Culture and a Connection

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Culture and a Connection
I would like to thank the staff and faculty of VCU's Interior Design department for taking the time and effort to make sure that I would leave the program with an advanced knowledge of architectural design, history and methods. I especially would like to thank Camden Whitehead, Christiana Lafazani, Ruth Baker Westervelt, Julie Wolfe, and Kevin Wyllie for giving me a new lens through which to look at the world.

I would also like to thank my wife, Brandon, and my daughters, Isabella and Miranda, for their love and gracious support throughout my pursuit of higher education.

And none of it would have been possible without the help, dedication, and companionship of my fellow classmates.

Chris Arias  
Virginia Commonwealth University, School of the Arts  
Interior Environments  
Thesis Book  
Spring 2009
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manifesto</td>
<td>1</td>
</tr>
<tr>
<td>Introduction</td>
<td>3</td>
</tr>
<tr>
<td>Site and Building Analysis</td>
<td>9</td>
</tr>
<tr>
<td>Program</td>
<td>5</td>
</tr>
<tr>
<td>Existing Plans and Elevations</td>
<td>15</td>
</tr>
<tr>
<td>Formal Building Analysis</td>
<td>17</td>
</tr>
<tr>
<td>Presentation Case Studies</td>
<td>21</td>
</tr>
<tr>
<td>Context Case Studies</td>
<td>25</td>
</tr>
<tr>
<td>Process Case Studies</td>
<td>27</td>
</tr>
<tr>
<td>Critical Design Considerations</td>
<td>29</td>
</tr>
<tr>
<td>Final Design</td>
<td>47</td>
</tr>
<tr>
<td>Resources</td>
<td>57</td>
</tr>
</tbody>
</table>
Culture and a Connection

In the Spanish province of Asturias, many homes built in the sixteenth and seventeenth centuries are constructed of dry-stacked stone and large timbers for floor joists, rafters, decking. They are topped with large, irregularly shaped roof slates. Alongside many of these homes stands a rectangular granary called a cabazo.

The cabazo, similarly constructed, is a stand-alone structure about twenty feet tall, six feet wide and twenty feet long. The main portion, (the storage area), stands ten feet off the ground atop two large, tapered columns. The upper level is typically separated from the lower level by a massive flat, horizontal stone that protrudes past the face of the columns. This one stone is the floor of the granary. The height above the ground and the continuous flat stone keep the food dry and safe from animals. The stone of the columns, quarried from nearby hills, consists of pieces as small as driveway gravel and as large as shoeboxes.

Even though they were built of varying size stones the builders created large, extremely flat vertical planes. Two beams, roughly hewn from chestnut logs, span one column to the next, and support the storage area and roof.

These curious structures, born from utility and perched on the hills of the Asturias countryside, have become local cultural icons. A record of visible human participation is left in the traces and details made by the tools of the workmen who built these cabazos. The traces make the connection between the structure and the hand of man, an immediate expression of the granary’s essence and thus an integral part of the local culture.

The industrial age introduced powerful machinery into the tool set of the designer. Extruded steel and reinforced concrete enable designers to create monumental structures within relatively short periods of time. Although the advent of these methods signaled the loss of the record of human participation, the hand of man was also lost in the repetition and redundancy found on the factory floor. The scale of the effort was hidden and diluted by the machinery used to construct the modern forms. The absence of visible traces of the men who built the structures creates a disconnect between humans and the built environment.

It is not feasible to go back to creating homes by stacking stones together or using hand tools to construct office buildings, but the materials that are produced by factories can become a new source of raw materials for designer and builder in a way that engages the craftsman. I believe that through the careful use of technology and materials, as well as the inclusion of the craftsman, an environment can be created that extends beyond formal appreciation and expresses a deeper connection between man, culture, and the built environment.

MANIFESTO
Thesis statement

The success of a public school administration is greatly dependent on its relationship with the community. This may come in the form of the physical environment as well as on the personal level. The American Association of School Administrators (AASA) annually awards the National Civic Star Award to administrations throughout the country that excel in creating such essential relationships. The award winners are recognized for their participation in encouraging and organizing local businesses, civic groups, and outside organizations to develop strong partnerships between school systems and the community.

