



2010

Children's Art Museum

Shalen Bradford
Virginia Commonwealth University

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Children's
Art Museum

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This is to certify that the thesis/creative project prepared by Shalen Bradford entitled "Children's Art Museum" has been approved by her committee as satisfactory completion of the thesis/creative project requirement for the degree of Master of Fine Arts.



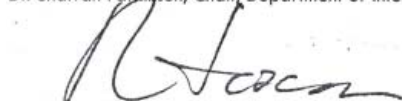
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A b s t r a c t

This Thesis explores the question; Is a children's museum a playground or a museum? Through research and visits to children's museums I feel that many are playgrounds. They are also visually stimulating to children, but not to the guardians who bring them there. In most cases the exhibits are permanent and there is little change to the atmosphere of the space on a regular basis.

An old warehouse located on North Boulevard was chosen to house this project idea of a children's art museum. The scenario is that The Virginia Museum of Fine Arts and the

Children's Museum of Richmond would have a joint venture in creating a the Children's Art Museum of Richmond. The buildings' close proximity to these two museums make it an excellent choice for both institutions.

There are interactive changing exhibits, a studio that continues the learning experience from the exhibit, and a gallery to display artwork that was created in the studio spaces. Through these three core spaces I hope to create a continuous interactive learning experience in this children's art museum.

Manifesto

Two qualities, sculpture and flexibility, can be present in design together or separately to create good design.

In a way design is its own work of art. It defines us as a culture and surrounds our daily lives. Design with sculptural qualities is thoughtful and creative and provides a purpose of its existence. An example of sculpture providing a purpose is highly relevant in Santiago Calatrava's work. He begins with an object of interest and creates a structure from that inspiration; for example the Turning Torso Tower in Sweden. This apartment building was constructed after a study of the human spine, and resembles the spine in its structure.

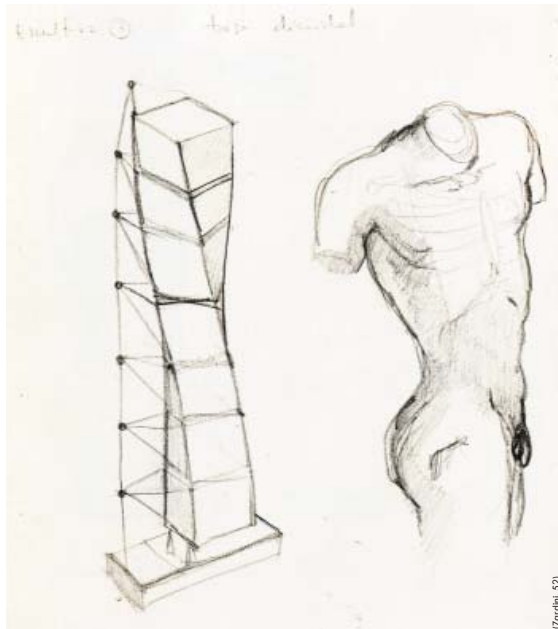
It is important to allow a user to interpret a design in their own way and should be considered throughout the

design process. A users need for a space can change rapidly and daily, reinforcing the importance of flexibility in design. Therefore, a flexible space that can allow this change is also functional and flexible. Herman Hertzberger leaves his designs open ended allowing the user to complete a design according to their need. A prime example of this is found in the Montessori School in Delft, where a central raised block in a hallway can be a meeting area, a stage, a seat, or a study area.

Both sculptural qualities and flexibility are important starting points when considering the design process, and can help to create a well designed space.



(all photos: Hertzberger, 153-155)



Project Introduction

The Children's Museum of Richmond (CMoR) recently conducted a study/survey on the museum's qualities. They have found that although CMoR does provide a learning atmosphere through play areas, museum exhibit qualities are not present. The museum is more of an interactive playground than that of an interactive museum. They have also found that many of their patrons do enjoy repeated visits to their exhibits, however, they would visit more often if there was a changing exhibit every few months.

This thesis will explore the following proposition. With CMoR's close proximity to The Virginia Museum of Fine Arts, they decided to team up to create a children's art museum that would be engaging to both young and old. Appealing to the young through interactive design and exhibits, while educating adults at the same time. A changing exhibit space could feature interactive exhibits,

exhibits on artists, sculptors, architects, designers etc, throughout art history and modern day. A virtual art lesson would occur within the exhibit space and provide inspiration for the youth to create their own works of art and experiment with different techniques of production. Of course, art classes would be provided in the new space as an outlet for inspiration and interaction with other children. And a gallery would be provided to display the new works of art created by children. Furthering the interaction and inspiration of art.

1207 North Boulevard is the site of choice for the CMoR and VMFA joint venture, the Children's Art Museum of Richmond. Museum Row, which is primarily located on the Boulevard, is currently the home to many museums such as, Maymont, The Virginia Museum of Fine Arts, The Virginia Historical Society, The Virginia Department of Historical Resources, The Children's

Museum of Richmond, The Science Museum of Virginia, and Lewis Ginter Botanical Garden. The building's location on the Boulevard and around the corner from CMoR provides an excellent 2nd location for both museums.

The location on Museum Row is not the only selling point. Other attractions would provide constant traffic and interest in the museum. The recently renovated Bow Tie Cinemas is located next door to the future museum, and down the street there is The Diamond and Arthur Ashe Center. There has also been an increase in the number of restaurants in the area.

Currently the historic, Art Deco building is vacant and offers 27,000 sq. feet of open space. Demolition will be kept to a minimum. There is plenty of area to plan for administrative areas, studio space, gallery space, changing exhibit space, ticket area, and storage.

What is a museum?

“Museums enable people to explore collections for inspiration, learning and enjoyment. They are institutions that collect, safeguard and make accessible artifacts and specimens, which they hold in trust for society.”

(UK Association of Museums)

“Permanent institution in the service of society and of its development, open to the public, which acquires, conserves, researches, communicates and exhibits the tangible and intangible heritage of humanity and its environment, for the purposes of education, study, and enjoyment.”

(International council of museums)

“Children's museums are institutions that provide exhibits and programs to stimulate informal learning experiences for children. In contrast with traditional museums that typically have a hands-off policy regarding exhibits, children's museums feature interactive exhibits that are designed to be manipulated by children. The theory behind such exhibits is that activity can be as educational as instruction, especially in early childhood.”

(Wikipedia)

When did children's museums begin?

In 1899 The Brooklyn Children's Museum was founded by the curator of fine arts at The Brooklyn Central Museum.

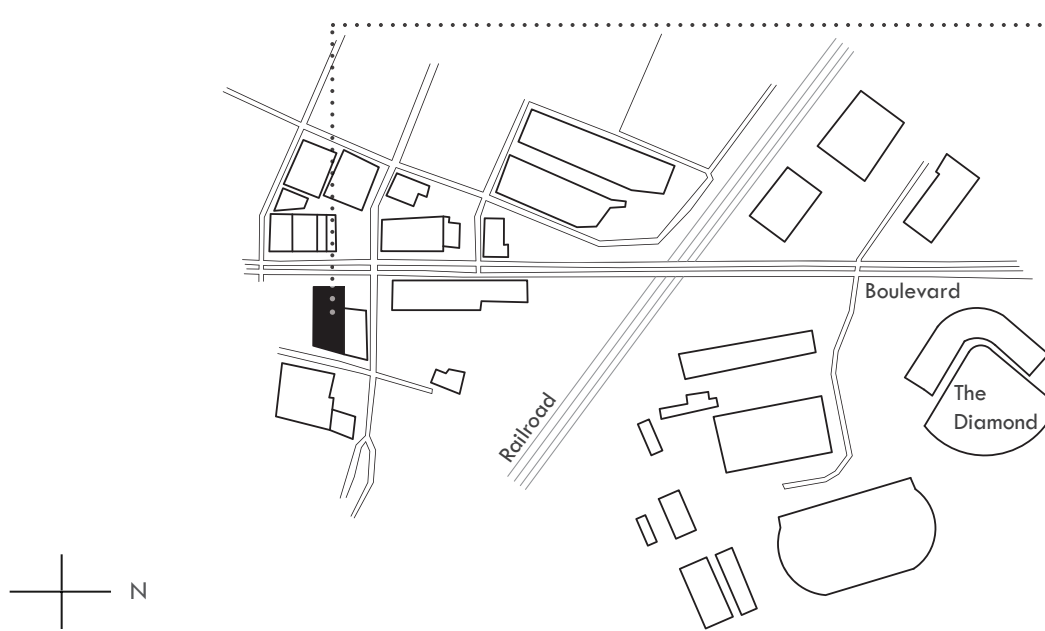
Following that was The Children's Museum of Boston in 1913, then a museum in Detroit and The Indianapolis Children's Museum. Both established in 1925. All of these museums were and are education driven. Many beginning founders were teachers, principals, and librarians. “Since the early part of the 1900's, children's museums have been among the leaders in the development of participatory and interactive exhibitions. Designed as educational institutions in which children can have direct experiences with objects that normally are confined to cases, children's museums have developed exhibitions and programs to accomodate this kind of self-directed learning” (Pitman-Gelles,43).

“The goal of most children's museums is to provide a learning environment in which children seek to understand themselves in the world in which they live” (Pitman-Gelles,43). They are created with

a child's needs in mind. “One reason that youth museums are effective is that they have clearly identified their audience: children, their families, and teachers” (Pitman-Gelles18,). However, first and foremost they are designed for the child. Through my visits I noticed that they might not be as stimulating to the parents of a child. It might be stimulating to see one's child learn about the world around them, but the adult might not be learning. Should all visitors be able to learn something from a visit to a “museum”?

Todd Pulliam stated in Museum News once that “In a museum sense, there are some differences between children and adults. There are many more similarities. We have confused the differences and failed to note the similarities. I am invariably asked whether children get something special from the tactile experiences provided in many children's museums. And who doesn't? Could you possibly believe that I want only to look at a piece of pumice?” (Pitman-Gelles,3).

Site Introduction



1207 North Boulevard is the location chosen for the children's museum thesis project. The building totals at 27,000 square feet and is an open warehouse floor plan. It is located near the new Bow Tie Cinemas, the Diamond and many other museums located on Museum Row. With its' size and location it proved to be a good site for what was needed for the museum. The history and site details are included in the following pages.

H i s t o r y

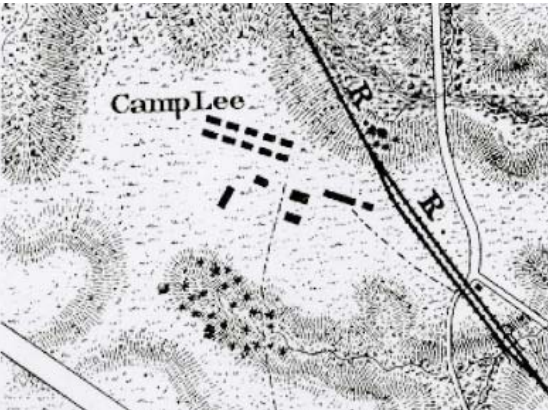


(Gorman)

History of Site

- 1789 - It began as the country estate of Colonel John Mayo Jr.
- 1859 - It became property of The Virginia Central Agricultural Society. They used the site as a Fairground.
- 1860 - The grounds were named Camp Lee in honor of Light Horse Harry Lee.
- 1862 - The Conscript Act was passed. It stated that any male between the ages of 18-35 had to complete military service. Camp Lee was the receiving point for these soldiers of the Confederate army.
- 1865 - When the Union Army occupied Richmond, the site became the headquarters and hospital for the North.
- 1865 - Later schools were set up there to educate the freed slaves.
- 1867 - It turned into Trotting Park.

(Gorman)



(Gorman)

History of Building

- 1949 - Construction of the building was completed.
- 1949 to 1978 - It was home to Virginia Auto Parts.
- 1979 to 1983 - The Richmond Area Association for mentally challenged citizens was located here. They handled processing and packaging.
- 1984 to 1988 - It was an automotive auto parts warehouse (wholesale).
- 1989 to ? - It was Roger Engineering and Manufacturing. They did light metal fabrication, machining and assembly.

S i t e P h o t o s

Exterior



Exterior Details



Interior



Structure



Interior Brick Detail



South Wall-Light Detail



Ceiling Bar Joists



Skylight with Bar Detail



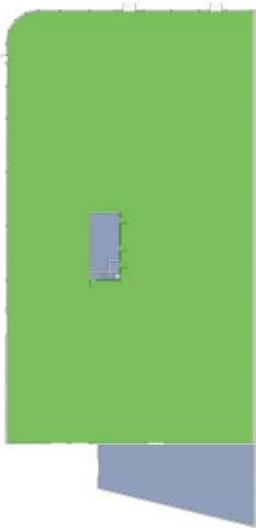
Exterior Brick/Window Sill/Glass Square Block Windows

The North, East, and South exterior walls of the Boulevard building are constructed with CMU's. The West exterior wall is constructed of brick masonry. A yellowish brick was used to finish the front of the building. There are two sets of glass double doors located on the front of the building and one single glass door at the South side of the building. The North side of the building is a solid wall. Two Garage doors are located on the South side of the building and three are located at the back or the East side of the building.

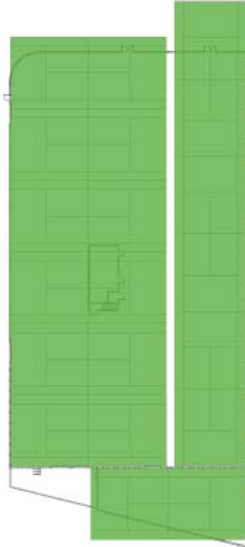
The interior of the space consists of an open floor plan. At one time there were interior walls. The floor, roof and ceiling are made of concrete. There are 48 barjoists that support the slabs of concrete in the ceiling. 21 skylights cover the entire ceiling.

Building Analysis Diagrams

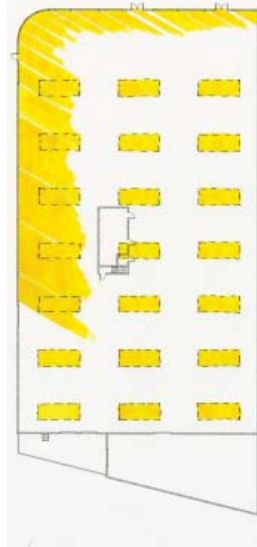
Proportions



Scale Comparison



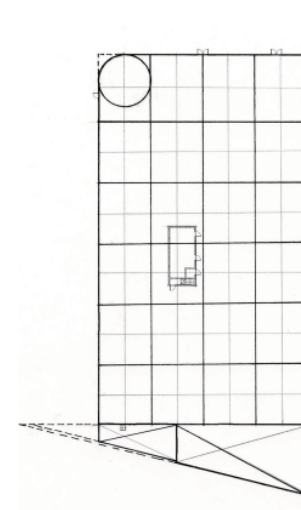
Natural Light



Parti



Geometry in Plan



There is one large open space in the building and two smaller spaces. The open floor plan will allow for many design possibilities.

