THE DUALITY OF THE LINE
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To the DREAMERS
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SUSAN PIEDMONT - PALLADINO

THESIS SUBMITTED TO THE FACULTY OF VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY IN PARTIAL FULFILLMENT OF THE DEGREE OF MASTER OF ARCHITECTURE

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ABSTRACT
Everything in the universe has an opposite, and exists in complete harmony. Without one, we would not experience the other. It is this duality of experiences, perspectives and actions that I seek to study in this thesis.

Dual natures are typically found in the unconventional life of Latin America, where barriers are not strictly defined and there is a constant mix of formality and informality. It is in this region, with its culture and history, that I plan to build a type of architecture that seeks to inspire the inhabitant to explore the possibility that one element can act in two opposing ways. Carnaval and Ash Wednesday will be the backdrops of the study, as I plan on designing both a market place and a church dedicated to these holidays.

How can we perceive an element one way, but then completely different the next day? To answer this question I will develop both a church and a market in Panama City, Panama.
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THE EXTRAORDINARY INTO
Marxism does not have an opportunity in Latin America. Can’t you see that it does not provide the magical side of things? It is practical and functional atheistic doctrine. Here it won’t have success!

-La Casa de los Espíritus, Isabel Allende
especialmente traídos del Libano ¡vaya uno a saber donde queda eso!, se decía Trueba, y a respirar de las flores que...
As an only child, the different characters in the stories and books I read kept me company through many afternoons at home. My fascination with the imaginary world influenced me in such a way that I started to create stories of every single item in my life, from naming my technological devices to justifying my personal struggles with fairytale obstacles.

In high school, I was introduced to a very popular literary genre in Latin America: Magic Realism. Authors such as Isabel Allende, Gabriel Garcia Marquez and Jorge Luis Borges showed me that extraordinary elements could be part of very mundane activities, even during well-known historic events. I wondered if architecture could have this same ambiguity of reality, if it was able to showcase the fact that extraordinary moments are just part of our ordinary lives.
HUMANITY SEEMS DESTINED TO OSCILLATE FOREVER BETWEEN DEVOTION TO THE WORLD OF DREAMS & ADHERENCE TO THE WORLD OF REALITY.

REALITY #1: OBJECT

REALITY #2: SHADOW

THEY ARE BOTH REAL... DIFFERENT, BUT REAL!
Space is defined by perception. Our perception of reality depends on the time it is visualized and our own personal backgrounds. One person may not perceive the same space as another individual in a given time.

For every reading I did regarding the perception of space, I decided to do a series of watercolor vignettes that would capture the essence of the readings. From spaces feeling as they were inside out, to viewing shadows of these and thinking they are the reality, the watercolors gave me a chance to quickly visualize what I was reading and transform it into architectural elements that could inform how I was to develop my thesis.

It is through these that I understood that I needed to find very specific moments in time to which people are expected to experience the same thing.
CORAZÓN DEL UNIVER

PUENTE DEL MUNDO
For the past 4 years, my architectural career has been focused on sites outside of my home country, Panama. I decided that it was time for me to give back to my origins and explore my hometown’s traditions, history and current needs.

Panama is located in the middle of continental America, and it is known as Puente del Mundo, Corazón del Universo or its translation in English: Bridge of the World, Heart of the Universe. As its motto says, Panama is a traveling and economic hub for the world. Thanks to the Panama Canal, a lot of different cultures and traditions have been inserted into the country.

