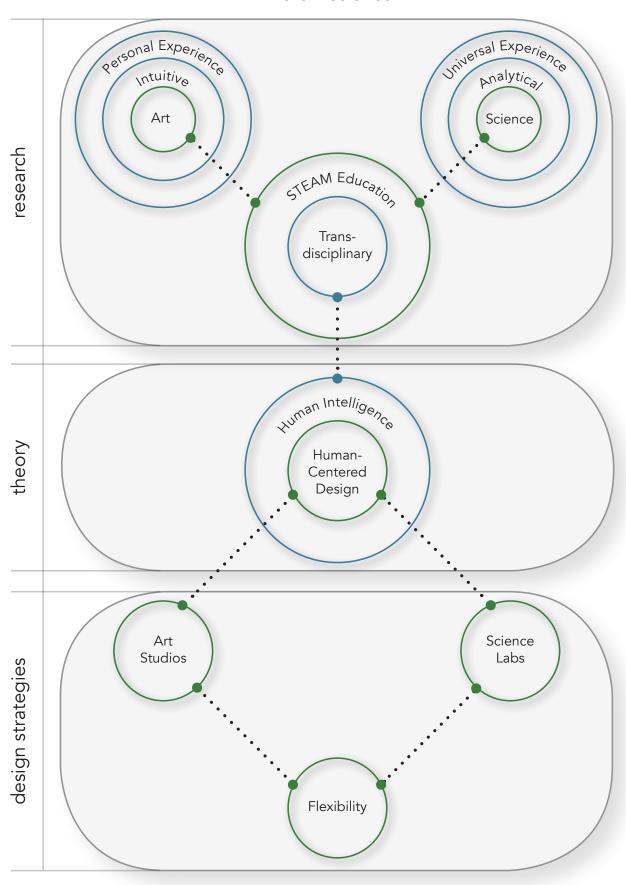
Mission Church Boston, MA

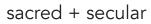
Central Focus to Catholic Grammar School

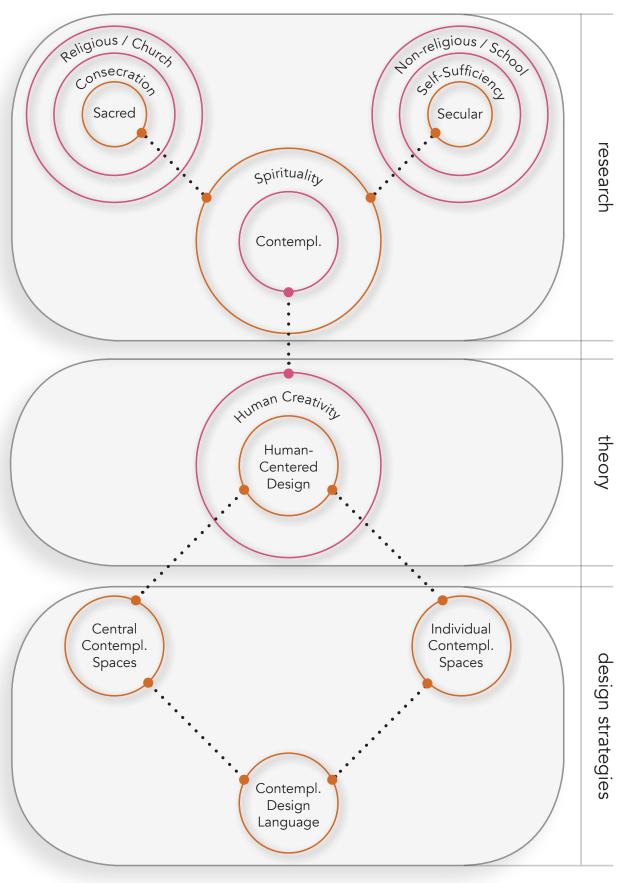
PANTHER Academy, located in Paterson, NJ, is a high school granted by NASA for approximately 200 students with a primary concentration on science and other core curriculum studies. It was an adaptive reuse and new construction project to an existing commercial facility that houses a planetarium in its large central dome, the focal point of the entire building's form. The relationship between the school's educational and architectural focus inspired me to create a similar one but with a focus on not only science but art as well. This analytical and intuitive combination is an interdisciplinary approach to education meant to foster a sense of universal unity. It's a manifestation of human creativity, an important factor in design thinking. A Boston, MA, red brick and limestonebuilding, originally built as the Mission School, with a projecting central entrance tower, and currently sharing a courtyard with the Mission Church Grammar School, made for an opportunity to translate this combination into the unity of