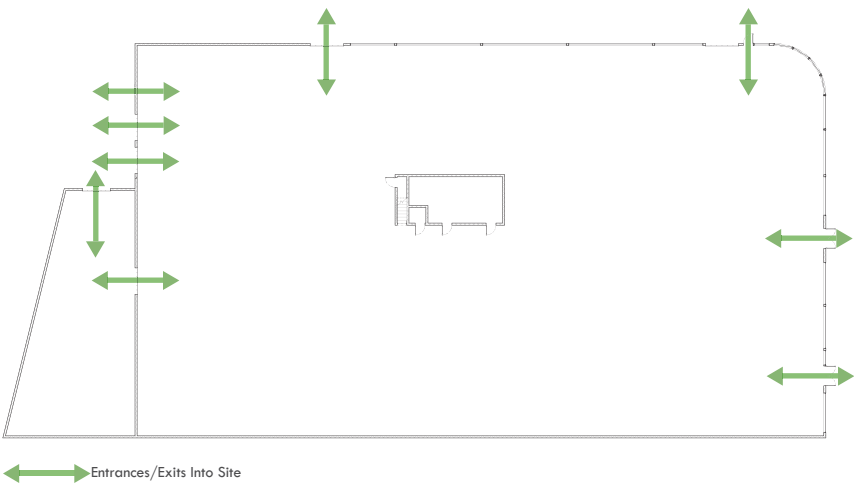
A full tennis court is 36' x 78'. 10 full tennis courts almost fit completely into the Boulevard site, which can give us an idea of the space available.

Natural light filters into the current space. There are 21 skylights located in the concrete ceiling. The South and West walls are flanked with windows.

The South and West walls are flanked with full window walls. The North wall is solid which shuts off the space from the exterior on that specific side.

The building can be broken down into many shapes. Rectangles, triangles and circles can be located throughout the space. Rectangles are dominant.

Circulation Around Site

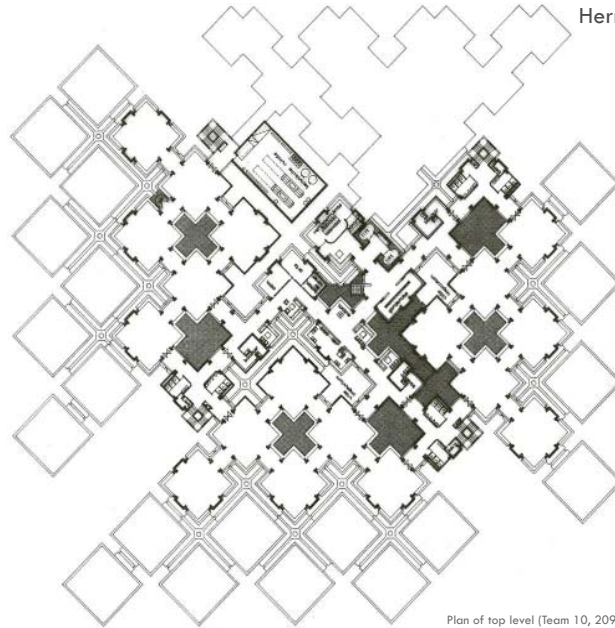


There are entrances and exits located on all walls except for the North wall. These openings are either doorways or garage doors.



These diagrams show the traffic around the Boulevard space and the commercial and residential areas located around the building.

Herman Hertzberger



Herman Hertzberger is an architect who primarily works out of the Netherlands. He is inspired by the use of the grid. He uses it as an organizational tool for his projects. He enjoys creating designs/ architecture that can be interpreted by the user. To make an object or place that can be changed to meet the needs of different users. It is up to the user to make the place their own.

Plan of top level (Team 10, 209)

Structuralism

Herman Hertzberger played a major role in Dutch Structuralism. This idea never became an actual movement; however it was extremely influential on his work. Structuralism was “about making open-ended building structures by the repeated use of basic elements. Both the elements themselves and the way they are linked are conceived to facilitate multiple uses and future growth and change”(team 10). He thought that “every building should have a universal support structure, a universal skeleton able to support any given program but just as easily able to dispose of it.”(HH) An example that he uses to support this statement and Structuralism is the Manhattan grid. Mr. Hertzberger states that it is an “extremely effective design that opens itself up to enormous range of possibilities. [He] once compared it to chess. The rules are universal, but possibilities for the next move are endless”(HH).



a Entrance/Exit



b Interruption of Grid

Both maps above are personal studies of the Manhattan Grid. (a)Grid study of the entrances and exits into and out of the city. In some cases the grid changes to accept the entrance or the exit. In others the entrance or exit adheres to the current grid situation. (b)On this map I studied the interruptions that occur in the standard grid system. The majority of the changes seemed to occur at the tip of the island. This could be due to the shape of the land or the coast changing in this area. Or it could be due to a more structured layout inland happening after settlements had been established on the tip of the island.

Montessori School in Delft



Montessori School, Delft (HH)

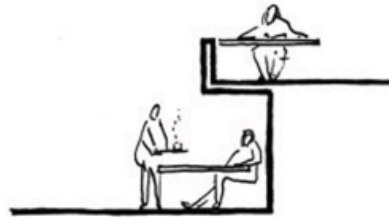
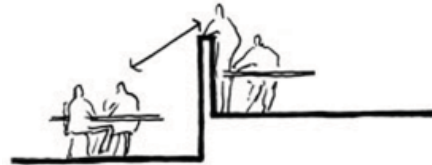
Classrooms are conceived as autonomous units (little homes) all situated along a school hall, as a communal street. The teacher (mother) decides with the children on what the room will look like. This gives an emotional bond with the daily environment (HH).



Hertzberger, 202



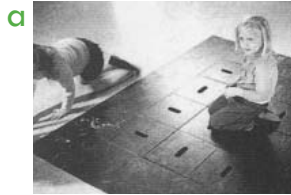
Hertzberger, 202



Sight Diagram (Hertzberger)

“The degree in which places are separate or open vis a vis each other, and the way in which that is done, lies in the hands of the designer, and consequently you can regulate the desired contact in a particular situation in such a way that privacy is ensured where that is required, while the range of vision of ‘the other’ does not become too restricted.

By introducing differences in level the scope of possibilities is expanded, but with different levels we must take into account that those who are higher up look down on the ones standing below; the positions are therefore not equal, and we must see to it that the ‘lower-downs have the opportunity to avoid the gaze of the higher-ups’. (Hertzberger, 202-3.)



Photos a-i from Hertzberger, 153-155

Areas in the school have been designed to be multi functional. The first row of pictures (a-d) above feature a gathering pit. It is usually part of the floor, but can become a

gathering center that is recessed in the floor for reading or play groups. The second row (e-h) shows a central block in the middle of the hallway at the school. It is a study

area when needed and also a waiting area. It can also convert into a stage for school plays by using the parts stored in the center of the block. The third row (i-l) shows the

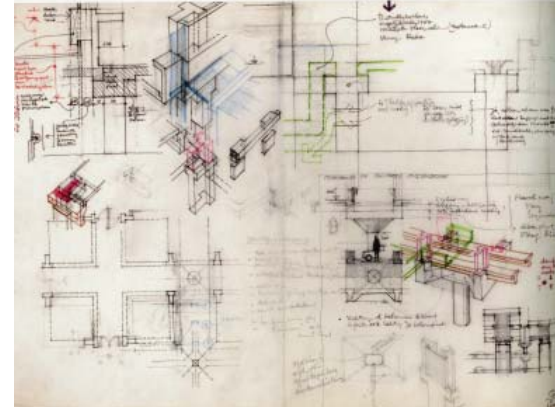
previous playground of the school. The simplistic use of cmu's provide endless entertainment and opportunities for the children to use their imagination.

Central Beheer, 1968 - 72

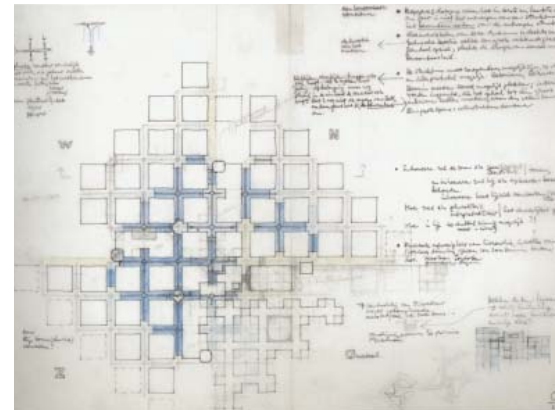


Central Beheer, HH

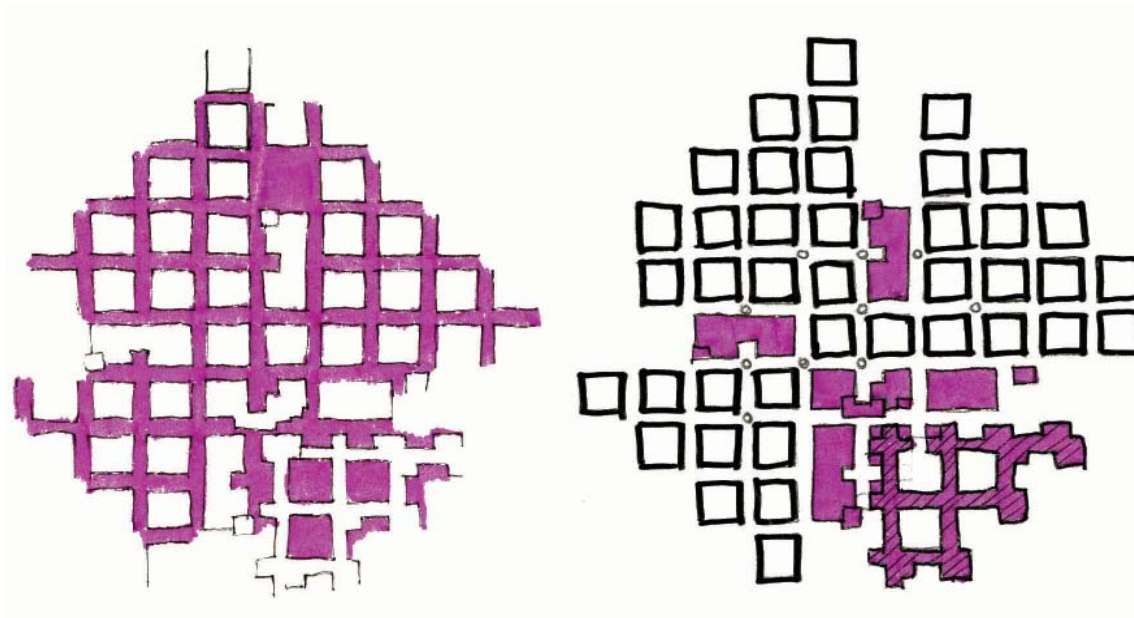
This office complex is located just outside of Apeldoorn which is in the Netherlands. This building was “intended to be the first step in creating a new urban centre fitting to this role” (Team 10, 208). It is referred to as the workplace for 1,000 people and is more like a city than a building. Hertzberger left the interior unfinished so that the user could adapt to their workspace as they needed to. “What matters is the interaction of form and users. What they convey to each other and bring about in each other, and how they mutually take possession of each other” (HH).



Design Sketch (Team 10, 208)



Design Sketch (Team 10, 209)



This is a study of the grid system applied to the Offices at Central Beheer. There is an obvious influence of the Manhattan grid system. The grid helps to show how the office spaces may have been created. There is a universal grid system; however, there are certain conditions where Hertzberger allows himself to abandon the grid.

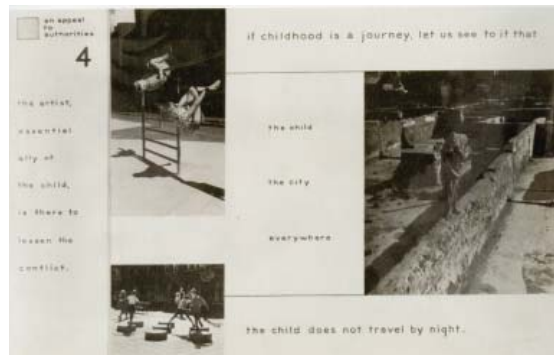
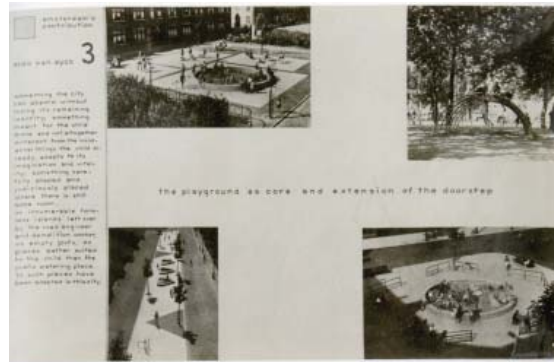
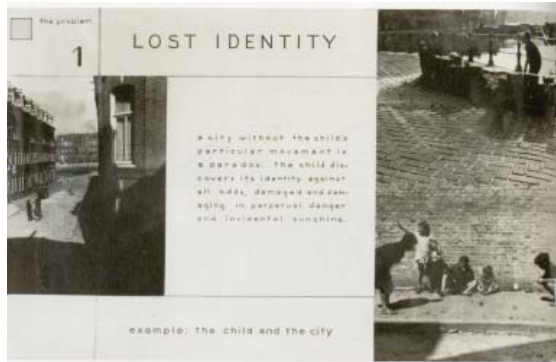
A l d o V a n E y c k



Piet Mondrian, Composition no.3 with colour panes (Fuchs, 47)

Aldo van Eyck began his career as an architect/designer in 1947 in Amsterdam. He started designing children's playgrounds for the Amsterdam City Council. Vincent Ligtelijn commented on van Eyck's work..."He approached architecture as a non-conformist with a conscience" (Ligtelijn, 15). He continued with "Although his work is recognisable by means of his personal style and themes, no two projects are the same in terms of form" (Ligtelijn, 15). He was inspired by Mondrian, along with many others. Van Eyck worked with a grid system on much of his work. I believe that his grids could go hand in hand with the feel of Mondrian's paintings.

The Lost Identity Grid

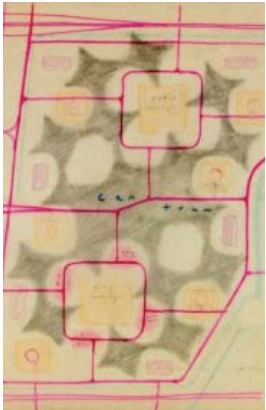


"At the same time, the grid offered real solutions for achieving immediate improvements with few resources. For the benefit of those for whom it counted most-children, who are generally absent in the main discourses of architecture and planning" (Team 10,56). Van Eyck uses an example of Snow. Snow can make a non permanent playground for children. He proposes that Amsterdam needs "something far more permanent than snow" for their children to play in. Something the city can absorb without losing its remaining identity, something meant for the child alone and not altogether different from

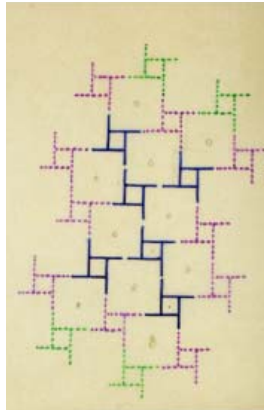
the incidental things the child already adapts to its imagination and vitality; something carefully shaped and judiciously placed where there is still some room. (Team 10,57). Van Eyck designed over 735 playgrounds. Since he designed so many "he had opportunity to develop various compositional techniques and to test them directly in practice. The playgrounds formed an effective laboratory for the ideas he was to later encapsulate in his Otterlo Circles (shown next page), in which he united the modern tradition with those of classical architecture and of vernacular or spontaneous building" (Team 10,56).