It is through this narrow land mass that the Pacific Ocean was discovered and the Spaniards used as a short cut to transport the gold extracted from South America.
FOR CALIFORNIA!
DIRECT
EXTRAORDINARY INDUCEMENTS
THIRTY-FIVE DAYS TO THE GOLD REGIONS
The "California Steam Navigation Co."
STEAM SHIP NICARAGUA
On FRIDAY, MARCH 23d, 1849
200 JACK ASSES!
Panama City, located by the Pacific Ocean, is composed of three different cities within itself. The original city, Panama la Vieja was destroyed by the pirate Henry Morgan, and then relocated to the south. This new colonial city came to be known to be Casco Antiguo, from where the modern new city grew out to be. Ultimately the growth of the new city expanded past Panama Viejo, joining the three cities together.
PANAMA BAY MANGLARS

PANAMA BAY
The site I chose for my thesis sits adjacent to a new green park development by the Panama bay. I choose this site because I wanted to integrate this old unique park into part of this new development. By adding a new destination point into this park, I seek to reactivate the area. Currently, Parque Urraca is surrounded by a booming real state heaven composed of skyscrapers and two historic low-rise buildings.
Within the existing park we find different sport fields and monuments. Surprisingly enough, the part itself has a dual nature as it divided both into a sporting playground and a monument yard. Past designers have tried to develop the site, but the community refuses to destroy any of the existing trees on site.

I plan to divide the park into quadrants in which each quadrant will contain a sport zone, a monument zone, a connection to the new green development on the other side of the street and finally an area for the new program.

It is my desire to keep most of the existing trees on the site without any disturbance.
In order for me to define how the program was going to fit into site quadrant that I choose, I decided to do a series of studies based on the surrealism technique Exquisite Corpse.

Exquisite Corpse is a set of drawings or words created by different collaborators where each collaborator could only see part of the previous collaborator’s input.

I decided to create a series of studies where I would design and analyse the site by making one drawing per day. I could only see the drawing from the day before to inform that day’s drawing.

**EXQUISITE CORPSE**
Ultimately I decided that the program would divide the site into two parts and the inhabitant would have to cross a threshold in order to access the rest. Nodes would signify events located strategically around the site, creating a trajectory that would eventually guide the user around.
TIPPING POINT
In order for me to explore the duality of a space, I needed to choose a specific point in time where duality is expected to occur. In the Panamanenian calendar of traditional events and holidays there is one in particular moment where in less than 12 hours the mindset changes 180° degrees: Carnavale/Fat Tuesday and Ash Wednesday. It is during this time, every year, that excess becomes restraint from sunset to dawn.
I started exploring the idea of creating a market and a church dedicated to these holidays. Roman Basilicas were my starting point in this exploration.
Basilicas, even though they have conserved almost the same spatial configuration, have been able to adapt to accommodate the epoch’s needs. The church and the market would follow this idea and eventually be able to transform each other depending on the needs of the user.
Both Carnavale and Ash Wednesday have significant moments and events within them that makes them unique from other holidays and festivities. I analyzed each event and tried to pair it with an opposite, but almost equivalent event from the opposite holiday.

This exercise yielded a set of parameters for the program that would be found within my church and market.

Just as in this exercise, I was going to explore space by analyzing two opposite events and try to design architectural elements that would accommodate the needs of each holiday.
Culecos are Carnavale mornings, when water is thrown from above for the feasters to refresh from the heat of the summer. Baptism is the first step into becoming part of the religion. It is during this act that holy water is placed on the sinner’s forehead and/or is bathed into it. A dual space for these events need to take into consideration the hand of God now welcoming the new believer and the importance of refreshment for the feasters.
Carnavale started as a way to get rid of all the food that would have been otherwise wasted during Lent, due to traditional restraint. Completely opposite to each other, Fasting and Feasting are somewhat balancing themselves. Both are excesses of an activity, and for that, their space needs to represent both the extreme of restraint and the extreme of excess.
FEASTING

RESTAURANT looking into a CHURCH HOW BIZARRE?
(FASTING)
SUNDAY MASS - SUNDAY BRUNCH
SIMULTANEOUSLY!
*PEOPLE IN MASS CAN'T SEE
PEOPLE AT RESTAURANT,

INSIDE OF CHURCH

RESTAURANT both looking at inside of church & outside into the garden protruding out

PLAN

GLASS BOX IN NATURE

SECTION

STAIRS connecting to other public spaces.