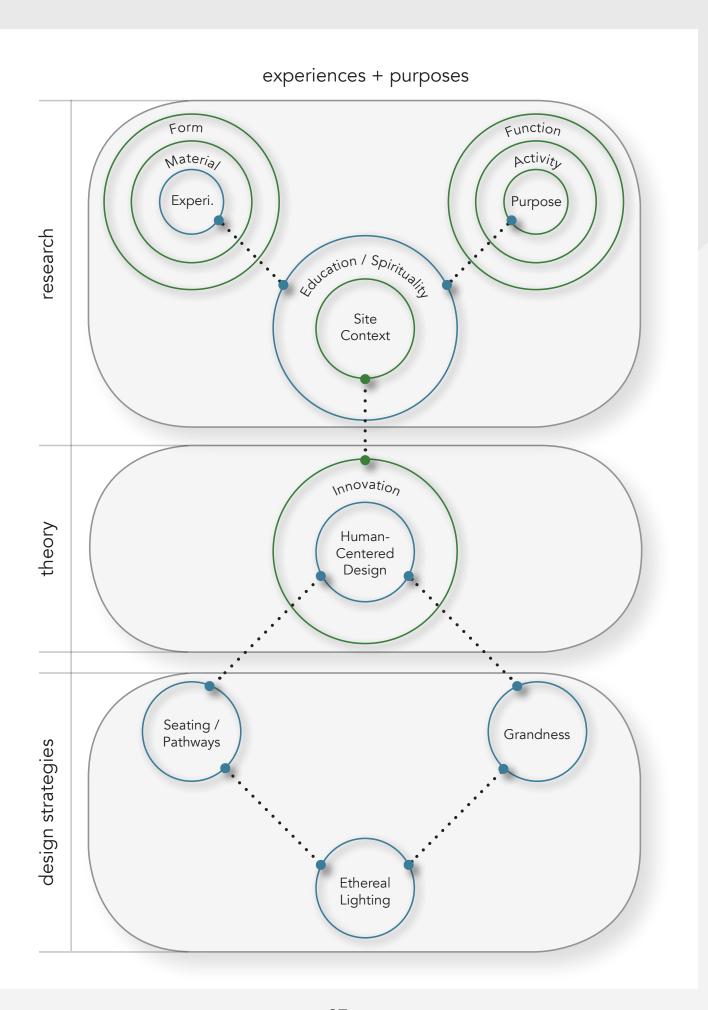
sacred and secular activity. The grammar school is a K-8 catholic urban school, connected to the Romanesque church, and a focus of the community-based complex with long history of providing education and spirituality. This connection was interpreted into an intervention of the former Mission School, where one building would house the uses and continuation of both the outside church and grammar school. By insinuating a small high school with a central contemplative space into its interior, religious and nonreligious practices unite for a cultural manifestation of human creativity. Design strategies are used to emphasize contemplative architecture's positive measurable effects on the mental state studied by neuroscientists to confirm the link between built beauty and experience. Sacred and secular ties with art and science for the purpose of unifying both experiences and purposes and remaining open for interpretation. One building shell will share contradictory centered uses around human cognitive ability.

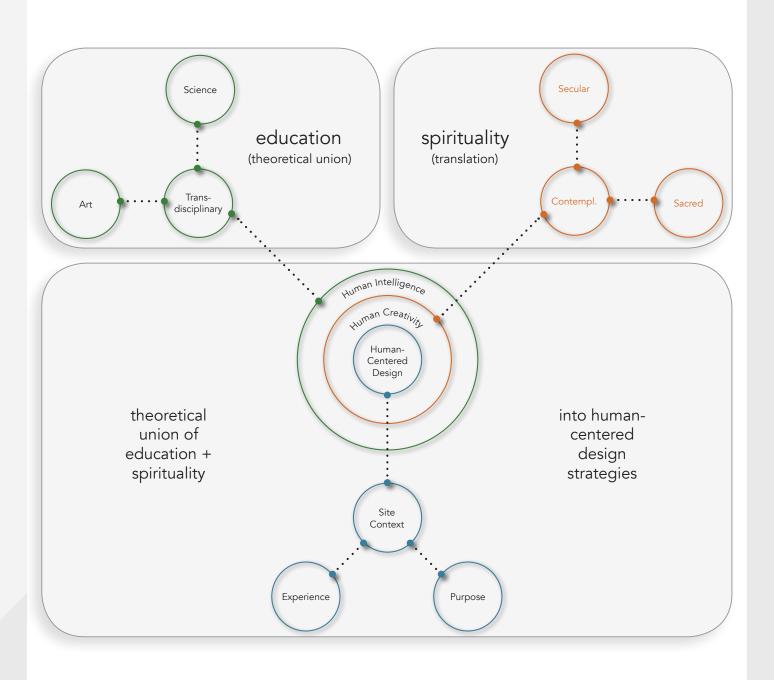












The building's symmetrical footprint made for easy equal distribution of multi-functional spaces. Together, 200 students are accommodated, grades 9-12, for interdisciplinary teaching/learning, contemplation, and unity of other end users.