The Arlington public school administration was given the 2007 Civic Star award for its participation and involvement of over 500 volunteer hours of the Rotarians club and over 900 hours of student participation. The program consisted of two months of social studies classes, followed by discussions between students and advisors to develop ideas to identify and select community organizations to work with. The students worked alongside the Rotarian volunteers to help local non-profit organizations. The hard work and efforts of all the participants in the program succeeded in building strong academic skills, civic responsibility and student self esteem.

At the corner of Leigh Street and 11th Avenue in Richmond Virginia stands a two-story modern design building that into which I plan to theoretically move part of the City of Richmond school administration. This building will house the superintendent and cabinet members along with the Medial service, public relations, and several conference rooms. These particular departments were selected due to the job description and interaction with the public and school board. This new facility will allow for a more accessible and intimate environment.

Through careful design consideration and an understanding of the programmatic needs of a school administration, I hope to create an environment that encourages a strong community and administration relationship that encourage and inspire award-winning programs like the ones recognized by the AASA.
The City of Richmond Virginia public school administration currently occupies the top four floors of Richmond's city hall. The primary level is the 14th floor, which houses the superintendent, cabinet members, and several conference rooms, as well as the school board assembly room. The board has regular meetings that sometimes address only a handful of the people. Some meetings might draw a large group, including local media and crowds that spill out into the adjacent conference room. The major offices line the outside walls of the building, whereas the elevators, storage, and smaller work areas occupy the core space of the floor. Most of the doors to the offices remain open, and traffic flows freely in and out. A great deal of interaction appears to take place in the hallways and in conference rooms.
City of Richmond School Administration
Adjacency Program: Total 14500 SF

Total Sheet (1990.0 B.F.)

City of Richmond School Administration: Total 7550 sf

Reception: Total 300 sf

- Space Allocation (Number of workers)
- Description of Function
- Proximity
- Size/Square footage
- Enclosed Office
- Equipment and Furnishings

Reception and waiting (2)
- Takes incoming calls, visitors, basic security
- Adjacent to entrance
- 300
- N
- Desk with panel bridge, workstation, seating, table.

Superintendent Offices: Total 550 sf

- Department and Staff (8)
  - Administration organization
  - Near office associate
  - 550
  - Y
  - Desk, coat closet, 2 guest chairs, credenza, conference areas.

Public Information Office: Total 1250 sf

- Department and Staff (8)
  - Develop media to promote district goals
  - Near office associate
  - 1250
  - Y
  - Desk, coat closet, 2 guest chairs, credenza.

Pupil Personal Services: Total 700 sf

Manager of Pupil Personal Services (5)
- Aid in student placement, office manager
- Near Superintendent offices
- 700
- Y
- Desk, coat closet, 2 guest chairs, credenza, small group meeting area.

Parent/Teacher Support: Total 500 sf

Parent/Teacher Coordinator (2)
- Assist parents, develop training programs, consultant to special Ed committee
- Near Superintendent offices
- 500
- Y
- Desk, coat closet, 2 guest chairs, credenza, small group meeting area. Access to conference rooms.

Superintendent Cabinet Members: Total 1350 sf

Manager Administration (10)
- Ad. department management and superintendent
- Near Superintendent offices and conference rooms
- 1350
- Y
- Desk, coat closet, 2 guest chairs, credenza, small group meeting area.

School Board Members: Total 1200 sf

- Address school system needs
- Centrally located and conference rooms
- 1200
- Y
- Desk, coat closet, 2 guest chairs, credenza, small group meeting area.

Additional Administrative needs: Total 700 sf

- Assembly, conference rooms and employee areas
- Space for meetings and employee functions
- Located adjacent to needed areas
- 700
- N
- Conference table for 30, large assembly area lounge and kitchen.

LEGEND

Square footage need
- Less 1
- More

Convenient 2

Minor relationship 3

Immediate Adjacency 4
On the corner of Tenth and Leigh Street in Richmond Virginia is the Virginia Treatment Center for Children. This modern architectural two-story brick and masonry panel building was built in 1959 when the modernist style of architectural design was still fresh and gaining a foothold in American commercial design.

The building has three main material elements that define the forms of the structure: the stack bond brickwork, pebble and cement masonry panels, and the fenestration. The use of materials to distinguish the form gives the building its stylistic parallel with the rest of the modern architectural world. The large vertical brick portion and the horizontal masonry panels appear as if they are one simple geometric form inserted into the other. The red brick portions of the structure establish a vertical permanence into which the pale yellow masonry panels are then mortised. This formal gesture of mortised form expresses the defining parti of the building.