ABSORBD

IMMERSED INTO TAKING IN

ONE

BARREN
These are acts where the body is being elevated to a higher or finer level. In the case of coronation, actively, there is one body being refined, while in the case of communion or the placement of ashes there are several bodies being treated on. A space that could support both activities has to reflect the importance of focusing on the activity, by providing a stage for it to occur.
CORONATION
AUDIENCE

ALTAR

CHOIR

NAVE

TWO PLATFORMS IS IT REALLY THAT?
ONE FOR INSTRUMENTS/
ONE FOR PEOPLE

HOW'S THIS PLATFORM WORKING FOR BOTH?

SEATING & STANDING DANCING & SITTING

HOW'S MUSIC SHAPING THE SPACE?
Music is a very important part of both Carnavale and Ash Wednesday or Lent in general. For each event the requirements are the same, but the names are not. A choir motivates sinners at Church, while a murga is a set of musicians at the Carnavale that create music throughout the whole event motivating people to dance and enjoy themselves. A very fine line needs to occur between these connections in order to create a space that could serve both.
During confession, we reveal secrets to liberate ourselves, while a costume conceals our identity to allow us to create a new image. We cover our mouths with our hands when telling a secret, making the sound move from a narrow space into a more open area. Like curves, a costume hides a possibility from every angle.
COSTUME
In a market, the inhabitant meanders around to find his way, while in church there is a set orientation and path. Both of this programs have something in common: the column. A sea of columns confuses the inhabitant while a linear path can be defined by these as well.
FEASTERS

CONTAINS THICK WALLS BUT THIN/FLUMSY ROOF.

MARKET AISLE NAVE AISLE UTILITIES

ADDEND BETWEEN COLUMNS?

COLUMN SLATING ELEVATING HIS BODY.

TABLES TURNING INTO PEWS?

LOOKING DOWN TOODS.

LOOKING AT ALTAR.
PILGRIMAGE

LONG
SEVERAL STOPS
LOOK FOR BOARDING
INDIVIDUAL

TRESHOLD/CONNECTION

TRAVELING TO FIND YOURSELF,

THE LONG TOWN WE GO TOMORROW
TIME OF DISCOVER
LONG ROAD WITH SEVERAL STOPS

RAMP (DIRECT)
EACH LANDING A STOP TO BUY OR SELL AT
Traditionally, in both Carnavale and Lent people travel from one place to the other to pay respect to the holidays. Although similar, a pilgrimage takes more effort and time than just standard traveling for Carnavale. A pilgrimage contains several stops and obstacles and is typically done as a single lone individual. On the other hand, traveling for Carnavale, in Panama, is done with a group and does not have any stops besides the final destination.
¿PA´LA RUMBA
OR TO CHURCH?
After gathering all this information and analyzing the different programs, activities and possible spaces, I decided that I wanted to create a building where the inhabitant would not notice when they were in a program or another. I wanted to create a seamless space that would only be defined by the activities occurring at a specific point in time.