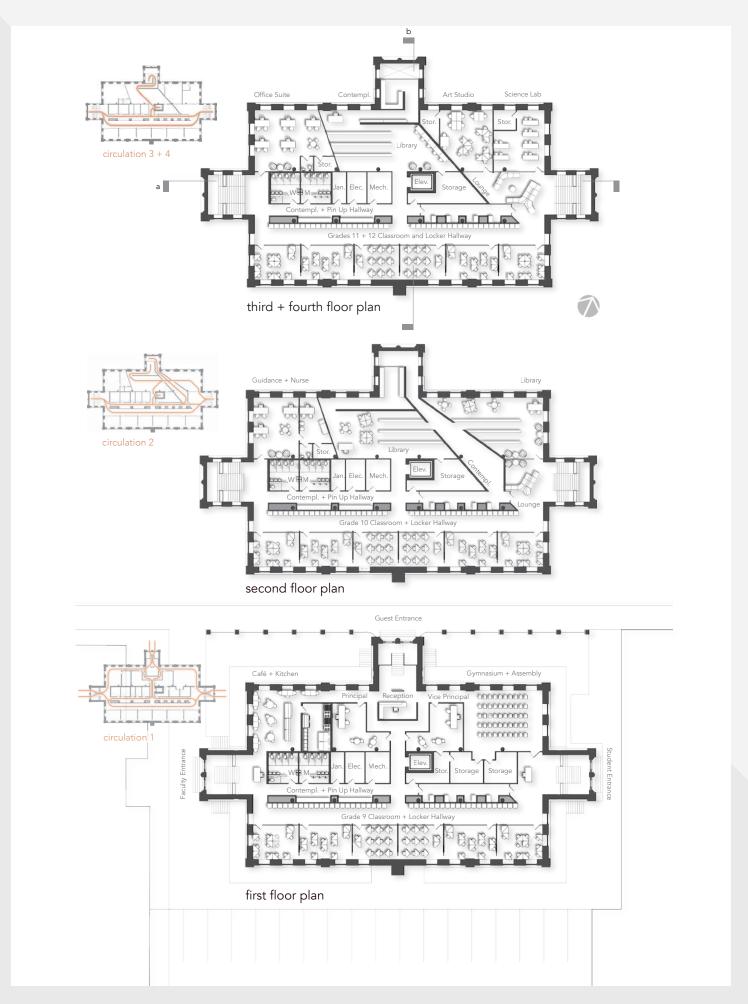


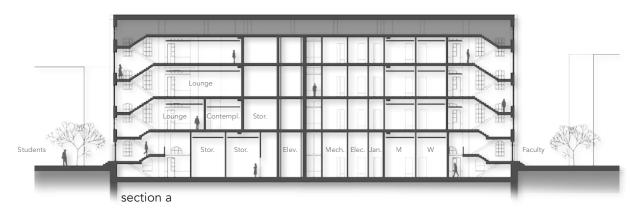
## space planning

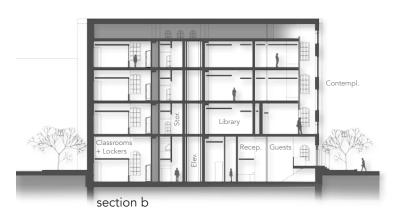
northern projecting central tower encases the visitors' entry, stacked contemplative centers, and its adjacent threestory light source - contemplative space. This area connects, by directed circulation paths, into the library housing all branches knowledge together gathering and studying. West of the library are administrative offices, adjacent to the staff entrance and staircase. The guidance department and nurse's office share the same suite. Desk space for 10 more departmental managers with attached seating welcome conversation. East of the library are art studios and science labs, adjacent to the student entrance, staircase, and lounges.

The entire south side of the building includes a string of classrooms connecting the staff and student entrances. Across from the classrooms, meant for 10 or less students, are lockers, 50 or more per floor. Adjacent to these is a combination of contemplative and pathway spaces. Separating the north and south sides is the building's core containing restrooms, storage rooms, janitor's closets, and electrical/ mechanical/tel-data rooms. Splitting the core is a straight circulation path connecting the north and south. The four levels, each roughly 4,400 SF and similar in program, accommodates an individual grade level and easy way-finding.