At the northwest corner of the building, a cantilevered portion gives this end a floating disconnect that further emphasizes the simple forms that make up the building’s expressive intent. The interior is defined by exposed, painted concrete masonry unit walls with one main corridor and a rhythmic placement of rooms on either side of it. In plan view, the building is divided into three main portions, each sitting off the other’s axis by about four feet. An interior skeleton of steel posts and beams and concrete slabs frees the building’s formal expression from some of the engineering limitations, such as meeting load-bearing requirements. On the western facade towards the south end is a radius wall that projects four feet from the main structure. This blue-tiled feature wall, displaying the sign for the treatment center, breaks away from the language of the rest of the building in an obvious attempt to denote the importance of that part of the building, the entrance. Almost all of the traffic flow is along the front side that faces west on Tenth Street. Most visitors to the building use the main entrance, while a few employees use an entrance on the northwest corner. This portion of the building was built as part of a larger building and is connected by a two-story perpendicular hall and set of rooms. The simple formal language distinguished by the use of materials and design sets the treatment center in the era of a modern structure.
Area Map

515 North 10th St.
Interstate and Commuter Traffic
Primary Local Traffic

Secondary Local Traffic
Minor Through Traffic

Philip Morris Research Center
Medical College of Virginia
Parking Garage
City of Richmond Courts: Criminal Division
Richmond City Hall

515 North 10th Street
Leigh and Tenth Streets are busy corridors. Most of the vehicle traffic is along Leigh, while most of the foot traffic comes from a parking deck south of the building on the other side of the street. Looking south on Tenth, the fourteen-story city hall can be seen and the Richmond City Jail and courthouses are situated in between them. Close by is the campus of the Medical College of Virginia, as well as the newly erected office of Philip Morris. There is no residential housing in the area but due to the college and the court buildings, the streets are active every day of the week.
EXISTING PLANS AND ELEVATIONS
FORMAL BUILDING ANALYSIS

CIRCULATION
The entrance on the Tenth Street side of the building and the access on the northwest corner limit the accessibility to the building. At the primary entrance on Tenth St., you walk through two sets of doors into a reception area. All visitors enter and exit through this door, while employees use the corner exit. Because the building is a treatment center for children, the egress restrictions are for security purposes.
The three rectangles that organize the plan of the building have three independent north/south axes each sitting four feet from the other. While the interior layout is not aligned with them, it is an element that is reiterated by the off-setting of the exterior walls. At these offsets, the building materials change the formal design from the strong verticals of brickwork to the horizontals of windows and panels. The lines that make up the joints of the masonry panels create a vertical rhythm on the façade. Each line is directly related to a window divider above and below the panels. Because the brick bond does not contain a header course or have a lap, the mortar joints run unbroken up from the ground to the eaves of the roof. The verticals of these panels and brickwork further work to emphasize the monumentality of the structure.

The simplified forms that establish the language of the building appear to meld one solid form into the other. The offset transition areas of the forms create a dialogue that the forms continue past their intersecting planes. This language of implied intersecting forms is interrupted at the entrance, where a radius wall arcs away from the building. The arc of the radius, like the rectangular forms, leaves the viewer to fill in the rest of the arc by creating a cylinder, and again uses the language of the implied form.

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Three rectangles make up the primary masses of the structure when viewed in plan. The shapes are also seen in elevation on the exterior. Masonry panels and brick veneer rectangles give the building its defining mass. The simple forms of each material flow from one story to the other and along large horizontal planes. The flat plane of the roof, which extends four feet past the walls, stops the verticality of the design. Due to the changing elevation of the site, the scale of the north end has a large monumental impression extending up from the sidewalk eighteen feet, while towards the south end of the building, the eaves are almost within reach.
The abstract expressionist movement known as cubism attempted to describe a three-dimensional object on a two-dimensional surface by flattening it and showing multiple views at once. A set of thoughtful architectural drawings does just that; although it pushes the concept further by showing additional information such as size and scale in space, materials and texture, and even emotion and experience. The drawings of landscape architect Lawrence Halprin speak one kind of visual language. The viewer not only understands the formal layout of his designs but the scale and emotions that are an integral part of what he has created.
Halprin describes the position of the FDR Memorial and its orientation to other prominent monuments around the capital by using diagrams and maps to illustrate sight lines and orientation. On these diagrams, he uses graphic representations as well as text to illustrate the proposed monument location and site situation. These loose, hand-drawn sketches create the first facet of a design language. Halprin even develops his own iconography to translate some of the site specific events that are not part of a landscape architect’s normal set of graphic standards. In one instance, he developed an entire system of symbols to describe movement through notation, which he called “motation.”

