Vertical School of Art

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Vertical Buildings (skyscrapers) challenge our perception of space, our perception of scale, our idea of movement, they challenge the way we live. Currently urban cities are becoming more and more dense. Lack of space is a big issue and now buildings are being torn down and are replaced by skyscrapers. And these new skyscrapers are being redefined to house a living and working environment.

Cubism challenges our perception of depth, our tactile sense, our ideas of proportion. Cubism, as a 20th century movement, was in continuous exploration of the senses. Cubists challenged the conception of art, and consequently shaped and influenced many social movements of their time.

Like any human expression, art and architecture are in a continuous evolution. Both share the pursuit of perfection, the exploration of spatial, sensorial, and emotional feelings. Both are a part of us.

With all of these ideas in mind, I started to investigate and explore the idea of a skyscraper that would house an art school. Where the building and its inhabitants will contribute to its surroundings of the school.

There is the challenge of programming the art school into a vertical configuration and at the same time, this challenge offers the possibility of discovery for new organization of the school as a vertical world.
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“Art is the elimination of the unnecessary”

...Pablo Picasso
After talking to my committee, the city of Baltimore became the correct choice. Baltimore's harbor is one of the city's main attractions because of its commercial life. In the past Baltimore was one of the main ports of the East Coast of the United States and for a period of time, was the capital of the USA. In the last few years, there has been a decrease on the amount of people leaving Baltimore. Even though the city has a lot of improvements around its harbor, there is still a lack of connection between it and the city.
*SITE*

1. City Hall
2. Post Office
3. Munsey Building
4. Old Commercial Building
5. Harbor

1, 2, and site

3, 4

4

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Figure 02 - Enlarged Site Plan

Figure 03 - Existing Parking Lot

Figure 04 - East View

Figure 05 - Old Brick Building
The site currently exists as a parking lot four blocks north of the harbor. North to the site we find the City Hall and Postal Office. On the east side, across Guilford Ave, there is a parking garage. Many little stores are located south of the site on Baltimore Street. The site shares a city block with two other buildings, an old brick commercial building and a twenty-two stories apartment tower. Since the Harbor is located four blocks south of the site, there is a large pedestrian and vehicular traffic going South to North. However, in the future there is going to be another large pedestrian circulation which will come west to east because of the new Baltimore metro station.
The following is a study of the shadows that are cast on my site from the surrounding buildings at the winter and summer solstice. The exercise was also an exploration of time, how it affects architecture. To understand the process of time I decided to use a collage technique to represent the passing of time in the drawing.
While working on my research, the site, and the program, I approached a larger exploration: art itself. After looking at the history of art through time, I was inspired and intrigued by cubism. This was due to its similarities with the way I see architecture. In cubism I was able to see pieces and parts and different colors of the same element that had a coherent and beautiful meaning when they were together as a painting. Cubism has a sense of unlimited discovery. A natural shape or a man-made object can be expressed as an explosion of layers, geometries and perspectives. The search for geometry and volume brought Picasso and Georges Braque to develop cubism. The evolution of this movement had two parts, Analytic Cubism and Synthetic Cubism.
From my investigation of cubism, I choose a Piccaso painting called “The violin and the grapes”. In the painting, a game in geometry and multiple perspective is discovered. I retraced its geometry, separated its layers and I was able to understand its beauty in more depth.

All the parts that form the painting were not there arbitrarily. They talked to each other, and they are organized around an invisible core. This organizer (the core) seems to hold everything in place and my brain was able to recreate the image and perceive the beauty of time in the painting.

I struggled for a good time finding not the geometry of the building but its connections to the city itself.

My idea of a vertical school of art was coming along. I had the desire to contribute to the city of Baltimore. Then, my passion for art and the challenge of a vertical building took me to a journey of discovering new ways to see architecture.

My first decision after talking to my committee was to dedicate the first couple of floors of the building to the pedestrian and to the grid of the city. The next connection was with MICA (Maryland Institute College of Art) to reinforce interaction through the city.

In a series of multiple layers and using my research on movement, location, shadows and art, I created a collage. The collage started to show me the connection and design movements in plan. Now I was ready for the next step.
After looking at my sketches and drawings of the horizontally proposed connections, it was time for a vertical investigation. Since I was designing a school of arts, I started thinking that there should be big spaces for exhibitions, and that those should be visually connected. This meant that when a person was walking in a corridor in level 15, he or she would be able to look down to level 13. After acknowledging the vertical visual connection I learned that the main core shouldn’t be near the center of the building, since the center should be as flexible as possible. Comparing my building to a college campus, I realized the program for the school of art includes some other spaces. I wanted to create public spaces between the schools, that I later called plazas.

vertical cubism

the program begins
In order to begin the architectural design, I needed to structure the School of Arts.

According to my research and further analysis, the spaces needed to consist of: outdoor and indoor exhibition spaces at the lower levels, with the main instructional elements of the school in the upper levels. The art school consist of tree main schools: Sculpture, Painting and Photography. Each of them had their strict necessities and requirements that inform its location throughout the building.

Figure 16 - Model of the right is a volumetric study of Picasso painting “The violin and the grapes (Left)

Figure 17 - Facade Studies (Below)
In order to analyze what the spatial dimensions for this program would be, I decided to make an experiment. I needed to compare different case studies.

I experimented with aligning three school examples on the site. I placed their plan views as if they were section cuts through the building. This experiment allowed me to discover two important points:

- The height of the building needs to house the schools.
- The amount of green spaces which I am calling “plazas” needs to link the three schools together into a whole.

What would a well known and successful art school looks like vertically?

Figure 18 - Site Comparison
This model and the following drawings show the development of the ground floor public plaza, the scale of the first levels of the building, and the entrance.
Figure 21 - Plan study for the ground level and plaza. (Above)

Figure 22 - The image at the bottom is a perspective view from the new plaza towards the school entrance. (Below)
This is a proposed section for the vertical school of art. I started to assign the location of the schools throughout the building, as well as the green spaces or “plazas”.

Figure 23 - Section Study
The structure of the building plays along with the geometry and architecture gestures. The school is held by a steel frame structure which facilitates the flexibility of the school interior letting the vertical connection to open up more freely. Also, the elevators and stairs work as anchors for the building as well as the main supports for the cantilevered volumes.
Structural Model, study of the columns grid, as well as vertical circulation.

Study of the cantilever space volumes.
Because of the interdisciplinary style of work in a School of Art, the space arrangement needs to support the idea. All common areas in the building connect if not spatially, visually, with other disciplines within the school.

The main presentation studios for each of the schools are rectangular volumes that cantilever out from the building and are structurally connected to the main cores to provide stability.
Detail A
“X” bracing
scale 1:40
Facade studies started as a study of needs for each discipline. The School of Sculpture found its location at the bottom of the building because of its proximity to the courtyard and also because of the big spaces needed for its development. The School of Painting needed more diffuse light, is located above the School of Sculpture with their main studio rooms facing north. Finally the School of Photography sits at the top. It has studio rooms that frame the city as an analogy to a film.
Next are the final drawings for my defense, as well as my final model

**Vertical School of Art**
Site Analysis
Context Analysis
South View
scale 1:200 (metric)
East Elevation
scale 1:200 (metric)
North View
scale 1:200 (metric)

Figure 57 - North Elevation
West View
scale 1:200 (metric)
Section B-B
scale 1:200 (metric)
Figure 62 - entrance view

Figure 63 - south-west view

Figure 64 - south-east view
Figure 65 - south-east corner

Figure 66 - bridge entrance
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All images, drawings and collages are produced by the author.