Team 10,56-57

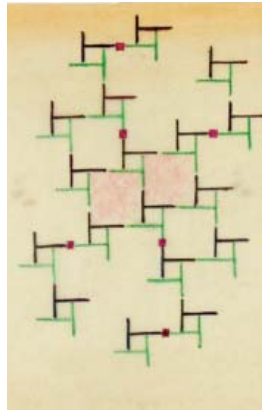
Buikslotermeer Urban Study, Amsterdam



Aldo van Eyck was commissioned to work on 1,500 homes for an experimental housing estate along with Van den Broek, and Bakema. All part of the Team 10. Van Eyck “worked



from a central area out towards the edges and he sought a general structure for the public spaces. A common feature of these studies is his use of a regular centrifugal



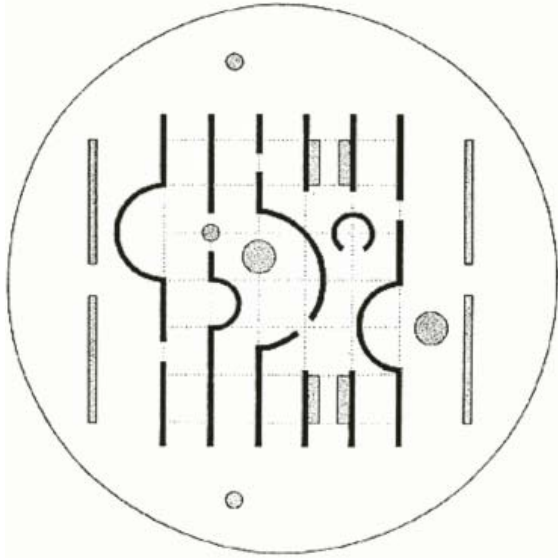
pattern of relations, encompassing inward-focussed areas of different sizes and characters without committing himself to definitive built forms. The main difference is



(Team 10, 116-117)

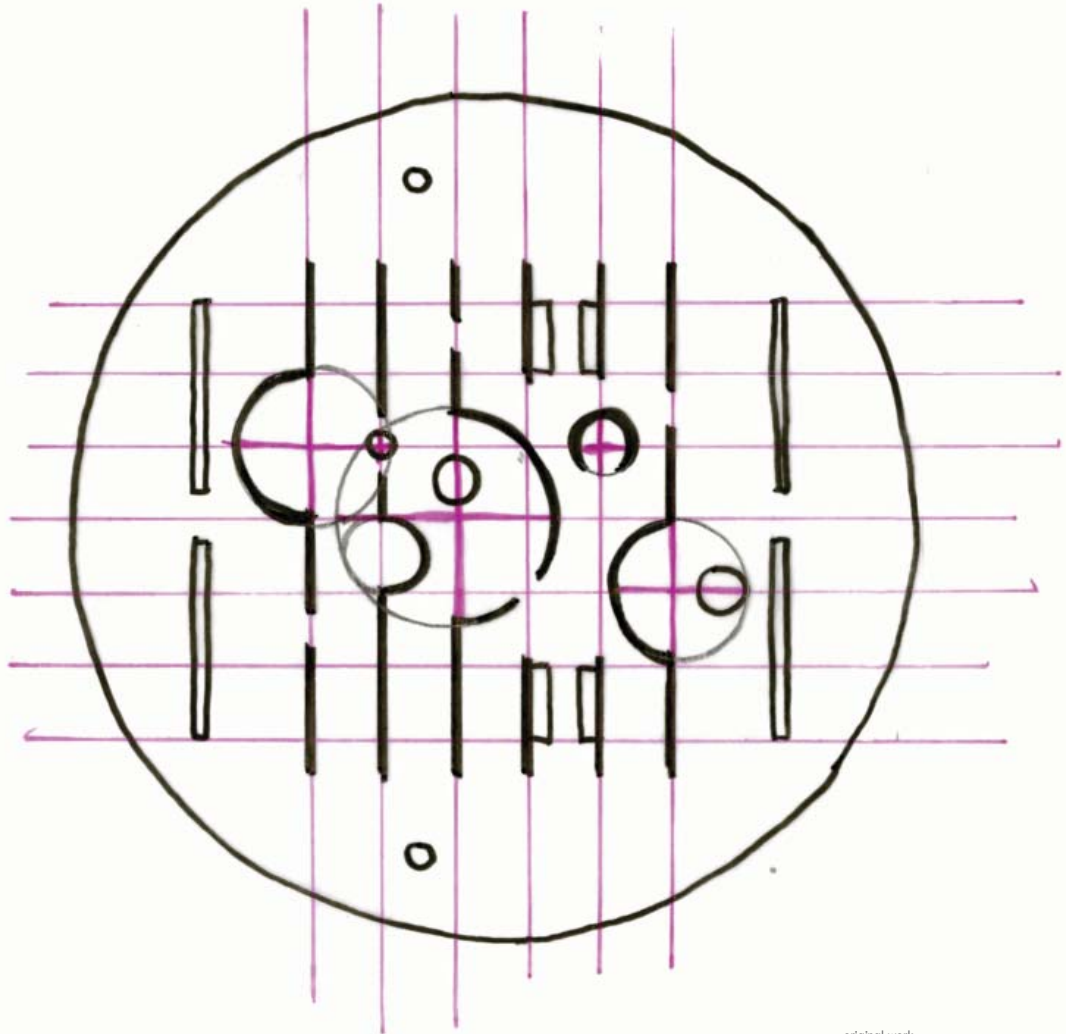
that this pattern is not converted directly into a built form and it leaves open possibilities for later programmatic and architectural decisions” (Team 10, 116).

Sonsbeek Exhibition, Arnhem



(Ligtelijn, 135)

Aldo van Eyck called Sonsbeek “a city for sculptors and their admirers” (Ligtelijn,39). It started with a circle inside of a square. A grid form created another square layout with circular interruptions in the wall which created a larger exhibit space. “Six parallel walls of equal height, under a light, translucent roof, form 5 streets just under 2.5 m wide, which towards the inside are transformed into a swirl of convex and concave spaces. Since it approached perpendicularly to the parallel walls, it only shows its riches when one enters it” (Ligtelijn,39).



original work

P l a y g r o u n d s



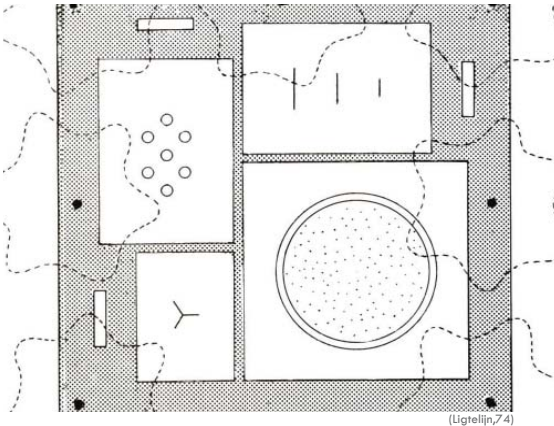
(Fuchs, 16-17)

“The very first playgrounds were embedded very often in the voids of Amsterdam where the houses of deported Jews had stood. Filling them with life, in the face of these facts, was a redeeming, therapeutic act, a way of weaving together once again the fabric of a devastated city” (Fuchs,45).

Playground Zaanhof, 1948



(Liggett, 74)



(Liggett, 74)

In Playground Zaanhof squares contain all active areas of the playground. The playground layout is very similar to a Mondrian painting. If you continued the squares so that they were all the same size, you would find bench areas created for seating.



My diagram above shows the "Mondrian" qualities that Zaanhof displays. The dotted lines show the continuation of the square portions of the playground, where sitting areas are contained.

Playground Equipment

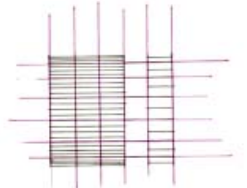
a



(Ligtelijn,80)



(Ligtelijn,80)

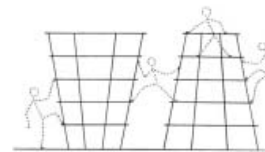


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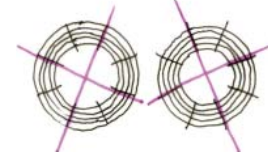
b



(Ligtelijn,80)

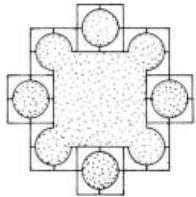


(Ligtelijn,80)

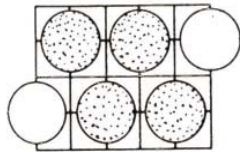


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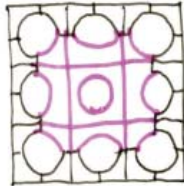
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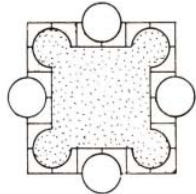
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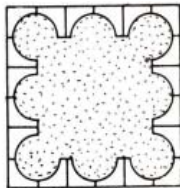
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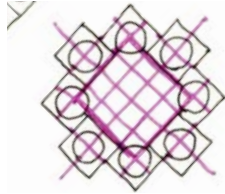


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4

(1-4, Ligtelij, 81)



original work

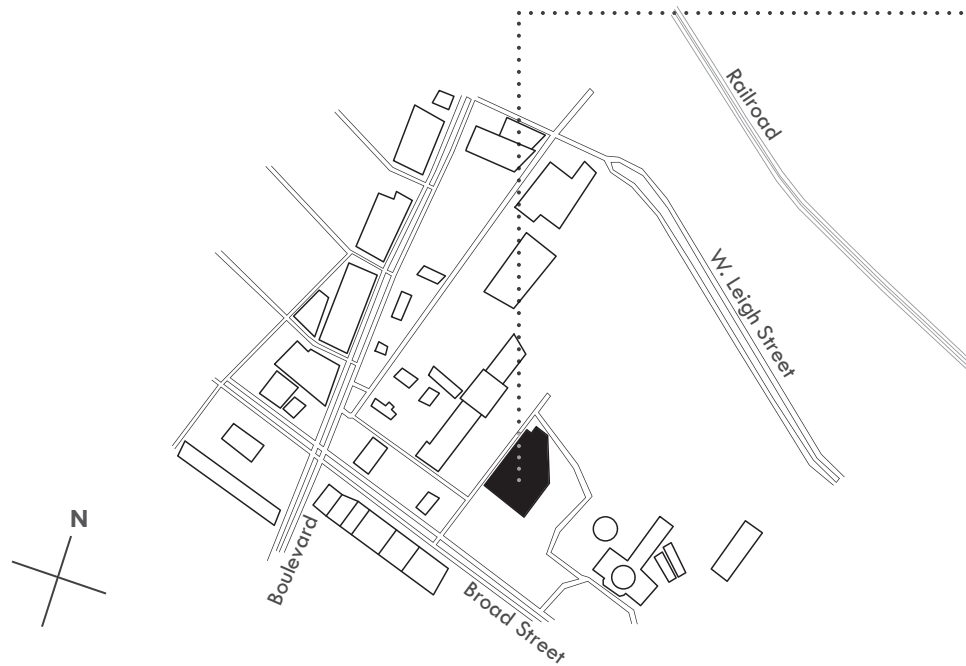
(a, b) The "Arch" was found first in Amsterdam, but quickly was adopted into cultures around the globe. My work below

highlights the grid work that was used in the plans of both forms (c) Sandbox- es were similar in layout to the playgrounds. A grid

pattern was made and then circles and squares created many unique forms that were then constructed and filled with sand.

"The **Playgrounds** were fantastic because the objects were simple: rectangular and round frames for climbing, a sandpit, a group of circular concrete blocks for jumping from one to another-objects that are not anything in themselves but which have an open function and therefore stimulate a child's imagination. Van Eyck's objects do not move, but they allow a child to move with all the acrobatism and suppleness he can muster" (Fuchs,7).

The Children's Museum of Richmond



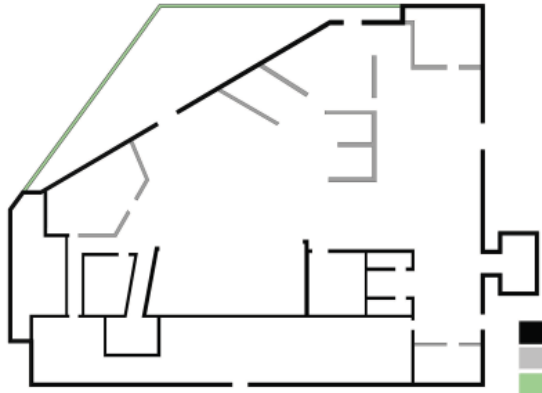
The Children's Museum is located at 2626 West Broad Street. The building was originally a storage facility and was then converted to the new home of CMoR, which moved from its original downtown location. It's location next to the Science Museum of Virginia and close proximity to the museums along the Boulevard made the site even more enticing. The museum ranks as number two most frequented museum in Virginia. It serves over 35,000 kids through school programs. Other than school programs, 230,000 kids/guardians pass through the museum every year. The administration at CMoR believes that children learn through play, and they want to teach adults how to learn with their children through interactive exhibits. They offer a variety of exhibits that teach children about every day life experiences, art, science, and theatre. Some of the designers of the exhibits were Redbox Design, and Chicago Scenic. Others were designed by an in house exhibit designer. (Harris)

Museum Layout



CMoR has 17 full time employees and about 20-30 part time employees. The offices at the left of the building are for the full time employees only. Full time employees use the larger break room located towards the back of the building. Part time employees use the break room towards the front of the building and have a storage room to keep their belongings in while helping out on the museum floor. There is plenty of break out/meeting space located in this section of administrative space. The back portion of administrative space houses some office space, but is mainly the location for a loading dock and mechanical needs. The front desk is for full and part time employees and is necessary for the purchase of tickets to the museum.

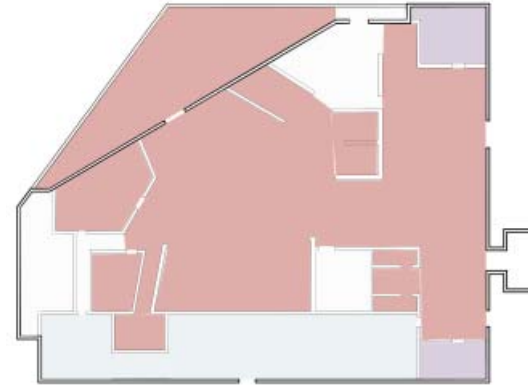
Wall Type Diagram



The actual museum space is basically separated by partition walls. Which allows for easier exhibit changes. All permanent spaces are constructed with Floor to ceiling walls

Floor to Ceiling Walls
 Partition Walls
 Outdoor Walls

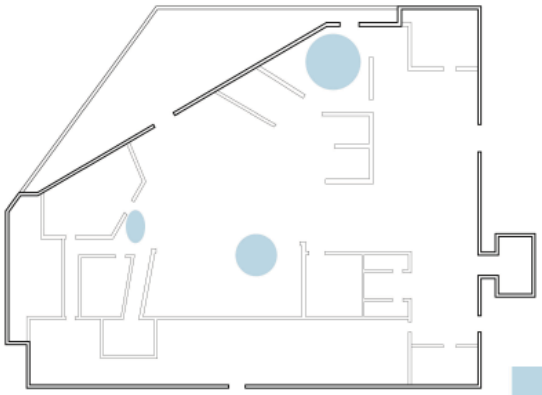
Noise Levels



Children are noisy by nature. Therefore children's museum can have issues with noise levels. Especially in a wide open area. This diagram shows how walls are used to separate noisy areas from areas that need to have a more quiet atmosphere.