Halprin uses perspective and scale figures to describe the potential environments to the reader of the drawings by illustrating the point of view of the future visitor. Figures are placed in the drawings next to the proposed forms to show the size of the space and the distance from one object to another. Halprin often put scale figures in section drawings to help describe the types of site elevations.

The monument is comprised of a series of “rooms” that the visitor walks through in a deliberate order. Halprin illustrates this concept through a series of design development drawings showing the procession and rough layout of how the visitor will progress through the experience. Other drawings illustrate a more direct formal analysis of the construction methods such as the use of water and how it will flow within the monument environment. These illustrations again start to add another layer of understanding to the experience that the future viewer will encounter.

Judgment, the concluding phase, is when the viewer has had an opportunity to assess all the different cubist-like facets of the drawings and can start to form individual ideas about what is being proposed by them. A jury might consider the expense or the social and the environmental impact, where as a contractor constructing the project might start to examine the building phases and feasibility.
As they say in the real estate business, “location, location, location.” A building’s location and its orientation can directly affect the design of the interior as well as the exterior. How you orient the main door and receiving area can be influenced by the amount of traffic on the street. Solar consideration might influence where offices are located. The influence of the site and building situation of the city halls of Lincoln Nebraska, Providence Rhode Island, and Charlotte, North Carolina, was analyzed to determine what external factors might affect the interaction with the buildings.

The city hall in Lincoln, Nebraska is one in a line of three public buildings, the Lancaster County Corrections, the Lancaster County City Hall and the courthouse. The three buildings have an east/west orientation with the main entrances of all three facing east. This east side of the building is oriented towards foot traffic, while the rear of the building faces 9th Street and provides service entrances as well as parking. The east-facing side has a tree-lined drive with a convenience store and banks. It appears that the neighborhood is much older than the government buildings, and this would have had an influence on the building’s orientation on the site.
Often the two-dimensional drawings of an architect, engineer, or designer can be removed from their context and viewed as works of fine art. The complex, almost stream of consciousness drawings of Carlo Scarpa are an iconic demonstration of this idea. The thousands of works that were used to show the structural elements to construct buildings, build-out spaces, and develop environments are illustrated with a language of bold lines, form-defining color, and side margins full of details resolving problems. Scarpa's drawings are a clear indication of his continuous involvement with each individual project. In an age where products were being designed in studios and then shipped off to be manufactured, his drawings made it clear that the design process did not end when the construction phase started.
My design considerations are guided by the attempt to create an interior environment that achieves an expression of cultural value and gain. The definition of the word cultural is often linked with terms like authenticity, sincerity, essential, natural, and real. Charles Lindholm’s book, *Culture and Authenticity*, discusses culture through the lens of authenticity. He describes how culture is developed through an authentic experience, a sense of belonging, and the ability to trace roots. It is also a factor in the relationship between man and his social and physical environment.

His participation in the design and construction process creates the necessary link between the two.

There are two elements that factor into the development of architecture and their interiors: the craftsman and the designer. The craftsman’s task is to build in a meaningful and real way, thus leaving a mark of time and commitment. The designer is responsible for guiding him to build something essential and sincere. For the craftsman, the intersections and joinery of materials realizes authenticity and while for the designer, the formal design considerations are more important. My design concepts are an exploration of what particular design elements can express the essence of culture and authenticity in order to create a link between the community and the designed interior.
In downtown Richmond, the Fan area is structured in a way that enables and encourages many different types of social interaction. The street and front side of a home fosters a kind of public engagement where conversations are often limited to brief small talk as residents go to the car or on their way into the house. The alleyway is a space where domestic business is taken care of such as the trash taken out or tools are removed from the garage. In the backyard, sandwiched in between these two, a different and unique kind of communication happens. Conversations tend to linger, and the subject matter is of a more intimate and immediate nature. My workstation and office design is an exploration of this type of backyard or over-the-fence interaction and attempts to integrate it into the work environment.
In the nineteenth century, stone and wood were the raw materials. They were joined together with care and skill. Craft was an important part of the local culture and served as evidence of an individual’s personal investment in the construction of the forms.