The first floor's visitor's connects the entrance to reception desk while a security desk overlooks the west and east entrances. The western corner is the kitchen/cafe area and the east is the auditorium/gymnasium, connected by a straight circulation path. The second floor contains the entrance to the three-story light contemplative space led by a contemplative pathway meant to funnel groups into individuals.







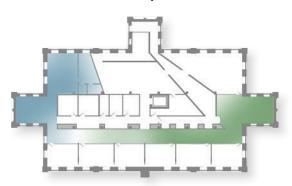








classroom flexibility



faculty vs. students

group vs. individual

# think. pray. meditate. live in the moment

Abstractly bringing outside contextual elements to the inside meant resembling qualities of the church. The three-story light area acts as the climactic moment of the entire space. This element speaks to the user by drawing their eyes up to the highest window and top of the grandiose partition. Leaving only room for standing encourages the user to decide on moving or remaining still. Seating acts as the main function of the stacked spaces, allowing the users freedom to choose their own contemplation strategies. Benches are placed as a tool for gathering. This element listens to the user and gives them a chance to process the climactic feature just behind the grandiose partition. Pathways leading to these spaces signify the spiritual journey and functions as part of the process. These both speak and

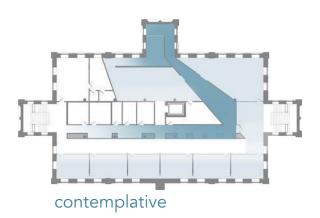
listen to the user by leading them either into or away the climactic and contemplative spaces.

Natural light from multiple levels fills the tall area. Light screening is used as a means for connecting the outside and inside while creating an element the user can focus their attention to. The language of ethereal light filtered through streamlined rooms extends throughout the program, allowing for moments of contemplation in areas of multiple functions. The south side of the building has its own contemplative spaces for both individuals and groups. The same bench form is used in a sequences to a circulation path, combining both pathway and contemplative functions. The continued use of lighting heightens connection with onself as well as others.

## central contemplative spaces

















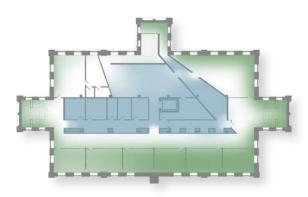


## lighting

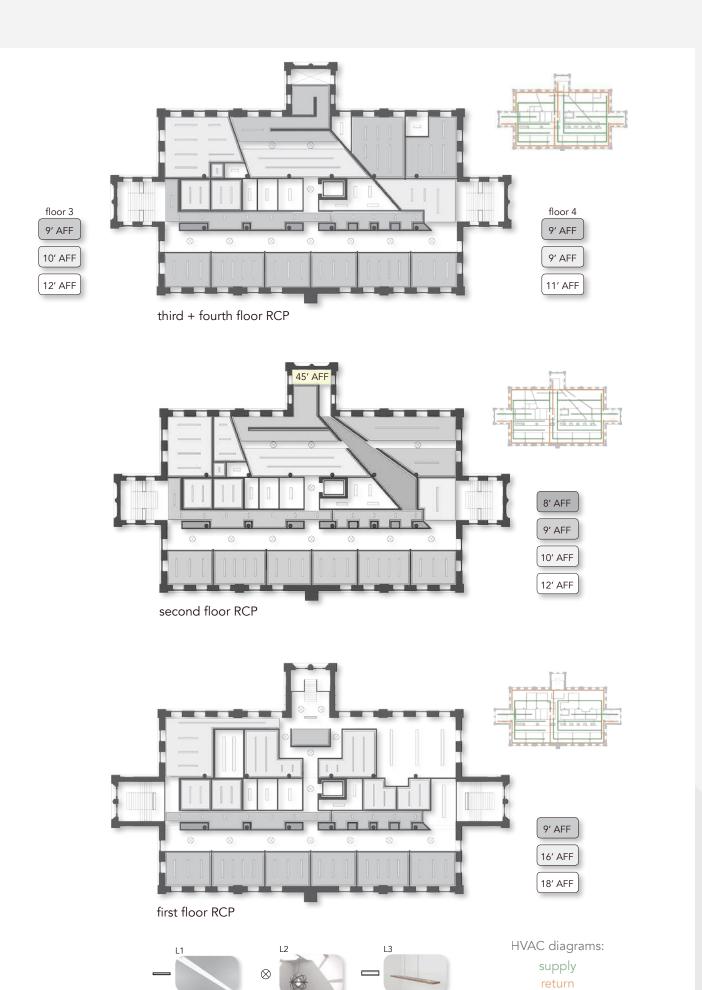
Religions use the various experiences light conveys for the mysticism of their respective deities. Natural light uniformly fills all heights of the tower's tall space, redefining the connection to the outside. Hints of outside light between wall planes enter the darker stacked spaces, heightening the contrast between inside and outside and emphasizing the connection between both sides through screening. The darker environment of contemplative spaces focus attention away from the material world and

toward inner enlightenment.