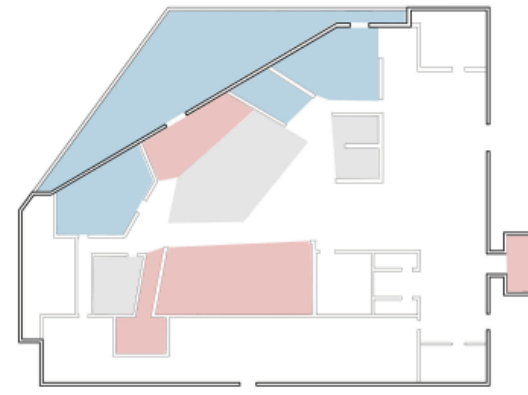
Noise Level-Low
 Noise Level-High
 Noise Level-Medium

Adult/Children Interaction



Some parents separated from their children while they played with others. There were 3 main areas where parents congregated together. The Ukrops Cafe became a sitting area for parents, there were tables and chairs outside of the art center and parents grouped together and socialized a lot in little farm with their infants.

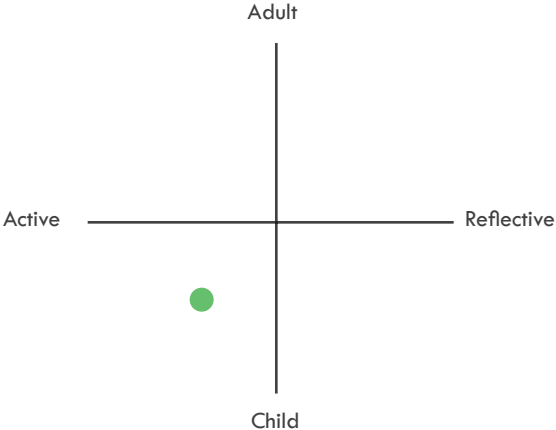
Parent Areas



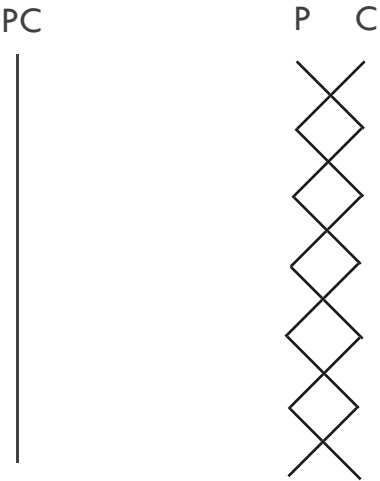
Parents and Children interacted differently within the exhibits. There were 3 different types of interaction ranging from no interaction to full interaction.

P-Stand; C-Play P=Parents
 P-Stand/Play; C-Play C= Children
 P-Play; C-Play

A n a l y s i s

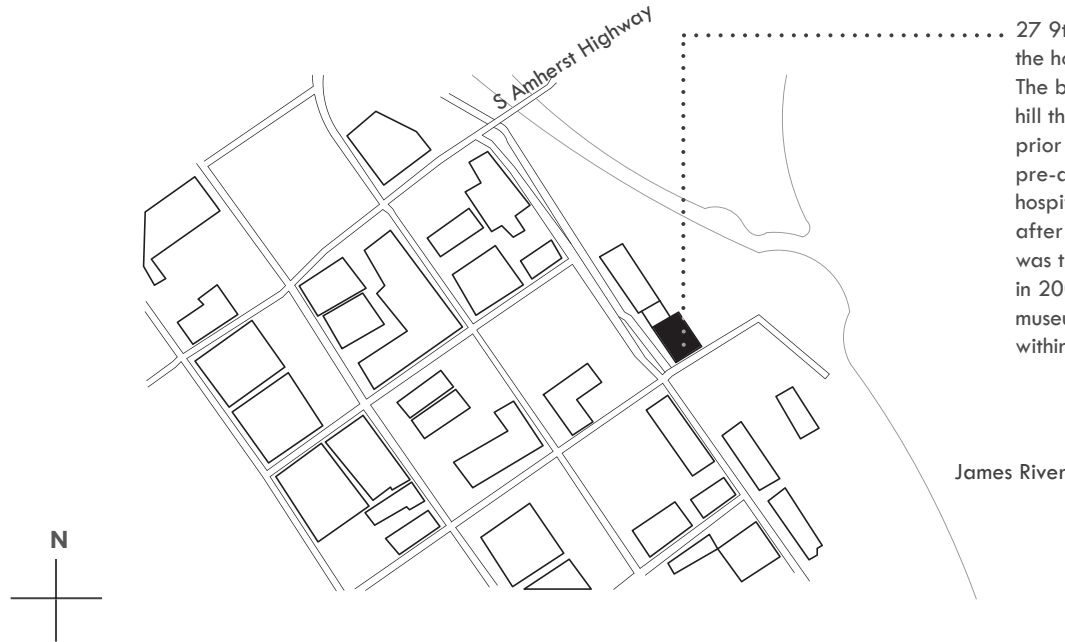


I feel that The Children’s Museum of Richmond is more active than reflective, and it is geared more towards the learning experience of a child than that of an adult. However, the museum does strive to teach adults how to play and learn with their children.



After visiting and observing CMoR I feel that Parents/ Guardians and Children might have an experience shown through the diagrams above. At times some adults did allow their children to play with other children and they sat behind. Some adults socialized with other adults as their children ran off by themselves. For the majority of their visit, adults and children stay together throughout all exhibits.

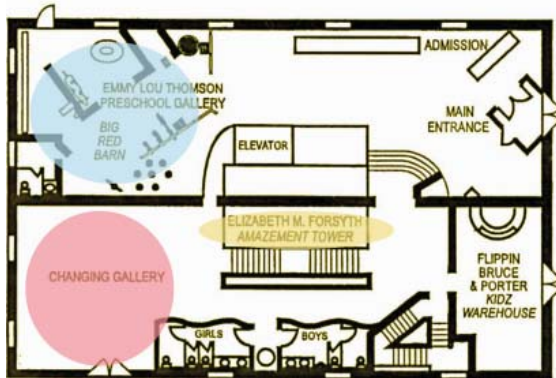
Amazement Square, Lynchburg, Virginia



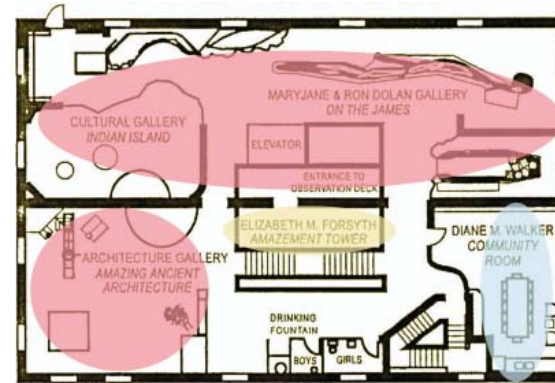
27 9th Street in Historic Downtown Lynchburg, Virginia is the home of this Children's Museum, Amazement Square. The building rests among other historic warehouses on a hill that runs into the James River. It has worn many hats prior to becoming an acclaimed children's museum. It pre-dates the Civil War, where it served as an overspill hospital for wounded soldiers. It was a tobacco factory after the war and then a shoe factory following that. It was then for a pesticide business before it was renovated in 2001 to become Lynchburg's children's museum. The museum maintains a bug theme both on the building and within because of its later use.

James River

Adult/Children Interaction



Second Floor



Fourth Floor

Adults played with the children that accompanied them to the museum. There were very few areas where the adults were not active in an exhibit. The tower was also made for adults to enjoy, but they seemed to stand back sit and observe the children. The exhibits were informative and interactive for children and adults.



First Floor

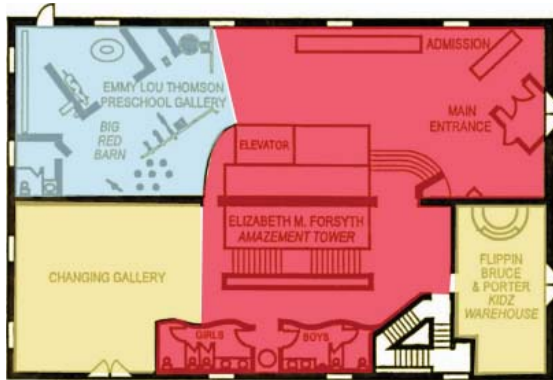


Third Floor

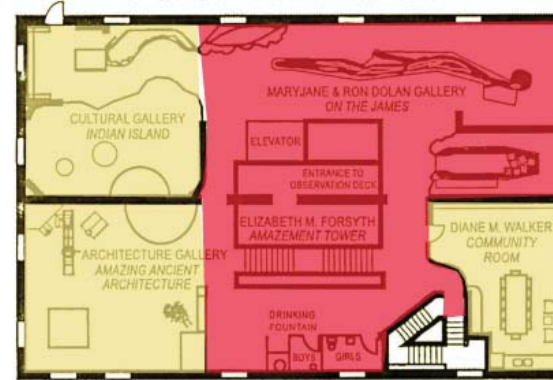
Benches were available for people to rest on. I used them to observe, but they were mostly vacant during my visit.

- P-Play; C-Play
- P-Stand/Play; C-Play
- P-Stand; C-Play

Noise Levels



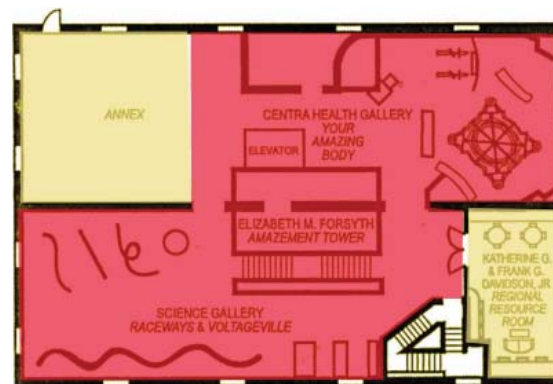
Second Floor



Fourth Floor



First Floor

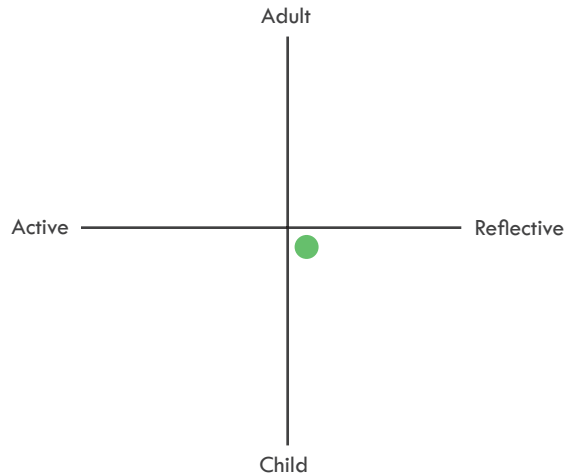


Third Floor

The central areas of the museum seemed to be the noisiest. Especially with the amazement tower rising up the middle of the entire building and carrying noise to all floors. Some of the corners of the buildings were used to wall off and contain more quiet areas.



Analysis



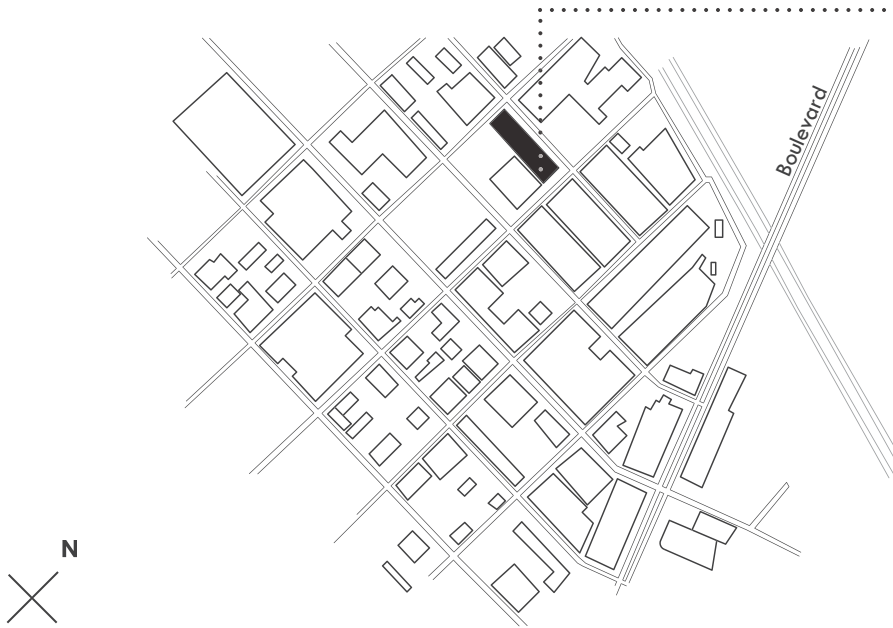
I feel that Amazement Square was an extremely active place and a wonderful museum for both parents and children to visit and learn. There was a lot of playing to be done within the exhibits, but I also feel that it had exhibits that you could reflect on more so than just play with. Some adults could have learned something from their visit to this museum while their children were learning too. I know that I learned a few things myself. It is called Amazement Square instead of a Children's Museum. The location name probably does not include "children's museum" because it offers educational exhibits and not as much of a playground atmosphere as other children's museums do. However, it does appeal to more children than adults.

PC



After visiting and observing Amazement Square I feel that Parents/Guardians and Children might have an experience shown through the diagram above. Adults and children experienced this museum hand in hand. Very rarely did I ever see an adult sitting by themselves without a child. It was an interactive experience for all.

Moseley Architects Richmond, Virginia



Scott's Addition is the new office location for Moseley Architects since they moved from their previous residence in Richmond's Southside in 2008. Before the economic downturn they needed to find a space that could house 200+ employees in accounting, human resources, information technology, interior design, marketing and architecture. They focus on public sector design, construction administration for school systems, state and federal government entities, and municipalities in Virginia. 3200 Norfolk Street served as a space for servicing large trucks in the past. Its' tall ceilings and existing structure were taken advantage of in creating the new Richmond headquarters for Moseley. With their focus on LEED design, the building was constructed to be LEED Platinum. (Ayon)

Areas Surrounding Building

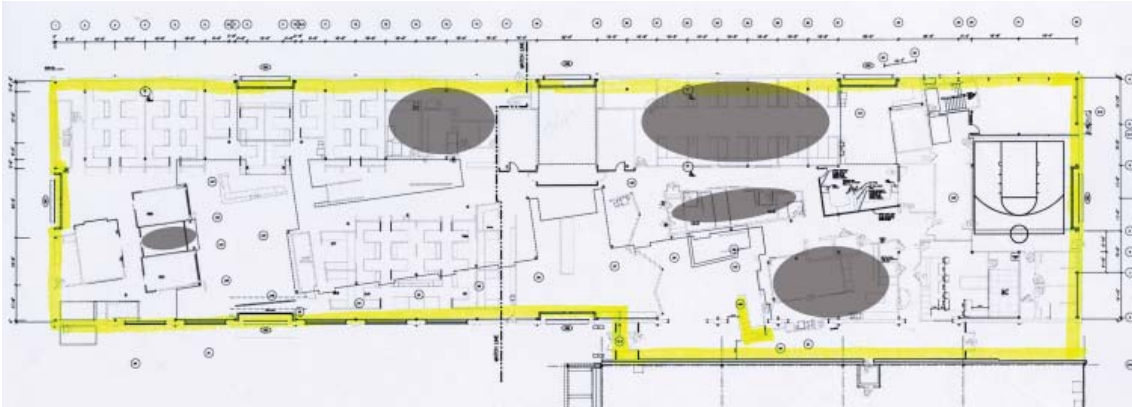


Moseley Architects is mainly surrounded by a grid of streets and low rise, older industrial buildings. Henry Ayon, an architect at Moseley, stated that Scott's Addition is referred to as having the "Brown Island Effect." In other words, there is not much "green" space present in the area. Moseley constructed their building with a Green roof in order to help with this situation.