The wall connectors joining the conference room glass panels symbolize the personal investment a craftsman historically contributed to the construction of a building. These connections create an additional visual cultural bond and show a similar kind of investment in the creation of the building.
The interior and exterior of a building can operate separately or in formal harmony and unification. When unified and viewed from the outside, the interior can also be perceived. The exterior form creates a dialogue about what the experience is like on the inside.

When a boat builder designs the interior of a vessel, he needs to pay careful attention to the hull in order to maximize space and ensure proper balance. Like a ship, a balance is created when a building’s interior and exterior are unified. That balance can extend to the community, and it gives the building a value beyond its boundaries.
The collapsible chair is an example of how an environment can engage a visitor and develop a relationship with him or her at the same time.

When the chair is not in use, it folds inside the wall and becomes part of the fluting details of the wainscotting. When extra seating is needed, the visitor can pull a chair out, open it up and store it back into the wall when not in use. The interaction makes a visitor feel more connected to the space and engenders a sense of responsibility to that space.
1. Reception
2. Waiting Area
3. Conference Plaza
4. Public Information Department
5. Superintendent and Associates
6. Superintendent Cabinet Members
7. School Board Work Stations
8. Conference Room
9. Kitchen Area
10. Stairwell
11. Bathrooms
12. Elevator
13. Storage
Zoning:
Zoned B-4

Use and Occupancy Classification:
Business Group B / Assembly Group A-3
Civic Administration / Community Hall.

General Building Heights and Areas:
IBC Table 503 – A-3, Building area limitations 6,000 sq ft., 1 story. IBC Table 503 – B, Building area limitations 9,000, 2 story.

Types of construction:
Type V building construction: IBC 602.5

Fire-Resistance-Rated Construction:
Building complies with IBC table 602.5

Interior Finishes:

Means of Egress:
Table 1004.1 – Assembly/ non fixed seats, net 7 sq. ft. per person
Table 1004.1 – Business areas 100 gross, sq. ft. per person Table 1005.1
Stairway egress 0.2 x total occupants min

Accessibility:
Assembly Areas: 1109.5.1 Drinking fountains. 2 Minimum one handicap and one for standing persons.

Interior Environment:
Floors: IBC 1210.1 Smooth, hard, nonabsorbent material extends 6" up bathroom walls.
Walls: IBC 1210.2 with in 2' of urinal a smooth, hard, nonabsorbent moisture resistant material extends 48" up bathroom walls.

Plumbing:
Fixtures: IBC Table 2902.1 Male – 1 toilet per 125, Female 1 toilet per 65, Lavatories – 1 per 200, Drinking fountains 1 per 1000, Service sink 1.

Existing structures:
Change of Occupancy: conformance IBC 3406.1

Building Code Requirements

Basement Design Layout Key
1. School Board Assembly Area
2. Conference Room
3. Entrance
4. Conference Plaza
5. Pupil Personal Service
6. Parent/Teacher Support
7. Storage
8. Stairwell
9. Elevator
10. Bathrooms

48" other .15 x total occupants. Passage way width: IBC 1021.2, no less then 44".
Conference Room and Plaza Areas

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LEED

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SARNO

Brandy

Cabernet

Inverness

Java

Natural

Onyx

Ivory

SA 7440

Swivel Chair

SA 7440 Swivel Chair

Seat Dimension:

18˝W x 18˝D

Seat Height:

16˝ - 21˝

Back:

24˝W x 10˝H

Overall:

27˝W x 22˝D x 28˝ - 33˝H

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SA 7460

Guest Chair

SA 7460 4-Post Guest Chair

Seat Dimension:

18˝W x 18˝D x 17 1/2˝H

Back:

24˝W x 10˝H

Overall:

24˝W x 22˝D x z

OPTIONS

Description

Hard-floor Casters

2˝ high hard floor, twin wheel, safety locking casters (soft wheeled)

N20 Glide

1.5˝ high glide

Walnut Wood Finish

Walnut wood, Natural finish available on request

Beech Wood Finishes

*Printed colors may vary from actual
Resources