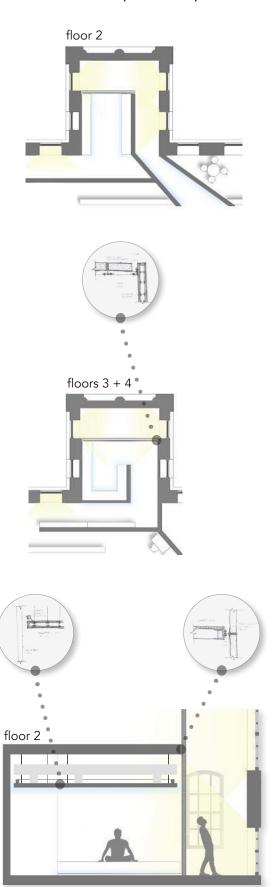
Gaps of light between ceiling and wall as well as floor and wall in both contemplative and surrounding areas create the impression of floating planes, still suggesting contrast and connection with the outside world, artifical or not. A sequence of hinted light in between lockers and its reflections on the floor also suggest combined pathway and contemplative functions. Linear recessed and hidden cove lighting reflect the ongoing mystery of light sources.



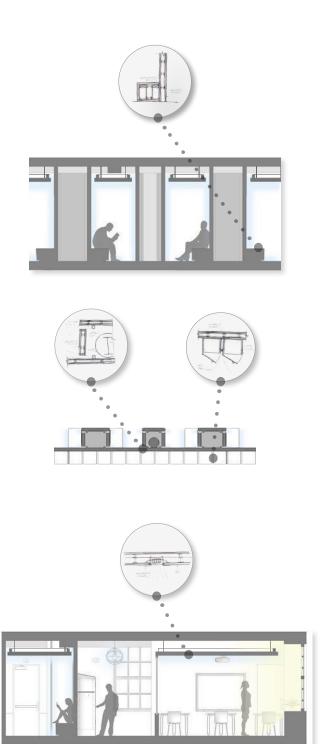
artificially vs. naturally lit



# central contemplative spaces



# individual contemplative spaces



## materials

and light composite materials balances the combination of light and dark strategies. Strong-willed and sensuous, they're meant to posess a hushed dignity and encourage contemplative qualities. The heavy look of aearted concrete emphasizes the division between outside and inside and contradicts its physically light weight, another tool in creating mystery. It's an opportunity to shape different functions of the

The combination of heavy same form and vice versa. Glass ight composite materials is used as both transparent ces the combination acoustic divions and freedom of the ghost translucent visual g-willed and sensuous, divisions and sceening of light.

Translucent concrete panels make up the grandiose partition to act as the material light source of the central-stacked contemplative spaces. It is the combination of both prominent materials: concrete and glass. The ceilings are made of acoustic gypsum properties.





#### now what?

Curiosity and inquisitiveness is a way of thinking. It led me from the NJ suburbs of NYC to the culturally sophisticated city of Boston. It immersed me into the different lifestyles I designed for. I necessitated exposure to the inner-workings of architectural design firms and the every day life result of an education like mine. I jumped from studying adaptive reuse in the historically significant "Cradle of Liberty" (Boston) to travelling from east Berlin to the west side daily, primarily for workplace design research. The artful city "condemned always to become, never be," (Berlin) steered me back to the central global art market (NYC). I then travelled daily from the heart of former Harlem Renaissance to the conspicuous Flatiron District for more workplace design research and professional practice before returning north for this project.

Utilizing Boston as a primary laboratory for design education means its historic and contemporary buildings were used as models and precedents for study, as well as the cultural and social aspects of its urban environment. One of the main focuses of my experiences in international interior architecture is the compromise between historic preservation, demolition and repurpose. In these processes, the concept of sustainability – in all dimensions – grabs my interest. To apply such strategies in the design world, I need to continue learning the creativity of the business side – where the endeavor for that capacity to endure will ignite.