View or No View



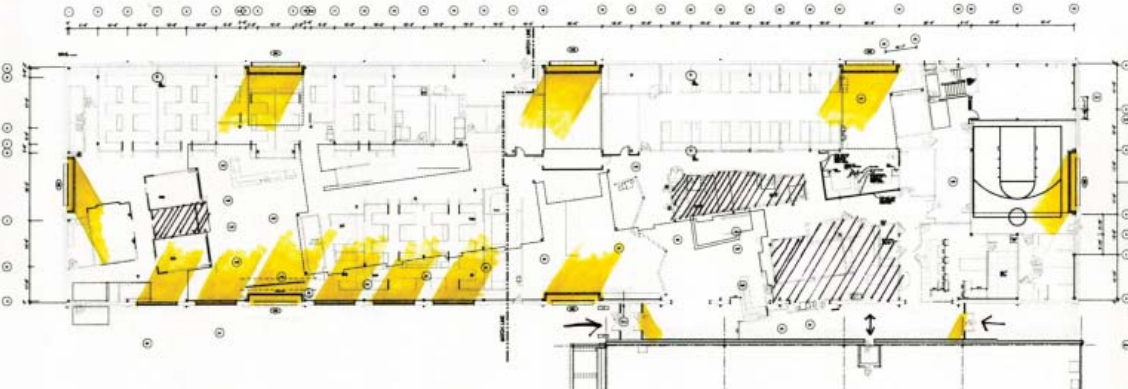
Plan received from Moseley Architects, Henry Ayon



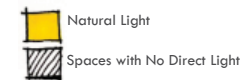
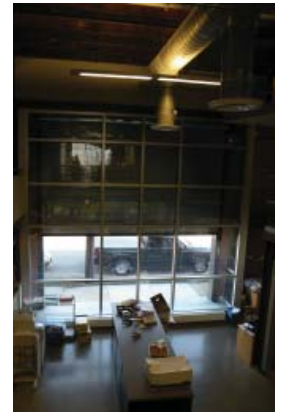
Spaces with Minimal or No View

Most of the areas within the office have an exterior view. This was accomplished by material choice and layout. All enclosed offices are constructed of glass. Office areas are laid out on a diagonal which allows light to filter in and views to outside areas available to many workers. It also creates an extremely open atmosphere. Bathrooms, Plotting Rooms, Conference Rooms, and some smaller Break Rooms have a limited view. There is no separation of professions within work areas either. Architects can work in an area with designers and engineers.

Natural Light



The design of the interior takes full advantage of the natural light sources. The Southside of the building has two levels of large open windows. The original garage door openings were maintained in the renovation. Glass windows were placed behind the garage doors so that the door serves as a window blind and provides a lot of light and privacy when needed. There are two of these doors located on the South side of the building, three on the North side and one at each end of the building.



C o n c e p t

Interaction:

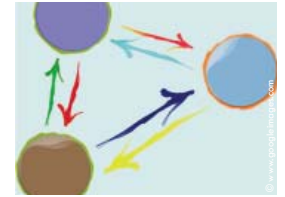
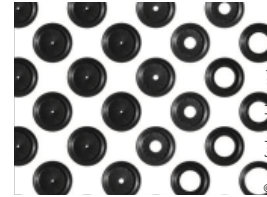
To create an interactive and inspiring atmosphere through movement, structure and design to encourage children to learn through an interactive exhibit experience.

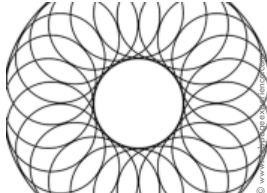
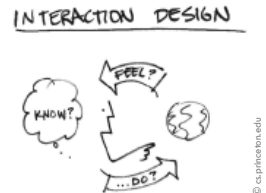
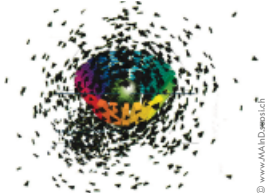
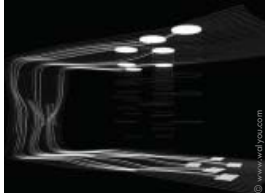
Through an interactive exhibit I want to create a museum-like atmosphere that can capture a child's attention and make them excited about learning with out "dumbing it down."

There are 3 main spaces in the museum: the exhibit, the studio, and the gallery. The way that they interact with eachother and their visitors completes the museum experience. There is a changing interactive exhibit in the museum. Once a

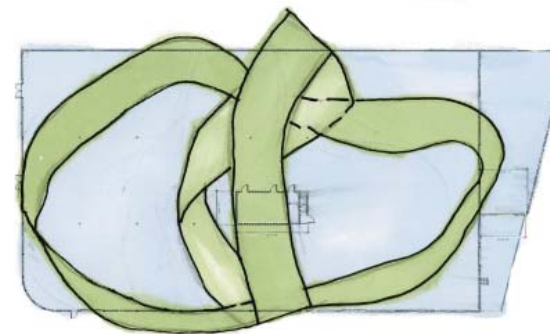
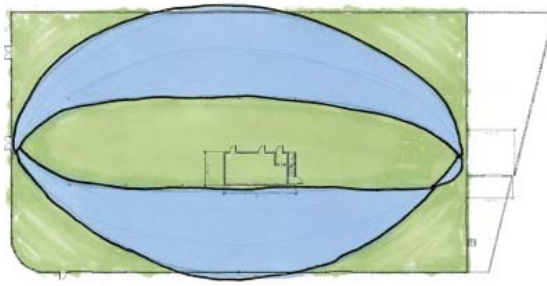
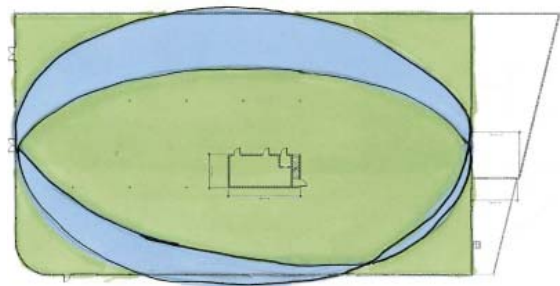
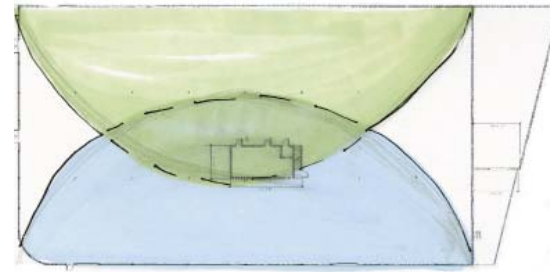
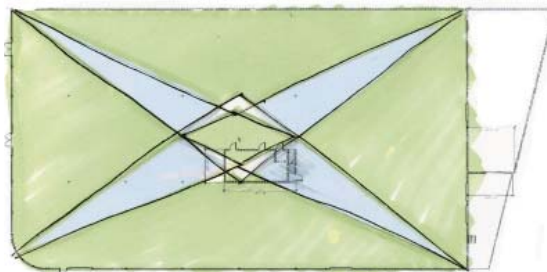
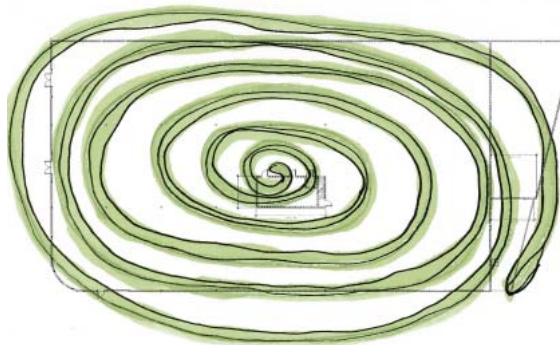
child has been inspired by the exhibit they take that inspiration to the studio and create their own works of art while reflecting on what they learned in the exhibit space. In the studio they interact with other children and their art. From the studio the artwork is displayed in the gallery. Here, children continue to interact with others art and could be inspired.

There is a continuous cycle of interaction and inspiration through a creative process. A continuous path, or the mobius strip, takes you through this experience and will continue after you leave and picks up when you return.



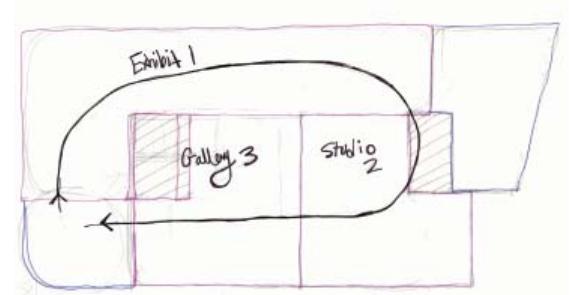
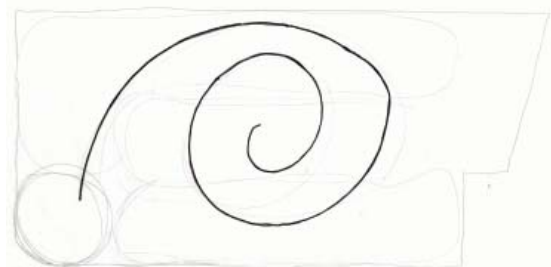
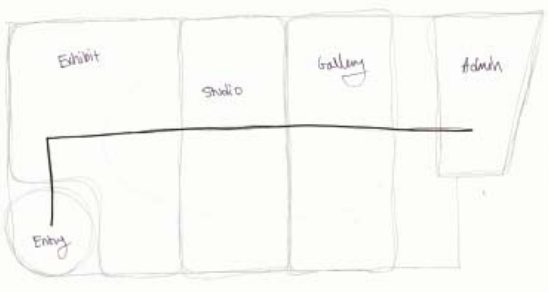
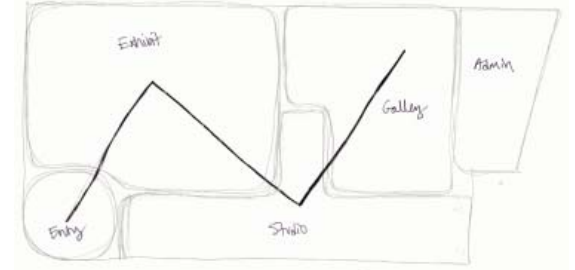
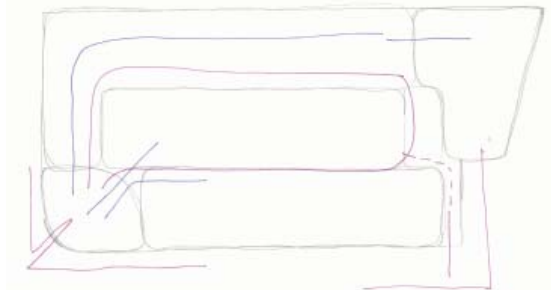
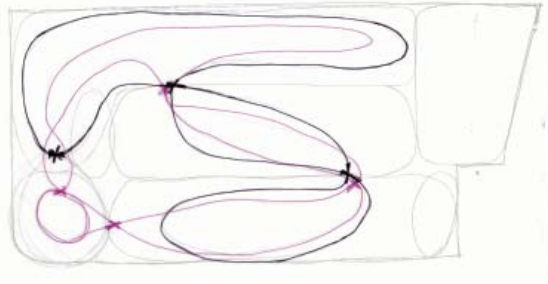


Parti Diagrams



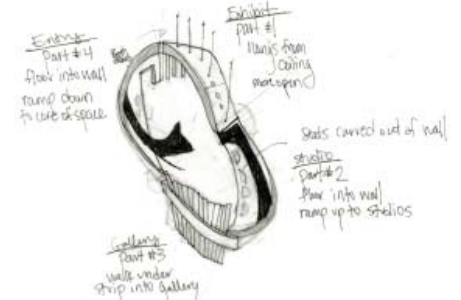
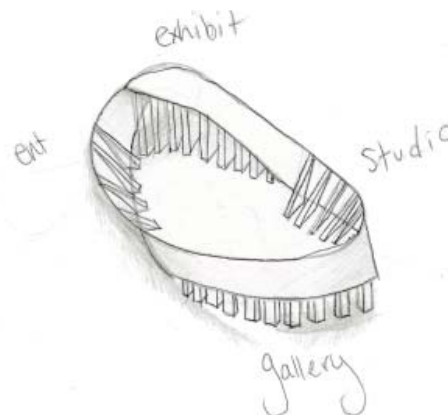
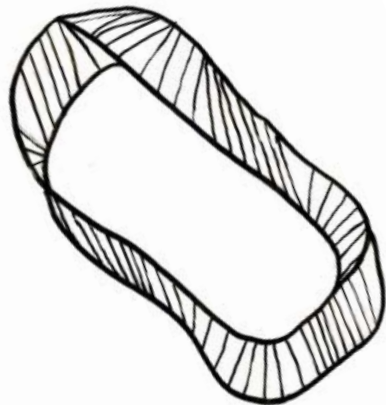
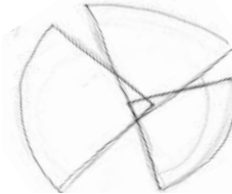
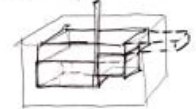
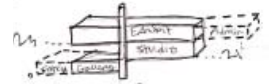
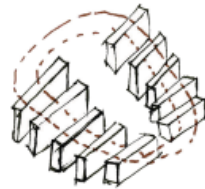
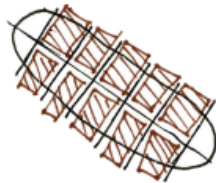
Parti diagrams informed both the concept and essence of the museum. Movement and interaction through the space was created by a mobius strip, shown in the parti above.