The market would act a sea of columns, where the inhabitant would lose himself until finally finding himself inside a church. This connection of the in and out of programs into one specific cross-over defines the duality of my architecture. From the outside, you would not be able to guess what was the real purpose of the building until you find yourself in it.
SITE PLAN
MARKET/ CHURCH LEVEL
Inside the ends of the curved walls, the program juxtaposes the events of both Carnavale and Ash Wednesday. On the North-East corner we see both confession and costume related to each other while creating an altar that works as a stage as well. Found in the North-West corner, a baptismal basin is surrounded by fountains used by the inhabitants to refresh themselves during the Summer months. The South-East corner contains a chimney that connects the ground level restaurant with the Ash chapel and outdoor café. And finally, the South-West corner contains an Eucaliptus tree that sways in the wind while a priest walks up the path to the wind chime that functions as church bell.
The market is shown as soon as you look at the site, with its invaded columns and colored tents. Outsiders believe that the building represents the vivacity found in Carnavale with its movement and excess, but like a costume those curved walls hide away the restraint of the hidden church.
LONGITUDINAL SECTION THROUGH CHURCH
WIND CHIME
The wind chime acts a church bell by allowing air to travel through when the priest aligns the openings. Metal clings against a small plate found in one of the openings creating sound.
If you are coming in specifically to the church you would see a cross that showcases whether there is a special event going on inside. The door also shows whether it is a lay day or special holiday by the way the pivot is opened. On Ash Wednesday the opening is wider than for any other day.
ENTERING CHURCH
The columns in the market will eventually guide the visitors inside the church, connecting both the inside and the outside. It is at this threshold that both worlds connect. Sacred and profane find each other face to face, while a skylight connects the user to the sky and rocks to the earth. A compressed earth retaining wall also connects the living with the death by allowing its walls to be invaded by ashes and food on opposite sides.
On that same threshold, water is collected from the rain. Stormwater moves along the roofs and is collected underneath the market in cisterns. As the water falls down through the gap between the market and the church, the inhabitant is metaphorically cleansed. The water acts a thresholds of purification before entering the church.
TRANSVERSE SECTION THROUGH MARKET
Above the baptismal basin there is a small roof garden where storm water is collected. During baptisms the priest opens a mechanism that allows the water to flow from this pond to the basin, creating a connection with the sky. Fountains around the basin refresh the environment for the inhabitants.
The priest’s quarters are above the confession stall. In order for confession to occur, the user needs to ring a bell that would notify the priest that someone awaits for him below. As you leave the confession stall you find yourself in an outdoor chapel. The altar of this outdoor chapel then becomes the stage for Carnavale performances. These are appreciated by the public that invades the market.
Where the market becomes the church, a transformation of the body occurs. It is here where one is able to feel the weight of the Bible verse found in Genesis 3:19: “for you were made of dust, and to dust you will return” that defines Ash Wednesday. Underneath this clash of worlds rests a crypt, that could be seen from above by a glass floor. One can feast the eyes by looking at the vibrancy of the market while fasting the soul when looking at the crypt.
For Ash Wednesday, the leftover palms from the year’s prior Palm Sunday are burnt to create the ash. It is at this chapel that this event occurs in a chimney that is also used as a fire for traditional Panamenian cooking. Underneath the chapel for Ashes lies a restaurant or community room, where traditional food found in Carnaval is cooked. The chimney notifies those in the outside, feasting in the market during Carnavale, that the party’s end is near as the church is preparing itself for Ash Wednesday on the next day.
Before taking communion one should confess their sins. Typically the confession stall makes the presence of the priest very apparent to the sinner. Instead, I created a space where the sinner would not be intimated by the priest and could speak to the wall instead. The form of the wall would allow the message to be delivered to the priest on the other side in complete darkness.
With this thesis I was able to conclude that a single architectural element could impose an experience and its opposite at the same time; it just depends on the angle in which it is being looked at. Time and perspective define the meaning of architecture, and it is up to the inhabitant to decide what it wants it to be. For example, a chimney could be profane element on one level, while sacred on the other and still provide the same function.
I would like to thank my committee for pushing me to my limits and taking the time to teach me that architecture could express my thoughts. You have completely change my outlook, and showed me that I could dance with architecture.
I would like to thank my family, specially my parents who have supported me throughout all my crazy adventures and ambitions and who have taught me that dreams can become true. For being there during those times when I thought I was not good enough or that the challenge was too big to be accomplished. For all those tears and laughs, this I give to you because this thesis was all me. My mind and my ideals are here, and this I dedicate to your love. Con amor, siempre.


APPENDIX

Column and path connection model
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Watercolor space studies
Mola
Map of America
Map of Panama
History Collage
  Google images of Panamenian history
  http://www.tramz.com/co/pa/pas.html
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  http://www.webring.org/l/rd?ring=panama;id=1;url=
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Pictures of Panama City
  Visit Panama Website
  http://www.visitpanama.com/
  (Accessed March 2014). [fair use]
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Panama City Plan Analysis
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<td><a href="http://www.telemetro.com/">http://www.telemetro.com/</a></td>
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