Traffic Diagrams

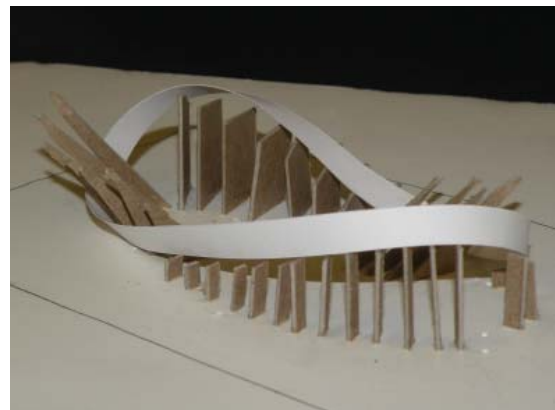
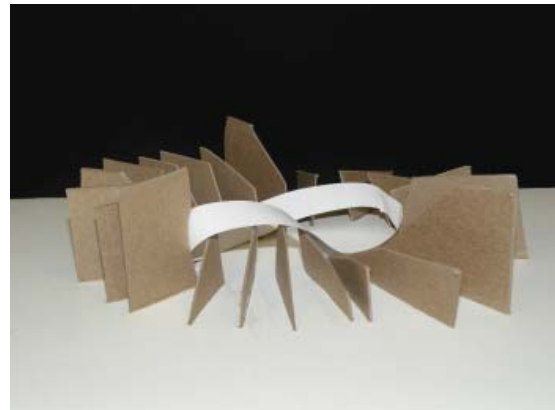
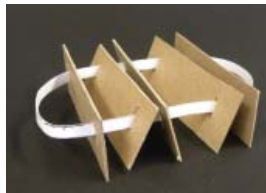


Traffic diagrams helped to figure out the necessary flow of the space. In turn, the traffic flow of the museum informed where the museum's core areas should be placed.

Preliminary Sketches



S k e t c h M o d e l s



P r o g r a m

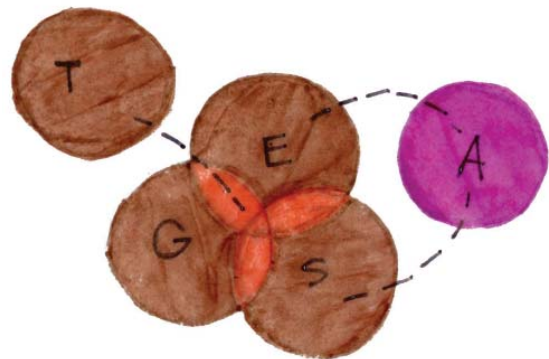
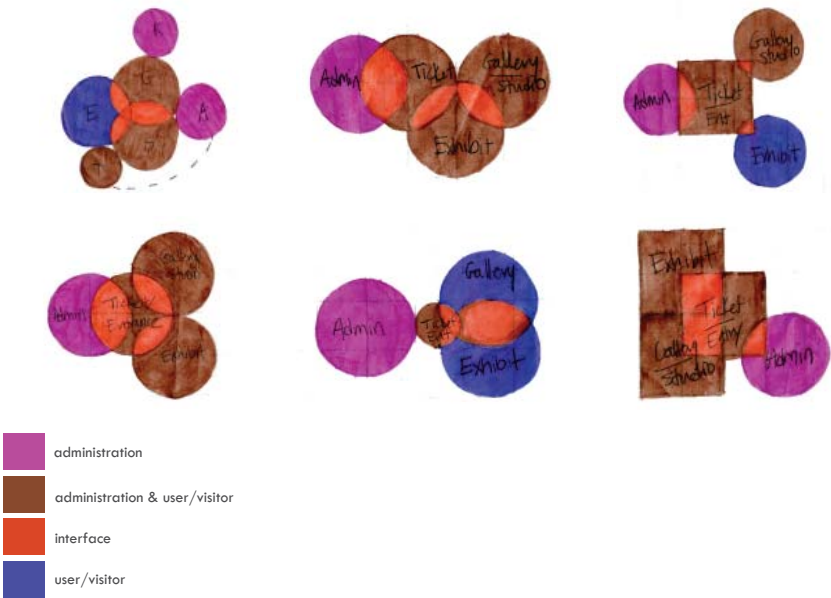
Necessary Spaces and Their Square Footage

Necessary Spaces	Square Footage Required
Administrative Area	3,550
Bathrooms	880
Studio Space	4,370
-Storage	600
Exhibit Space	6,830
Ticket/Entrance Area	1,505
Central Core/Lobby	2,400
Gallery Space	2,225
Storage	500
Ramps/Egress	4,140
	27,000 Total Square Feet

Pragmatic Adjacencies and Relationships

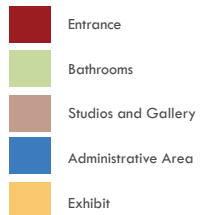
Criteria Matrix	Sq Footage Needs	Adjacencies	Public Access	Daylight and/or View	Privacy	Plumbing	Special Equipment	Special Considerations
① Administrative Areas	3,550	⑤ ⑦	No	Yes	Yes	Yes	Yes	
② Ticket/Entrance Area	1,505	③ ⑨	Yes	Yes	No	No	Yes	
③ Central Core/Lobby	2,400	⑤ ② ⑦ ⑨	Yes	Yes	No	No	No	
④ Bathrooms	880	③ ⑤ ⑦ ⑨	Yes	Yes	Yes	Yes	Yes	
⑤ Exhibit Space	6,830	③ ⑦ ⑨ ⑥	Yes	Yes	No	Yes	No	
⑥ Storage-Exhibit	500	⑤	No	No	Yes	Yes	Yes	
⑦ Studio Space	4,370	⑧ ⑤ ⑨ ①	Yes	Yes	No	Yes	Yes	
⑧ Storage-Studio	600	⑦	No	Yes	Yes	Yes	Yes	
⑨ Gallery Space	2,225	⑩	Yes	Yes	No	No	No	
⑩ Patio		⑨	Yes	Yes	No	No	No	

Adjacency Diagrams



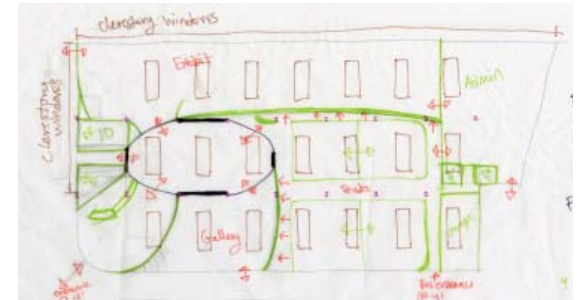
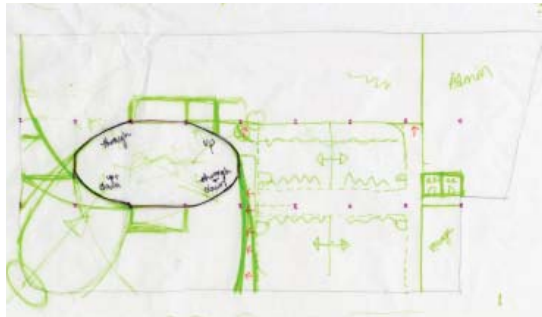
Adjacency bubble diagrams were used to study the location needs of the museums' core spaces. Figuring out what spaces needed to have a direct relationship to other spaces and how the spaces should overlap was a crucial step before space planning.

B l o c k P l a n n i n g

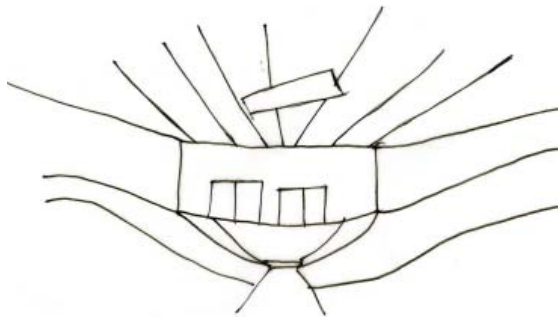
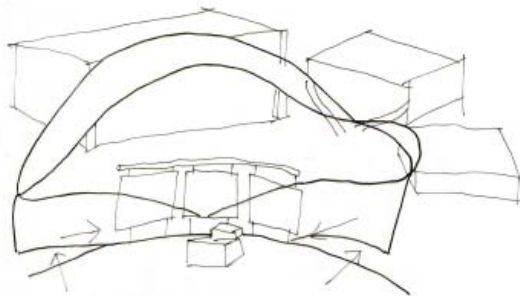
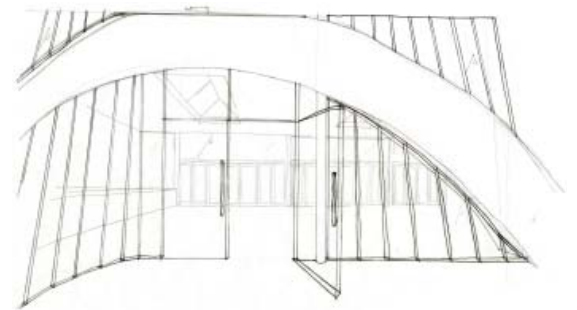
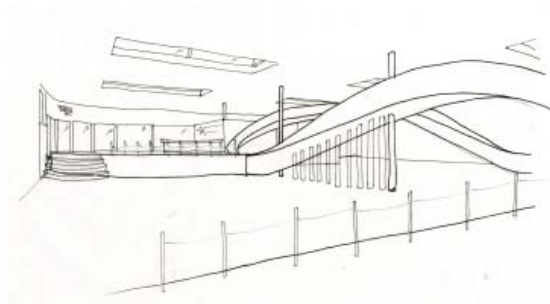
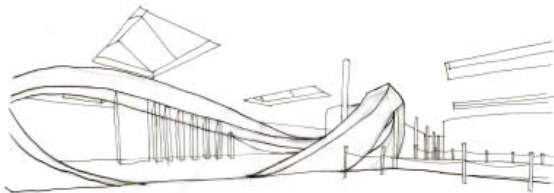


As block planning progressed, the entrance was placed in the rounded front corner of the building. A circulation began with all three main space coming together at a point in the center of the building. Later, this center became the central core or lobby of the museum.

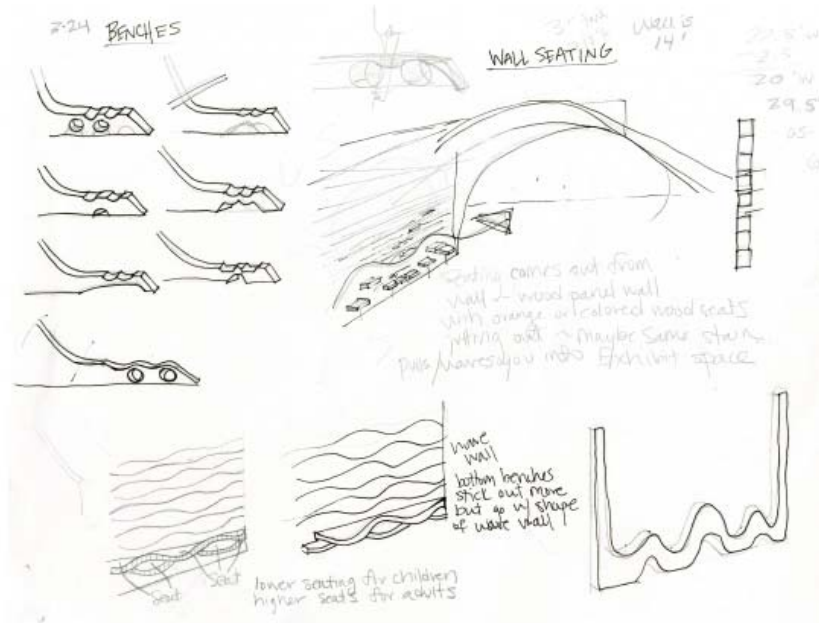
Project



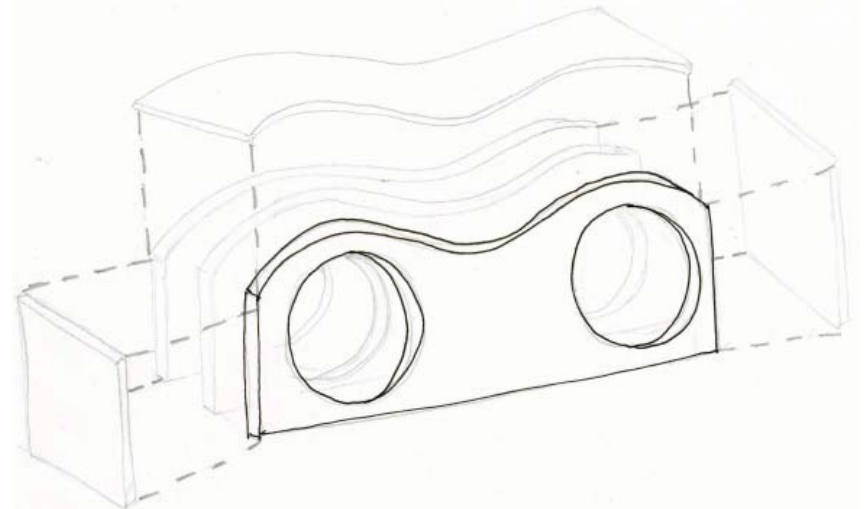
Preliminary Interior Perspectives



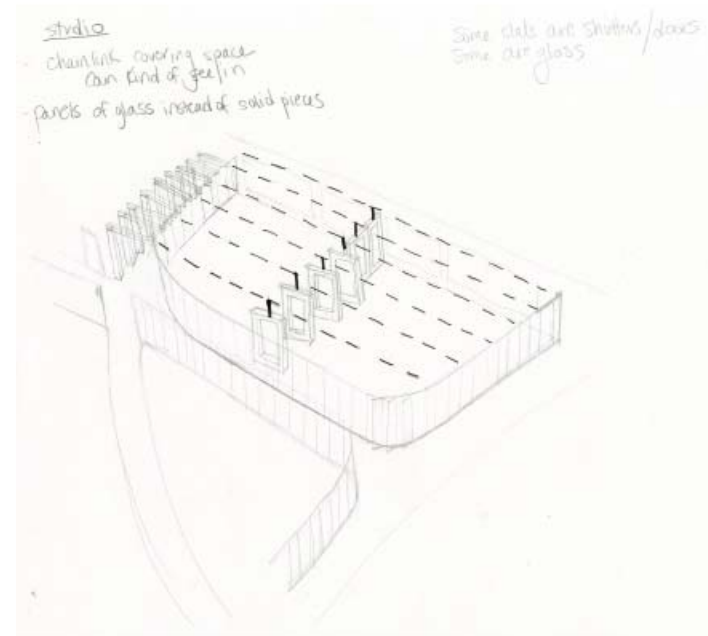
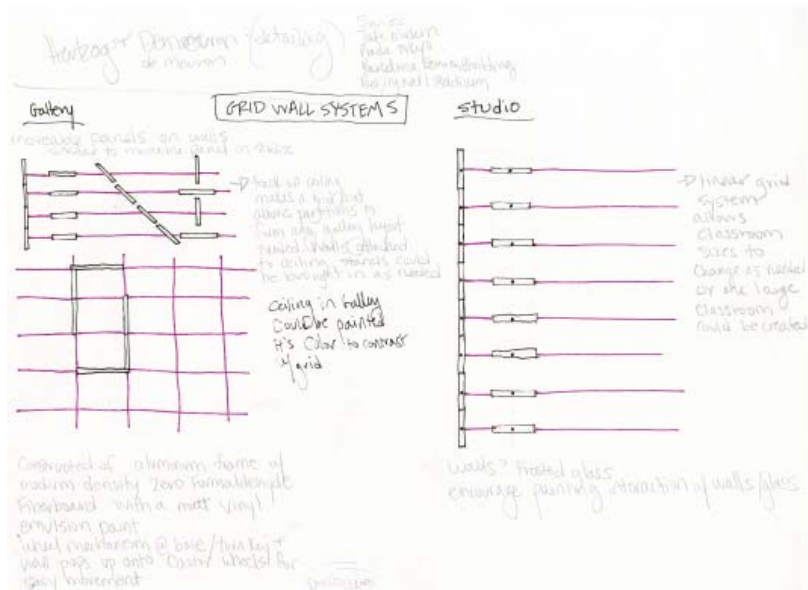
Details - seating



Construction of BENCH



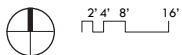
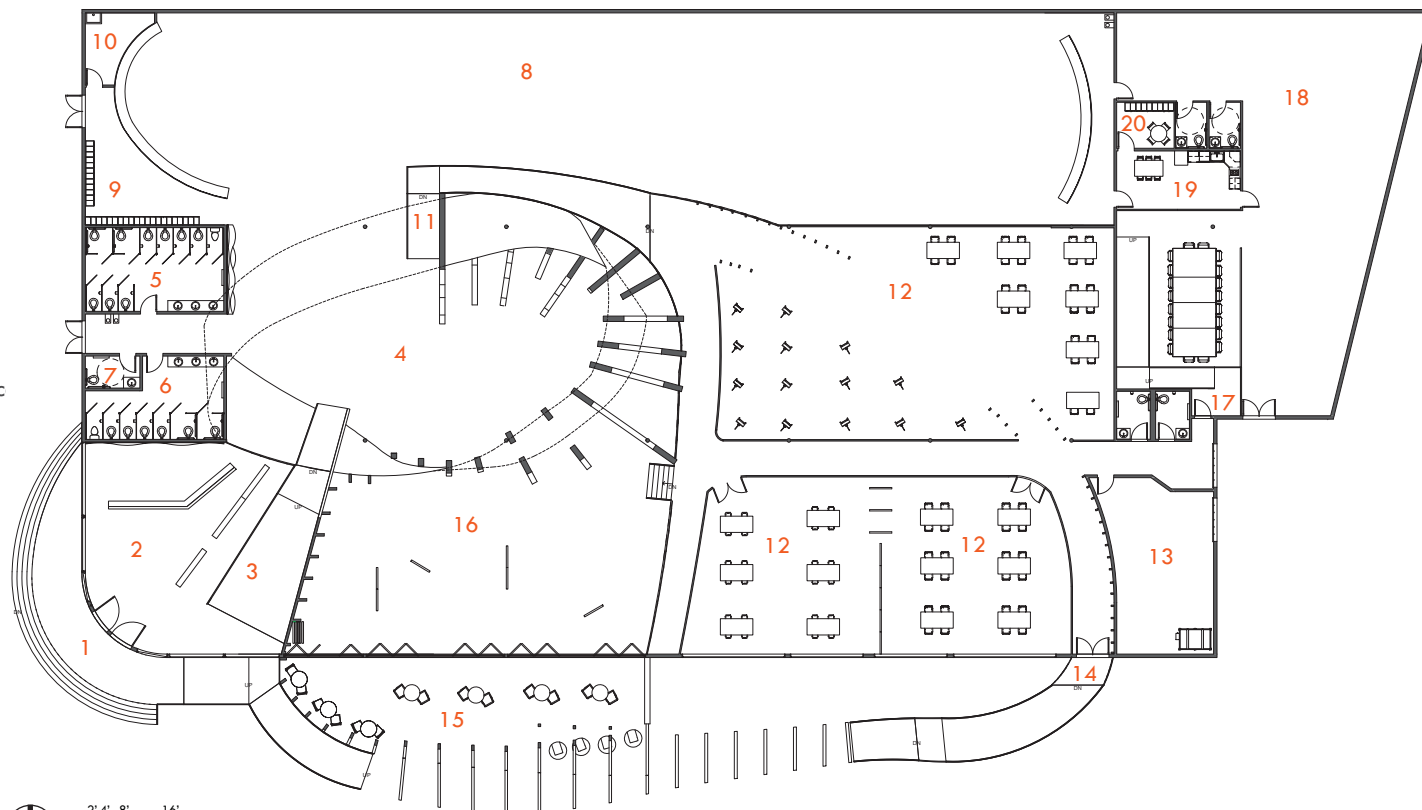
Details - partition walls



D e s i g n

Legend

- 1 main front entrance
- 2 ticket area
- 3 ramp to central core
- 4 central core
- 5 ladies restroom
- 6 mens restroom
- 7 family restroom
- 8 exhibit area
- 9 locker room
- 10 storage
- 11 ramp to studios
- 12 studio area
- 13 storage
- 14 school bus entrance
- 15 patio
- 16 gallery
- 17 ramp to administrative office
- 18 administrative offices
- 19 kitchen
- 20 employee break room



Materials

Paint



Benjamin Moore paint



Benjamin Moore paint



Benjamin Moore paint

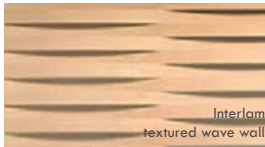


Benjamin Moore paint

Wall & Other Materials



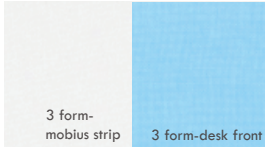
glass walls



Interlam
textured wave wall

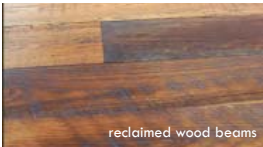


3 form-wall panels

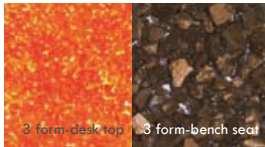


3 form-mobius strip

3 form-desk front



reclaimed wood beams



3 form-desk top

3 form-bench seat

Flooring



concrete floor



Nora Systems
rubber flooring

Lockers &



Digilock

Furniture



Digilock



Izzy
patio
chair



Eero Aarnio
pastil chair



Izzy bar
stools



Izzy table

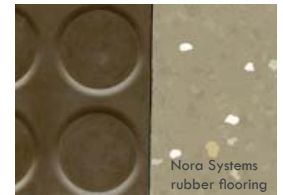
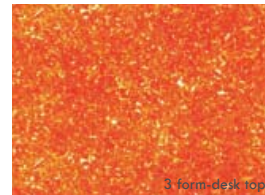
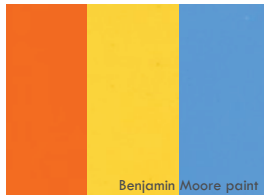


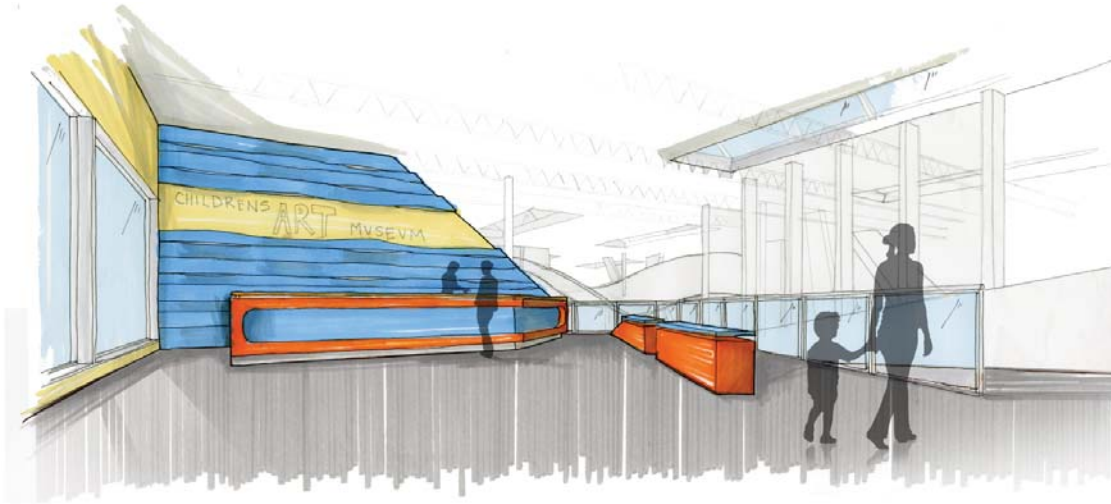
School Outfitters studio chairs

Entrance

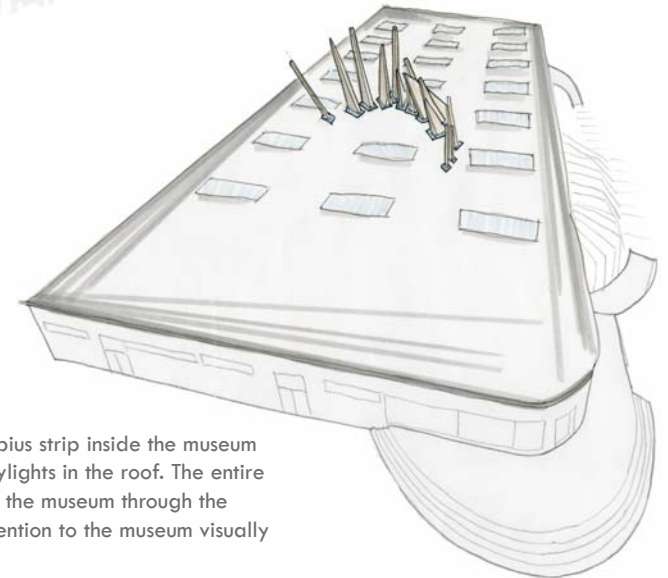


The original yellow brick of the site was maintained. A new main entrance was made at the front curved corner of the building.

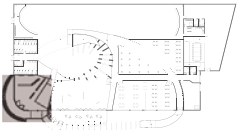




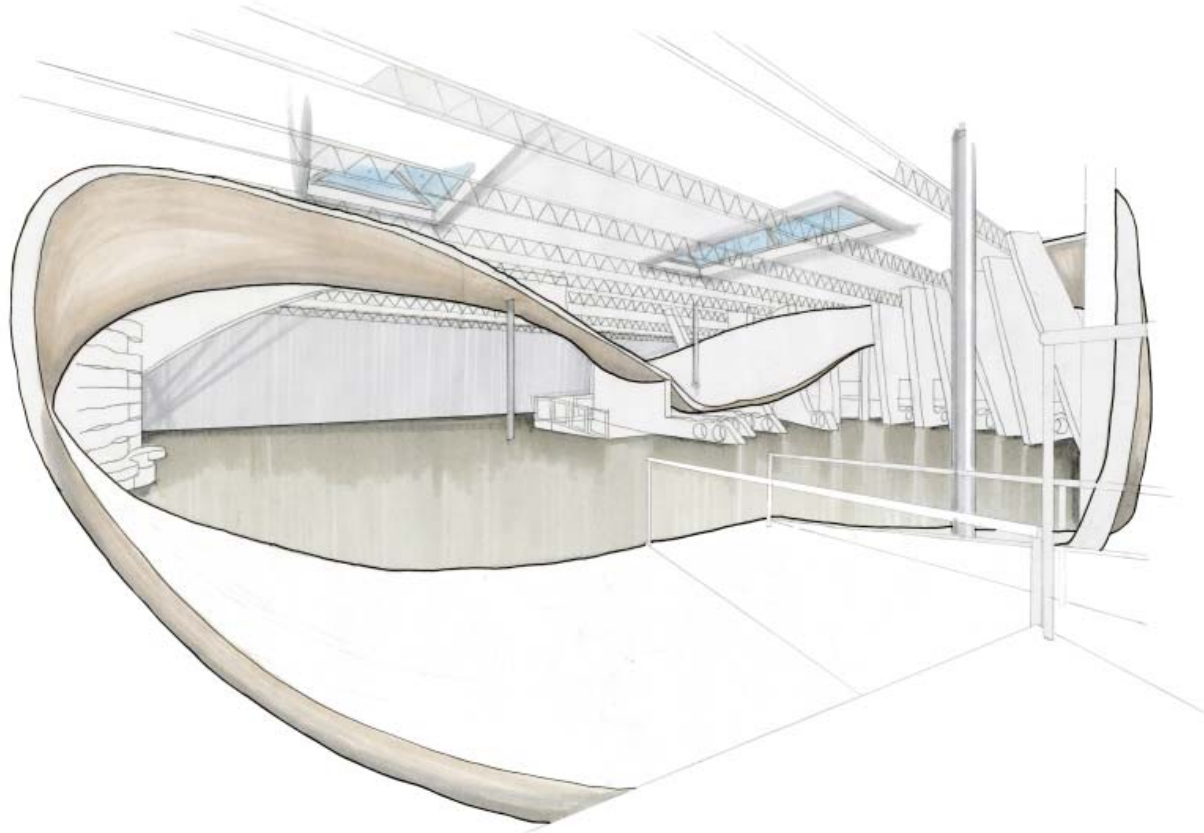
A ticket counter and seating area are provided at the entrance of the museum. The entrance is raised three feet from ground level so that visitors can view the layout of the museum from above before they enter into its' core.



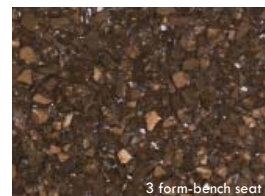
Beams that support the mobius strip inside the museum continue outside through skylights in the roof. The entire beam is visible while inside the museum through the skylights, and also calls attention to the museum visually from the exterior.



Central Core



An actual mobius strip forms the central core of the museum. The strip takes all three forms of construction: a ceiling, a wall, and a ramp. Original columns and new wooden beams support the strip.





The strip's support extend out from under the strip to provide bench seating. A wave top dips to form a seat and circular cut outs are available to occupy a child's attention.



The support beam walls double as passage ways into the gallery and group seating areas.

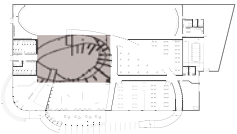
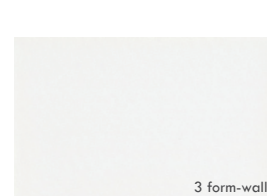
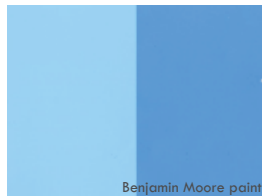
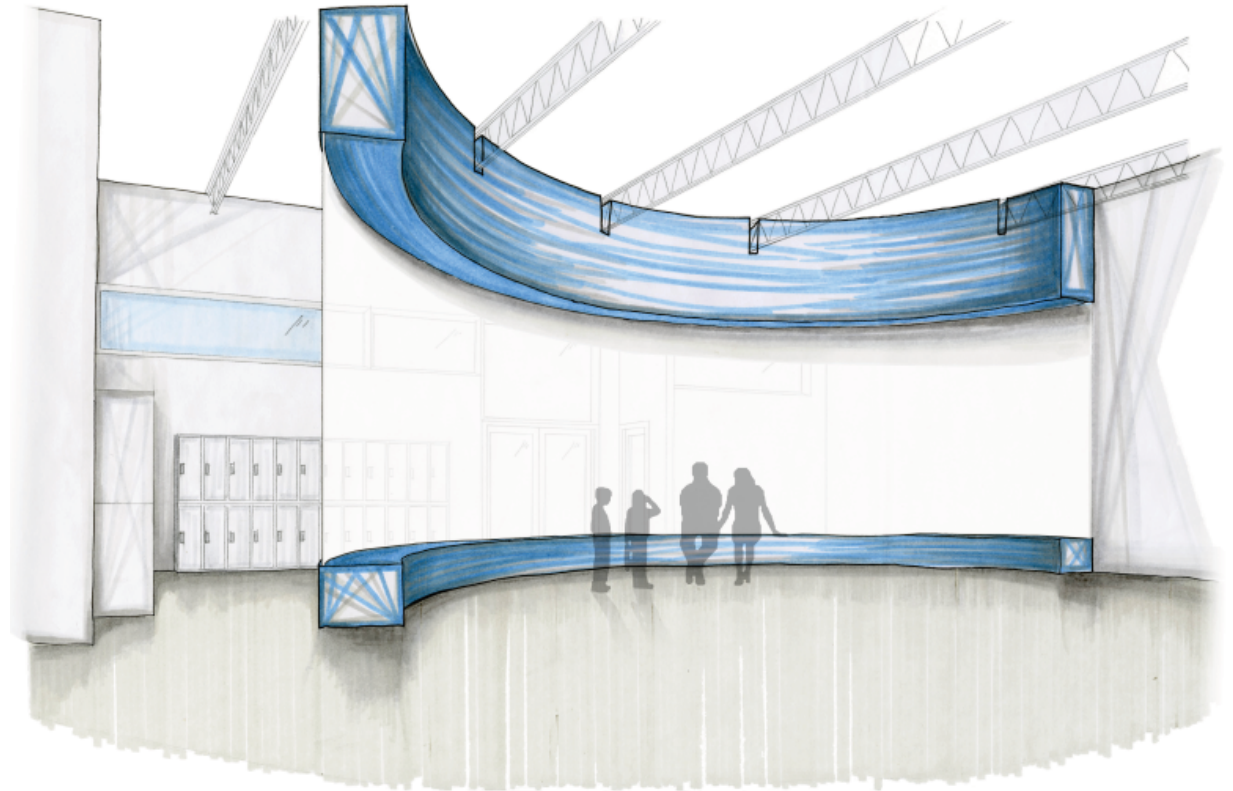
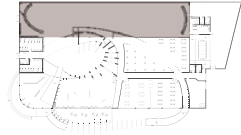


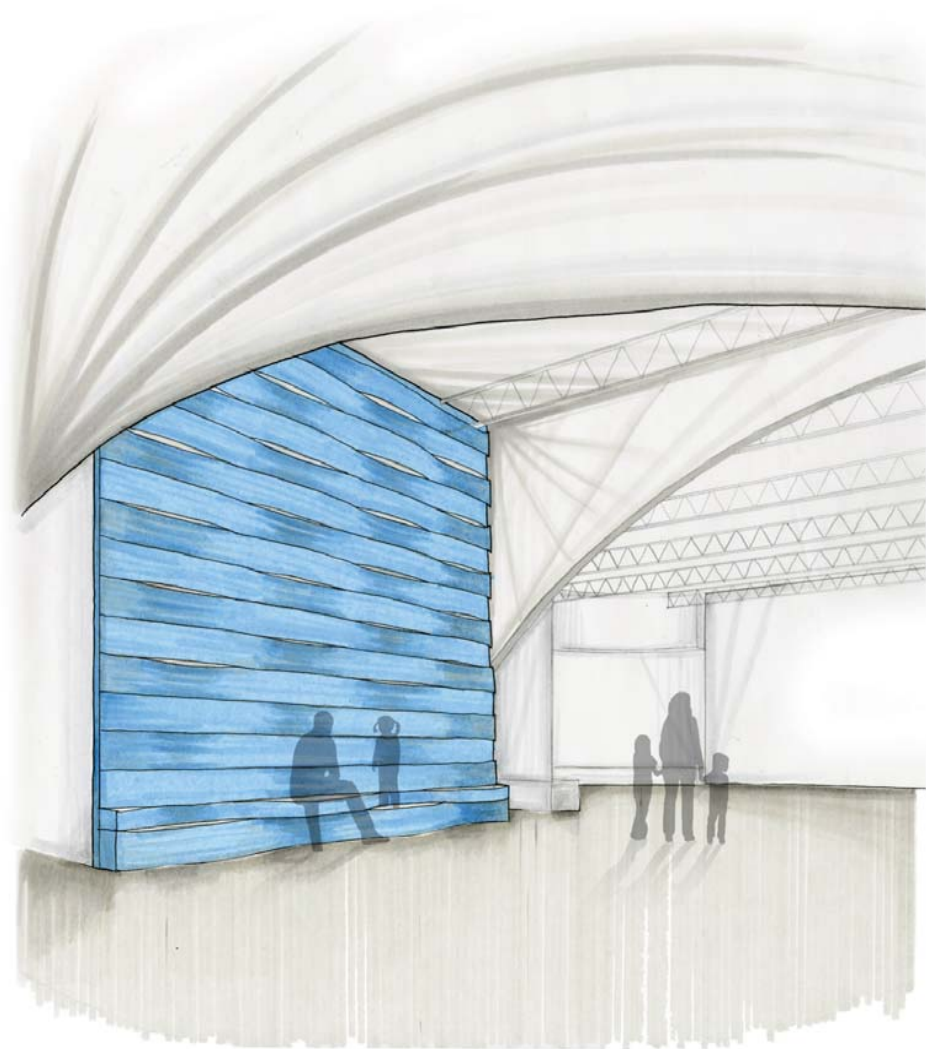
Exhibit Area

Curved walls flank the east and west ends of the exhibit and implies portions of another strip that moves the visitor through the space. The west wall (shown) is also a bench, and a storage room and locker room are provided behind.

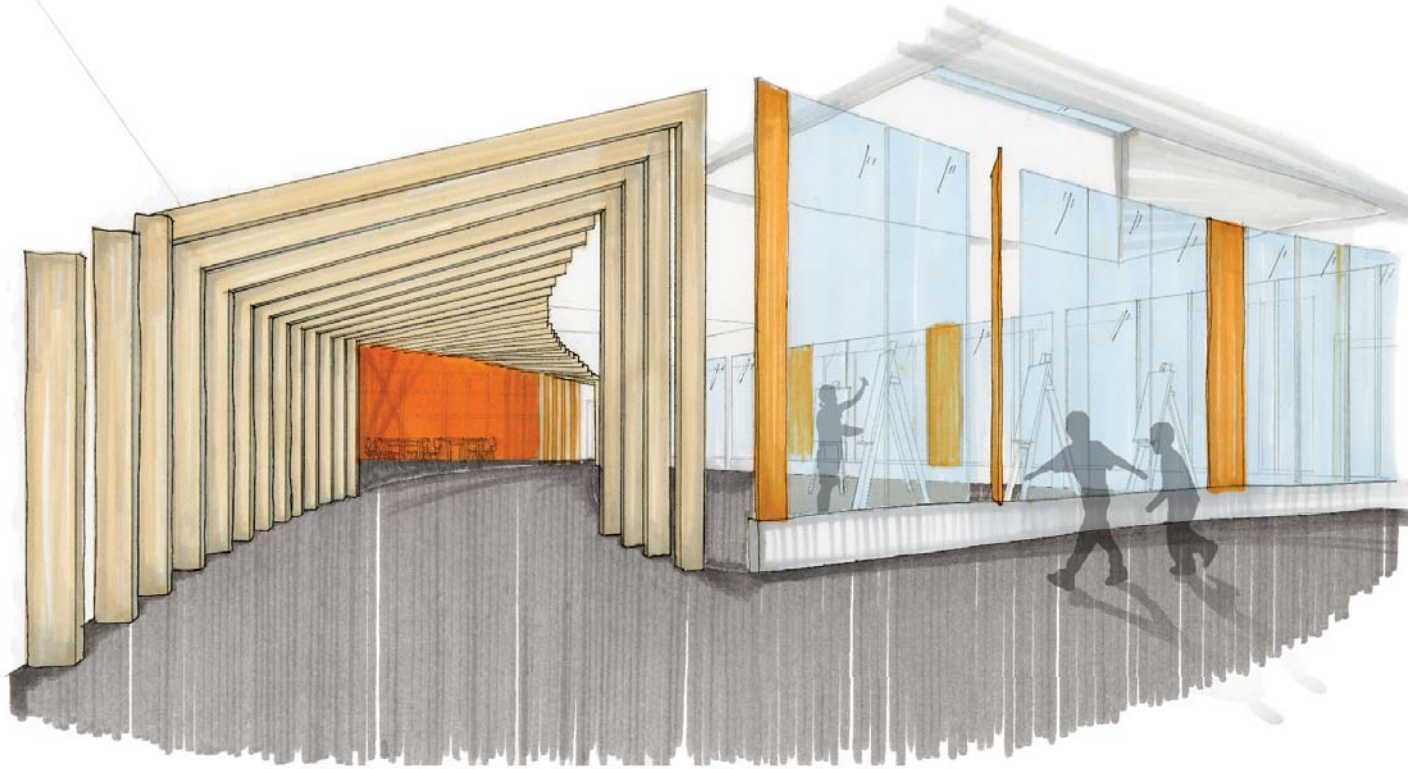




A wave feature wall leads visitors into the exhibit area. The wall extends at the bottom to provide seating outside both the exhibit and restroom spaces.



Studio Area



A wave ceiling meets you at the entrance of the studio and moves the visitor through the space. Its' shape was informed by a third mobius strip. Two open studios are formed by the dropped ceiling.



Benjamin Moore paint



3 form-wall panels

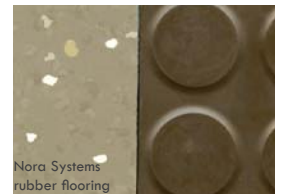


glass walls

School Outfitters studio chairs



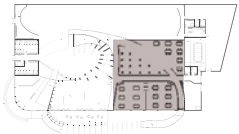
reclaimed wood beams



Nora Systems rubber flooring



A separate school group entrance is located on the south side of the building and leads visitors into the studio space.



Two enclosed studio spaces are provided in the west portion of the building. A ceiling track system allows partitions to move and studio sizes to fluctuate with changing space needs.

Gallery Area

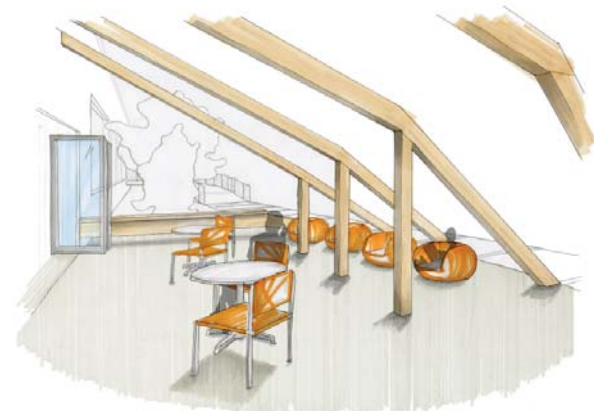
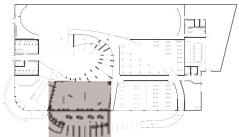


A track system allows gallery walls to move with changing gallery shows. The west wall of the gallery also opens up to an outdoor patio.



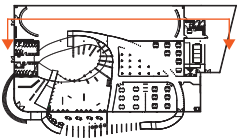
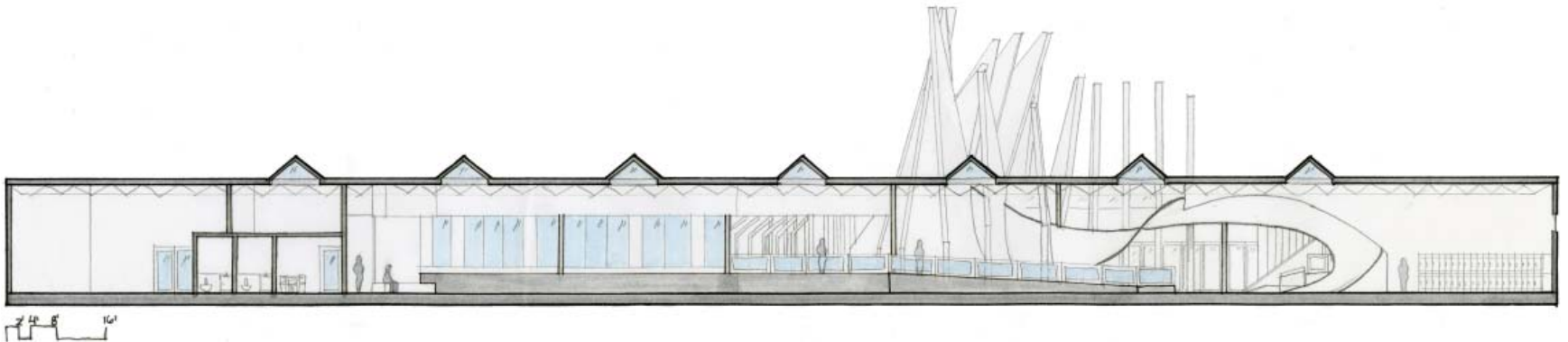


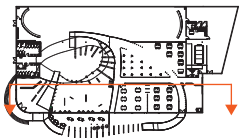
The patio off of the gallery provides extra space for special events, and outdoor seating for every day museum visitors.



Adult and children seating areas are provided on the patio. Structural beams that are informed by a mobius strip, create the patio space.

Sections





S o u r c e s

Ayon, Henry. Personal Interview: Moseley Architects. November 5, 2009.

Chandler. Personal Interview: Amazement Square. October 24, 2009.

Contract World. "Professor Herman Hertzberger". <<http://www.contractworld.com/41790?x=1>>.

Crone, Carolyn. Personal Interview: Plant Zero. October 23, 2009.

Fuchs, Rudi, Lia Karsten, Liane Lefaivre, Anja Novak, Debbie Wilken, Ingeborg de Roode, Erik Schmitz, Francis Strauven. *Aldo van Eyck, The Playgrounds and The City*. Rotterdam: NAI Publishers.

Gorman, Michael D. "Camp Lee Article." for The Whitehouse of the Confederacy.

Harris, Meredith. Personal Interview: The Children's Museum of Richmond. September 18, 2009.

"Herman Hertzberger." <http://en.wikipedia.org/wiki/Herman_Hertzberger>.

Hertzberger, Herman. *Lessons For Students In Architecture*. Rotterdam: Herman Hertzberger and O10 Publishers, 2009.

HH. <http://www.ahh.nl/index_en.html>.

Jodidio, Philip. Santiago Calatrava. Germany: Taschen, 2007.

Kliment, Stephen A. *Building Type Basics For Museums*. Canada: John Wiley & Sons, Inc., 2001.

Ligtelijn, Vincent. *Aldo van Eyck, Works*. Netherlands: Birkhauser Publishers, 1999.

Marks, Isaac R. Personal Interview: Richmond City Hall. September 10, 2009.

Pitman-Gelles, Bonnie. *Museums Magic & Children, Youth Education In Museums*. United States of America: Association of Science-Technology Centers, 1981.

Rafael Vinoly Architects. <<http://www.rvapc.com/>>.

Team 10. Rotterdam: NAI Publishers.

Van Bergeijk, Herman, Deborah Hauptmann. *Notations of Herman Hertzberger*. Rotterdam: NAI Publishers, 1998.

Zardini, Mirko. Santiago Calatrava: Secret Sketchbook. United States of America: The Monacelli Press, 1996.